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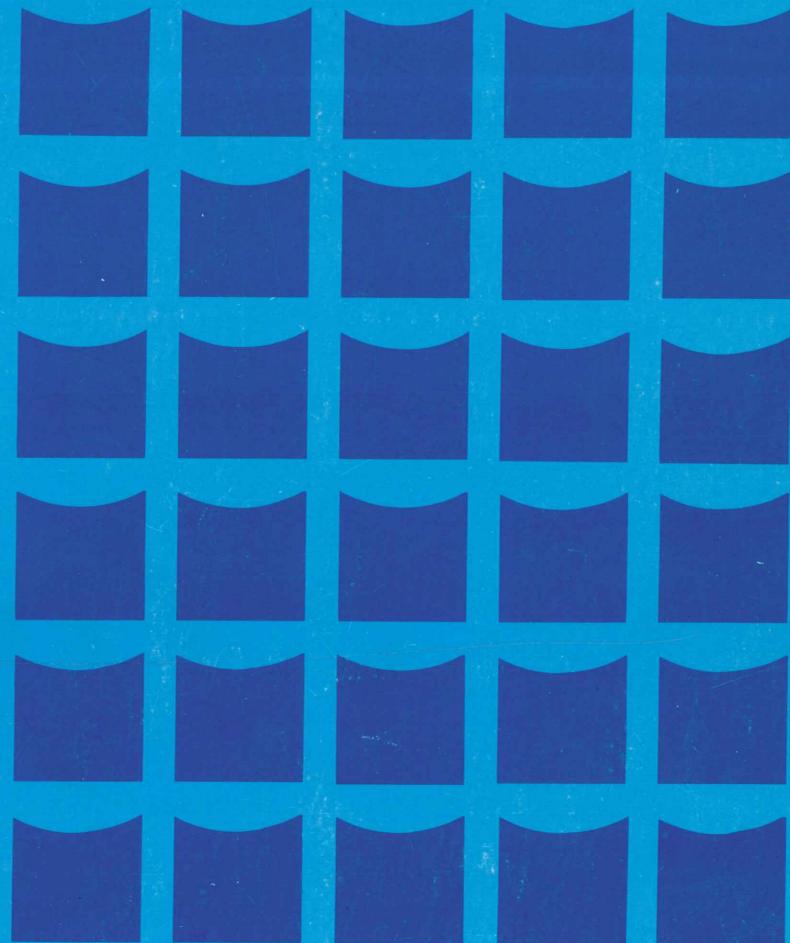


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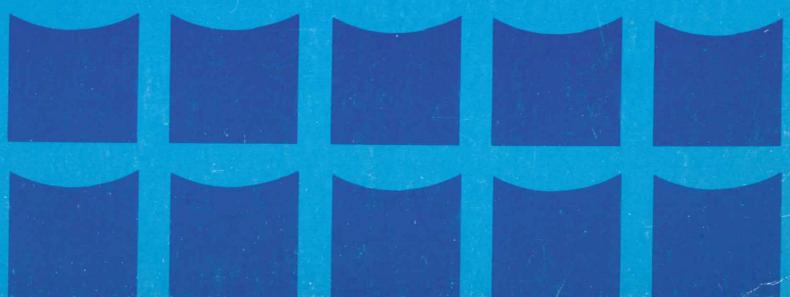
Biological effects of oil pollution in the marine environment: A bibliography

Christiane Filion-Myklebust and Kjell I. Johannessen



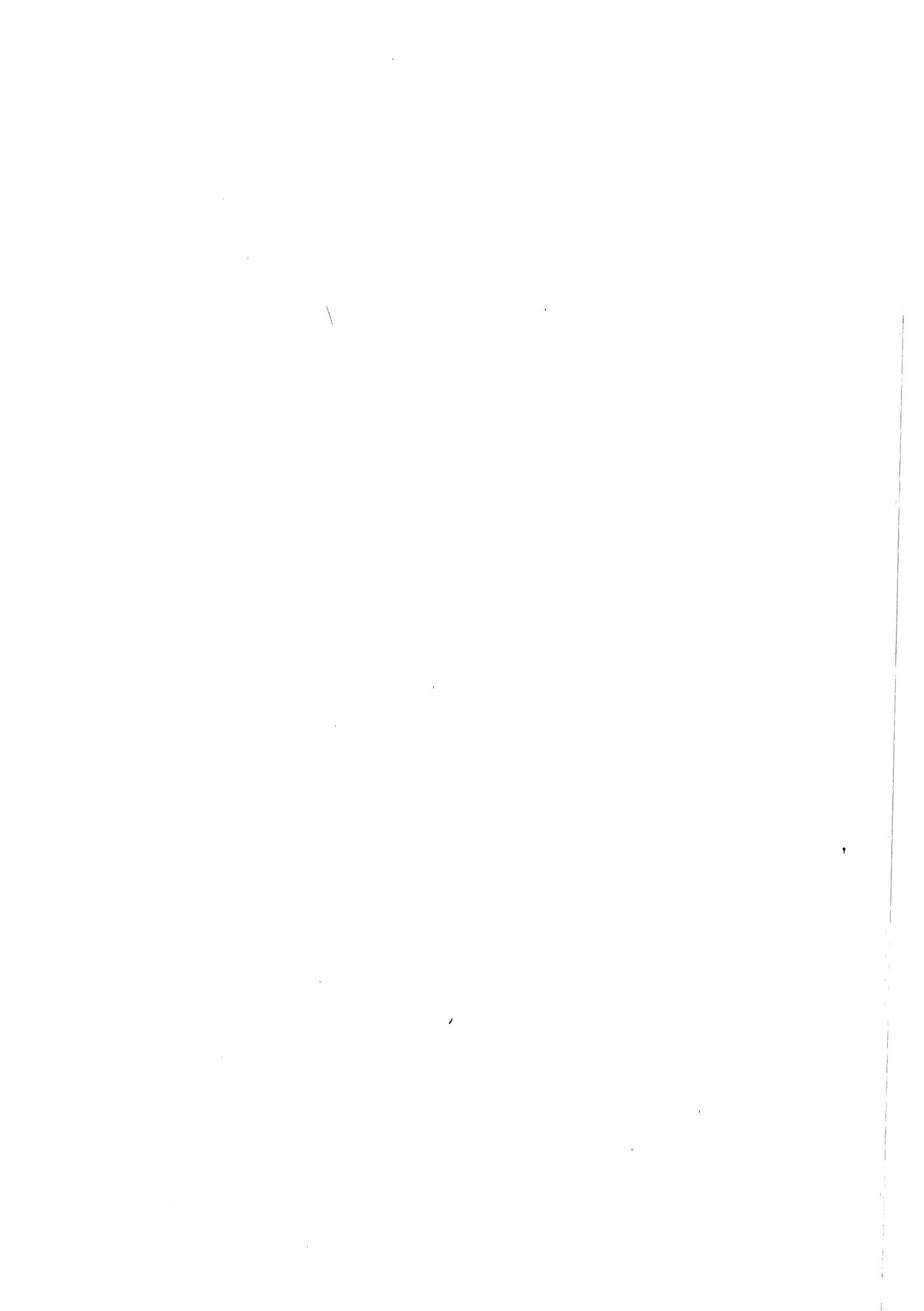
Forskningsprogram om Havforurensninger

The Norwegian Marine Pollution Research and Monitoring Programme



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Christiane Filion-Myklebust and Kjell I. Johannessen



BIOLOGICAL EFFECTS OF OIL POLLUTION IN
THE MARINE ENVIRONMENT: A BIBLIOGRAPHY

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INTRODUCTION

A selected and indexed bibliography on the biological effects of oil pollution in the marine environment has been prepared. The basic objectives of this bibliography are:

1. To identify literature specifically dealing with known effects of oil pollution on marine organisms and ecosystems;
2. To provide a basic reference document for use in research projects related to oil pollution;
3. To help indicate major deficiencies in our knowledge of this topic.

All the references included in the present bibliography have been compiled according to the following criteria:

1. The references can be found in available scientific literature;
2. The references deal with specific research topics and/or scientific observations, and include specific data or observations; general discussions and review articles referring to specific data have also been included;
3. Publications of a non-scientific or a journalistic nature have been omitted.

The bibliography covers the period from 1970 to the end of 1979. In addition, some references prior to 1970 have been included on the basis of their special significance, e.g. reports on the TORREY CANYON oil spill disaster.

The references have been selected from several sources, the main ones being:

1. Personal references collections,
2. Other bibliographies,
3. Governmental and International Organisations' publications,
4. Proceedings of Conferences and Symposia,
5. Specialized books,
6. Scientific periodicals,
7. References from the papers themselves.

A computer-based literature search including BIOSIS Previews, Pollution Abstracts and Oceanic Abstracts was initially carried out but it was later found that the survey did not cover more than 40-50% of all the references selected. Consequently, various other bibliographic data bases also had to be examined, e.g. Biological Abstracts, Bioresearch Index, Current Contents: Life Sciences (CC-LS) and Current Contents: Agriculture, Biology and Environmental Sciences (CC-ABES). In order to include as many relevant references as possible for the year 1979, all 1979 and early 1980 issues of the above mentioned bibliographic data bases, as well as scientific periodicals themselves had to be searched.

The present bibliography is divided in two Sections:

Section I includes an alphabetical list of all references, numbered from 1 to 1158. Titles of periodicals are abbreviated according to the Serial Sources for the BIOSIS Data Base, 1979.

Section II includes numerous Subject Indexes, where references dealing with particular topics and specific research problems have been classified.

Finally, references dealing with Fate of oil and Biodegradation of oil have as a rule been omitted, unless of general interest and relevance to the subject of the present bibliography.

INTRODUCTION

Une bibliographie choisie et indexée traitant des effets biologiques de la pollution par le pétrole sur le milieu marin est présentée. Les principaux objectifs de cette bibliographie sont les suivants:

1. Identifier les références ayant spécifiquement trait aux effets connus de la pollution par le pétrole sur les organismes et les écosystèmes marins;
2. Fournir un document de référence pouvant servir à définir des projets de recherche sur la pollution par le pétrole;
3. Aider à signaler les insuffisances majeures de notre connaissance du sujet.

Toutes les références citées dans la présente bibliographie ont été compilées selon les critères suivants:

1. Les références peuvent être trouvées dans la littérature scientifique disponible;
2. Les références traitent de sujets de recherche spécifiques et/ou d'observations scientifiques, et contiennent des données ou observations précises; les discussions générales et les comptes-rendus se référant à des données scientifiques spécifiques ont aussi été retenus;
3. Les publications d'un caractère non-scientifique ou journalistique ont été omises.

Cette bibliographie englobe la période de 1970 jusqu'à la fin de 1979. De plus quelques références antérieures à 1970 ont été retenues en raison de leur intérêt spécial, par exemple, les études sur la catastrophe du TORREY CANYON.

Les références ont été sélectionnées à partir de diverses sources, les principales étant:

1. Collections personnelles de références,
2. Autres bibliographies,
3. Publications d'Organisations Gouvernementales et Internationales,
4. Comptes-rendus de Conférences et Symposiums,
5. Ouvrages spécialisés,
6. Périodiques scientifiques,
7. Références issues des articles mêmes.

Une recherche de la littérature utilisant un ordinateur fut d'abord exécutée sur les "BIOSIS Previews, Pollution Abstracts et Oceanic Abstracts" mais il fut plus tard constaté que cet examen n'englobait pas plus de 40 à 50% de toutes les références choisies. Par conséquent, plusieurs autres sources de documentation bibliographique durent également être analysées, par exemple, "Biological Abstracts, Bioresearch Index, Current Contents: Life Sciences (CC-LS) et Current Contents: Agriculture, Biology and Environmental Sciences (CC-ABES)". Afin d'inclure autant de références pertinentes que possible pour l'année 1979, tous les numéros des sources de documentation bibliographique ci-haut mentionnées, ainsi que les périodiques scientifiques mêmes, publiés en 1979 et au début de 1980 durent aussi être examinées.

On retrouve deux Sections dans la présente bibliographie:

Section I consiste en une liste alphabétique de toutes les références choisies, numérotées de 1 à 1158. Les titres des périodiques scientifiques sont abrégés selon le "Serial Sources for the BIOSIS Data Base, 1979".

Section II comprend de nombreux Index qui permettent une accessibilité entière et rapide aux références classifiées selon des thèmes définis et des sujets de recherche spécifiques.

Finalement, les références traitant du Sort du pétrole et de la Biodégradation du pétrole ont en principe été écartées, à moins d'être d'intérêt général et pertinentes au sujet de la présente bibliographie.

Section I

References

1. ADAMS, W.A., 1975.
Light intensity and primary productivity under sea ice containing oil.
Victoria, B.C., Dept. of the Environment, Beaufort Sea Project, 156 p. (Beaufort Sea Technical Report No. 29).
2. AHEARN, D.G., 1974.
The sources, fates and effects of oil in the seas.
In: Vernberg, F.J. & Vernberg, W.B., eds. Pollution and physiology of marine organisms. New York, Academic Press, p. 247-251.
3. AHEARN, D.G., CROW, S.A., BERNER, N.H. & MEYERS, S.P., 1976.
Microbiological cycling of oil in estuarine marshlands.
In: Wiley, M., ed. Estuarine processes, Vol. 1. New York, Academic Press, p. 483-492.
4. AHEARN, D.G., & MEYERS, S.P., 1973.
The microbial degradation of oil pollutants.
Proceedings of a Workshop, Atlanta, Georgia, 4-6 Dec. 1972.
Baton Rouge, La., Louisiana State University, Center for Wetland Resources, LSU-SG-73-01, 322 p.
5. AHEARN, D.G. & MEYERS, S.P., 1976.
Fungal degradation of oil in the marine environment.
In: Jones, E.B.G., ed. Recent advances in aquatic mycology, London, Paul Elek (Scientific Books), p. 125-133.
6. AIKEN, D.E. & ZITKO, V., 1977.
Effects of Iranian crude oil on lobsters (Homarus americanus) held in floating crates.
ICES C.M.Pap.Rep. No. C.M.1977/E:45, 13 p.
7. ALBEAUX-FERNET, M. & LAUR, C.M., 1970.
Influence de la pollution par le mazout sur les testicules de crabes (étude histologique).
C.R.hebd.Séances Acad.Sci.Sér.D Sci.nat., 270, p. 170-173.
8. ALBERS, P.H., 1977.
Effects of external applications of fuel oil on hatchability of Mallard eggs.
In: Wolfe, D.A., ed. Fate and effects of petroleum hydrocarbons in marine ecosystems and organisms. Proceedings of a Symposium, Seattle, Wash., Nov. 10-12, 1976. New York, Pergamon Press, p. 158-163.
9. ALBERS, P.H., 1979.
Effects of Corexit-9527 on the hatchability of Mallard eggs.
Bull.environ.Contam.Toxicol., 23(4-5), 661-668.
10. ALBERS, P.H. & SZARO, R.C., 1978.
Effects of No.2 fuel oil on common Eider eggs.
Mar.Pollut.Bull., 9(5), 138-139.

11. ALLEN, D.W., ALLEN, R.B., BLACK, R.E., FRIEDMAN, J.M., MALLON, L.G., MORSE, R.W., PETERSON, S.B. & SMITH, L.J., 1976. Effects on commercial fishing of petroleum development off the northeastern United States. Cambridge, Mass., Woods Hole Oceanographic Institution, Marine Policy and Ocean Program, 80 p.
12. ALLEN, H., 1971. Effects of petroleum fractions on the early development of a sea urchin. Mar.Pollut.Bull., 2(9), 138-140.
13. ALLEN, J.A., 1969. West Falmouth oil spill, Massachusetts, September 1969. Mar.Pollut.Bull., 16, 16-17.
14. ALYAKRINSKAYA, I.O., 1974. Biochemical changes in the hemolymph of the Black Sea Mytilus galloprovincialis during oil pollution. Zool.Zh., 53(2), 179-183.
15. ANDELMAN, J.B. & SNODGRASS, J.E., 1974. Incidence and significance of polynuclear aromatic hydrocarbons in the water environment. Crit.Rev.environ.Control, 4, 69-83.
16. ANDELMAN, J.B. & SUESS, M.J., 1970. Polynuclear aromatic hydrocarbons in the water environment. Bull.W.H.O., 43, 479-508.
17. ANDERSON, G.E., 1972. The effects of oil on the gill filtration rate of Mya arenaria. Virginia Journal of Science, 23(2), 45-47.
18. ANDERSON, J.W., 1973. Uptake and depuration of specific hydrocarbons from fuel oil by the bivalves Rangia cuneata and Crassostrea virginica. In: Background papers prepared for the National Academy of Sciences. Ocean Affairs Board Workshop on Inputs, Fates and Effects of Petroleum in the Marine Environment. Airlie, Virginia 21-25 May, p. 690-708.
19. ANDERSON, J.W., 1975. Laboratory studies on the effects of oil on marine organisms: an overview. Washington D.C., American Petroleum Institute, API Publ. No. 4242, 70 p.
20. ANDERSON, J.W., 1977. Effects of petroleum hydrocarbons on the growth of marine organisms. In: McIntyre, A.D. & Whittle, K.J., eds. Petroleum hydrocarbons in the marine environment. Proceedings ICES Workshop, Aberdeen 9-12 Sept., 1975. International Council for the Exploration of the Sea, 171, p. 157-165.

21. ANDERSON, J.W., 1977.
Responses to sublethal levels of petroleum hydrocarbons:
Are they sensitive indicators and do they correlate with
tissue contamination?
In: Wolfe, D., ed. *Fate and effects of petroleum in marine
ecosystems and organisms.* New York, Pergamon Press, p. 95-114.
22. ANDERSON, J.W., 1978.
Long-term effects of hydrocarbons on selected ecosystems
and associated organisms.
In: Pacific Northwest Laboratory Annual Report for 1977.
PNL-2500, Pt. 2, 4.11-4.17. Battelle Pacific Northwest
Laboratories, Richland, Washington.
23. ANDERSON, J.W., 1979.
Long-term effects of hydrocarbons on selected ecosystems
and associated organisms.
In: Pacific Northwest Laboratory Annual Report for 1978.
PNL-2850, Pt. 2, 4.5-4.12. Battelle Pacific Northwest
Laboratories, Richland, Washington.
24. ANDERSON, J.W., 1979.
An assessment of knowledge concerning the fate and effects
of petroleum hydrocarbons in the marine environment.
In: Vernberg, W.B., Calabrese, A., Thurberg, F.P. & Vernberg,
F.J., eds. *Marine pollution: functional responses.* New York,
Academic Press, p. 3-22.
25. ANDERSON, J.W., 1979.
Oil in the marine environment: an overview.
Paper presented at the Symposium on Ecological Effects of
Environmental Stress, New York Bight Project Office, New York,
June 10, 1979.
26. ANDERSON, J.W., 1979.
Mortality, sublethal responses, and tissue accumulation in
marine crustaceans exposed to flowing oil extracts and
oil-dispersant mixtures.
In: Abstracts from the 14th European Marine Biology Symposium,
Protection of Life in the Sea, Helgoland, 23-29 Sept. 1979,
p. 1-2.
27. ANDERSON, J.W. & BLAYLOCK, J.W., 1978.
Fate of polycyclic aromatic hydrocarbons in controlled
ecosystem enclosures.
Bull.environ.Contam.Toxicol., 19, 832-838.
28. ANDERSON, J.W., CLARK, R.C. & STEGEMAN, J.J., 1974.
Contamination of marine organisms by petroleum hydrocarbons.
In: Cox, G., ed. *Proceedings of a Workshop on Marine Bioassays,*
sponsored by the American Petroleum Institute, Environmental
Protection Agency and Marine Technology Society, Washington D.C.,
Marine Technology Society, p. 36-75.

29. ANDERSON, J.W., DIXIT, D.B., WARD, G.S. & FOSTER, R.S., 1977.
Effects of petroleum hydrocarbons on the rate of heart beat
and hatching success of estuary fish embryos.
In: Vernberg, F.J., Calabrese, A., Thurberg, F.P. & Vernberg,
W.B., eds. Physiological responses of marine biota to
pollutants. New York, Academic Press, p. 241-258.
30. ANDERSON, J.W., KIESSER, S.L. & BLAYLOCK, J.W., 1979.
Comparative uptake of naphthalenes from water and oiled
sediment by benthic amphipods.
In: Proceedings 1979 Oil Spill Conference (Prevention, Behavior,
Control, Cleanup), Washington D.C., American Petroleum Institute,
Publ. No. 4308, p. 579-584.
31. ANDERSON, J.W. & MALINS, D.C., 1978.
Physiological stresses and responses in chronically oiled
organisms.
J.Fish.Res.Board Can., 35, 679-680.
32. ANDERSON, J.W., MOORE, L.J., BLAYLOCK, J.W., WOODRUFF, D.L. &
KIESSER, S.L., 1977.
Bioavailability of sediment-sorbed naphthalenes to the
sipunculid worm, Phascolosoma agassizii.
In: Wolfe, D.A., ed. Fate and effects of petroleum hydrocarbons
in marine ecosystems and organisms. Proceedings of a Symposium,
Seattle, Wash., Nov. 10-12, 1976. New York, Pergamon Press,
p. 276-285.
33. ANDERSON, J.W. & NEFF, J.M., 1975.
Accumulation and release of petroleum hydrocarbons by edible
marine animals.
In: International Symposium, Recent Advances in the Assessment
of the Health Effects of Environmental Pollution, 3, p. 1461-
1469.
34. ANDERSON, J.W., NEFF, J.M., COX, B.A., TATEM, H.E. & HIGHTOWER,
G.M., 1974.
The effects of oil on estuarine animals: toxicity, uptake and
depuration, respiration.
In: Vernberg, F.J. & Vernberg, W.B., eds. Pollution and
physiology of marine organisms. New York, Academic Press,
p. 285-310.
35. ANDERSON, J.W., NEFF, J.M., COX, B.A., TATEM, H.E. & HIGHTOWER,
G.M., 1974.
Characteristics of dispersions and water-soluble extracts of
crude and refined oils and their toxicity to estuarine
crustaceans and fish.
Mar.Biol.(Berl.), 27, 75-88.
36. ANDERSON, J.W., NEFF, J.M. & PETROCELLI, S.R., 1974.
Sublethal effects of oil, heavy metals and PCB's on marine
organisms.
In: Khan, M.A.Q. & Bederka, J.P.Jr., eds. Survival in toxic
environments. New York, Academic Press, p. 83-121.

37. ANDERSON, J.W., RILEY, R.G. & BEAN, R.M., 1978.
Recruitment of benthic animals as a function of petroleum hydrocarbon concentrations in the sediment.
J.Fish.Res.Board Can., 35(5), 776-790.
38. ANDERSON, J.W., RILEY, R.G., BEAN, R.M., BLAYLOCK, J.W. & KIESSER, S.L., 1977.
Laboratory and field studies on the effects of petroleum hydrocarbons on benthic marine invertebrates.
In: Program Review of Environmental Effects of Energy Related Activities on Marine/Estuarine Ecosystems. U.S. Environmental Protection Agency, Energy Office, Washington D.C., p. 107-131.
39. ANDERSON, J.W., ROESIJADI, G., WOODRUFF, D.L. & CRECELIUS, E.A., 1977.
Research to determine the accumulation of organic constituents and heavy metals from petroleum-impacted sediments by marine detritivores of the Alaskan Outer Continental Shelf.
In: Outer Continental Shelf Environmental Assessment Program. Environmental assessment of the Alaskan continental shelf., Vol. XII. Effects. Boulder, Colorado, US. NOAA, p. 770-821.
40. ANDERSON, R.D., 1975.
Petroleum hydrocarbons and oyster resources of Galveston Bay, Texas.
In: Proceedings of a Joint Conference on Prevention and Control of Oil Spills, sponsored by the American Petroleum Institute, Environmental Protection Agency and U.S. Coast Guard, held in San Francisco, California, March 25-27, 1975. Washington.D.C., American Petroleum Institute, p. 541-548.
41. ANDERSON, R.D., 1978.
Benzo(a)pyrene metabolism in the American oyster Crassostrea virginica.
Environmental Protection Agency. Ecological Research Series. EPA-600/3-78-009. 18 p.
42. ANDERSON, R.D. & ANDERSON, J.W., 1974.
Oil bioassays with the American oyster, Crassostrea virginica (Gmelin).
Proc.Natl Shellfish.Assoc., 65, 38-42.
43. ANDERSON, R.D. & ANDERSON, J.W., 1976.
Effects of salinity and selected petroleum hydrocarbons on the osmotic and chloride regulation of the American oyster, Crassostrea virginica.
Physiol.Zool., 48(4), 420-429.
44. ANDREWS, A.R. & FLOODGATE, G.D., 1974.
Some observations on the interactions of marine protozoa and crude oil residues.
Mar.Biol.(Berl.), 25, 7-12.
45. ANGELIS, E. DE & GIORDANO, G.G., 1974.
Sea urchin egg development under the action of benzo(a)pyrene and 7,12-dimethylbenz(a)anthracene.
Cancer Res., 34, 1275-1280.

46. ANONYMOUS, 1969.
Oil on the Sea. Proceedings of a Symposium on the Scientific and Engineering Aspects of Oil Pollution of the Sea, sponsored by Massachusetts Institute of Technology and Woods Hole Oceanographic Institution, held in Cambridge, Mass., May 16, 1969. Plenum Press, 114 p. (Hoult, D.P., ed.).
47. ANONYMOUS, 1970.
Proceedings of a Joint Conference on Prevention and Control of Oil Spills. New York, December 15-17, 1969. New York, American Petroleum Institute, 345 p. (API, Federal Water Pollution Control Administration).
48. ANONYMOUS, 1971.
Proceedings of a Joint Conference on Prevention and Control of Oil Spills, sponsored by the American Petroleum Institute, U.S. Environmental Protection Agency and U.S. Coast Guard, held in Washington D.C., 15-17 June, 1971. Washington D.C., API, 544 p.
49. ANONYMOUS, 1971.
Biological and oceanographical survey of the Santa Barbara Channel oil spill, 1969-1970. Vol. I. Biology and bacteriology. Allan Hancock Foundation, University of Southern California, Los Angeles, 426 p. (Straughan, D., ed.).
50. ANONYMOUS, 1971.
Biological and oceanographical survey of the Santa Barbara Channel oil spill, 1969-1970. Vol. II. Physical, chemical and geological studies. Allan Hancock Foundation, University of Southern California, Los Angeles, 477 p. (Kolpack, R.L., ed.).
51. ANONYMOUS, 1971.
Santa Barbara oil spill: short-term analysis of macroplankton and fish. Washington D.C., US Environmental Protection Agency, Water Quality Office, Water Pollution Control Research Series, No. 15080 EAL 02/71, 68 p.
52. ANONYMOUS, 1972.
Offshore Petroleum Production, an Environmental Inquiry. Proceedings of the Santa Barbara Oil Symposium, sponsored by the National Science Foundation, Division of Graduate Education in Science and The Marine Science Institute, University of California, Santa Barbara, California, Dec. 16-18, 1970. National Science Foundation, 377 p.
53. ANONYMOUS, 1973.
Proceedings of Joint Conference on Prevention and Control of Oil Spills, sponsored by the American Petroleum Institute, U.S. Environmental Protection Agency and U.S. Coast Guard, held in Washington D.C., 13-15 March 1973. Washington D.C., API, 834 p.
54. ANONYMOUS, 1973.
Effects of oil and chemically dispersed oil on selected marine biota - a laboratory study. Battelle Pacific Northwest Laboratories, Report for the American Petroleum Institute on Environmental Affairs, API Publication No. 4191, 2.4-2.5.

55. ANONYMOUS, 1973.
Background Papers for a Workshop on Inputs, Fates, and Effects of Petroleum in the Marine Environment. Vol. I. Inputs, Chemical Techniques, Biological Techniques. Washington D.C., National Academy of Sciences, 373 p.
56. ANONYMOUS, 1973.
Background Papers for a Workshop on Inputs, Fates, and Effects of Petroleum in the Marine Environment. Vol. 2. Physical, Chemical and Biological Fates, Chronic, Acute and Health Effects. Washington D.C., National Academy of Sciences, 434 p.
57. ANONYMOUS, 1973.
Estuarine pollution: a bibliography. U.S. Department of the Interior, Office of Water Resources Research, Washington, Water Resources Scientific Information Centre, Report No. WRSIC 73-205, 478 p.
58. ANONYMOUS, 1973.
Oil spillage: a bibliography. 2 volumes. U.S. Department of the Interior, Office of Water Resources Research, Washington, Water Resources Scientific Information Centre, Report No. WRSIC 73-207, NTIS No. PB-221 107/108.
59. ANONYMOUS, 1974.
Proceedings of a Symposium and Workshop held at the National Bureau of Standards, Gaithersburg, Maryland, May 13-17, 1974. U.S. National Bureau of Standards, Marine Pollution Monitoring (Petroleum), Washington D.C., U.S. Government Printing Office, Spec.Publ.U.S.Natl Bur.Stand. No. 409, 316 p.
60. ANONYMOUS, 1974.
IMCO/FAO/UNESCO/WMO/WHO/IAEA/UN Joint Group of Experts on the Scientific Aspects of Marine Pollution. GESAMP, Report of the Sixth Session, WHO, Geneva 1974, p. 1-43. (Cole, H.A., ed.).
61. ANONYMOUS, 1975.
Petroleum in the marine environment. Workshop on Inputs, Fates, and the Effects of Petroleum in the Marine Environment, May 21-25, 1973. Airlie, Va., Ocean Affairs Board, National Academy of Sciences, Washington D.C., 107 p.
62. ANONYMOUS, 1975.
Oil platforms and the sea. An ecological analysis. La Jolla, California, Scripps Institution of Oceanography, Institute of Marine Resources, 98 p.
63. ANONYMOUS, 1975.
Petroleum and environmental conservation. Report of the Proceedings at the IPIECA Symposium, Teheran, 7-9 April, 1975. Teheran, International Petroleum Industry Environmental Conservation Association, 366 p.

64. ANONYMOUS, 1975.
Proceedings of a Joint Conference on Prevention and Control of Oil Spills, sponsored by the American Petroleum Institute, Environmental Protection Agency and U.S. Coast Guard, held in San Francisco, California, March 25-27, 1975. Washington D.C., American Petroleum Institute, 612 p.
65. ANONYMOUS, 1976.
Prevention and control of marine oil pollution. Regional Marine Oil Pollution Conference - Australia. Brisbane, 8-10 Nov. 1976. North Sydney, Petroleum Institute Environmental Conservation Executive, 234 p.
66. ANONYMOUS, 1976.
Sources, Effects and Sinks of Hydrocarbons in the Aquatic Environment. Proceedings of the Symposium, Washington D.C., 9-11 August 1976. Arlington, Virginia, American Institute of Biological Sciences, 578 p.
67. ANONYMOUS, 1977.
Proceedings of the 1977 Oil Spill Conference (Prevention, Behavior, Control, Cleanup), sponsored by American Petroleum Institute, Environmental Protection Agency and U.S. Coast Guard, March 8-10, 1977, New Orleans, Louisiana. Washington D.C., American Petroleum Institute, Publ. No. 4284, 640 p.
68. ANONYMOUS, 1977.
Proceedings of the 1977 Oil Spill Response Workshop, New Orleans, 15-17 February 1977. Washington D.C., US Fish and Wildlife Service, Biological Services Program, 153 p. (FWS/OBS/77-24) (Fore, P.L., ed.).
69. ANONYMOUS, 1977.
An oil spill bibliography, March 1975 to December 1976. Fisheries and Environment Canada, Fate and Effects of Oil Working Group, Economic and Technical Review Report EPS-3-EC-77-10, 112 p.
70. ANONYMOUS, 1977.
A selected bibliography on the fate and effects of oil pollution relevant to the Canadian marine environment. Fisheries and Environment Canada, Fate and Effects of Oil Working Group, Economic and Technical Review Report EPS-3-EC-77-23, 174 p.
71. ANONYMOUS, 1977.
The ARGO MERCHANT oil spill: a preliminary scientific report. Boulder, Colorado, National Oceanic and Atmospheric Administration, Environmental Research Laboratories, 323 p.
72. ANONYMOUS, 1977.
Bravorapporten. Norges Offentlige Utredninger, NOU 1977: 47, 76 p.
73. ANONYMOUS, 1977.
Bravoutblåsing: feltobservasjoner, analysresultater og beregninger tilknyttet oljen på sjøen. Institutt for Kontinental-sokkelundersøkelser (IKU), Rapport Nr. 90, Oppdrag Nr. 71, 335 p.

74. ANONYMOUS, 1977.
The Bravo blow-out. A report on marine research activities April 23 to May 5 1977 including some preliminary results. Fiskeri og Havet, Serie B, 1977, No. 5, Rapporter fra Fiskeridirektoratets Havforskningsinstitutt, Bergen, 41 p.
75. ANONYMOUS, 1977.
The Ekofisk Bravo blow-out. Compiled Norwegian contributions. International Council for the Exploration of the Sea, Fisheries Improvement Committee, Shellfish and Benthos Committee, C.M. 1977/E:55, 65 p.
76. ANONYMOUS, 1977.
Impact of oil on the marine environment. GESAMP Reports and Studies No. 6, 250 p.
77. ANONYMOUS, 1978.
The AMOCO CADIZ oil spill: A preliminary scientific report. Boulder, Colorado, National Oceanic and Atmospheric Administration, Environmental Research Laboratories, US Environmental Protection Agency, 281 p.
78. ANONYMOUS, 1978.
Recovery potential of oiled marine northern environments. J.Fish.Res.Board Can., 35, 296 p. (Stevenson, J.C., ed.).
79. ANONYMOUS, 1978.
A selected bibliography on oil spill dispersants. Fisheries and Environment Canada, Fate and Effects of Oil Working Group, Economic and Technical Review Report EPS-3-EC-78-2, 98 p.
80. ANONYMOUS, 1978.
Fate and effects of polynuclear aromatic hydrocarbons in the aquatic environment. Washington D.C., American Petroleum Institute, Publ. No. 4297, 23 p.
81. ANONYMOUS, 1979.
Om virkninger av oljeforurensning i nordlige farvann. Forskningsprogram om Havforurensninger, Rapport nr. 1, 1979, 220 p.
82. ANONYMOUS, 1979.
Proceedings of the 1979 Oil Spill Conference (Prevention, Behavior, Control, Cleanup), sponsored by the American Petroleum Institute, Environmental Protection Agency and U.S. Coast Guard, March 19-22, 1979, Los Angeles, California. Washington D.C., American Petroleum Institute, Publ. No. 4308, 728 p.
83. ANONYMOUS, 1979.
The environmental impact of refinery effluents. The Hague, CONCAWE, 241 p. (Report No. 5/79) (Prepared by CONCAWE's Water Pollution Special Task Force No. 8).
84. ANONYMOUS, 1979.
Oil and the sea. Washington D.C., American Petroleum Institute, 23 p.

85. ANONYMOUS, 1979.
Oil spills and sea farms.
Fish Farming Int., 6(3), 18-20.
86. ARHELGER, S.D., ROBERTSON, B.R. & BUTTON, D.K., 1977.
Arctic hydrocarbon biodegradation.
In: Wolfe, D.A., ed. Fate and effects of petroleum hydrocarbons in marine ecosystems and organisms. Proceedings of a Symposium, Seattle, Wash., Nov. 10-12, 1976. New York, Pergamon Press, p. 270-275.
87. ARINC, E., POHL, R.J., BEND, J.R. & PHILPOT, R.M., 1979.
Biotransformation of benzo(a)pyrene by little skate hepatic microsomes :- stimulation and reconstitution of benzo(a)pyrene hydroxylase activity.
In: Commission Internationale pour l'Exploration Scientifique de la Mer Méditerranée. IVes Journées d'Etudes sur les Pollutions Marines en Méditerranée. Workshop on Pollution of the Mediterranean. Monaco, C.I.E.S.M.M., p. 273-276.
88. ARMSTRONG, H.W., FUCIK, K., ANDERSON, J.W. & NEFF, J.M., 1977.
Effects of oilfield brine effluent on benthic organisms in Trinity Bay, Texas. API Publication No. 4291, 81 p. American Petroleum Institute, Washington D.C.
89. ARMSTRONG, H.W., FUCIK, K., ANDERSON, J.W. & NEFF, J.M., 1979.
Effects of oilfield brine effluent on sediments and benthic organisms in Trinity Bay, Texas.
Mar.environ.Res., 2(1), 55-70.
90. ARMSTRONG, J.E. & CALDER, J.A., 1978.
Inhibition of light-induced pH increase and O₂ evolution of marine microalgae by water-soluble components of crude and refined oils..
Appl.environ.Microbiol., 35, 858-862.
91. ATEMA, J., 1976.
Sublethal effects of petroleum fractions on the behaviour of the lobster, Homarus americanus, and the mud snail, Nassarius obsoletus.
In: Wiley, M., ed. Estuarine Processes, Vol. 1. New York, Academic Press, 302-312.
92. ATEMA, J., 1977.
The effects of oil on lobsters.
Oceanus, 20(4), 67-73.
93. ATEMA, J. & STEIN, L.S., 1972.
Sublethal effects of crude oil on lobster (Homarus americanus) behaviour.
Environmental Protection Agency, Tech.Rep. WHOI-72-74, 76 p. (NTIS No. PB-213 872).
94. ATEMA, J. & STEIN, L.S., 1974.
Effects of crude oil on the feeding behavior of the lobster Homarus americanus.
Environ.Pollut., 6, 77-86.

95. ATLAS, R.M., 1973.
Fate and effects of oil pollutants in extremely cold marine environments.
Pasadena, California, Jet Propulsion Laboratory, 34 p.
(Final Report May, 1973 - October, 1973).
96. ATLAS, R.M., 1974.
Fate and effects of oil pollutants in extremely cold marine environments.
Louisville, Kentucky, University of Louisville, 36 p.
(AD/A-003 554).
97. ATLAS, R.M., 1975.
Fate and effects of oil pollutants in extremely cold marine environments.
Louisville, Kentucky, University of Louisville, 42 p.
98. ATLAS, R.M., 1976.
Fate and effects of oil pollutants in extremely cold marine environments.
Louisville, Kentucky, University of Louisville, Department of Biology, 39 p. (Annual Report Jan. 1 - Dec. 31, 1976).
99. ATLAS, R.M., 1977.
Fate and effects of oil pollutants in extremely cold marine environments.
Louisville, Kentucky, University of Louisville, Department of Biology, 52 p. (Annual Report No. 5).
100. ATLAS, R.M., 1977.
Studies on petroleum degradation in the Arctic.
In: Wolfe, D.A., ed. Fate and effects of petroleum hydrocarbons in marine ecosystems and organisms. Proceedings of a Symposium, Seattle, Wash., Nov. 10-12, 1976. New York, Pergamon Press, p. 261-269.
101. ATLAS, R.M. & BARTHA, R., 1972.
Biodegradation of petroleum in seawater at low temperatures.
Can.J.Microbiol., 18, 1851-1855.
102. ATLAS, R.M. & BARTHA, R., 1973.
Fate and effects of polluting petroleum in the marine environment.
Residue Rev., 49, 49-85.
103. ATLAS, R.M., HOROWITZ, A. & BUDOSH, M., 1978.
Prudhoe crude oil in Arctic marine ice, water, and sediment ecosystems: degradation and interactions with microbial and benthic communities.
J.Fish.Res.Board Can., 35(5), 585-590.
104. ATLAS, R.M., SCHOFIELD, E.A., MORELLI, F.A. & CAMERON, R.E., 1976.
Effects of petroleum pollutants on Arctic microbial populations.
Environ.Pollut., 10, 35-43.

105. AUGENFELD, J.M., 1980.
Effects of Prudhoe Bay crude oil contamination in sediment
working rates of Abarenicola pacifica.
Mar.environ.Res., in press.
106. AUGENFELD, J.M., ANDERSON, J.W., WOODRUFF, D.L. & WEBSTER, J.L.,
1980.
Effects of Prudhoe Bay crude oil contaminated sediments on
Protobrachia staminea (Mollusca:Pelecypoda): Hydrocarbon content,
condition index, free amino acid level.
Mar.environ.Res., in press.
107. AVOLIZI, R.J. & NUWAYHID, M.A., 1974.
Effects of crude oil and dispersants on bivalves.
Mar.Pollut.Bull., 5, 149-153.
108. AYERS, R.C., JAHNS, H.O. & GLAESER, J.L., 1974.
Oil spills in the Arctic ocean: extent of spreading, and
possibility of large-scale thermal effects.
Science (Wash.D.C.), 186(4166), 843-844.
109. BAK, R.P.M. & ELGERSHUIZEN, J.H.B.W., 1976.
Patterns of oil-sediment rejection in corals.
Mar.Biol. (Berl.), 37, 105-113.
110. BAKER, J.M., 1970.
Oil pollution in salt marsh communities.
Mar.Pollut.Bull., 1, 27-28.
111. BAKER, J.M., 1970.
The effects of oil on plants.
Environ.Pollut., 1, 27-44.
112. BAKER, J.M., 1971.
Seasonal effects of oil pollution on salt-marsh vegetation.
Oikos, 22(1), 106-110.
113. BAKER, J.M., 1971.
The effects of a single oil spillage.
In: Cowell, E.B., ed. The ecological effects of oil pollution
on littoral communities. Barking, Essex, Applied Science
Publishers, p. 16-20.
114. BAKER, J.M., 1971.
Successive spillages.
In: Cowell, E.B., ed. The ecological effects of oil pollution
on littoral communities. Barking, Essex, Applied Science
Publishers, p. 21-32.
115. BAKER, J.M., 1971.
Refinery effluent.
In: Cowell, E.B., ed. The ecological effects of oil pollution
on littoral communities. Barking, Essex, Applied Science
Publishers, p. 33-43.

116. BAKER, J.M., 1971.
Seasonal effects.
In: Cowell, E.B., ed. The ecological effects of oil pollution on littoral communities. Barking, Essex, Applied Science Publishers, p. 44-51.
117. BAKER, J.M., 1971.
Effects of cleaning.
In: Cowell, E.B., ed. The ecological effects of oil pollution on littoral communities. Barking, Essex, Applied Science Publishers, p. 52-57.
118. BAKER, J.M., 1971.
Oil and salt-marsh soil.
In: Cowell, E.B., ed. The ecological effects of oil pollution on littoral communities. Barking, Essex, Applied Science Publishers, p. 62-71.
119. BAKER, J.M., 1971.
Growth stimulation following oil pollution.
In: Cowell, E.B., ed. The ecological effects of oil pollution on littoral communities. Barking, Essex, Applied Science Publishers, p. 72-77.
120. BAKER, J.M., 1971.
Comparative toxicities of oils, oil fractions, and emulsifiers.
In: Cowell, E.B., ed. The ecological effects of oil pollution on littoral communities. Barking, Essex, Applied Science Publishers, p. 78-87.
121. BAKER, J.M., 1971.
The effects of oils on plant physiology.
In: Cowell, E.B., ed. The ecological effects of oil pollution on littoral communities. Barking, Essex, Applied Science Publishers, p. 88-98.
122. BAKER, J.M., 1973.
Biological effects of refinery effluents.
In: Proceedings of the Joint Conference on Prevention and Control of Oil Spills. Washington D.C., American Petroleum Institute, p. 715-724.
123. BAKER, J.M., 1973.
Ecological effects of refinery effluents.
Rep.Oil Pollut.Res.Unit, Field Stud.Council, 1972, p. 7-13.
124. BAKER, J.M., 1973.
Recovery of salt marsh vegetation from successive oil spillages.
Environ.Pollut., 4(3), 223-230.
125. BAKER, J.M., 1975.
The effects of oil pollution on Spartina anglica.
In: Stranack, F. & Coughlin, J., eds. Rothschild Symposium - Spartina in the Solent, Exbury, 4th June, 1975. Exbury, Hampshire Solent Protection Society/Central Electricity Generating Board (Fawley), p. 22-24.

126. BAKER, J.M., 1976.
Marine ecology and oil pollution: Proceedings of an Institute of Petroleum/Field Studies Council Meeting, held at Aviemore, Scotland, 21-23 April 1975. Barking, Essex, Applied Science Publishers, 566 p.
127. BAKER, J.M., 1976.
Ecological changes in Milford Haven during its history as an oil port.
In: Baker, J.M., ed. Marine ecology and oil pollution. Barking, Essex, Applied Science Publishers, p. 55-66.
128. BAKER, J.M., 1976.
Investigation of refinery effluent effects through field surveys.
In: Baker, J.M., ed. Marine ecology and oil pollution. Barking, Essex, Applied Science Publishers, p. 201-225.
129. BAKER, J.M., 1976.
Experimental investigation of refinery effluents.
In: Baker, J.M., ed. Marine ecology and oil pollution. Barking, Essex, Applied Science Publishers, p. 247-254.
130. BAKER, J.M., 1976.
Effects of oil on the marine environment.
In: Prevention and Control of Marine Oil Pollution. Regional Marine Oil Pollution Conference, Australia, Brisbane, 8-10 Nov., 1976.. North Sydney, Petroleum Institute Environmental Conservation Executive (PIECE), 17 p.
131. BAKER, J.M., 1976.
Environmental effect of oil and the chemicals used to control it on the shore and splash zones.
In: Warldey-Smith, J.,ed.The Control of Oil Pollution on the Sea and Inland Waters. London, Graham and Trotman Ltd., p. 57-72.
132. BAKER, J.M., 1978.
Marine ecology and oil pollution.
J.Water Pollut.Control Fed., 50(3), 442-449.
133. BAKER, J.M., 1979.
The environmental impact of refinery effluents. Part III: Ecological impact of refinery effluents in the marine and estuarine environment.
In: CONCAWE. The environmental impact of refinery effluents, III-1 to III-77. The Hague, CONCAWE. (Report No. 5/79)
(Prepared by CONCAWE's Water Pollution Special Task Force No. 8).
134. BAKER, J.M., 1979.
Responses of salt marsh vegetation to oil spills and refinery effluents.
In: Jeffries, R.L. & Davy, A.J., eds. Ecological processes in coastal environments. The First European Ecological Symposium and the 19th Symposium of the British Ecological Society, Norwich, 12-16 Sept. 1977. Oxford, Blackwell Scientific Publications, p. 529-542.

135. BAKER, J.M., ADDY, J., DICKS, B., HAINSWORTH, S., LEVELL, D., CRAPP, G. & OTTWAY, S., 1977.
Ecological effects of marine oil pollution.
In: McIntyre, A.D. & Whittle, K.J., eds. Petroleum hydrocarbons in the marine environment. Proceedings ICES Workshop, Aberdeen 9-12 Sept., 1975, International Council for the Exploration of the Sea, 171, p. 196-201.
136. BAKER, J.M., CAMPODONICO, I., GUZMAN, L., TEXERA, J.J., TEXERA, B., VENEGAS, C. & SANHUEZA, A., 1975.
An oil spill in the Straits of Magellan.
In: Baker, J.M., ed. Marine Ecology and Oil Pollution. Proceedings of an Institute of Petroleum/Field Studies Council Meeting, Aviemore, Scotland, 1975. Barking, Essex, Applied Science Publishers Ltd., p. 441-472.
137. BAKER, J.M. & CRAPP, G.B., 1974.
Toxicity tests for predicting the ecological effects of oil and emulsifier pollution on littoral communities.
In: Beynon, L.R. & Cowell, E.B., eds. Ecological aspects of toxicity testing of oils and dispersants. Barking, Essex, Applied Science Publishers, p. 23-40.
138. BAKKE, T. & JOHNSEN, T.M., 1979.
Response of a subtidal sediment community to low levels of oil hydrocarbons in a Norwegian fjord.
In: Proceedings 1979 Oil Spill Conference (Prevention, Behavior, Control, Cleanup), Washington D.C., American Petroleum Institute, Publ. No. 4308, p. 633-639.
139. BAKKE, T. & SKJOLDAL, H.R., 1979.
Effects of toluene on the survival, respiration and adenylate system of a marine isopod.
Mar.Pollut.Bull., 10(4), 111-115.
140. BALAEV, L.A., MAZMANIDI, N.D. & BAZHASHVILI, T.R., 1976.
The reactions of some Black Sea organisms in an electric field exposed to dissolved petroleum products.
J.Ichthyol., 16, 647-652.
141. BARNETT, C.J. & KONTOGIANNIS, J.E., 1975.
The effect of crude oil fractions on the survival of a tidepool copepod, Tigriopus californicus.
Environ.Pollut., 8(1), 45-54.
142. BARNETT, J. & TOEWS, D., 1978.
The effects of crude oil and the dispersant, Oilsperse 43, on respiration and coughing rates in Atlantic salmon (Salmo salar).
Can.J.Zool., 56(2), 307-310.
143. BARNETT, S.M., VELANKAR, S.K. & HOUSTON, C.W., 1974.
Mechanism of hydrocarbon uptake by microorganisms.
Biotechnol.Bioeng., 16(6), 863-865.
144. BARRETT, R.T., 1979.
Small oil spill kills 10-20,000 seabirds in North Norway.
Mar.Pollut.Bull., 10(9), 253-254.

145. BARRY, M. & YEVICH, P.P., 1975.
The ecological, chemical and histopathological evaluation
of an oil spill site. Part III. Histopathological studies.
Mar.Pollut.Bull., 6(11), 171-172.
146. BARSZCZ, C., YEVICH, P.P., BROWN, L.R., YARBROUGH, J.D. &
MINCHEW, C.D., 1978.
Chronic effects of three crude oils on oysters suspended in
estuarine ponds.
J.environ.Pathol.Toxicol., 1(6), 879-896.
147. BARTHA, R. & ATLAS, R.M., 1977.
The microbiology of aquatic oil spills.
Adv.appl.Microbiol., 22, 226-266.
148. BARTON, D.R. & WALLACE, R.R., 1979.
The effects of an experimental spillage of oil sands tailing
sludge on benthic invertebrates.
Environ.Pullut., 18(4), 305-312.
149. BATTERTON, J.C., WINTERS, K. & VAN BAALEN, C., 1977.
Toxicity of crude oils and fuel oils presented directly to
microalgae.
J.Phycol., 13(suppl.), 6. (Abstract)
150. BATTERTON, J.C., WINTERS, K. & VAN BAALEN, C., 1978.
Sensitivity of three microalgae to crude oils and fuel oils.
Mar.environ.Res., 1(1), 31-42.
151. BAYNE, B.L., MOORE, M.N., WIDDOWS, J., LIVINGSTONE, D.R. & SALKELD,
P., 1979.
Measurement of the responses of individuals to environmental
stress and pollution: studies with bivalve molluscs.
Phil.Trans.R.Soc., 286, 563-581.
152. BEAN, R.M., VANDERHORST, J.R. & WILKINSON, P., 1974.
Interdisciplinary study of the toxicity of petroleum to
marine organisms.
Richland, Washington, Battelle Pacific Northwest Laboratories,
48 p.
153. BELLAMY, D.F., CLARKE, D.M., JOHN, D.M., JONES, D., WHITTICK, A. &
DARKE, T., 1967.
Effects of pollution from the TORREY CANYON on littoral and
sublittoral ecosystems.
Nature (Lond.), 216, 1170-1173.
154. BELLAN, G., REISH, J. & FORET, J.P., 1972.
The sublethal effects of a detergent on the reproduction,
development and settlement in the polychaetous annelid
Capitella capitata.
Mar.Biol. (Berl.), 14, 183-188.

155. BEND, J.F., HALL, P. & FOUREMAN, G.L., 1976.
Comparison of benzo(a)pyrene hydroxylase (aryl hydrocarbon hydroxylase, AHH) activities in hepatic microsomes from untreated and 1,2,3,4-dibenzanthracene (DBA)-induced male little skates (Raja erinacea).
Bull.Mt Desert Isl.biol.Lab., 16, 3-5.
156. BENDER, M.E., SHEARLS, E.A., AYRES, R.P., HERSHNER, C.H. & HUGGETT, R.J., 1977.
Ecological effects of experimental oil spills on Eastern coastal plain estuarine ecosystems.
In: Proceedings 1977 Oil Spill Conference (Prevention, Behavior, Control, Cleanup), Washington D.C., American Petroleum Institute, Publ. No. 4284, p. 505-510.
157. BENDER, M.E., SHEARLS, E.A., MURRAY, L. & HUGGETT, R.J., 1979.
Effects of experimental oil spills in coastal plain estuaries.
In: Abstracts of the 14th European Marine Biology Symposium, Protection of Life in the Sea, Helgoland, 23-29 Sept., 1979, p. 5-6.
158. BENIJTS, F. & VERSICHELE, D., 1975.
The role of water-sediment interaction in the Ostend sluice-dock with regard to the toxicity of pollutants to invertebrate larvae.
In: Koeman, J.H. & Strik, J.J.T.W.A., eds. Sublethal effects of toxic chemicals on aquatic animals. Proceedings of the Swedish-Netherland Symposium, Wageningen, The Netherlands. Amsterdam, Elsevier Scientific Publishing Company, p. 221-234.
159. BENVILLE, P.E.Jr. & KORN, S., 1977.
The acute toxicity of six monocyclic aromatic crude oil components to striped bass (Morone saxatilis) and bay shrimp (Crago franciscorum).
Calif.Fish Game, 63, 204-209.
160. BERDUGO, V., HARRIS, R.P. & O'HARA, S.C., 1977.
The effect of petroleum hydrocarbons on reproduction of an estuarine planktonic copepod in laboratory cultures.
Mar.Pollut.Bull., 8(6), 138-143.
161. BESLIER, A., BIRRIEN, J.L., CABIOCH, L., DOUVILLE, J.L., LARSONNEUR, C. & LE BORGNE, L., 1979.
Distribution of hydrocarbons from the AMOCO CADIZ oil spill in sublittoral sediments, north of Brittany.
In: Abstracts from the 14th European Marine Biology Symposium, Protection of Life in the Sea, Helgoland, 23-29 Sept., 1979, p. 8.
162. BEYNON, L.R., 1971.
Oil spill dispersants.
J.Inst.Petrol., 57 (553), 1-17.
163. BEYNON, L.R. & COWELL, E.B., 1974.
Ecological aspects of toxicity testing of oils and dispersants.
Barking, Essex, Applied Science Publishers, 149 p.

164. BIERI, R.H. & STAMOUDIS, V.C., 1977.
The fate of petroleum hydrocarbons from a No. 2 fuel oil spill
in a seminatural estuarine environment.
In: Wolfe, D.A., ed. Fate and effects of petroleum hydrocarbons
in marine ecosystems and organisms. New York, Pergamon Press,
p. 332-344.
165. BIGFORD, T.E., 1977.
Effects of oil on behavioural responses to light, pressure and
gravity in larvae of the rock crab Cancer irroratus.
Mar.Biol.(Berl.), 43(2), 137-148.
166. BLACKMAN, R.A.A., 1972.
Effects of sunken crude oil on the feeding and survival of the
brown shrimp Crangon crangon.
International Council for the Exploration of the Sea, C.M.
1972/K:13, 8 p.
167. BLACKMAN, R.A.A., 1974.
Effects of sunken oil on the feeding of plaice on brown shrimps
and other benthos.
Copenhagen, International Council for the Exploration of the
Sea, C.M.1974/E:24, 7 p.
168. BLACKMAN, R.A.A., 1974.
Toxicity of oil-sinking agents.
Mar.Pollut.Bull., 5(8), 116-118.
169. BLACKMAN, R.A.A., FRANKLIN, F.L., NORTON, M.G. & WILSON, K., 1978.
New procedures for the toxicity testing of oil slick dispersants
in the United Kingdom.
Mar.Pollut.Bull., 9(9), 234-238.
170. BLACKMAN, R.A.A. & MACKIE, P.R., 1973.
Preliminary results of an experiment to measure the uptake of
n-alkane hydrocarbons by fish.
International Council for the Exploration of the Sea, Fisheries
Improvement Committee, C.M. 1973/E:23, 9 p.
171. BLANK, H., DAVE, G. & GUSTAFSSON, K., 1978.
An annotated literature survey of methods for determination of
effects and fate of pollutants in aquatic environments.
National Swedish Environment Protection Board Report, SNV PM
1050, 398 p.
172. BLANTON, W.G. & ROBINSON, M.C., 1973.
Some acute effects of low boiling petroleum fractions on the
cellular structures of fish gills under field conditions.
Publ.La.State Univ., LSU-SG-73-01, p. 265-273.
173. BLEAKLEY, R.J. & BOADEN, P.J.S., 1974.
Effects of an oil spill remover on beach meiofauna.
Annls Inst.océanogr.Monaco, 50, 51-58.
174. BLUMER, M., 1967.
Hydrocarbons in the digestive tract and liver of basking shark.
Science (Wash.D.C.), 156(3773), 390-391.

175. BLUMER, M., 1972.
Submarine seeps: are they a major source of open ocean oil pollution?
Science (Wash.D.C.), 176, 1257-1258.
176. BLUMER, M., 1972.
Oil contamination and the living resources of the sea.
In: Ruivo, M., ed. Marine pollution and sea life. London, Fishing News (Books), p. 476-481.
177. BLUMER, M., 1976.
Polycyclic aromatic compounds in nature.
Sci.Amer., 234(3), 34-45.
178. BLUMER, M., EHRHARDT, M. & JONES, J.H., 1973.
The environmental fate of stranded oil.
Deep-Sea Res., 20, 239-259.
179. BLUMER, M., HUNT, J.M., ATEMA, J. & STEIN, L.S., 1973.
Interaction between marine organisms and oil pollution.
Washington D.C., US Environmental Protection Agency, Office of Research and Monitoring, Ecological Research Series No. EPA-R3-73-042, 97 p.
180. BLUMER, M. & SASS, J., 1972.
Oil pollution: Persistence and degradation of spilled fuel.
Science (Wash.D.C.), 176(4039), 1120-1122.
181. BLUMER, M., SOUZA, G. & SASS, J., 1970.
Hydrocarbon pollution of edible shellfish by an oil spill (Buzzards Bay, Mass.).
Mar.Biol.(Berl.), 5(3), 195-202.
182. BLUNDO, R., 1978.
The toxic effects of the water soluble fractions of No. 2 fuel oil and of three aromatic hydrocarbons on the behaviour and survival of barnacle larvae.
Countr.mar.Sci., 21, 25-38.
183. BOEHM, P.D. & QUINN, J.G., 1976.
The effect of dissolved organic matter in sea water on the uptake of mixed individual hydrocarbons and No. 2 fuel oil by a marine filter-feeding bivalve (Mercenaria mercenaria).
Estuarine coastal mar.Sci., 4(1), 93-105.
184. BOEHM, P.D. & QUINN, J.G., 1977.
The persistence of chronically accumulated hydrocarbons in the hard-shell clam Mercenaria mercenaria.
Mar.Biol. (Berl.), 44, 227-233.
185. BOESCH, D.F., 1973.
Biological effects of chronic oil pollution on coastal ecosystems.
In: Background Papers for a Workshop on Inputs, Fates and Effects of Petroleum in the Marine Environment. Vol. 2 Physical, Chemical and Biological Fates, Chronic, Acute and Health Effects. Washington D.C., National Academy of Sciences, p. 603-618.

186. BOESCH, D.F., 1975.
Potential effects of oil and gas development on benthic organisms.
In: Cronin, L.E. & Smith, R.E., eds. Marine environmental implications of offshore and gas development in the Baltimore Canyon Region of the Mid-Atlantic coast. Proceedings of the Estuarine Research Federation Outer Continental Shelf Conference and Workshop, Dec. 2-4, 1974. Wachapreague, Virginia, Estuarine Research Federation, p. 421-430. (ERF-75-1)
187. BOESCH, D.F. & HERSHNER, C.H., 1974.
The ecological effects of oil pollution in the marine environment.
In: Boesch, D.F., Hershner, C.H. & Milgram, J.H., eds. Oil spills and the marine environment: A report to the Energy Policy Project of the Ford Foundation. Cambridge, Massachusetts, Ballinger Publishing Co., p. 1-55.
188. BOESCH, D.F., HERSHNER, C.H. & MILGRAM, J.H., 1974.
Oil spills and the marine environment: A report to the Energy Policy Project of the Ford Foundation.
Cambridge, Massachusetts, Ballinger Publishing Company, 114 p.
189. BOIKO, E.V. & PETROV, YU.M., 1975.
Role of mussels Mytilus edulis in removal of petroleum products from seawater (under experimental conditions).
Hydrobiol.J.(Engl.Transl.Gidrobiol.Zh.), 11(2), 19-24.
190. BONEY, A.D., 1970.
Toxicity studies with an oil spill emulsifier and the green alga Prasinocladus marinus.
J.mar.biol.Assoc.U.K., 50, 461-473.
191. BONEY, A.D., 1974.
Aromatic hydrocarbons and the growth of marine algae.
Mar.Pollut.Bull., 5(12), 185-186.
192. BONEY, A.D., 1979.
Long-term observations on the intertidal lichen Lichina pygmaea Ag.
J.mar.biol.Assoc.U.K., 59, 801-802.
193. BORIES, G., TULLIEZ, J., PELTIER, J.-C. & FLECKINGER, R., 1976.
Change in the concentration of aliphatic and naphthenic hydrocarbons, as well as 3,4-benzopyrene, in mussels from a coastal zone polluted by a spill of fuel oil.
C.R.hebd.Séances Acad. Sci.Sér.D Sci.nat., 282, 1641-1644.
194. BOTT, T.L. & ROGENMUSER, K., 1978.
Effects of No. 2 fuel oil, Nigerian crude oil, and used Crankcase oil on attached algal communities: acute and chronic toxicity of water-soluble constituents.
Appl.environ.Microbiol., 36(5), 673-682.
195. BOTT, T.L., ROGENMUSER, K. & THORNE, P., 1978.
Effects of No. 2 fuel oil, Nigerian crude oil, and used Crankcase oil on benthic algal communities.
J.environ.Sci.Health, 13(10), 751-780.

196. BOURNE, E.W. & JONES, R.W., 1973.
Effects of 7,12-dimethyl-benz(a)anthracene (DMBA) in fish
cells in vitro.
Trans.Amer.microsc.Soc., 92, 140-142.
197. BOURNE, W.R.P., PARRACK, J.D. & POTTS, G.R., 1967.
Birds killed in the TORREY CANYON disaster.
Nature (Lond.), 215, 1123-1125.
198. BRANDAL, P.O., GRAHL-NIELSEN, O., NEPPELBERG, T., PALMORK, K.H.,
WESTRHEIM, K. & WILHELMSEN, S., 1976.
Oil-tainting of fish, a laboratory test on salmon and saithe.
International Council for the Exploration of the Sea.
CM 1976/E:33. 6 p.
199. BRAVO, H., SALAZAR, S., BOTELLO, A.V. & MANDELLI, E.F., 1978.
Polyaromatic hydrocarbons in oysters from coastal lagoons
along the eastern coast of the Gulf of Mexico, Mexico.
Bull.environ.Contam.Toxicol., 19, 171-176.
200. BRENNIMAN, G.R., ANVER, M.R., HARTUNG, R. & ROSENBERG, S.H., 1979.
Effects of outboard motor exhaust emissions on goldfish
(*Carassius auratus*).
J.environ.Pathol.Toxicol., 2(6), 1267-1282.
201. BREUIL, C. & SHINDLER, D.B., 1977.
Effects of crude oil on bacterial and fungal populations in
freshwater artificial ponds.
ASM Abstr.Annual Meeting, 77, p. 269. (Abstract No. Q45)
202. BRIDIE, A.L., WOLFF, C.J.M. & WINTER, M., 1979.
The acute toxicity of some petrochemicals to goldfish.
Water Res., 13(7), 623-626.
203. BRIDIE, A.L., WOLFF, C.J.M. & WINTER, M., 1979.
BOD and COD of some petrochemicals.
Water Res., 13(7), 627-630.
204. BROCKSEN, R.W. & BAILEY, H.T., 1973.
Respiratory response of juvenile Chinook salmon and striped
bass exposed to benzene, a water-soluble component of crude oil.
In: *Proceedings of the Joint Conference on Prevention and
Control of Oil Spills*. Washington D.C., American Petroleum
Institute, p. 783-791.
205. BRODERSEN, C.C., RICE, S.D., SHORT, J.W., MECKLENGBURG, T.A. &
KARINEN, J.F., 1977.
Sensitivity of larval and adult Alaskan shrimp and crabs to
acute exposures of the water-soluble fraction of Cook Inlet
crude oil.
In: *Proceedings of the 1977 Oil Spill Conference*, New Orleans,
La., March 8-10, 1977. American Petroleum Institute, Publication
No. 4284, Washington D.C., p. 575-578.

206. BROOKS, J.M., FRYXELL, G.A., 1977.
Gulf Underwater Flare Experiment (GUFEX): Effects of hydrocarbons on phytoplankton.
Texas A&M University, College Station, Texas, 33 p.
NTIS No. PB-276 482/7SL.
207. BROWN, A.C., BAISSAC, P. de B. & LEON, B., 1974.
Observations on the effects of crude oil pollution on the sandy beach snail, Bullia (Gastropoda: Prosobranchiata).
Trans.R.Soc.S.Africa, 41, 19-24.
208. BROWN, D.H., 1972.
The effect of Kuwait crude oil and a solvent emulsifier on the metabolism of the marine lichen, Lichina pygmaea.
Mar.Biol.(Berl.), 12(4), 309-315.
209. BROWN, D.H., 1973.
Toxicity studies on the components of an oil-spill emulsifier using Lichina pygmaea and Xanthoria parietina.
Mar.Biol.(Berl.), 18, 291-297.
210. BROWN, E.R., HAZDRA, J.J., KEITH, L., GREENSPAN, I., KWAPINSKI, J.B.G. & BEAMER, P., 1973.
Frequency of fish tumors found in a polluted watershed as compared to nonpolluted Canadian waters.
Cancer Res., 33, 189-198.
211. BROWN, L.R., 1977.
Consequences of oil pollution in the estuarine environment of the Gulf of Mexico.
In: United States. Environmental Protection Agency, Office of Water Planning and Standards. Estuarine Pollution Control and Assessment: Proceedings of a Conference. Vol. 2. Washington D.C., US EPA, p. 401-408.
212. BROWN, R.A. & HUFFMAN, H.L.Jr., 1976.
Hydrocarbons in open ocean waters.
Science (Wash.D.C.), 191, 847-849.
213. BROWN, R.A. & PANCIROV, R.J., 1979.
Polynuclear aromatic hydrocarbons in Baltimore Canyon fish.
Environ.Sci.Technol., 13(7), 878-901.
214. BROWN, R.G., GILLEPSIE, D.I., LOCK, A.R., PEARCE, P.A. & WATSON, G.H., 1973.
Bird mortality from oil slicks off eastern Canada. February-April, 1970.
Can.Field-Nat., 87, 225-234.
215. BROWNELL, R.L. Jr., 1971.
Whales, dolphins and oil pollution.
In: Straughan, D., ed. Biological and oceanographical survey of the Santa Barbara oil spill, 1969-1970. Vol. I. Biology and bacteriology. Allan Hancock Foundation, University of Southern California, Los Angeles, p. 255-276.

216. BRUNIES, A., 1971.
Mineralölgeschmack bei Miesmuscheln.
Arch.Lebensmittelhyg., 22, 63-64.
217. BUDOSH, M. & ATLAS, R.M., 1977.
Toxicity of oil slicks to Arctic amphipods.
Arctic, 30(2), 85-92.
218. BUELL, J.W. & KACZNYSKI, V.W., 1975.
Baseline study program, North Puget Sound. Biological oil impact literature review. 2 vols. vol. 1: Text, vol. 2: Bibliography. Prepared by Beak Consultants, Inc., Portland, Ore., for Washington State Department of Ecology, Olympia, Wash. NTIS No. PB-254 291/292.
219. BUGGE, H.C., 1976.
The North Sea problem.
In: Hood, D.W. & Burrell, D.C., eds. Assessment of the Arctic marine environment: selected topics. Fairbanks, University of Alaska, Institute of Marine Science, p. 45-54. (Occ.Publ. No. 4)
220. BURNS, K.A., 1976.
Microsomal mixed function oxydases in an estuarine fish, Fundulus heteroclitus, and their induction as a result of environmental contamination.
Comp.Biochem.Physiol.B Comp.Biochem., 53, 443-446.
221. BURNS, K.A., 1976.
Hydrocarbon metabolism in intertidal fiddler crab Uca pugnax.
Mar.Biol.(Berl.), 36(1), 5-11.
222. BURNS, K.A. & TEAL, J.M., 1971.
Hydrocarbon incorporation into the salt marsh ecosystem from the West Falmouth oil spill.
Tech.Rep.Woods Hole Oceanogr.Inst., 71-69, 24 p.
223. BURNS, K.A. & TEAL, J.M., 1973.
Hydrocarbons in the pelagic Sargassum community.
Deep-Sea Res., 20, 207-211.
224. BURNS, K.A. & TEAL, J.M., 1979.
The West Falmouth oil spill: hydrocarbons in the salt marsh ecosystem.
Estuarine coastal mar.Sci., 8(4), 349-360.
225. BURROWS, P., ROWLEY, C. & OWEN, D., 1974.
TORREY CANYON: a case study in accidental pollution.
Scott.J.polit.Econ., 11, 237-258.
226. BURWOOD, R. & SPEERS, G.C., 1974.
Photo-oxidation as a factor in the environmental dispersal of crude oil.
Estuarine coastal mar.Sci., 2(2), 117-135.

227. BUTLER, J.N., MORRIS, B.F. & SLEETER, T.D., 1976.
The fate of petroleum in the open ocean.
In: Sources, Effects and Sinks of Hydrocarbons in the Aquatic Environment. Proceedings of the Symposium, Washington D.C., 9-11 August, 1976. Arlington, Virginia, American Institute of Biological Sciences, p. 288-297.
228. BUTLER, M.J.A., BERKES, F. & POWLES, H., 1974.
Biological aspects of oil pollution in the marine environment: a review. Enlarged edition.
Manuscr. Rep. Mar. Sci. Centre, McGill University, No. 22 A, 133 p.
229. BYRNE, C.J. & CALDER, J.A., 1977.
Effect of the water-soluble fraction of crude, refined and waste oils on the embryonic and larval stages of the quahog clam Mercenaria sp.
Mar. Biol. (Berl.), 40, 225-231.
230. CABIOCH, L., DAUVIN, J.-C. & GENTIL, F., 1978.
Preliminary observations on pollution of the sea bed and disturbance of sublittoral communities in Northern Brittany by oil from the AMOCO CADIZ.
Mar. Pollut. Bull., 9(11), 303-306.
231. CABIOCH, L., DAUVIN, J.C., GENTIL, F., MORA, J., RETIERE, C., RIVAIN, F. & RODRIGUEZ, C., 1979.
Effects of hydrocarbons from the AMOCO CADIZ oil spill on the sublittoral benthos, north of Brittany.
In: Abstracts from the 14th European Marine Biology Symposium, Protection of Life in the Sea, Helgoland, 23-29 Sept. 1979, p. 16.
232. CALDER, J.A., 1977.
Investigations of breakdown and sublethal biological effects in trace petroleum constituents in the marine environment.
In: Giam, C.S., ed. Pollutant effects on marine organisms. Proceedings of a Workshop, College Station, Texas, May 16-19, 1976. Lexington, D.C. Heath and Company, p. 31-32.
233. CALDER, J.A. & LADER, J.H., 1976.
Effect of dissolved aromatic hydrocarbons on the growth of marine bacteria in batch culture.
Appl. environ. Microbiol., 32(1), 95-101.
234. CALDWELL, R.S., 1976.
Acute and chronic toxicity of seawater extracts of Alaskan crude oil to zoeae of the Dungeness crab, Cancer magister Dana.
In: Environmental assessment of the Alaskan continental shelf. Vol. 8., Boulder, Colorado, NOAA Environmental Research Laboratories, p. 345-375.
235. CALDWELL, R.S., CALDARONE, E.M. & MALLON, M.H., 1977.
Effects of a seawater-soluble fraction of Cook Inlet crude oil and its major aromatic components on larval stages of the Dungeness crab, Cancer magister Dana.
In: Wolfe, D.A., ed. Fate and effects of petroleum hydrocarbons in marine ecosystems and organisms. Proceedings of a Symposium, Seattle, Wash., Nov. 10-12, 1976. New York, Pergamon Press, p. 210-220.

236. CANONNE, M.P., 1976.
La pollution de la mer par les hydrocarbures.
Ann.hydrogr., 2(3), 109 p.
237. CARR, R.S. & REISH, D.J., 1977.
The effect of petroleum hydrocarbons on the survival and life history of polychaetous annelids.
In: Wolfe, D.A., ed. Fate and effects of petroleum hydrocarbons in marine organisms and ecosystems. Proceedings of a Symposium, 10-12 Nov. 1976. Seattle, Wash., New York, Pergamon Press, p. 168-173.
238. CARR, R.S. & REISH, D.J., 1978.
Studies on the Mytilus edulis community in Alamitos Bay, California: VII. The influence of water-soluble petroleum hydrocarbons on byssal thread formation.
Veliger, 21(2), 283-287.
239. CARTHY, J.D. & ARTHUR, D.R., editors, 1968.
The biological effects of oil pollution on littoral communities.
London, Field Studies Council, 198 p.
240. CEAS, M.P., 1974.
Effects of 3-4 benzopyrene on sea urchin egg development.
Acta Embryol.exp., 3, 267-272.
241. CHAMBERS, J.E., 1979.
Induction of microsomal mixed-function oxidase system components in striped mullet by short-term exposure to crude oil.
Toxicol.Lett., 4(4), 227-230.
242. CHAMBERS, J.E., HEITZ, J.R., MCCORKLE, F.M. & YARBROUGH, J.D., 1978.
The effects of crude oil on enzymes in the brown shrimp (Penaeus sp.).
Comp.Biochem.Physiol. C Comp.Pharmacol., 61(1), 29-32.
243. CHAMBERS, J.E., HEITZ, J.R., MCCORKLE, F.M. & YARBROUGH, J.D., 1979.
Enzyme activities following exposure to crude oil in a simulated ecosystem. I. American oysters and brown shrimp.
Environ.Res., 20, 133-139.
244. CHAMBERS, J.E., HEITZ, J.R., MCCORKLE, F.M. & YARBROUGH, J.D., 1979.
Enzyme activities following exposure to crude oil in a simulated ecosystem. II. Striped mullet.
Environ.Res., 20, 140-147.
245. CHAMBERS, J.E., YARBROUGH, J.D. & HEITZ, J.R., 1975.
The effect of crude oil exposure on enzymes in the shrimp hepatopancreas.
ASB (Assoc.southeast.Biol.) Bull., 22(2), 45. (Abstract)

246. CHAN, E.I., 1977.
Oil pollution and tropical littoral communities: biological effects of the 1975 Florida Keys oil spill.
In: Proceedings 1977 Oil Spill Conference (Prevention, Behavior, Control, Cleanup), Washington D.C., American Petroleum Institute, Publ. No. 4284, p. 539-542.
247. CHAN, G.L., 1972.
A study of the effects of the San Francisco oil spill on marine organisms: Part I.
Rockville, Maryland, NOAA, Office of Sea Grant, 35 p.
(NOAA-72090817)
248. CHAN, G.L., 1973.
A study of the effects of the San Francisco oil spill on marine organisms.
In: Proceedings of a Joint Conference on the Prevention and Control of Oil Spills, Washington D.C., March 13-15, 1973.
Washington D.C., American Petroleum Institute, p. 741-782.
249. CHAN, G.L., 1975.
A study of the effects of the San Francisco oil spill on marine life. Part II. Recruitment.
In: Proceedings of a Joint Conference on Prevention and Control of Oil Spills, San Francisco, California, March 25-27, 1975.
Washington D.C., American Petroleum Institute, p. 457-461.
250. CHAN, G.L., 1977.
The five-year recruitment of marine life after the 1971 San Francisco oil spill.
In: Proceedings 1977 Oil Spill Conference (Prevention, Behavior, Control, Cleanup), Washington D.C., American Petroleum Institute, Publ. No. 4284, p. 543-546.
251. CHAPLIN, A.E., 1971.
The effects of oil-spill emulsifiers on the metabolism of crustacea.
Rep.Oil Pollut.Res.Unit, Field Stud.Counc., 1971, 39-45.
252. CHASSE, C., 1978.
Esquisse d'un bilan écologique provisoire de l'impact de la marée noire de l'AMOCO CADIZ sur le littoral.
Actes Colloq.Cent.natl.Exploit.Océans, 6, 115-134.
253. CHASSE, C., 1978.
The ecological impact on and near shores by the AMOCO CADIZ oil spill.
Mar.Pollut.Bull., 9(11), 298-301.
254. CHEUNG, M.T., CHENG, T.Y., LEUNG, S.W., LO, C.C. & MAK, L.M., 1979.
Oil pollution along coastal areas of Hong Kong.
Mar.Pollut.Bull., 10(8), 228-231.
255. CHIA, F.S., 1973.
Killing of marine larvae by diesel oil.
Mar.Pollut.Bull., 4(2), 29-30.

256. CHRISTIANSEN, M.E. & STØRMER, F.C., 1978.
Effects of the water-soluble fraction of Ekofisk crude oil
on zoeal larvae of the crab Hyas araneus.
Ambio, 7(1), 23-25.
257. CLARK, R.B., 1971.
Oil pollution and its biological consequences. A review of
current scientific literature.
Paper prepared for Great Barrier Reef Petroleum Drilling
Royal Commissions. University of Newcastle-upon-Tyne,
Department of Zoology, 111 p.
258. CLARK, R.B., 1973.
Impact of chronic and acute oil pollution on seabirds.
In: Background Papers for a Workshop on Inputs, Fates and
Effects of Petroleum in the Marine Environment. Vol. 2
Physical, Chemical and Biological Fates, Chronic, Acute
and Health Effects. Washington, D.C., National Academy
of Sciences, p. 619-634. (AD-783 990)
259. CLARK, R.C. Jr., 1973.
Biological fate of petroleum hydrocarbons in aquatic macro-
organisms.
In: Background Papers for a Workshop on Inputs, Fates and
Effects of Petroleum in the Marine Environment. Vol. 2
Physical, Chemical and Biological Fates, Chronic, Acute
and Health Effects. Washington, D.C., National Academy
of Sciences, p. 485-506. (AD-783 990)
260. CLARK, R.C. Jr., 1973.
Interagency investigations of a persistent oil spill on
the Washington coast. Animal population studies, hydro-
carbon uptake by marine organisms, and algae response
following the grounding of the troopship GENERAL M.C. MEIGS.
In: Proceedings of a Joint Conference on Prevention and
Control of Oil Spills, Washington, D.C., March 13-15, 1973.
Wash. D.C., American Petroleum Institute, p. 793-808.
261. CLARK, R.C. Jr., 1976.
Impact of the transportation of petroleum on the waters of
the northeastern Pacific Ocean.
Mar.Fish.Rev., 38(11), 20-26.
262. CLARK, R.C. Jr. & BLUMER, M., 1967.
Distribution of n-paraffins in marine organisms and sediment.
Limnol.Oceanogr., 12, 79-87.
263. CLARK, R.C. Jr. & FINLEY, J.S., 1973.
Techniques for analysis of paraffin hydrocarbons and for
interpretation of data to assess oil spill effects in
aquatic organisms.
In: Proceedings of a Joint Conference on Prevention and
Control of Oil Spills, Washington D.C., March 13-15, 1973.
Washington, D.C., American Petroleum Institute, p. 161-172.
264. CLARK, R.C. Jr. & FINLEY, J.S., 1973.
Paraffin hydrocarbon patterns in petroleum-polluted mussels.
Mar.Pollut.Bull., 4(11), 172-176.

265. CLARK, R.C. Jr. & FINLEY, J.S., 1975.
Long-term chemical and biological effects of a persistent oil spill following the grounding of the GENERAL M.C. MEIGS.
In: Proceedings of a Joint Conference on Prevention and Control of Oil Spills, San Francisco, California, March 25-27, 1975. Washington, D.C., American Petroleum Institute, p. 479-488.
266. CLARK, R.C. Jr. & FINLEY, J.S., 1975.
Uptake and loss of petroleum hydrocarbons by the mussel, Mytilus edulis, in laboratory experiments.
Fish.Bull., 73(3), 508-515.
267. CLARK, R.C. Jr. & FINLEY, J.S., 1977.
Effects of oil spills in Arctic and subarctic environments.
In: Malins, D.C., ed. Effects of petroleum on arctic and subarctic marine environments and organisms. Vol. II. Biological effects. New York, Academic Press, p. 411-476.
268. CLARK, R.C. Jr., FINLEY, J.S. & GIBSON, G.G., 1974.
Acute effects of outboard motor effluent on two marine shell-fish.
Environ.Sci.Technol., 8(12), 1009-1014.
269. CLARK, R.C. Jr. & MACLEOD, W.D.J., 1977.
Inputs, transport mechanisms, and observed concentrations of petroleum in the marine environment.
In: Malins, D.C., ed. Effects of petroleum in Arctic and subarctic marine environments and organisms. Vol. I. Nature and fate of petroleum. New York, Academic Press, p. 91-223.
270. CLARK, R.C. Jr., PATTEN, B.G. & DE NIKE, E.E., 1978.
Observations of a cold-water intertidal community after 5 years of a low-level, persistent oil spill from the GENERAL M.C. MEIGS.
J.Fish.Res.Board Can., 35, 754-765.
271. CLIMBERG, R., MANN, S. & STRAUGHAN, D., 1973.
A reinvestigation of Southern California rocky intertidal beaches three and a half years after the 1969 Santa Barbara oil spill: a preliminary report.
In: Proceedings of a Joint Conference on Prevention and Control of Oil Spills, Washington D.C., March 13-15, 1973. Washington, D.C., American Petroleum Institute, p. 687-702.
272. COBET, A.B. & GUARD, H.E., 1973.
Effect of a Bunker C fuel on the beach bacterial flora.
In: Proceedings of a Joint Conference on Prevention and Control of Oil Spills, Washington D.C., March 13-15, 1973. Washington D.C., American Petroleum Institute, p. 815-819.
273. COHEN, Y., NISSENBAUM, A. & EISLER, R., 1977.
Effects of Iranian crude oil on the Red Sea octocoral Heteroxema fuscescens.
Environ.Pollut., 12(3), 173-186.

274. COLE, H.A., editor, 1975.
Petroleum and the continental shelf of North-West Europe:
Proceedings of a Conference organized jointly by the Geo-
logical Society of London, the Institute of Geological
Sciences, the Institute of Petroleum, and the Petroleum
Exploration Society of Great Britain. Vol. 2. Environ-
mental Protection.
Barking, U.K., Applied Science Publishers, 126 p.
275. COLE, H.A., editor, 1979.
The assessment of sublethal effects of pollutants in the
sea.
London, The Royal Society of London, A Royal Society Dis-
cussion held on 24-25 May, 1978, 235 p.
276. COLE, T.J., 1978.
Preliminary ecological-genetic comparison between unperturbed
and oil-impacted Urosalpinx cinerea (Prosobranchia: Gastropoda)
populations: Nobska Point (Woods Hole) and Wild Harbor (West
Falmouth), Massachusetts.
J.Fish.Res.Board Can., 35, 624-629.
277. COLLIER, T.K., THOMAS, L.C. & MALINS, D.C., 1978.
Influence of environmental temperature on disposition of
dietary naphthalene in Coho salmon (Oncorhynchus kisutch):
isolation and identification of individual metabolites.
Comp.Biochem.Physiol. C Comp.Pharmacol., 61(1), 23-28.
278. COLWELL, R.R., MILLS, A.L., WALKER, J.D., GARCIA-TELLO, P. &
CAMPOS-P., V., 1978.
Microbial ecology studies of the METULA spill in the Straits
of Magellan.
J.Fish.Res.Board Can., 35(5), 573-580.
279. COLWELL, R.R., WALKER, J.D. & NELSON, J.D. Jr., 1973.
Microbial ecology and the problem of petroleum degradation
in Chesapeake Bay.
In: Ahearn, D.G. & Meyers, S.P., eds. The microbial de-
gradation of oil pollutants. Proceedings of a Workshop,
Atlanta, Georgia, 4-6 December 1972. Baton Rouge, La.,
Louisiana State University, Center for Wetland Resources,
p. 185-197.
280. CONAN, G., D' OZOUVILLE, L. & MARCHAND, M., editors, 1978.
AMOCO CADIZ - premières observations des conséquences à court
terme de la pollution par hydrocarbures sur l'environnement
marin.
Actes Colloq.Cent.natl Exploit.Océans, 6, 239 p.
281. CONNELL, D.W., 1971.
Kerosene-like tainting in Australian mullet.
Mar.Pollut.Bull., 2, 188-190.

282. CONNELL, D.W., 1974.
A kerosene-like taint in the sea mullet, Mugil cephalus (Linnaeus). I. Composition and environmental occurrence of the tainting substance.
Austr.J.mar.freshwat.Res., 25(1), 7-24.
283. CONNELL, D.W., 1978.
A kerosene-like taint in the sea mullet Mugil cephalus (Linneaus). II. Some aspects of the deposition and metabolism of hydrocarbons in muscle tissue.
Bull.environ.Contam.Toxicol., 20, 492-498.
284. CONNELL, D.W. & BYCROFT, B.M., 1978.
Maximum biological half-lives of n-alkanes (9 carbons - 13 carbons) in the sea mullet Mugil cephalus.
Chemosphere, 7(10), 779-785.
285. CONNELL, D.W., COX, K. & McLAUGHLAN, R.L., 1975.
Occurrence of kerosene-like hydrocarbons in the bream, Mylio australis Gunther.
Aust.J.mar.freshwat.Res., 26, 419-422.
286. CONNOR, P.M., 1972.
Further investigations into the toxicity of oil and dispersants.
Copenhagen, International Council for the Exploration of the Sea, Fisheries Improvement Committee, 1972 (C.M.1972/E: 14), 6 p.
287. CONOVER, R.J., 1971.
Some relations between zooplankton and Bunker C oil in Chedabucto Bay following the wreck of the tanker ARROW.
J.Fish.Res.Board Can., 28(9), 1327-1330.
288. COOK, W.L., MASSEY, J.K. & AHEARN, D.G., 1973.
The degradation of oil by yeasts and its effects on Lebistes reticulatus.
In: Ahearn, D.G. & Meyers, S.P., eds. The microbial degradation of oil pollutants. Louisiana Univ.Pub. No. LSU SG 7301, p. 279-282.
289. COON, N.C., ALBERS, P.H. & SZARO, R.C., 1979.
No. 2 fuel oil decreases embryonic survival of great black-backed gulls.
Bull.environ.Contam.Toxicol., 21(1-2), 152-156.
290. COOPER, K., 1978.
The interaction of water soluble fraction (WSF) of South Louisiana crude oil and Dermocystidium (labyrinthomyxa) marinum at varying temperatures in the American oyster, Crassostrea virginica Gmelin.
Proc.Natl.Shellfish.Assoc., 68, 77. (Abstract)
291. CORNER, E.D.S., 1975.
The fate of fossil fuel hydrocarbons in marine animals.
Proc.R.Soc.Lond. B. Biol.Sci., 189, 391-413.

292. CORNER, E.D.S., 1978.
Pollution studies with marine plankton. Part 1. Petroleum hydrocarbons and related compounds.
Adv.mar.Biol., 15, 289-380.
293. CORNER, E.D.S. & HARRIS, R.P., 1976.
Hydrocarbons in marine zooplankton and fish. Part I. Zoo-plankton.
In: Lockwood, A.P.M., ed. Effects of pollutants on aquatic organisms. Cambridge, Cambridge University Press, p. 71-85.
294. CORNER, E.D.S. & HARRIS, R.P., 1976.
Experiments with petroleum hydrocarbons.
In: Lectures presented at the 4th FAO/SIDA Training Course, Toxicity Testing, Lysekil, Sweden, 13 Oct.-29.Nov., 1975. (Suppl. to Report), Rome, FAO, p. 181-198. (FAO/SIDA/TFINT 173 (SWE) - Suppl. I.)
295. CORNER, E.D.S., HARRIS, R.P., KILVINGTON, C.C. & O'HARA, S.C.M., 1976.
Petroleum compounds in the marine food web: short-term experiments on the fate of naphthalene in Calanus.
J.mar.biol.Assoc.U.K., 56(1), 121-133.
296. CORNER, E.D.S., KILVINGTON, C.C. & O'HARA, S.C.M., 1973.
Qualitative studies on the metabolism of naphthalene in Maia squinado (Herbst).
J.mar.biol.Assoc.U.K., 53, 819-832.
297. COTE, R.P., 1976.
The effects of petroleum refinery liquid wastes on aquatic life, with special emphasis on the Canadian environment.
Nat.Res.Counc.Can.Assoc.Comm.sci.Criteria environ.Qual.
Publ. 15021, 79 p.
298. COWELL, E.B., editor, 1971.
The ecological effects of oil pollution on littoral communities. Proceedings of the Symposium sponsored by The Institute of Petroleum, held in London, England, Nov. 30-Dec. 1, 1970.
Barking, Essex, England, Applied Science Publishers, 257 p.
299. COWELL, E.B., 1971.
Oil pollution in perspective.
In: Cowell, E.B., ed. The ecological effects of oil pollution on littoral communities. Barking, Essex, Applied Science Publishers, p. 224-234.
300. COWELL, E.B., 1971.
Some effects of oil pollution in Milford Haven, United Kingdom.
In: Proceedings of a Joint Conference on Prevention and Control of Oil Spills. Washington D.C., June 15-17, 1971. Washington D.C., American Petroleum Institute, p. 429-436.

301. COWELL, E.B., 1971.
Chronic oil pollution caused by refinery effluent water.
In: Hepple, P., ed. Water pollution by oil: Proceedings of a Seminar held at Aviemore, 4-8 May, 1970. London.
Institute of Petroleum, p. 380-381.
302. COWELL, E.B., 1972.
Oil pollution of the sea.
Nat.Wales, 13, 12-20.
303. COWELL, E.B., 1976.
Oil pollution of the sea.
In: Johnston, R., ed. Marine pollution. London, Academic Press, p. 353-401.
304. COWELL, E.B., BAKER, J.M. & CRAPP, G.B., 1972.
The biological effects of oil pollution and oil cleaning materials on littoral communities, including salt marshes.
In: Ruivo, M., ed. Marine pollution and sea life. London, Fishing News (Books) Ltd., p. 359-364.
305. COWELL, E.B., COX, G.V. & DUNNETT, G.M., 1979.
Applications of ecosystem analysis to oil spill impact.
In: Proceedings 1979 Oil Spill Conference (Prevention, Behaviour, Control, Cleanup). Washington D.C., American Petroleum Institute, Publ. No. 4308, p. 517-519.
306. COX, B.A. & ANDERSON, J.W., 1973.
Some effects of No. 2 fuel oil on the brown shrimp Penaeus aztecus.
Am.Zool., 13(4), 1308.
307. COX, B.A., ANDERSON, J.W. & PARKER, J.C., 1975.
An experimental oil spill: the distribution of aromatic hydrocarbons in the water, sediment, and animal tissue within a shrimp pond.
In: Proceedings of a Joint Conference on Prevention and Control of Oil Spills, San Francisco, California, March 25-27, 1975. Washington D.C., American Petroleum Institute, p. 607-612.
308. CRADDOCK, D.R., 1977.
Acute toxic effects of petroleum on Arctic and subarctic marine organisms.
In: Malins, D.C., ed. Effects of petroleum on Arctic and subarctic marine environments and organisms. Vol. II. Biological effects. New York, Academic Press, p. 1-93.
309. CRAIGIE, J.S. & McLACHLAN, J., 1970.
Observations on the littoral algae of Chedabucto Bay following the ARROW oil spill.
Halifax, N.S., Canada, Atlantic Regional Laboratory, Unpublished Report, ARL-8, NRC 11489.
310. CRAPP, G.B., 1969.
The biological effects of marine oil pollution and shore cleaning.
Rep.Field Stud Counc., 1969, 27-42.

311. CRAPP, G.B., 1971.
The effects of oil pollution and emulsifier cleansing on littoral animals and plants.
Rep.Oil Pollut.Res.Unit, Field Stud.Counc., 1971, 7-13.
312. CRAPP, G.B., 1971.
Monitoring the rocky shore.
In: Cowell, E.B., ed. The ecological effects of oil pollution on littoral communities. Barking, Essex, Applied Science Publishers, p. 102-113.
313. CRAPP, G.B., 1971.
Field experiments with oil and emulsifiers.
In: Cowell, E.B., ed. The ecological effects of oil pollution on littoral communities. Barking, Essex, Applied Science Publishers, p. 114-128.
314. CRAPP, G.B., 1971.
Laboratory experiments with emulsifiers.
In: Cowell, E.B., ed. The ecological effects of oil pollution in littoral communities. Barking, Essex, Applied Science Publishers, p. 129-149.
315. CRAPP, G.B., 1971.
The biological consequences of emulsifier cleansing.
In: Cowell, E.B., ed. The biological effects of oil pollution on littoral communities. Barking, Essex, Applied Science Publishers, p. 150-168.
316. CRAPP, G.B., 1971.
The ecological effects of stranded oil.
In: Cowell, E.B., ed. The ecological effects of oil pollution on littoral communities. Barking, Essex, Applied Science Publishers, p. 181-186.
317. CRAPP, G.B., 1971.
Chronic oil pollution.
In: Cowell, E.B., ed. The ecological effects of oil pollution on littoral communities. Barking, Essex, Applied Science Publishers, p. 187-203.
318. CRAPP, G.B. & BAKER, J.M., 1972.
Toxicity tests for predicting the ecological effects of oils and emulsifiers on littoral communities.
Rep.Oil Pollut.Res.Unit, Field Stud.Counc., 1972, 35-39.
319. CROCKER, A.D. & CRONSHAW, J., 1974.
The effect of a crude oil on intestinal absorption in ducklings, Anas platyrhynchos.
Environ.Pollut., 7(3), 165-177.
320. CROCKER, A.D., CRONSHAW, J. & HOLMES, W.N., 1975.
The effect of several crude oils and some petroleum distillation fractions on intestinal absorption in ducklings, Anas platyrhynchos.
Environ.Physiol.Biochem., 5(2), 92-106.

321. CROSS, T.F., SOUTHGATE, T. & MYERS, A.A., 1979.
The initial pollution of shores in Bantry Bay, Ireland,
by oil from the tanker BETELGEUSE.
Mar.Pollut.Bull., 10(4), 104-107.
322. CROXALL, J.P., 1977.
The effects of oil on sea birds.
In: McIntyre, A.D. & Whittle, K.J., eds. Petroleum hydro-carbons in the marine environment. Proceedings ICES Workshop, Aberdeen 9-12 Sept. 1975, International Council for the Exploration of the Sea, 171, p. 191-195.
323. CRUZ, A.A. DE LA, 1975.
Effects of a simulated oil spillage on a tidal marsh pond.
ASB (Assoc.southeast.Biol.) Bull., 22(2), 50. (Abstract)
324. CUBIT, J., 1972.
The effects of the 1969 Santa Barbara oil spill on marine intertidal invertebrates.
In: Holmes, R.E. & DeWitt, F.A.Jr., eds. Proceedings of the Santa Barbara Oil Symposium: Offshore Petroleum Production, an Environmental Inquiry, Santa Barbara, California, December 16-18, 1970. Washington D.C., National Science Foundation, p. 131-136.
325. CUCCI, T.L. & EPIPHANIO, E., 1976.
Effects of water-soluble fractions of Kuwait crude oil and No. 2 fuel oil (API standards) on the larval development of the mud crab, Eurypanopeus depressus (Smith).
Am.Zool., 16(2), 250. (Abstract)
326. CULLINANE, J.P. & WHELAN, P.M., 1976.
Effects of oil on beaches in West Cork, Ireland.
Mar.Pollut.Bull., 7(4), 72-73.
327. CUNDELL, A.M. & YOUNG, R.R., 1975.
Hindgut microflora from oil-polluted soft-shell clams.
Mar.Pollut.Bull., 6, 134-135.
328. DALLA VENEZIA, L. & FOSSATO, V.U., 1977.
Characteristics of suspensions of Kuwait oil and Corexit 7664 and their short- and long-term effects on Tisbe bulbisetosa (Copepoda: Harpacticoida).
Mar.Biol.(Berl.), 42, 233-237.
329. DAVAVIN, I.A., MIRONOV, O.G. & TSIMBAL, I.M., 1975.
Influence of oil on nucleic acids of algae.
Mar.Pollut.Bull., 6, 13-14.
330. DAVENPORT, J., 1973.
A comparison of the effects of oil, BP 1100 and oleophilic fluff upon the porcelain crab, Porcellana platycheles.
Chemosphere, 1, 3-6.

331. DAVENPORT, J., LØNNING, S. & SÆTHRE, L.J., 1979.
The effects of Ekofisk oil extract upon oxygen uptake
in eggs and larvae of the cod Gadus morhua L.
Astarte, 12(1), 31-34.
332. DAVIS, J.E. & ANDERSON, S.S., 1976.
Effects of oil pollution on breeding grey seals.
Mar.Pollut.Bull., 7, 115-118.
333. DAY, J.H., 1972.
Oil pollution in South African seas.
S.Afr.J.Sci., 68(5), 130-131.
334. DE ANGELIS, E. & GIORDANO, G.G., 1974.
Sea urchin egg development under the action of benzo(a)-
pyrene and 7,12-dimethylbenz(a)anthracene.
Cancer Res., 34, 1275-1280.
335. DESHIMARU, O., 1971.
Studies of the pollution of fish meat by mineral oils.
I. Deposition of crude oil in fish meat and its detection.
Bull.Jpn.Soc.sci.Fish., 37, 297-301.
336. DE VRIES, A.L., 1976.
The physiological effect of acute and chronic exposure to
hydrocarbons and of petroleum on the Near-Shore fishes of
the Bering Sea.
In: Environmental assessment of the Alaskan continental shelf.
Vol. 8. Boulder, Colorado, NOAA Environmental Research Labo-
ratories, p. 1-14. (NTIS No. PB-261 407)
337. DE VRIES, A.L., 1979.
The effect of naphthalene on synthesis of peptide antifreeze
in the Bering Sea sculpin Myoxocephalus verrucosus.
In: Vernberg, W.B., Calabrese, A., Thurberg, F.P. & Vernberg,
F.J., eds. Marine pollution: functional responses. New York,
Academic Press, p. 53-68.
338. DEWLING, R.T. & CELSO DO AMARAL E. SILVA, C., 1979.
Impact of dispersant use during the BRAZILIAN MARINA incident.
In: Proceedings 1979 Oil Spill Conference (Prevention, Be-
havior, Control, Cleanup), Washington D.C., American Petroleum
Institute, Publ. No. 4308, p. 269-276.
339. DICKMAN, M., 1971.
Preliminary notes of changes in algal primary productivity
following exposure to crude oil in the Canadian Arctic.
Can.Field-Nat., 85(3), 249-251.
340. DICKS, B., 1973.
Some effects of Kuwait crude oil on the limpet Patella
vulgata.
Environ.Pollut., 5(3), 219-229.

341. DICKS, B., 1976.
The effects of refinery effluents: the case history of a saltmarsh.
In: Baker, J.M., ed. Marine ecology and oil pollution, Barking, Essex, Applied Science Publishers, p. 227-245.
342. DIETER, M.P., 1976.
The effects of petroleum hydrocarbons on aquatic birds.
In: Sources, Effects and Sinks of Hydrocarbons in the Aquatic Environment. Proceedings of the Symposium, Washington D.C., 9-11 August, 1976. Arlington, Virginia, American Institute of Biological Sciences, p. 437-446.
343. DILLON, T.M., NEFF, J.M. & WARNER, J.S., 1978.
Toxicity and sublethal effects of No. 2 fuel oil on the supralittoral isopod Lygia exotica.
Bull.environ.Contam.Toxicol., 20(3), 320-327.
344. DIMICHELE, L. & TAYLOR, M.H., 1978.
Histopathological and physiological responses of Fundulus heteroclitus L. to naphthalene exposure.
J.Fish.Res.Board Can., 35, 1060-1066.
345. DISALVO, L.H., GUARD, H.E. & HUNTER, L., 1975.
Tissue hydrocarbon burden of mussels as potential monitor of environmental hydrocarbon insult.
Environ.Sci.Technol., 9, 247-251.
346. DIVAVIN, I.A., 1973.
The DNA of Black Sea mussels under normal conditions and in water contaminated with oil.
Hydrobiol.J. (Engl.Transl.Gidrobiol.Zh.), 9, 67-69.
347. DIVAVIN, I.A., 1975.
Oil and phenol influence of some properties of nucleic acids from the Black Sea shrimp, Palaemon adspersus.
Biol.Morya (Vladivost.), 3, 62-64.
348. DIVAVIN, I.A. & TSYMBAL, I.M., 1975.
Effect of oil on the intensity of incorporation of C^{14} -carbonate in nucleic acids of the red algal genus Ceramium.
Biol.Morya (Kiev), 35, 127-131.
349. DIVAVIN, I.A. & YEROKHIN, V.YE., 1978.
Changes in biochemistry of some aquatic organisms of the Barents Sea coast in experimental oil intoxication.
Hydrobiol.J. (Engl.Transl.Gidrobiol.Zh.), 14(5), 63-66.
350. DIXIT, D. & ANDERSON, J.W., 1977.
Distribution of naphthalenes within exposed Fundulus similis and correlations with stress behavior.
In: Proceedings of the 1977 Oil Spill Conference (Prevention, Behavior, Control, Cleanup), Washington D.C., American Petroleum Institute, p. 633-636.

351. DONAHUE, W.H., WANG, R.T., WELCH, M. & NICOL, J.A.C., 1977.
Effects of water-soluble components of petroleum oils and
aromatic hydrocarbons on barnacle larvae.
Environ.Pollut., 13(3), 187-202.
352. DONAHUE, W.H., WELCH, M.F., LEE, W.Y. & NICOL, J.A.C., 1977.
Toxicity of water soluble fractions of petroleum oils on
larvae of crabs.
In: Giam, C.S., ed. Pollutant effects on marine organisms.
Proceedings of a Workshop, College Station, Texas, May 16-19,
1976. Lexington, D.C. Heath and Company, p. 77-94.
353. DOW, R.L., 1975.
Reduced growth and survival of clams transplanted to an oil
spill site (Maine).
Mar.Pollut.Bull., 6(8), 124-125.
354. DOW, R.L., 1978.
Size-selective mortalities of clams in an oil spill site.
Mar.Pollut.Bull., 9(2), 45-48.
355. DOW, R.L. & HURST, J.W. Jr., 1975.
The ecological, chemical and histopathological evaluation
of an oil spill site. Part 1. Ecological studies.
Mar.Pollut.Bull., 6, 164-166.
356. DREWA, G., DABROWSKA, T., ZBYTNIEWSKI, Z. & PAUTSCH, F., 1979.
Effect of crude oil and detergent "Solo" on the activity of
some hydrolases in hemolymph of crab Rhithropanopeus harrisi.
Pol.Arch.Hydrobiol., 26, 205-211.
357. DREWA, G., ZBYTNIEWSKI, Z. & PAUTSCH, F., 1977.
The effect of detergent "Solo" and crude oil on the activities
of cathepsin D and acid phosphatase in hemolymph of Crangon
crangon L.
Pol.Arch.Hydrobiol., 24(2), 279-284.
358. DUGUY, R. & RABIN, P., 1975.
Intoxication aigue par les hydrocarbures observée chez un
phoque-veau marin (Phoca vitulina).
ICES C.M. Pap.Rep., No. N:5, 2 p.
359. DUNN, B.P. & FEE, J., 1979.
Polycyclic aromatic hydrocarbon carcinogens in commercial
seafoods.
J.Fish.Res.Board Can., 36(12), 1469-1476.
360. DUNN, B.P. & STICH, H.F., 1975.
The use of mussels in estimating benzo(a)pyrene contamination
of the marine environment.
Proc.Soc.exp.Biol.Med., 150, 49-51.
361. DUNN, B.P. & STICH, H.F., 1976.
Release of the carcinogen benzo(a)pyrene from environmentally
contaminated mussels.
Bull.environ.Contam.Toxicol., 15, 398-401.

362. DUNN, B.P. & YOUNG, D.R., 1976.
Baseline levels of benzo(a)pyrene in southern California mussels.
Mar.Pollut.Bull., 7, 231-234.
363. DUNNING, A. & MAJOR, C.W., 1974.
The effect of cold seawater extracts of oil fractions upon the blue mussel, *Mytilus edulis*.
In: Vernberg, F.J. & Vernberg, W.B., eds. Pollution and physiology of marine organisms. New York, Academic Press, p. 349-366.
364. DUNSTAN, W.M., ATKINSON, L.P. & NATOLI, J., 1975.
Stimulation and inhibition of phytoplankton growth by low molecular weight hydrocarbons.
Mar.Biol.(Berl.), 31, 305-310.
365. EBELING, A.W., 1972.
Santa Barbara oil spill: fishes.
In: Holmes, R.E. & DeWitt, F.A., eds. Proceedings of the Santa Barbara Oil Symposium: Offshore Petroleum Production, an Environmental Inquiry. Santa Barbara, California, 16-18 December 1970. Wash. D.C., National Science Foundation, p. 138-164.
366. EDWARDS, R.R.C., 1978.
Effects of water-soluble oil fractions on metabolism, growth and carbon budget of the shrimp *Crangon crangon*.
Mar.Biol.(Berl.), 46, 259-265.
367. EHRHARDT, M., 1972.
Petroleum hydrocarbons in oysters from Galveston Bay.
Environ.Pollut., 3, 257-271.
368. EHRHARDT, M. & HEINEMANN, J., 1974.
Hydrocarbons in blue mussels from the Kiel Bight.
In: Marine Pollution Monitoring (Petroleum). Proceedings of a Symposium and Workshop held at the National Bureau of Standards, Gaithersburg, Maryland, May 13-17, 1974, sponsored by the Intergovernmental Oceanographic Commission, the World Meteorological Organization and the US Department of Commerce. Washington D.C., US Government Printing Office, p. 221-225.
369. EHRHARDT, M. & HEINEMANN, J., 1975.
Hydrocarbons in blue mussels from the Kiel Bight.
Environ.Pollut., 9, 263-282.
370. EISLER, R., 1973.
Latent effects of Iranian crude oil and a chemical oil dispersant on Red Sea molluscs.
Isr.J.Zool., 22, 97-105.
371. EISLER, R., 1975.
Toxic, sublethal, and latent effects of petroleum on Red Sea macrofauna.
In: Proceedings of the 1975 Conference on Prevention and Control of Oil Pollution, held in San Francisco, California, March 25-27, 1975. Washington D.C., American Petroleum Institute, p. 535-540.

372. EISLER, R., 1975.
Acute toxicities of crude oil and oil-dispersants mixtures
to Red Sea fishes and invertebrates.
Isr.J.Zool., 24(1-2), 16-27.
373. EISLER, R. & KISSIL, G.W.M., 1975.
Toxicities of crude oils and oil-dispersants mixtures to
juvenile rabbitfish, Siganus rivulatus.
Trans.Am.Fish.Soc., 104(3), 571-578.
374. ELDRIDGE, M.B. & ECHEVERRIA, T., 1978.
Fate of ^{14}C -benzene in eggs and larvae of Pacific herring
(Clupea harengus pallasi).
J.Fish.Res.Board Can., 35(6), 861-865.
375. ELDRIDGE, M.B., ECHEVERRIA, T. & WHIPPLE, J.A., 1977.
Energetics of Pacific herring (Clupea harengus pallasi)
embryos and larvae exposed to low concentrations of benzene,
a monoaromatic component of crude oil.
Trans.Am.Fish.Soc., 106(5), 452-461.
376. ELGERSHUIZEN, J.H.B.W. & DE KRUIJF, H.A.M., 1976.
Toxicity of crude oils and dispersants to the stony coral
Madracis mirabilis.
Mar.Pollut.Bull., 7(2), 22-25.
377. ELSON, P.F., 1974.
Impact of recent economic growth and industrial development
on the ecology of Northwest Miramichi Atlantic salmon (Salmo
salar).
J.Fish.Res.Board Can., 31(5), 521-544.
378. ENGEL, R.H. & NEAT, M.J., 1971.
Toxicity of oil dispersing agents determined in a circulating
aquarium system.
In: Proceedings of a Joint Conference on Prevention and
Control of Oil Spills, held in Washington D.C., June 15-17,
1971. Washington D.C., American Petroleum Institute, p. 297-
303.
379. ENGELHARDT, F.R., GERACI, J.R. & SMITH, T.G., 1977.
Uptake and clearance of petroleum hydrocarbons in the
ringed seal, Phoca hispida.
J.Fish.Res.Board Can., 34(8), 1143-1147.
380. EPLER, J.L., YOUNG, J.A., HARDIGREE, A.A., RAO, T.K., GUERIN,
M.R., RUBIN, I.B., HO, C.H. & CLARK, B.R., 1978.
Analytical and biological analyses of test materials from
the synthetic fuel technologies. I. Mutagenicity of crude
oils determined by the Salmonella typhimurium/microsomal
activation system.
Mutat.Res., 57(3), 265-276.
381. ERNST, V.V., NEFF, J.M. & ANDERSON, J.W., 1977.
The effects of the water-soluble fractions of No. 2 fuel oil
on the early development of the estuarine fish, Fundulus
grandis Baird and Girard.
Environ.Pollut., 14(1), 25-36.

382. EVANS, G.W., LYES, M. & LOCKWOOD, A.P.M., 1977.
Some effects of oil dispersants on the feeding behaviour
of the brown shrimp, Crangon crangon.
Mar.Behav.Physiol., 4(3), 171-182.
383. FALK, M.R. & LAWRENCE, M.J., 1973.
Acute toxicity of petrochemical drilling fluid components
and wastes to fish.
Tech.Rep.Ser.Can.Resour.Manage.Branch, CEN T-73-1, 112 p.
384. FALK-PETERSEN, I.B., 1979.
Toxic effects of aqueous extracts of Ekofisk crude oil,
crude oil fractions, and commercial products on the develop-
ment of sea urchin eggs.
Sarsia, 64(3), 161-170.
385. FARRINGTON, J.W., 1977.
Oil pollution in the coastal environment.
In: United States. Environmental Protection Agency.
Office of Water Planning and Standards. Estuarine Pollution
Control and Assessment: Proceedings of a Conference. Vol. 2.
Washington D.C., US Environmental Protection Agency, p. 385-400.
386. FARRINGTON, J.W. & QUINN, J.G., 1973.
Petroleum hydrocarbons in Narragansett Bay. I. Survey of
hydrocarbons in sediments and clams (Mercenaria mercenaria).
Estuarine Coastal mar.Sci., 1, 71-79.
387. FARRINGTON, J.W. & MEYER, P.A., 1975.
Hydrocarbons in the marine environment.
Environ.Chem., 1, 109-136.
388. FARRINGTON, J.W., TEAL, J.M., MEDEIROS, G.C., BURNS, K.A.,
ROBINSON, E.A., QUINN, J.G. & WADE, T.L., 1976.
Intercalibration of gas chromatographic analyses for hydro-
carbons in tissues and extracts of marine organisms.
Anal.Chem., 48(12), 1711-1716.
389. FAUCHALD, K., 1971.
The benthic fauna in the Santa Barbara Channel following
the January, 1969 oil spill.
In: Straughan, D., ed. Biological and oceanographical
survey of the Santa Barbara Channel oil spill 1969-1970.
Vol. 1. Biology and bacteriology. Allan Hancock Foundation,
University of Southern California, Los Angeles, p. 61-116.
390. FAUCHALD, K., 1972.
A survey of the benthos off Santa Barbara following the
January 1969 oil spill.
Rep.Calif.coop.ocean.Fish.Invest., 16, 125-129.
391. FEDERLE, T.W., VESTAL, J.R., HATER, G.R. & MILLER, M.C., 1979.
Effects of Prudhoe Bay crude oil on primary production and
zooplankton in Arctic tundra thaw ponds.
Mar.environ.Res., 2(1), 3-18.

392. FLECKINGER, R., STEVENIN, G. & RIEUCAU, C., 1977.
 Pollution marine par les hydrocarbures. Appréciation des conséquences sur les moules sauvages, (*Mytilus edulis*) en fonction du temps écoulé depuis la pollution.
Bull.Acad.vét.Fr., 50, 79-84.
393. FLEMINGER, A. & HULSEMANN, K., 1977.
 Effect of the water-soluble fractions of crude, refined and waste oils on the embryonic and larval stages of the quahog clam, *Mercenaria* sp..
Mar.Biol.(Berl.), 40(3), 225-232.
394. FLETCHER, G.L., KICENIUK, J.W., KING, M.J. & PAYNE, J.F., 1979.
 Reduction of blood plasma copper concentrations in a marine fish following a 6 month exposure to crude oil.
Bull.environ.Contam.Toxicol., 22(4-5), 548-551.
395. FLOODGATE, G.D., GIBB, D.F. & PUGH, K.P., 1973.
 Microbial interaction with oil in the marine environment.
 In: Background Papers for a Workshop on Inputs, Fates and Effects of Petroleum in the Marine Environment. Vol. 2. Physical, Chemical and Biological Fates. Washington D.C., National Academy of Sciences, p. 507-515. (AD-783 990)
396. FONG, W.C., 1976.
 Uptake and retention of Kuwait crude oil and its effects on oxygen uptake by the soft-shell clam, *Mya arenaria*.
J.Fish.Res.Board Can., 33(12), 2774-2780.
397. FORNS, J.M., 1977.
 The effects of crude oil on larvae of lobster, *Homarus americanus*.
 In: Proceedings of the 1977 Oil Spill Conference (Prevention, Behavior, Control, Cleanup), held in New Orleans, Louisiana, March 8-10, 1977. Washington D.C., American Petroleum Institute, p. 569-573.
398. FOSSATO, V.U., 1975.
 Elimination of hydrocarbons by mussels.
Mar.Pollut.Bull., 6, 7-10.
399. FOSSATO, V.U. & CANZONIER, W.J., 1976.
 Hydrocarbon uptake and loss by mussel (*Mytilus edulis*).
Mar.Biol.(Berl.), 36(3), 243-250.
400. FOSTER, M., CHARTERS, A.C. & NEUSHUL, M., 1971.
 The Santa Barbara oil spill. Part 1. Initial quantities and distribution of pollutant crude oil.
Environ.Pollut., 2, 97-113.
401. FOSTER, M., NEUSHUL, M. & ZINGMARK, R., 1971.
 The Santa Barbara oil spill. Part 2. Initial effects on intertidal and kelp bed organisms.
Environ.Pollut., 2, 115-134.

402. FOUREMAN, G.L., HALL, P. & BEND, J.R., 1976.
Distribution of $1-^{14}\text{C}$ -hexadecane in the lobster, *Homarus americanus*, at various times after injection into the pericardial sinus.
Bull.Mt Desert Isl.biol.Lab., 16, 43-45.
403. FRANKENFELD, J.W., ELLIOT, J.J., BENTLEY, R.E. & SLEIGHT, B.H. III, 1975.
Toxic effects of oil discharged from ships.
Washington D.C., US Coast Guard, Office of Research and Development, 132 p. (Final Report, Feb. 1975 - Dec. 1975, CG-D-16-76)
404. FRIES, C. & TRIPP, M.R., 1976.
Effects of phenols on clams.
Mar.Fish.Serv., 38(10), 10-11.
405. FRIES, C.R. & TRIPP, M.R., 1977.
Cytological damage in *Mercenaria mercenaria* exposed to phenol.
In: Wolfe, D.A., ed. Fate and effects of petroleum hydrocarbons in marine organisms and ecosystems. Proceedings of a Symposium, Seattle, Washington, Nov. 10-12, 1976. New York, Pergamon Press, p. 174-181.
406. FROST, L.C., 1974.
TORREY CANYON disaster: the persistent toxic effects of detergents on cliff-edge vegetation at the Lizard Peninsula, Cornwall.
Cornish Stud., 2, 5-14.
407. FUCIK, K.W., ARMSTRONG, H.W. & NEFF, J.M., 1977.
The uptake of naphthalenes by the clam, *Rangia cuneata*, in the vicinity of an oil-separator platform in Trinity Bay, Texas.
In: Proceedings of the 1977 Oil Spill Conference (Prevention, Behavior, Control, Cleanup), held in New Orleans, Louisiana, March 8-10, 1977. Washington D.C., American Petroleum Institute, p. 637-640.
408. FUCIK, K.W. & NEFF, J.M., 1977.
Effects of temperature and salinity on naphthalenes uptake in the temperate clam *Rangia cuneata* and the boreal clam *Prototaca staminea*.
In: Wolfe, D.A., ed. Fate and effects of petroleum hydrocarbons in marine ecosystems and organisms. New York, Pergamon Press, p. 305-312.
409. GANNING, B. & BILLING, U., 1974.
Effects on community metabolism of oil and chemically dispersed oil on Baltic bladder wrack, *Fucus vesiculosus*.
In: Beynon, L.R. & Cowell, E.B., eds. Ecological aspects of toxicity testing of oil and dispersants. Barking, Essex, Applied Science Publishers, p. 53-61.

410. GARDNER, G.R., YEVICH, P.P. & ROGERSON, P.F., 1975.
Morphological anomalies in adult oyster, scallop and
Atlantic silversides exposed to waste motor oil.
In: Proceedings of the Joint Conference on Prevention and
Control of Oil Spills, held in San Francisco, California,
March 25-27, 1975. Washington D.C., American Petroleum
Institute, p. 473-477.
411. GATELLIER, C.R., 1975.
Etat des connaissances sur les effets écologiques des
hydrocarbures dans le milieu marin.
In: Commission Internationale pour l'Exploration Scienti-
fique de la Mer Méditerranée. IIes Journées d'Etudes sur
les Pollutions Marines en Méditerranée. Monaco, C.I.E.S.M.M.,
p. 39-45.
412. GELDER-OTTWAY, S. VAN, 1976.
Some physical and biological effects of oil films floating
on water.
In: Baker, J.M., ed. Marine ecology and oil pollution,
Barking, Essex, Applied Science Publishers, p. 255-277.
413. GELDER-OTTWAY, S. VAN, 1976.
The comparative toxicities of crude oils, refined oil pro-
ducts and oil emulsions.
In: Baker, J.M., ed. Marine ecology and oil pollution,
Barking, Essex, Applied Science Publishers, p. 287-302.
414. GELDER-OTTWAY, S. VAN & KNIGHT, M., 1976.
A review of world oil spillages 1960-1975.
In: Baker, J.M., ed. Marine ecology and oil pollution:
Proceedings of an Institute of Petroleum/Field Studies
Council Meeting, held at Aviemore, Scotland, 21-23 April,
1975. Barking, Essex, Applied Science Publishers, p. 483-
520.
415. GENTRY, R. & MCALISTER, W.B., 1976.
Physiological impact of oil on pinnipeds.
In: Environmental Assessment of the Alaskan Continental
Shelf. Vol. 8. Boulder, Colorado, National Oceanic and
Atmospheric Administration, Environmental Research Labo-
ratories, p. 15-23. NTIS No. PB-261 407.
416. GEORGE, J.D., 1971.
The effects of pollution by oil and oil-dispersants on the
common intertidal polychaetes, Cirriformia tentaculata and
Cirratulus cirratus.
J.appl.Ecol., 8, 411-420.
417. GERACI, J.R. & SMITH, T.G., 1976.
Behavior and pathophysiology of seals exposed to crude oil.
In: Sources, Effects and Sinks of Hydrocarbons in the Aquatic
Environment. Proceedings of the Symposium, Washington D.C.,
August 9-11, 1976. Arlington, Virginia, American Institute
of Biological Sciences, p. 448-462.

418. GERACI, J.R. & SMITH, T.G., 1976.
Direct and indirect effects of oil on ringed seals (Phoca hispida) of the Beaufort Sea.
J.Fish.Res.Board Can., 33(9), 1976-1984.
419. GERACI, J.R. & SMITH, T.G., 1977.
Consequences of oil fouling on marine mammals.
In: Malins, D.C., ed. Effects of petroleum on Arctic and subarctic marine environments and organisms. Vol. II. Biological effects. New York, Academic Press, p. 399-410.
420. GERHART, E.H. & CARLSON, R.M., 1978.
Hepatic mixed-function oxidase activity in rainbow trout exposed to several polycyclic aromatic compounds.
Environ.Res., 17(2), 284-295.
421. GIAM, C.S., editor, 1977.
Pollutant effects on marine organisms.
Proceedings of a Workshop, College Station, Texas. May 16-19, 1976. Lexington, D.C. Heath and Company, 211 p.
422. GIAM, C.S., CHAN, H.S. & NEFF, G.S., 1976.
Distribution of n-paraffins in selected marine benthic organisms.
Bull.environ.Contam.Toxicol., 16, 37-43.
423. GIBSON, D.T., 1977.
Aromatic hydrocarbons: distribution and possible fate in the environment.
In: Giam, C.S., ed. Pollutant effects on marine organisms. Proceedings of a Workshop, College Station, Texas, May 16-19, 1976. Lexington, D.C. Heath and Company, p. 38-39.
424. GISON, D.T., 1977.
Biodegradation of aromatic petroleum hydrocarbons.
In: Wolfe, D.A., ed. Fate and effects of petroleum hydrocarbons in marine ecosystems and organisms. Proceedings of a Symposium, Seattle, Wash., Nov. 10-12, 1976. New York, Pergamon Press, p. 36-46.
425. GILES, R.C. & BROWN, L.R., 1977.
A bacteriological study of fin rot in mullet associated with exposure to crude oil.
ASM Abstr.Annual Meeting, 77, p. 268. (Abstract No. Q45)
426. GILES, R.C. & BROWN, L.R., 1978.
Bacteriological aspects of fin erosion in mullet exposed to crude oil.
J.Fish Biol., 13, 113-117.
427. GILFILLAN, E.S., 1973.
Effects of seawater extracts of crude oil on carbon budgets in two species of mussels.
In: Proceedings of a Joint Conference on Prevention and Control of Oil Spills, held in Washington D.C., March 13-15, 1973. Washington D.C., American Petroleum Institute, p. 691-695.

428. GILFILLAN, E.S., 1975.
Decrease of net carbon flux in two species of mussels
caused by extracts of crude oil.
Mar.Biol.(Berl.), 29(1), 53-58.
429. GILFILLAN, E.S., JIANG, L.C., DONOVAN, D., HANSON, S. &
MAYO, D.W., 1976.
Reduction in carbon flux in Mya arenaria caused by a
spill of No. 2 fuel oil.
Mar.Biol.(Berl.), 37(2), 115-123.
430. GILFILLAN, E.S., MAYO, D.W., PAGE, D.S., DONOVAN, D. &
HANSON, S., 1977.
Effects of varying concentrations of petroleum hydrocarbons
in sediments on carbon flux in Mya arenaria.
In: Vernberg, F.J., Calabrese, A., Thurberg, F.P. & Vernberg,
W.B., eds. Physiological responses of marine biota to pollu-
tants. New York, Academic Press, p. 299-314.
431. GILFILLAN, E.S., MAYO, D.W., PAGE, D.S., HARSHBARGER, J.,
HANSON, S., ARCHAMBEAULT, T. & WEST, A., 1977.
A chemical, biological and histopathological examination of
an oil spill site.
Augusta, Maine, Final Report to State of Maine Department of
Environmental Protection.
432. GILFILLAN, E.S. & VANDERMEULEN, J.H., 1978.
Alterations in growth and physiology in chronically oiled
soft-shell clams, Mya arenaria, chronically oiled with
Bunker C from Chedabucto Bay, Nova Scotia, 1970-76.
J.Fish.Res.Board Can., 35(5), 630-636.
433. GILMOUR, A.J. & NEGILSKI, D.S., 1976.
Evaluation of the environmental implications of oil spill
dispersants.
In: Prevention and Control of Marine Oil Pollution. Regional
Marine Oil Pollution Conference - Australia, Brisbane, Nov.
8-10, 1976. North Sydney, Petroleum Institute Environmental
Conservation Executive (PIECE), 27 p.
434. GOLDBERG, E.D., BOWEN, V.T., FARRINGTON, J.W., HARVEY, G.,
MARTIN, J.H., PARKER, P.L., RISEBROUGH, R.W., ROBERTSON, W.,
SCHNEIDER, E.D. & GAMBLE, E., 1978.
The mussel watch.
Environ.Conserv., 5, 101-126.
435. GORDON, D.C. & PROUSE, N.J., 1972.
The effects of some crude and refined oils on marine phyto-
plankton photosynthesis.
Copenhagen, International Council for the Exploration of
the Sea, Fisheries Improvement Committee, 10 p. (C.M. 1972/
E:33)
436. GORDON, D.C. & PROUSE, N.J., 1972.
The effects of three oils on marine phytoplankton photo-
synthesis.
Mar.Biol.(Berl.), 22, 329-333.

437. GORMAN, M.L. & SIMMS, C.E., 1978.
Lack of effect of ingested Forties Field crude oil on avian growth.
Mar.Pollut.Bull., 9(10), 273-276.
438. GOULD, H.R. & KOONS, C.B., 1978.
Worldwide status of research on fate and effect of oil in the marine environment.
Houston, Texas, EXXON Production Research Company, 91 p.
439. GRAHAM, R.J. & DORRIS, T.C., 1968.
Long-term toxicity bioassay of oil refinery effluents.
Water Res., 2(9), 643-663.
440. GRAHL-NIELSEN, O., NEPPELBERG, T., PALMORK, K.H., WESTRHEIM, K. & WILHELMSEN, S., 1976.
The DRUPA oil spill investigation concerning oil, water and fish.
International Council for the Exploration of the Sea, C.M.1976/E:34,18 p.
441. GRAHL-NIELSEN, O., STAVELAND, J.T. & WILHELMSEN, S., 1978.
Aromatic hydrocarbons in benthic organisms from coastal areas polluted by Iranian crude oil.
J.Fish.Res.Board Can., 35(5), 615-623.
442. GRASSLE, J.F., 1973.
Methods for studying the effects of marine oil spills.
In: Background Papers for a Workshop on Inputs, Fates and Effects of Petroleum in the Marine Environment. Vol. 1. Inputs, Chemical Techniques, Biological Techniques. Washington D.C., National Academy of Sciences, p. 323-346.
443. GREEN, F.A. & NEFF, J.M., 1977.
Toxicity, accumulation and release of three polychlorinated naphthalenes (Halowax 1000, 1013, and 1099) in postlarval and adult grass shrimp, Palaemonetes pugio.
Bull.environ.Contam.Toxicol., 17, 399-407.
444. GREEN, K.A., 1974.
The effects of petroleum hydrocarbons on organisms of the continental shelf.
Biologist, 56, 165-179.
445. GRIFFIN, L.F. & CALDER, J.A., 1977.
Toxic effect of water-soluble fractions of crude, refined, and weathered oils on the growth of a marine bacterium.
Appl.environ.Microbiol., 33(5), 1092-1096.
446. GRUGER, E.H. Jr., WEKELL, M.M., NUMOTO, P.T. & CRADDOCK, D.R., 1977.
Induction of hepatic aryl hydrocarbon hydroxylase in salmon exposed to petroleum dissolved in seawater and to petroleum and polychlorinated biphenyls, separate and together, in food.
Bull.environ.Contam.Toxicol., 17, 512-520.

447. GRUGER, E.H. Jr., WEKELL, M.M. & ROBISCH, P.A., 1977.
 Effects of chlorinated biphenyls and petroleum hydrocarbons on the activity of hepatic aryl hydrocarbon hydroxylase of Coho salmon (Oncorhynchus kisutch) and Chinook salmon (O. tshawytscha).
In: Wolfe, D.A., ed. Fate and effects of petroleum hydrocarbons in marine ecosystems and organisms. Proceedings of a Symposium, Seattle, Wash., Nov. 10-12, 1976. New York, Pergamon Press, p. 323-331.
448. GUNKEL, W. & GASSMANN, G., 1979.
 Oil, oil dispersants and related substances.
In: Abstracts from the 14th European Marine Biology Symposium, Protection of Life in the Sea, Helgoland, 23-29 Sept. 1979, p. 39.
449. GUSEY, W.F. & MATURGO, Z.D., 1971.
 Petroleum production and fish and wildlife resources: the Gulf of Mexico, Louisiana.
 New York, Shell Oil Company, Environmental Conservation Department, 38 p.
450. GYLLENBERG, G. & LUNDQVIST, G., 1976.
 Some effects of emulsifiers and oil on two copepod species.
Acta zool. Fenn., 148, 1-24.
451. HADLEY, D., 1977.
 Intra- and interspecific variability in tolerance of Southern California Littorina planaxis and Littorina scutulata to petroleum.
Environ. Res., 13(2), 186-208.
452. HAGSTRØM, Å., 1977.
 The fate of oil in a model ecosystem.
Ambio, 6(4), 229-231.
453. HAGSTRØM, B.E. & LØNNING, S., 1977.
 The effects of Esso Corexit 9527 on the fertilizing capacity of spermatozoa.
Mar. Pollut. Bull., 8(6), 136-138.
454. HALL, L.W. Jr., BUIKEMA, A.L. & CAIRNS, J.Jr., 1978.
 The effects of a simulated refinery effluent on the grass shrimp, Palaemonetes pugio.
Arch. environ. Contam. Toxicol., 7, 23-35.
455. HALLADAY, W.B. & MERTENS, E.W., 1975.
 Impact of oil operations on the marine environment.
In: Petroleum and environmental conservation. Report of the Proceedings at the IPIECA Symposium, Teheran, 7-9 April 1975. International Petroleum Industry Environmental Conservation Association, p. 155-181.
456. HAMPSON, G.R. & MOUL, E.T., 1977.
 Salt marsh grasses and Number 2 fuel oil.
Oceanus, 20(4), 25-30.

457. HAMPSON, G.R. & MOUL, E.T., 1978.
No. 2 fuel oil spill in Bourne, Massachusetts: immediate assessment of the effects on marine invertebrates and a 3-year study of growth and recovery of a salt marsh.
J.Fish.Res.Board Can., 35(5), 731-744.
458. HANNA, B.M., HELLEBUST, J.A. & HUTCHINSON, T.C., 1975.
Field studies on the phytotoxicity of crude oil to sub-arctic aquatic vegetation.
Verh.Int.Verein.Limnol., 19, 2165-2171.
459. HARDY, R., MACKIE, P.R. & WHITTLE, K.J., 1977.
Hydrocarbons and petroleum in the marine ecosystem - A review.
In: McIntyre, A.D. & Whittle, K.J., eds. Petroleum hydrocarbons in the marine environment. Proceedings from ICES Workshop held in Aberdeen, 9-12 Sept. 1975. International Council for the Exploration of the Sea, 171, p. 17-26.
460. HARDY, R., MACKIE, P.R., WHITTLE, K.J. & MCINTYRE, A.D., 1974.
Discrimination in the assimilation of n-alkanes in fish.
Nature (Lond.), 252, 577-578.
461. HARGER, J.R.E. & STRAUGHAN, D., 1972.
Biology of sea mussels (Mytilus californianus Conrad and M.edulis Linn.) before and after the Santa Barbara oil spill (1969).
Water, Air, Soil Pollut., 1, 381-388.
462. HARGRAVE, B.T. & NEWCOMBE, C.P., 1973.
Crawling and respiration as indices of sublethal effects of oil and a dispersant on an intertidal snail Littorina littorea.
J.Fish.Res.Board Can., 30(12), 1789-1792.
463. HARRIS, R.P., BERDUGO, V., CORNER, E.D.S., KILVINGTON, C.C. & O'HARA, S.C.M., 1977.
Factors affecting the retention of a petroleum hydrocarbon by marine planktonic copepods.
In: Wolfe, D.A., ed. Fate and effects of petroleum hydrocarbons in marine organisms and ecosystems. Proceedings of a Symposium, 10-12 Nov. 1976, Seattle, Wash. New York, Pergamon Press, p. 286-304.
464. HARRIS, R.P., BERDUGO, V., O'HARA, S.C.M. & CORNER, E.D.S., 1977.
Accumulation of ^{14}C -l-naphthalene by an oceanic and an estuarine copepod during long-term exposure to low-level concentrations.
Mar.Biol.(Berl.), 42(3), 187-195.
465. HARRISON, E.A., 1977.
The biological effects of oil spills - A bibliography with abstracts.
Springfield, Virginia, National Technical Information Service, 196 p. NTIS/PS-77/0200/4SL.

466. HARRISON, E.A., 1978.
The biological effect of oil spills (A bibliography with abstracts).
Springfield, Virginia, National Technical Information Service, 247 p. NTIS/PS-78/0193/9SL.
467. HARTOG, C. DEN & JACOBS, R.W.P.M., 1979.
Effects of the AMOCO CADIZ oil spill on a seagrass community with species reference to the mobile benthic fauna.
In: Abstracts from the 14th European Marine Biology Symposium, Protection of Life in the Sea, Helgoland, 23-29 Sept. 1979, p. 41.
468. HAWKES, J.W., 1977.
The effects of petroleum hydrocarbons exposure on the structure of fish tissues.
In: Wolfe, D.A., ed. Fate and effects of petroleum hydrocarbons in marine ecosystems and organisms. Proceedings of a Symposium, Seattle, Wash., Nov. 10-12, 1976. New York, Pergamon Press, p. 115-128.
469. HAY, K.G., 1977.
The impact of offshore petroleum operations on marine and estuarine areas.
In: United States. Environmental Protection Agency, Office of Water Planning and Standards. Estuarine Pollution Control and Assessment: Proceedings of a Conference, Vol. 2. Washington D.C., US Environmental Protection Agency, p. 467-474.
470. HÄKKILÄ, K. & NIEMI, A., 1973
Effects of oil and emulsifiers on eggs and larvae of northern pike Esox lucius in brackish water.
Aqua Fennica, 3, 44-59.
471. HEBERT, G.W., & KUSSAT, R.H., 1972.
A laboratory evaluation of the toxicity of certain oils and chemical oil dispersants to juvenile Coho salmon and staghorn sculpins.
Canada, Department of the Environment, Fisheries Service, Pacific Region, Northern Operations Branch, Technical Report 1972-6, 19 p.
472. HEITZ, J.R., CHAMBERS, J. & YARBROUGH, J.D., 1974.
The acute effects of Empire Mix crude oil on enzymes in oysters, shrimp and mullet.
In: Vernberg, F.J. & Vernberg, W.B., eds. Pollution and physiology of marine organisms. New York, Academic Press, p. 311-328.
473. HELDAL, M., NORLAND, S., LIEN, T. & KNUTSEN, G., 1978.
Acute toxicity of several oil dispersants towards the green algae Chlamydomonas and Dunaliella.
Chemosphere, 3, 247-255.

474. HEPPEL, P., editor, 1971.
Water pollution by oil: Proceedings of a Seminar held at Aviemore, Scotland, 4-8 May, 1970.
London, Institute of Petroleum, 393 p.
475. HERSHNER, C. & MOORE, K., 1977.
Effects of the Chesapeake Bay oil spill of February 2, 1976 on salt marshes of the Lower Bay.
In: Proceedings 1977 Oil Spill Conference (Prevention, Behavior, Control, Cleanup), Washington D.C., American Petroleum Institute Publ. No. 4284, p. 529-534.
476. HO, C.L. & KARIM, H., 1978.
Impact of adsorbed petroleum hydrocarbons on marine organisms.
Mar.Pollut.Bull., 9, 156-162.
477. HODGINS, H.O., GRONLUND, W.D., MIGHELL, J.L., HAWKES, J.W. & ROBISCH, P.A., 1977.
Effect of crude oil on trout reproduction.
In: Wolfe, D.A., ed. Fate and effects of petroleum hydrocarbons in marine organisms and ecosystems. Proceedings of a Symposium, 10-12 Nov. 1976, Seattle, Wash. New York, Pergamon Press, p. 143-150.
478. HODGINS, H.O., MCCAIN, B.B. & HAWKES, J.W., 1977.
Marine fish and invertebrate diseases, host disease resistance, and pathological effects of petroleum.
In: Malins, D.C., ed. Effects of petroleum on Arctic and subarctic marine environments and organisms. Vol. II. Biological effects. New York, Academic Press, p. 95-173.
479. HODSON, R.E., AZAM, F. & LEE, R.F., 1977.
Effects of four oils on marine bacterial populations: Controlled ecosystem pollution experiment.
Bull.mar.Sci., 27(1), 119-126.
480. HOFFMAN, D.J., 1978.
Embryonic effects of crude oil in Mallard ducks and chicks.
Toxicol.appl.Pharmacol., 46(1), 183-190.
481. HOFFMAN, D.J., 1979.
Embryotoxic effects of crude oil containing nickel and vanadium in Mallards.
Bull.environ.Contam.Toxicol., 23(1-2), 203-206.
482. HOFFMAN, D.J., 1979.
Embryonic and teratogenic effects of crude oil on Mallard embryos on day-one development.
Bull.environ.Contam.Toxicol., 22(4-5), 632-637.
483. HOFFMAN, D.J., 1979.
Embryotoxic and teratogenic effects of petroleum hydrocarbons in Mallards (Anas platyrhynchos).
J.Toxicol.environ.Health, 5(5), 835-844.

484. HOLME, N.A., 1978.
Note on the condition in September 1978 of some intertidal
sands polluted by AMOCO CADIZ oil.
Mar.Pollut.Bull., 9(11), 302.
485. HOLMES, R.W., 1969.
The Santa Barbara oil spill.
In: Hoult, D.P., ed. Oil on the Sea. Proceedings of a Symposium on the Scientific and Engineering Aspects of Oil Pollution of the Sea, sponsored by Massachusetts Institute of Technology and Woods Hole Oceanographic Institution, held in Cambridge, Mass., May 16, 1969.
New York, Plenum Press, p. 15-27.
486. HOLMES, W.N., CAVANAUGH, K.P. & CRONSHAW, J., 1978.
The effects of ingested petroleum on oviposition and some aspects of reproduction in experimental colonies of Mallard ducks (*Anas platyrhynchos*).
J.Reprod.Fertil., 54, 335-347.
487. HOLMES, W.N. & CRONSHAW, J., 1977.
Biological effects of petroleum on marine birds.
In: Malins, D.C., ed. Effects of petroleum on Arctic and subarctic marine environments and organisms. Vol. II. Biological effects. New York, Academic Press, p. 359-398.
488. HOLMES, W.N., CRONSHAW, J. & GORSLINE, J., 1978.
Some effects of ingested petroleum on seawater-adapted ducks (*Anas platyrhynchos*).
Environ.Res., 17(2), 177-190.
489. HOLMES, W.N., GORSLINE, J. & CRONSHAW, J., 1979.
Effect of mild cold stress on the survival of seawater-adapted Mallard ducks (*Anas platyrhynchos*) maintained on food contaminated with petroleum.
Environ.Res., 20(2), 425-444.
490. HOPE JONES, P., MONNAT, J.-Y., CADBURY, C.J. & STOWE, T.J., 1978.
Birds oiled during the AMOCO CADIZ incident - an interim report.
Mar.Pollut.Bull., 9(11), 307-312.
491. HOPKIN, R. & KAIN, J.M., 1978.
The effects of some pollutants on the survival, growth and respiration of Laminaria hyperborea.
Estuarine coastal mar.Sci., 7, 531-553.
492. HORNE, A.J. & KAUFMAN, W.J., 1974.
Biological effects of ammonium salts and diluted treated petroleum refinery effluent on estuarine aufwuchs, phytoplankton, and fish communities.
Berkeley, California, University of California, School of Public Health, 112 p. (SERL Report No. 74-5)

493. HOROWITZ, A. & ATLAS, R.M., 1978.
Crude oil degradation in the Arctic. Changes in bacterial populations and oil composition during one year exposure in a model system.
In: Underkofler, L.A., ed. Developments in industrial microbiology. Vol. 19. Proceedings of the 34th General Meeting of the Society for Industrial Microbiology. East Lansing, Mich., USA, August 21-26, 1977. Arlington, Va., USA, Society for Industrial Microbiology, p. 517-522.
494. HOROWITZ, A., GUTNIK, D. & ROSENBERG, E., 1975.
Sequential growth of bacteria on crude oil.
Appl.Microbiol., 30, 10-19.
495. HOWE, C. & OTTWAY, S.M., 1971.
Some effects of crude oil, oil fractions and products on the prawn Leander squilla.
Rep.Oil Pollut.Res.Unit, Field Stud.Counc., 1971, 22-28.
496. HOWGATE, P., MACKIE, P.R., WHITTLE, K.J., FARMER, J., MCINTYRE, A.D. & ELEFTHERIOU, A., 1977.
Petroleum tainting in fish.
In: McIntyre, A.D. & Whittle, K.J., eds. Petroleum hydrocarbons in the marine environment. Proceedings from ICES Workshop held in Aberdeen, 9-12 September 1975. International Council for the Exploration of the Sea, 171, p. 143-146.
497. HSIAO, S.I.C., 1978.
Effects of crude oils on the growth of Arctic marine phytoplankton.
Environ.Pollut., 17(2), 93-108.
498. HSIAO, S.I.C., KITTLE, D.W. & FOY, M.G., 1978.
Effects of crude oils and the oil dispersant Corexit on primary production of Arctic marine phytoplankton and seaweed.
Environ.Pollut., 15(3), 209-222.
499. HUFFORD, G.L., 1971.
The biological response to oil in the marine environment: a review.
Washington D.C., US Coast Guard, Oceanographic Unit, 23 p.
500. HUGHES, D.E. & MCKENZIE, P., 1975.
The microbial degradation of oil in the sea.
Proc.R.Soc.Lond. B Biol.Sci., 189, 375-390.
501. HURLEY, D.E., 1975.
Marine oil spills. A selected bibliography.
Wellington, New Zealand Oceanographic Institute, 68 p.
(Miscellaneous Publication No. 69)
502. HUTCHINSON, T.C., HELLEBUST, J.A., MACKAY, D., TAM, D. & KAUS, P., 1979.
Relationship of hydrocarbon solubility to toxicity in algae and cellular membrane effects.
In: Proceedings 1979 Oil Spill Conference (Prevention, Behavior, Control, Cleanup), Washington D.C., American Petroleum Institute, Publ. No. 4308, p. 541-547.

503. HYLAND, J.L., 1978.
Onshore survey of macrobenthos along the Brittany coast
following the AMOCO CADIZ oil spill.
Actes Colloq.Cent.natl Exploit.Océans, 6, 175-192.
504. HYLAND, J.L. & MILLER, D.C., 1979.
Effects of No. 2 fuel oil on chemically-evoked feeding
behavior of the mud snail, Ilyanassa obsoleta.
In: Proceedings 1979 Oil Spill Conference (Prevention,
Behavior, Control, Cleanup), Washington D.C., American
Petroleum Institute, Publ. No. 4308, p. 603-607.
505. HYLAND, J.L. & SCHNEIDER, E.D., 1976.
Petroleum hydrocarbons and their effects on marine orga-
nisms, populations, communities and ecosystems.
In: Sources, Effects and Sinks of Hydrocarbons in the
Aquatic Environment. Proceedings of the Symposium,
Washington D.C., 9-11 August, 1976. Arlington, Virginia,
American Institute of Biological Sciences, p. 464-506.
506. IGNATIADES, L. & MIMIKOS, N., 1977.
Ecological responses of phytoplankton on chronic oil
pollution.
Environ.Pollut., 13, 109-118.
507. IGNATIADES, L. & MIMIKOS, N., 1977.
A survey of petroleum hydrocarbons in Elefsis Bay, Aegean
Sea, and their effect on phytoplankton growth.
In: Commission Internationale pour l'Exploration Scienti-
fique de la Mer Méditerranée. IIIes Journées d'Etudes sur
les Pollutions Marines. Protection du Littoral Méditerranéen.
Monaco, C.I.E.S.M.M., p. 139-142.
508. JACOBSON, S.M. & BOYLAN, D.B., 1973.
Effect of seawater soluble fraction of kerosene on chemo-
taxis in a marine snail, Nassarius obsoletus.
Nature (Lond.), 241, 213-215.
509. JAMES, W.P., HANN, R.W. Jr. & SLOWEY, F., 1975.
Effects of an offshore crude oil inloading terminal on the
marine environment.
Mar.Technol.Soc.J., 9, 27-31.
510. JEFFRIES, H.P., 1972.
A stress syndrome in the hard clam, Mercenaria mercenaria.
J.Invertbr.Pathol., 20, 242-251.
511. JEFFRIES, H.P. & JOHNSON, W.C. II, 1976.
Petroleum, temperature, and toxicants: examples of suspected
responses by plankton and benthos on the continental shelf.
Kingston, Rhode Island, University of Rhode Island, Graduate
School of Oceanography, 13 p.

512. JOHANNESSEN, K.I., 1976.
Effects of seawater extract of Ekofisk oil on hatching success of Barents Sea capelin.
International Council for the Exploration of the Sea,
C.M. 1976/E:29, 12 p.
513. JOHNSON, F.G., 1977.
Sublethal biological effects of petroleum hydrocarbon exposures: bacteria, algae and invertebrates.
In: Malins, D.C., ed. Effects of petroleum on Arctic and subarctic marine environments and organisms. Vol. II. Biological effects. New York, Academic Press, p. 271-318.
514. JOHNSTON, C.S., 1977.
The sub-lethal effects of water-soluble extracts of crude oil on the fertilization and development of Fucus serratus L. (serrated wrack).
In: McIntyre, A.D. & Whittle, K.J., eds. Petroleum hydrocarbons in the marine environment. Proceedings from ICES Workshop held in Aberdeen, 9-12 September 1975. International Council for the Exploration of the Sea, 171, 184-185.
515. JOHNSTON, R., 1976.
Mechanisms and problems of marine pollution in relation to commercial fisheries.
In: Johnston, R., ed. Marine Pollution. London, Academic Press, p. 3-158.
516. JOHNSTON, R., 1977.
What North Sea oil might cost fisheries.
Rapp.P.-V.Réun.Cons.int.Explor.Mer, 171, 212-223.
517. JOHNSTON, R., 1978.
Ekofisk blow out and after.
Scott.Fish.Bull., 44, 44-47.
518. JOHNSTON, R. & MCINTYRE, A.D., 1976.
The effect of oily water discharges on marine organisms in the context of North Sea oil developments.
In: The separation of oil from water for North Sea operations. Proceedings of a Seminar, 22-23 June, 1976. Edinburgh, Herriot-Watt University, Institute of Offshore Engineering, p. 15-36.
519. JONES, P.H., MONNAT, J.-Y., CADBURY, C.J. & STOWE, T.J.S., 1978.
Birds oiled during the AMOCO CADIZ incident: An interim report.
Mar.Pollut.Bull., 9(11), 307-310.
520. JØNSTEN, A.H. & HANSEN, E.B., 1977.
Oil pollution and seabirds in Denmark 1971-1976.
Dan.Rev.Game Biol., 10(5), 1-32.

521. KANTER, R., 1974.
Susceptibility to crude oil with respect to size, season and geographic location in Mytilus californianus (Bivalvia). Los Angeles, California, University of Southern California, Sea Grant Program, 43 p. (USC-SG-4-74)
522. KANTER, R., STRAUGHAN, D. & JESSEE, W.N., 1971.
Effects of exposure to oil on Mytilus californianus from different localities.
In: Proceedings of a Joint Conference on Prevention and Control of Oil Spills, held in Washington D.C., 15-17 June, 1971. Washington D.C., American Petroleum Institute, p. 485-488.
523. KARINEN, J.F. & RICE, S.D., 1974.
Effects of Prudhoe Bay crude oil on molting Tanner crabs (Chionoecetes bairdi).
Mar.Fish.Rev., 36(7), 31-37.
524. KATAYAMA, K., 1976.
Influences of heavy oils on the early development in Porphyra cultures.
Bull.Fish.Exp.Stn Okayama Pref., 1976, 165-169.
525. KATOR, H. & HERWIG, R., 1977.
Microbial responses after two experimental oil spills in an Eastern coastal plain estuarine ecosystem.
In: Proceedings 1977 Oil Spill Conference (Prevention, Behavior, Control, Cleanup), March 8-10, 1977, New Orleans, Louisiana. Washington D.C., American Petroleum Institute, Publ. No. 4284, p. 517-522.
526. KATZ, L.M., 1973.
The effects of the water soluble fraction of crude oil on larvae of the decapod crustacean Neopanope texana (Sayi).
Environ.Pollut., 5(3), 199-204.
527. KAUSS, P.B. & HUTCHINSON, T.C., 1975.
The effects of water-soluble petroleum components on the growth of Chlorella vulgaris Beijerinck.
Environ.Pollut., 9, 157-174.
528. KAUSS, P.B. & HUTCHINSON, T.C., 1976.
Studies on the susceptibility of Ankistrodesmus species to crude oil components.
Verh.Int.Verein.Limnol., 19, 2155-2164.
529. KAUSS, P.B. & HUTCHINSON, T.C., 1978.
Effects of benzene, a water soluble component of crude oils on membrane integrity and ionic content of the green alga Ankistrodesmus falcatus var. mirabilis.
Water Pollut.Res.Can., 13, 85-98.
530. KAUSS, P.B., HUTCHINSON, T.C. & GRIFFITHS, M., 1972.
Field and laboratory studies of the effects of crude oil spills on phytoplankton.
Proc.Inst.environ.Sci., 18, 22-26.

531. KECK, R.T., 1978.
Sublethal effects of the water-soluble fraction of Nigerian crude oil on the juvenile hard clams, Mercenaria mercenaria (Linne).
Environ.Pollut., 15(2), 109-120.
532. KEIZER, P.D. & WELLS, P.G., 1975.
The effectiveness and toxicity of the oil dispersant, Oilsperse 43, in large outdoors tanks.
Surveillance Report, EPS-5-AR, Canada. 75-8, 24 p.
533. KERKHOFF, M., 1974.
Oil pollution of the shellfish areas in the Oosterschelde estuary: December 1973.
Copenhagen, International Council for the Exploration of the Sea, Fisheries Improvement Committee, 11 p. (C.M. 1974/E:13)
534. KETCHUM, B.H., 1973.
Oil in the marine environment.
In: Background Papers for a Workshop on Inputs, Fates and Effects of Petroleum in the Marine Environment. Vol. 2. Physical, Chemical and Biological Fates, Chronic, Acute and Health Effects. Washington D.C., National Academy of Sciences, p. 709-738. (AD-783 990)
535. KICENIUK, J.W. & PAYNE, J.F., 1977.
An evaluation of death by hypoxia in a marine fish as an indicator of oil dispersant toxicity.
In: Parker, W.R., ed. Proceedings of the 3rd Aquatic Toxicity Workshop, November 2-3, 1976. Halifax, Nova Scotia, Environment Canada, Environmental Protection Service, p. 119-122.
536. KICENIUK, J.W., PENROSE, W.R. & SQUIRES, W.R., 1978.
Oil spill dispersants cause bradycardia in a marine fish.
Mar.Pollut.Bull., 9(2), 42-45.
537. KING, K.A. & LEFEVER, C.A., 1979.
Effects of oil transferred from incubating gulls to their eggs.
Mar.Pollut.Bull., 10(11), 319-320.
538. KING, K.A., MACKO, S., PARKER, P.L. & PAYNE, E., 1979.
Resuspension of oil - Probable cause of brown pelican fatality.
Bull.environ.Contam.Toxicol., 23(6), 800-805.
539. KING, P.J., 1977.
An assessment of the potential carcinogenic hazard of petroleum hydrocarbons in the marine environment.
In: McIntyre, A.D. & Whittle, K.J., eds. Petroleum hydrocarbons in the marine environment. Proceedings ICES Workshop, Aberdeen 9-12 Sept. 1975, International Council for the Exploration of the Sea, 171, 202-211.

540. KINSEY, D.W., 1973.
Small-scale experiments to determine the effects of crude oil films on gas exchange over the coral back-reef at Heron Island.
Environ.Pollut., 4, 167-182.
541. KITTREDGE, J.S., 1972.
Effects of the water-soluble component of oil pollution on chemoreception by crabs.
U.S.Natl.tech.Inf.Serv.Gov.annu.Rep., 72(9), 88-93.
542. KITTREDGE, J.S., 1973.
The effects of crude oil pollution on the behaviour of marine invertebrates.
Duarte, California, City of Hope National Medical Center, Division of Neurosciences, 14 p.
543. KLOTH, T.C. & WOHLSCLAG, D.E., 1972.
Size-related metabolic response of the pinfish, Lagodon rhomboides, to salinity variations and sublethal petrochemical pollution.
Contr.mar.Sci., 16, 125-137.
544. KNAP, A.H., WILLIAMS, P.J. LE B. & TYLER, I., 1979.
Contribution of volatile petroleum hydrocarbons to the organic carbon budget of an estuary.
Nature (Lond.), 279, 517-519.
545. KNIEPER, L.H. & CULLEY, D.D. Jr., 1975.
The effects of crude oil on the palatability of marine crustaceans.
Progr.Fish-Cult., 37(1), 9-14.
546. KOLPACK, R.L., MEYERS, T.J., BARROW, J.L., DRAKE, D.E. & PLUTCHAK, N.B., 1973.
Fate of oil in a water environment. Phase 1. Vol. II.
Annotated bibliography of selected literature.
Los Angeles, University of Southern California, Environmental Geology Program, 166 p.
547. KONTOGIANNIS, J.E. & BARNETT, C.J., 1973.
The effect of oil pollution on survival of the tidal pool copepod Tigriopus californicus.
Environ.Pollut., 4, 69-79.
548. KOONS, C.B. & WHEELER, R.B., 1977.
Inputs, fate, and effects of petroleum in offshore Norwegian waters.
EXXON Production Research Company, Special Report,
Basin Exploration Division, EPR.28EX.77, 35 p.
549. KOOYMAN, G.L., DAVIS, R.W. & CASTELLINI, M.A., 1977.
Thermal conductance of immersed pinniped and sea otter pelts before and after oiling with Prudhoe Bay crude.
In: Wolfe, D.A., ed. Fate and effects of petroleum hydrocarbons in marine organisms and ecosystems. Proceedings of a Symposium, held in Seattle, Wash., Nov. 10-12, 1976.
New York, Pergamon Press, p. 151-157.

550. KOPISCHKE, F.D., 1972.
 The effect of 2,4-D and Diesel fuel on egg hatchability.
 J.Wildl.Manage., 36, 1353-1356.
551. KORN, S., HIRSCH, N. & STRUHSAKER, J.W., 1976.
 Uptake, distribution, and depuration of ^{14}C -benzene in
 northern anchovy, Engraulis mordax, and striped bass,
 Morone saxatilis.
 Fish.Bull., 74(3), 545-551.
552. KORN, S., HIRSCH, N. & STRUHSAKER, J.W., 1977.
 The uptake, distribution and depuration of ^{14}C -benzene and
 ^{14}C -toluene in Pacific herring, Clupea harengus pallasi.
 U.S.Natl mar.Fish.Serv.Fish.Bull., 75(3), 633-636.
553. KORN, S., MOLES, D.A. & RICE, S.D., 1979.
 Effects of temperature on the median tolerance limit of
 pink salmon and shrimp exposed to toluene, naphthalene,
 and Cook Inlet crude oil.
 Bull.environ.Contam.Toxicol., 21(4-5), 521-525.
554. KORN, S., STRUHSAKER, J.W. & BENVILLE, P. JR., 1976.
 Effects of benzene on growth, fat content, and caloric
 content of striped bass, Morone saxatilis.
 Fish.Bull., 74(3), 694-698.
555. KOROLEV, A.M., FROLOV, O.YU. & MAZMANIDI, N.D., 1979.
 Study of some physicochemical characteristics of mucus
 from the Black Sea pickerel in conditions of petroleum toxicosis.
 Biol.Nauki (Mosc.), 9, 38-45.
556. KORRINGA, P., 1973.
 The importance of oil pollution in the North Sea.
 In: Background Papers for a Workshop on Inputs, Fates and
 Effects of Petroleum in the Marine Environment. Vol. 2.
 Physical, Chemical and Biological Fates, Chronic, Acute
 and Health Effects. Washington D.C., National Academy of
 Sciences, p. 739-743. (AD-783 990)
557. KOTOV, A.M., 1976.
 Changes in some of the indicators of carbohydrate metabolism
 in the blood of the picarel and the sole following experimen-
 tal poisoning by dissolved oil products.
 Hydrobiol.J. (Engl.Transl.Gidrobiol.Zh.), 12(6), 74-78.
558. KOVALEVA, G.I., 1979.
 Effect of dissolved petroleum products on the liver carbo-
 hydrate metabolism in two Black Sea fish species, Spicara
smaris and Solea laskaris nasuta.
 Biol.Morya (Vladivost.), 1, 66-71.
559. KOVALEVA, G.I. & MAZMANIDI, N.D., 1978.
 The effect of crude oil and its derivatives on fish (A
 Review).
 Hydrobiol.J. (Engl.Transl.Gidrobiol.Zh.), 14(5), 57-62.

560. KRASILNIKOV, N.A., TSYBAN, A.V. & KORONELLI, T.V., 1973.
 Assimilation of saturated alkanes by marine bacteria.
Okeanologiya, 13, 877-882.
561. KREBS, C.T. & BURNS, K.A., 1977.
 Long term effects of an oil spill on populations of the
 salt-marsh crab Uca pugnax.
Science (Wash.D.C.), 197, 484-487.
562. KRISTOFFERSSON, R., BROBERG, S. & OIKARI, A., 1973.
 Physiological effects of a sublethal concentration of phenol
 in the pike (Esox lucius L.) in pure brackish water.
Ann.Zool.Fenn., 10, 392-397.
563. KRSINIC, F., VILLICIC, D., PICER, M. & PICER, N., 1979.
 Noxious effects of diesel oil D-2 and the synergistic
 effect of polychlorinated biphenyls (Aroclor 1242) on
 zooplankton species Eurydice truncata.
 In: Commission Internationale pour l'Exploration Scienti-
 fique de la Mer Méditerranée. IVes Journées d'Etudes sur
 les Pollutions Marines en Méditerranée. Workshop on Pol-
 lution of the Mediterranean. Monaco, C.I.E.S.M.M., p. 307-
 312.
564. KURELEC, B., BRITVIC, S., RIJAVEC, M., MULLER, W.E.G. & ZAHN,
 R.K., 1977.
 Benzo(a)pyrene monooxygenase induction in marine fish.
 Molecular response to oil pollution.
Mar.Biol.(Berl.), 44(3), 211-216.
565. KURELEC, B., MATIJASEVIC, Z., RIJAVEC, M., ALACEVIC, M.,
 BRITVIC, S., MULLER, W.E.G. & ZAHN, R.K., 1979.
 Induction of benzo(a)pyrene monooxygenase in fish and
 the Salmonella test as a tool for detecting mutagenic-
 carcinogenic xenobiotics in the aquatic environment.
Bull.environ.Contam.Toxicol., 21(6), 799-807.
566. KÜHNHOLD, W.W., 1969.
 Der Einfluss wasserlöslicher Bestandteile von Rohölen und
 Rohölfraktionen auf die Entwicklung von Heringsbrut.
Ber.dtsch.wiss.Komm.Meeresforsch., 20(2), 165-171.
567. KÜHNHOLD, W.W., 1969.
 Effect of water soluble substances of crude oil on eggs and
 larvae of cod and herring.
 International Council for the Exploration of the Sea,
 Fisheries Improvement Committee, C.M.1969/E:17, 15 p.
568. KÜHNHOLD, W.W., 1972.
 Untersuchungen über die Toxizität von Rohölextrakten und
 Emulsionen auf Eier und Larven von Dorsch und Hering.
 University of Kiel, Institute of Oceanography, Ph.D.
 Thesis, 174 p.

569. KÜHNHOLD, W.W., 1972.
The influence of crude oils on fish fry.
In: Ruivo, M., ed. Marine pollution and sea life, West Byfleet, Surrey, U.K., Fishing News (Books) Ltd., p. 315-317.
570. KÜHNHOLD, W.W., 1974.
Investigations on the toxicity of seawater-extracts of three crude oils on eggs of cod (Gadus morhua L.).
Ber.dtsch wiss.Komm.Meeresforsch., 23, 165-180.
571. KÜHNHOLD, W.W., 1975.
Acute toxicity of crude oil to fish fry and the intake of sublethal concentrations of crude oil hydrocarbons.
University of Kiel, The Fish Organization Branch, 33 p.
(N76-26724/4SL).
572. KÜHNHOLD, W.W., 1977.
The effect of mineral oils on the development of eggs and larvae of marine species.
In: McIntyre, A.D. & Whittle, K.J., eds. Petroleum hydrocarbons in the marine environment. Proceedings ICES Workshop, Aberdeen 9-12 Sept. 1975, International Council for the Exploration of the Sea, 171, 175-183.
573. KÜHNHOLD, W.W. & BUSCH, F., 1978.
On the uptake of three different types of hydrocarbons by salmon eggs (Salmo salar L.).
Meeresforschung, 26(1-2), 50-59.
574. KÜHNHOLD, W.W., EVERICH, D., STEGEMAN, J.J., LAKE, J. & WOLKE, R.E., 1978.
Effects of low levels of hydrocarbons on embryonic, larval and adult Winter flounder (Pseudopleuronectes americanus).
In: Proceedings of the Conference on Assessment of Ecological Impacts of Oil Spills. Keystone, Colorado, 14-17 June 1978. Arlington, Virginia, American Institute of Biological Sciences, p. 678-711.
575. KASIMOV, R.Y. & RUSTAMOVA, S.A., 1971.
Effect of petroleum and petroleum products on sturgeon and other fish.
Tr.tsentr.nauchno-issled.Inst.oset.Khoz., 3, 191-195.
576. KASYMOV, A.G. & ALIEV, A.D., 1973.
Experimental study of the effect of oil on some representatives of benthos in the Caspian Sea.
Water, Air, Soil Pollut., 2, 235-245.
577. LACAZE, J.C., 1974.
Ecotoxicology of crude oils and the use of experimental marine ecosystems.
Mar.Pollut.Bull., 5(10), 153-156.

578. LACAZE, J.C., 1976.
Expériences de pollution en écosystèmes marins contrôlés.
Applications aux produits pétroliers.
Océanis, 2, (Suppl.), 1-115.
579. LACAZE, J.C. & VILLEDON DE NAIDE, O., 1976.
Influence of illumination on phytotoxicity of crude oil.
Mar.Pollut.Bull., 7(4), 73-76.
580. LAIR, M.D., ROGERS, R.G. & WELDON, M.R., 1971.
Environmental effects of petrochemical waste discharges on
Tallaboa and Guayanilla Bays, Puerto Rico.
Athens, Georgia, US Environmental Protection Agency,
Region IV, 102 p.
581. LAKE, J.L. & HERSHNER, C., 1977.
Petroleum sulfur-containing compounds and aromatic hydrocarbons in the marine molluscs Modiolus demissus and Crassostrea virginica.
In: Proceedings 1977 Oil Spill Conference (Prevention, Behavior, Control, Cleanup), held in New Orleans, Louisiana, March 8-10, 1977. Washington D.C., American Petroleum Institute, Publ. No. 4284, p. 627-632.
582. LALLIER, R., 1973.
Changes in the differentiation of the sea urchin larva by action of a detergent upon the unsegmented egg.
Experientia, 29, 1022-1023.
583. LAND, B., 1974.
The toxicity of drilling fluid components to aquatic biological systems.
Fish.mar.Serv.Res.Dev.Tech.Rep.No. 487, 33 p.
584. LANDNER, L. & HAGSTRØM, Å., 1975.
Oil spill protection in the Baltic Sea.
J.Wat.Pollut.Control Fed., 47, 796-809.
585. LAROCHE, G., 1973.
Analytical approach in the evaluation of biological damage resulting from spilled oil.
In: Background Papers for a Workshop on Inputs, Fates, and Effects of Petroleum in the Marine Environment. Vol. 1. Inputs, Chemical Techniques, Biological Techniques.
Washington D.C., National Academy of Sciences, p. 347-374.
586. LAROCHE, G., EISLER, R. & TARZWELL, C.M., 1970.
Bioassay procedures for oil and oil dispersant toxicity evaluations.
J.Water Pollut.Control Fed., 42(11), 1982-1989.
587. LARSON, R.A., BOTT, T.L., HUNT, L.L. & ROGENMUSER, K., 1979.
Photooxidation products of a fuel oil and their antimicrobial activity.
Environ.Sci.Technol., 13(8), 965-969.

588. LASDAY, A.H. & MERTENS, E.W., 1976.
Fate of oil and effects on marine life.
J.Petrol.Technol., 28(11), 1285-1288.
589. LATIFF, S.A., 1971.
The effect of oil slick dispersant, Esso Corexit 7664 and
the joint effect with crude oil on the survival of marine
glass fish, Ambassis sp. and palaemonid shrimps.
Malay.agric.J., 48, 13-19.
590. LAUBIER, L., 1978.
The AMOCO CADIZ oil spill. Lines of study and early obser-
vations.
Mar.Pollut.Bull., 9(11), 285-287.
591. LAUGHLIN, R.B. & NEFF, J.M., 1977.
Interactive effects of temperature, salinity shock and
chronic exposure to No. 2 fuel oil on survival, develop-
ment rate and respiration of the horseshoe crab, Limulus
polyphemus.
In: Wolfe, D.A., ed. Fate and effects of petroleum hydro-
carbons in marine organisms and ecosystems. Proceedings
of a Symposium, 10-12 Nov. 1976, Seattle, Wash. New York,
Pergamon Press, p. 182-191.
592. LAUGHLIN, R.B. & NEFF, J.M., 1979.
Interactive effects of salinity, temperature and polycyclic
aromatic hydrocarbons on the survival and development rate
of larvae of the mud crab Rhithropanopeus harrisii.
Mar.Biol.(Berl.), 53(3), 281-292.
593. LAUGHLIN, R.B. & NEFF, J.M., 1979.
The interactive effects of temperature, salinity, and sub-
lethal exposure to phenanthrene, a petroleum-derived poly-
cyclic aromatic hydrocarbon (PAH) on the respiration rate
of juvenile mud crabs, Rhithropanopeus harrisii.
In: Proceedings 1979 Oil Spill Conference (Prevention,
Behavior, Control, Cleanup), held in Los Angeles, California,
March 19-22, 1979. Washington D.C., American Petroleum
Institute, Publ. No. 4308, p. 585-590.
594. LAUGHLIN, R.B., YOUNG, L.G.L. & NEFF, J.M., 1978.
A long-term study of the effects of water-soluble fractions
of No. 2 Fuel Oil on the survival, development rate, and
growth of the mud crab, Rhithropanopeus harrisii.
Mar.Biol.(Berl.), 47(1), 87-95.
595. LAW, R.J., 1978.
Petroleum hydrocarbon analyses conducted following the
wreck of the supertanker AMOCO CADIZ.
Mar.Pollut.Bull., 9(11), 293-296.
596. LAW, R.J., 1978.
Determination of petroleum hydrocarbons in water, fish and
sediments following the Ekofisk blow-out.
Mar.Pollut.Bull., 9(12), 321-323.

597. LAWLER, G.C., LOONG, W.A. & LASETER, J.L., 1978.
Accumulation of saturated hydrocarbons in tissues of
petroleum-exposed Mallard ducks (*Anas platyrhynchos*).
Environ.Sci.Technol., 12(1), 47-51.
598. LAWLER, G.C., LOONG, W.A. & LASETER, J.L., 1978.
Accumulation of aromatic hydrocarbons in tissues of
petroleum-exposed Mallard ducks (*Anas platyrhynchos*).
Environ.Sci.Technol., 12(1), 51-54.
599. LAWRENCE, M. & SCHERER, E., 1974.
Behavioural responses of whitefish and rainbow trout to
drilling fluids.
*Fish.mar.Serv.Res.Dev.Tech.Rep.*No. 502, 47 p.
600. LANNERGREN, C., 1978.
Net- and nannoplankton: effects of an oil spill in the
North Sea.
Bot.Mar., 21(6), 353-356.
601. LE BOEUF, B.J., 1971.
Oil contamination and elephant seal mortality: a "negative"
finding.
In: Straughan, D., ed. *Biological and oceanographical
survey of the Santa Barbara Channel oil spill 1969-1970.
Volume 1. Biology and bacteriology.* Los Angeles, Allan
Hancock Foundation, University of Southern California,
p. 227-285.
602. LEE, R.F., 1975.
Fate of petroleum hydrocarbons in marine zooplankton.
In: Proceedings of a Joint Conference on Prevention and
Control of Oil Spills, held in San Francisco, California,
March 25-27, 1975. Washington D.C., American Petroleum
Institute, p. 549-554.
603. LEE, R.F., 1976.
Monitoring of petroleum hydrocarbons.
In: Portmann, J.E., ed. *FAO Fish.Tech.Pap.* No. 150,
p. 38-47.
604. LEE, R.F., 1977.
Fate of petroleum components in estuarine waters of the
southeastern United States.
In: Proceedings 1977 Oil Spill Conference (Prevention,
Behavior, Control, Cleanup), held in New Orleans, Louisiana,
March 8-10, 1977. Washington D.C., American Petroleum
Institute, Publ. No. 4284, p. 611-616.
605. LEE, R.F., 1977.
Accumulation and turnover of petroleum hydrocarbons in
marine organisms.
In: Wolfe, D.A., ed. *Fate and effects of petroleum hydro-
carbons in marine organisms and ecosystems. Proceedings
of a Symposium, 10-12 Nov. 1976, Seattle, Wash.* New York,
Pergamon Press, p. 60-70.

606. LEE, R.F., 1977.
Fate of petroleum hydrocarbons in marine animals.
In: Oceans '77. Proceedings of a Conference, Los Angeles, California, 17-19 October 1977. New York, IEEE, p. 40C1-40C4.
607. LEE, R.F. & ANDERSON, J.W., 1977.
Fate and effect of naphthalenes in controlled ecosystem enclosures.
Bull.mar.Sci., 27(1), 127-134.
608. LEE, R.F. & BENSON, A.A., 1973.
Fates of petroleum in the sea: biological aspects.
In: Background Papers for a Workshop on Inputs, Fates and Effects of Petroleum in the Marine Environment. Vol. 2. Physical, Chemical and Biological Fates, Chronic, Acute and Health Effects. Washington D.C., U.S. National Academy of Sciences, p. 541-551. (AD-783 990)
609. LEE, R.F., FURLONG, E. & SINGER, S., 1977.
Metabolism of hydrocarbons in marine invertebrates: aryl hydrocarbon hydroxylase from tissues of the blue crab, Callinectes sapidus and the polychaete worm, Nereis sp.
In: Giam, C.S., ed. Pollutant effects on marine organisms. Lexington, Massachusetts, D.C. Health and Co., p. 111-124.
610. LEE, R.F., GARDNER, W.S., ANDERSON, J.W., BLAYLOCK, J.W. & BARWELL-CLARKE, J., 1978.
Fate of polycyclic aromatic hydrocarbons in controlled ecosystem enclosures.
Environ.Sci.Technol., 12(7), 832-838.
611. LEE, R.F. & RYAN, C., 1976.
Biodegradation of petroleum hydrocarbons by marine microbes.
In: Sharpley, J.M. & Kaplan, A.M., eds. Proceedings of the Third International Biodegradation Symposium. London, Applied Science Publishers, p. 119-125.
612. LEE, R.F., RYAN, C. & NEUHAUSER, M.L., 1976.
Fate of petroleum hydrocarbons taken up from food and water by blue crab Callinectes sapidus.
Mar.Biol.(Berl.), 37(4), 363-370.
613. LEE, R.F., SAUERHEBER, R. & BENSON, A.A., 1972.
Petroleum hydrocarbons: uptake and discharge by the marine mussel Mytilus edulis.
Science (Wash.D.C.), 177, 344-346.
614. LEE, R.F., SAUERHEBER, R. & DOBBS, G.H., 1972.
Uptake, metabolism, and discharge of polycyclic aromatic hydrocarbons by marine fish.
Mar.Biol.(Berl.), 17, 201-208.

615. LEE, R.F., SINGER, S.C., TENORE, K.R., GARDNER, W.S. & PHILPOT, R.M., 1979.
Detoxification system in polychaete worms: importance in the degradation of sediment hydrocarbons.
In: Vernberg, W.B., Calabrese, A., Thurberg, F.P. & Vernberg, F.J., eds. Marine pollution: functional responses, New York, Academic Press, p. 23-38.
616. LEE, R.F. & TAKAHASHI, M., 1977.
The fate and effect of petroleum in controlled ecosystem enclosures.
In: McIntyre, A.D. & Whittle, K.J., eds. Petroleum hydrocarbons in the marine environment. Proceedings ICES Workshop, Aberdeen 9-12 Sept. 1975, International Council for the Exploration of the Sea, 171, 150-156.
617. LEE, R.F., TAKAHASHI, M., BEERS, J.R., THOMAS, W.H., SEIBERT, D.L.R., KOELLER, P. & GREEN, D.R., 1977.
Controlled ecosystems: their use in the study of the effects of petroleum hydrocarbons on plankton.
In: Vernberg, F.J., Calabrese, A., Thurberg, F.P. & Vernberg, W.B., eds. Physiological responses of marine biota to pollutants. New York, Academic Press, p. 323-342.
618. LEE, W.Y., 1978.
Chronic sublethal effects of the water soluble fractions of No. 2 fuel oils on the marine isopod, Sphaeroma quadridentatum. Mar.environ.Res., 1, 5-17.
619. LEE, W.Y. & NICOL, J.A.C., 1977.
The effects of the water-soluble fractions of No. 2 fuel oil on the survival and behaviour of coastal and oceanic zooplankton.
Environ.Pollut., 12(4), 293-306.
620. LEE, W.Y. & NICOL, J.A.C., 1978.
Individual and combined toxicity of some petroleum aromatics to the marine amphipod Elasmopus pectenircus.
Mar.Biol.(Berl.), 48(3), 215-222.
621. LEE, W.Y., WELCH, M.F. & NICOL, J.A.C., 1977.
Survival of two species of amphipods in aqueous extracts of petroleum oils.
Mar.Pollut.Bull., 8(4), 92-94.
622. LEE, W.Y., WINTERS, K. & NICOL, J.A.C., 1978.
The biological effects of the water-soluble fractions of a No. 2 fuel oil on the planktonic shrimp, Lucifer faxoni. Environ.Pollut., 15(3), 167-184.
623. LE FEVRE, J., 1979.
On the hypothesis of a relationship between dinoflagellate blooms and the AMOCO CADIZ oil spill.
J.mar.biol.Assoc.U.K., 59(2), 525-528.

624. LEHMANN, E.J., 1975.
The biological effects of oil spills (A bibliography with abstracts).
Springfield, Virginia, National Technical Information Service, 111 p.
625. LE LOURD, P., 1977.
Oil pollution in the Mediterranean sea.
Ambio, 6(6), 317-320.
626. LE PEMP, X., LACAZE, J.C. & DE NAIDE, O.V., 1976.
Toxicité d'un pétrole brut vis-à-vis de la production primaire du phytoplancton de l'estuaire de la Rance: influence de la température et du temps de contact.
Bull.Mus.natl Hist.nat.Ecol.gén., 386(32), 107-110.
627. LE PENNEC, M. & LE ROUX, S., 1979.
Effects d'un pétrole brut sur la formation de la coquille de *Mytilus edulis* (L.).
Rev.int.Océanogr.méd., 55, 49-55.
628. LEPPÄKOSKI, E.J., 1973.
Effects of an oil spill in the northern Baltic.
Mar.Pollut.Bull., 4(6), 93-94.
629. LEPPÄKOSKI, E.J. & LINDSTRÖM, L.S., 1978.
Recovery of benthic macrofauna from chronic pollution in the sea area off a refinery plant, southwest England.
J.Fish.Res.Board Can., 35, 766-775.
630. LE ROUX, S., 1977.
The toxicity of pure hydrocarbons to mussel larvae.
In: McIntyre, A.D. & Whittle, K.J., eds. Petroleum hydrocarbons in the marine environment. Proceedings ICES Workshop, Aberdeen 9-12 Sept. 1975, International Council for the Exploration of the Sea, 171, 189-190.
631. LE ROUX, S. & LUCAS, A., 1978.
Première série de résultats sur la toxicité du pétrole brut de l'AMOCO CADIZ.
Actes Colloq.Cent.natl Exploit.Océans, 6, 215-226.
632. LE ROUX, S. & LUCAS, A., 1978.
Techniques d'étude des effets des hydrocarbures sur la physiologie des larves de moule.
Revue int.Océanogr.méd., 49, 75-79.
633. LEUNG, T.S. & BULKLEY, R.V., 1979.
Effects of petroleum hydrocarbons on length of incubation and hatching success in the Japanese Medaka.
Bull.environ.Contam.Toxicol., 23(1-2), 236-243.
634. LEVELL, D., 1973.
The effects of oil pollution and cleaning on the fauna of soft substrates.
Rep.Oil Pollut.Res.Unit, Field Stud.Counc., 1973, 72-77.

635. LEVELL, D., 1976.
The effect of Kuwait crude oil and the dispersant BP 1100X on the lugworm, Arenicola marina L.
In: Baker, J.M., ed. Marine ecology and oil pollution.
Barking, Essex, Applied Science Publishers, p. 131-188.
636. LEVITAN, W.M. & TAYLOR, M.H., 1979.
Physiology of salinity-dependent naphthalene toxicity in Fundulus heteroclitus.
J.Fish.Res.Board Can., 36(6), 615-620.
637. LEVY, E.M., 1972.
Evidence for the recovery of the waters off the east coast of Nova Scotia from the effects of a major oil spill.
Water, Air, Soil Pollut., 1, 144-148.
638. LEWIS, J.B., 1971.
Effect of crude oil and oil-spill dispersant on reef corals.
Mar.Pollut.Bull., 2, 59-62.
639. LEWIS, R.R., 1979.
Oil and mangrove forests: the aftermath of the HOWARD STARR oil spill.
Fla Sci., 42(Suppl. 1), 26. (Abstract)
640. LIGHT, M. & LANIER, J.L., 1978.
Biological effects of oil pollution - A comprehensive bibliography with abstracts.
Groton, Connecticut, Coast Guard Research and Development Center, 648 p. (NTIS No. AD-A064 196/9SL).
641. LINDEN, O., 1974.
Effects of oil spill dispersants on the early development of Baltic herring.
Ann.Zool.Fenn., 11, 141-148.
642. LINDEN, O., 1975.
Acute effects of oil and oil/dispersant mixture on larvae of Baltic herring.
Ambio, 4(3), 130-133.
643. LINDEN, O., 1976.
The influence of crude oil and mixtures of crude oil/dispersants on the ontogenetic development of the Baltic herring, Clupea harengus membras L.
Ambio, 5(3), 136-140.
644. LINDEN, O., 1976.
Effects of oil on the reproduction of the amphipod Gammarus oceanicus.
Ambio, 5(1), 36-37.
645. LINDEN, O., 1976.
Effects of oil on the amphipod Gammarus oceanicus.
Environ.Pollut., 10(4), 239-250.

646. LINDEN, O., 1977.
Sublethal effects of oil on mollusc species from the
Baltic sea.
Water, Air, Soil Pollut., 8(3), 305-313.
647. LINDEN, O., 1978.
Biological effects of oil on early development of the
Baltic herring Clupea harengus membras.
Mar.Biol.(Berl.), 45(3), 273-283.
648. LINDEN, O., ELMGREN, R. & BOEHM, P., 1979.
The TSESIS oil spill: its impact on the coastal ecosystem
of the Baltic Sea.
Ambio, 8(6), 244-253.
649. LINDEN, O., SHARP, J.R., LAUGHLIN, R. & NEFF, J.M., 1979.
Interactive effects of salinity, temperature and chronic
exposure to oil on the survival and developmental rate of
embryos of the estuarine killi-fish Fundulus heteroclitus.
Mar.Biol.(Berl.), 51(2), 101-110.
650. LOCKWOOD, A.P.M., editor, 1976.
Effects of pollutants on aquatic organisms.
Cambridge, Cambridge University Press, 193 p.
651. LONGWELL, A.C., 1977.
A genetic look at fish eggs and oil.
Oceanus, 20(4), 46-58.
652. LOYA, Y. & RINKEVICH, B., 1979.
Abortion effect in corals induced by oil pollution.
Mar.Ecol.Prog.Ser., 1, 77-80.
653. LUCAS, A. & LE ROUX, S., 1975.
Mise en évidence de la toxicité de divers pétroles bruts
vis-à-vis des larves de moule.
C.R.hebd.Séances Acad.Sci.Sér.D Sci.nat., 280(20), 2381-2384.
654. LYTLE, J.S., 1975.
Fate and effects of crude oil on an estuarine pond.
In: Proceedings of a Joint Conference on Prevention and Control
of Oil Spills, sponsored by the American Petroleum Institute,
Environmental Protection Agency and US Coast Guard, held in
San Francisco, March 25-27, 1975. Washington D.C., American
Petroleum Institute, p. 595-600.
655. LYTLE, J.S., LYTLE, T.F., GEARING, J.M. & GEARING, P.J., 1979.
Hydrocarbons in benthic algae from the Eastern Gulf of Mexico.
Mar.Biol.(Berl.), 51(3), 279-288.
656. LØNNING, S., 1977.
The sea urchin egg as a test object in oil pollution studies.
In: McIntyre, A.D. & Whittle, K.J., eds. Petroleum hydro-
carbons in the marine environment. Proceedings ICES Workshop,
Aberdeen, 9-12 Sept. 1975, International Council for the
Exploration of the Sea, 171, 186-188.

657. LØNNING, S., 1977.
 The effects of crude Ekofisk oil and oil products on marine fish larvae.
 Astarte, 10(1), 37-48.
658. LØNNING, S. & FALK-PETERSEN, I.B., 1979.
 The effects of oil dispersants on marine eggs and larvae.
 Astarte, 11(2), 135-138.
659. LØNNING, S. & HAGSTRØM, B.E., 1975.
 The effects of crude oil and the dispersant Corexit 8666 on sea urchin gametes and embryos.
 Norw.J.Zool., 23(2), 121-130.
660. LØNNING, S. & HAGSTRØM, B.E., 1975.
 The effects of oil dispersants on the cell in fertilization and development.
 Norw.J.Zool., 23(2), 131-134.
661. LØNNING, S. & HAGSTRØM, B.E., 1976.
 Deleterious effects of Corexit 9527 on fertilization and development.
 Mar.Pollut.Bull., 7(7), 124-127.
662. LØNNING, S. & HAGSTRØM, B.E., 1978.
 A toxicological evaluation of a plastic oil absorbant.
 Mar.Pollut.Bull., 9(10), 276-278.
663. MCAULIFFE, C.D., 1973.
 The environmental impact of an offshore oil spill.
 In: Background Papers for a Workshop on Inputs, Fates and Effects of Petroleum in the Marine Environment. Vol. 1. Inputs, Chemical Techniques, Biological Techniques.
 Washington D.C., National Academy of Sciences, p. 223-279.
664. MCAULIFFE, C.D., SMALLEY, A.E., GROOVER, R.D., WELSH, W.M., PICKLE, W.S. & JONES, G.E., 1975.
 Chevron Main Pass Block 41 oil spill: chemical and biological investigations.
 In: Proceedings of the 1975 Conference on Prevention and Control of Oil Pollution, San Francisco, California, March 25-27, 1975. Washington D.C., American Petroleum Institute, p. 555-566.
665. MCCAIN, B.B., HODGINS, H.O., GRONLUND, W.D., HAWKES, J.W., BROWN, D.W., MYERS, M.S. & VANDERMEULEN, J.H., 1978.
 Bioavailability of crude oil from experimentally oiled sediments to English sole (Parophrys vetulus), and pathological consequences.
 J.Fish.Res.Board Can., 35(5), 657-664.
666. MCEWAN, E.H., 1978.
 The effect of crude oils on salt gland sodium secretion of orally imposed salt loads in glaucous-winged gulls, Larus glaucescens.
 Can.J.Zool., 56(5), 1212-1213.

667. MCGILL, S. & SPOTTISWOOD, I., 1976.
Offshore activities and the environment.
In: Prevention and control of marine oil pollution. Regional Marine Oil Pollution Conference - Australia, Brisbane, 8-10 Nov. 1976. North Sydney, Petroleum Institute Environmental Conservation Executive, 13 p.
668. MCILVAINE, P.M., 1974.
The environmental impact of oil spills.
In: Taussig, J.K. Jr., ed. Proceedings 4th Annual International Conference, Pollution control in the marine industries. held in Washington D.C., May 14-16, 1974, p. 235-245.
669. MCINTYRE, A.D., DAVIES, J.M., MASSIE, L., HARDY, R., WHITTLE, K.J. & MACKIE, P., 1977.
Field and experimental observations in relation to the Ekofisk oil blowout.
International Council for the Exploration of the Sea, Fisheries Improvement Committee, C.M.1977/E:52, 13 p.
670. MCINTYRE, A.D. & WHITTLE, K.J., editors, 1977.
Petroleum hydrocarbons in the marine environment.
Proceedings from ICES Workshop held in Aberdeen, 9-12 Sept. 1975. International Council for the Exploration of the Sea, 171, 230 p.
671. MACKAY, D. & HARRISON, W., editors, 1973.
Oil and the Canadian environment.
In: Proceedings of a Conference, sponsored by the Institute of Environmental Sciences and Engineering, University of Toronto, 16 May 1973. Toronto, University of Toronto, 142 p.
672. MCKEOWN, B.A. & MARCH, G.L., 1977.
The effect of Bunker C oil and oil dispersant on blood chemistry and gill morphology in rainbow trout.
Spill Technol. Newslett., 2(2), 36-48.
673. MCKEOWN, B.A. & MARCH, G.L., 1978.
The acute effect of Bunker C oil and an oil dispersant on: serum glucose, serum sodium and gill morphology in both freshwater and seawater acclimated rainbow trout (Salmo gairdneri).
Water Res., 12(3), 157-163.
674. MCKEOWN, B.A. & MARCH, G.L., 1978.
The effects of Bunker C oil and oil dispersant: Part 2.
Effects on the accumulation of chlorine-labelled Bunker C oil in various fish tissues.
Mar. environ. Res., 1(2), 119-124.
675. MACKIE, P.R., HARDY, R., BUTLER, E.I., HOLLIGAN, P.M. & SPOONER, M.F., 1978.
Early samples of oil in water and some analyses of zooplankton.
Mar. Pollut. Bull., 9(11), 296-297.

676. MACKIE, P.R., HARDY, R. & WHITTLE, K.J., 1978.
Preliminary assessment of the presence of oil in the ecosystem at Ekofisk after the blow out, April 22-30, 1977.
J.Fish.Res.Board Can., 35(5), 544-551.
677. MACKIE, P.R., HARDY, R., WHITTLE, K.J., CONWAY, D.V.P. & MCINTYRE, A.D., 1976.
Relationship between hydrocarbons and chlorophyll, particulate carbon and plankton in the area between the Firth of Forth, and the Forties Oilfield.
ICES C.M. Pap.Rep., No. E:42, 12 p.
678. MACKIE, P.R., MCGILL, A.S. & HARDY, R., 1972.
Diesel oil contamination of brown trout (Salmo trutta L.).
Environ.Pollut., 3, 9-16.
679. MACKIN, J.G., 1973.
A review of significant papers on effects of oil spills and oilfield brine discharges on marine biotic communities.
College Station, Texas, Texas A&M Research Foundation,
University of Texas, 171 p.
680. MCLEESE, D.W. & METCALFE, C.D., 1979.
Toxicity of creosote to larval and adult lobsters and Crangon and its accumulation in lobster hepatopancreas.
Bull.environ.Contam.Toxicol., 22, 796-799.
681. MCROY, C.P. & WILLIAMS, S.L., 1977.
Sublethal effects on seagrass photosynthesis.
In: Outer Continental Shelf Environmental Assessment Program.
Environmental assessment of the Alaskan continental shelf.
Vol. XII. Effects. Boulder, Colorado, US National Oceanic and Atmospheric Administration, p. 636-673.
682. MAJOR, C.W., 1977.
The effect of pure oil subcomponents on Mytilus edulis, the blue mussel.
In: Vernberg, F.J., Calabrese, A., Thurberg, F.P. & Vernberg, W.B., eds. Physiological responses of marine biota to pollutants. New York, Academic Press, p. 315-322.
683. MAJORI, L., PETRONIO, F., NEDOCLAN, G. & BARBIERI, A., 1973.
Marine pollution by hydrocarbons in the Northern Adriatic Sea.
Revue int.Océanogr.méd., 31-32, 137-169.
684. MALINS, D.C., 1977.
Effects of petroleum on Arctic and subarctic marine environments and organisms. Vol. I. Nature and fate of petroleum.
New York, Academic Press, 321 p.
685. MALINS, D.C., 1977.
Effects of petroleum on Arctic and subarctic marine environments and organisms. Vol. II. Biological effects.
New York, Academic Press, 500 p.

686. MALINS, D.C., 1977.
Biotransformation of petroleum hydrocarbons in marine organisms indigenous to the Arctic and Subarctic.
In: Wolfe, D.A., ed. Fate and effects of petroleum hydrocarbons in marine ecosystems and organisms. Proceedings of a Symposium held in Seattle, Wash., Nov. 10-12, 1976. New York, Pergamon Press, p. 47-59.
687. MALINS, D.C., 1977.
Metabolism of aromatic hydrocarbons in marine organisms.
In: Kraybill, H.F., Dawe, C.J., Harshbarger, J.C. & Tardiff, R.G., eds. Aquatic pollutants and biological effects with emphasis on neoplasia. New York, Ann.N.Y.Acad.Sci., 298, 482-496.
688. MALINS, D.C., COLLIER, T.K. & SANBORN, H.R., 1979.
Disposition and metabolism of aromatic hydrocarbons in marine organisms.
In: Khan, M.A.Q., Lech, J.J. & Menn, J.J., eds. Pesticide and xenobiotic metabolism in aquatic organisms. Washington D.C., American Chemical Society, p. 57-75.
689. MALINS, D.C., GRUGER, E.H. Jr., HODGINS, H.O. & WEBER, D.D., 1977.
Sublethal effects of petroleum hydrocarbons and trace metals, including biotransformations, as reflected by morphological, chemical, physiological, pathological and behavioral indices.
In: Outer Continental Shelf Environmental Assessment Program. Environmental assessment of the Alaskan continental shelf. Vol. XII. Effects. Boulder, Colorado, US National Oceanic and Atmospheric Administration, p. 125-298.
690. MALINS, D.C., HODGINS, H.O. & WEBER, D.D., 1976.
Sublethal effects as reflected by morphological, chemical, physiological and behavioural indices.
In: Outer Continental Shelf Environmental Assessment Program. Environmental assessment of the Alaskan continental shelf. Vol. VIII. Boulder, Colorado, US National Oceanic and Atmospheric Administration, Environmental Research Laboratories, p. 119-138.
691. MALINS, D.C., KRAHN, M.M., BROWN, D.W. & MACLEOD, W.D. Jr., 1979.
Determination of petroleum products in marine environments.
In: Abstracts from the 14th European Marine Biology Symposium, Protection of Life in the Sea, Helgoland, 23-29 Sept. 1979, p. 60-61.
692. MALINS, D.C. & STANSBY, M.E., 1976.
Assessment of available literature on effects of oil pollution on biota in Arctic and subarctic waters.
In: Outer Continental Shelf Environmental Assessment Program. Environmental assessment of the Alaskan continental shelf. Vol. VIII. Boulder, Colorado, US National Oceanic and Atmospheric Administration, Environmental Research Laboratories, p. 155-320.
693. MANKKI, J. & VAURAS, J., 1974.
Littoral fish populations after an oil tanker disaster in the Finnish SW Archipelago.
Annals zool.Fenn., 11, 120-126.

694. MANN, K.H., 1978.
A biologist looks at oil in the sea.
In: Arctic Petroleum Operators Association. Proceedings
of the 7th Arctic Environmental Workshop, Fairmont Hot
Springs, B.C., Canada, April 12-15, 1978. Toronto, Ont.,
University of Toronto, Institute of Environmental Studies,
p. 67-73.
695. MANN, K.H. & CLARK, R.B., 1978.
Long-term effects of oil spills on marine intertidal commu-
nities.
J.Fish.Res.Board Can., 35(5), 791-795.
696. MARTINEZ, A.R., 1977.
Environmental impact of the oil industry. A case study:
Venezuela.
In: Petroleum Industry and the Environment. Seminar papers
and documents. Vols. 1 & 2. Petroleum Meeting, Paris, March
29 - April 1, 1977. Nairobi, United Nations Environment
Programme, p. 761-868.
697. MARTY, D., BIANCHI, A. & GATELLIER, C., 1979.
Effects of three oil spill dispersants on marine bacterial
populations.
Mar.Pollut.Bull., 10(10), 285-286.
698. MASNIK, M.T., STAUFFER, J.R., HOCUTT, C.H. & WILSON, J.H., 1976.
The effects of an oil spill on the macroinvertebrates in a
small Southwestern Virginia Creek.
J.environ.Sci.Health Part A Environ.Sci.Eng., 11(4-5), 281-
296.
699. MATVEEVA, E., 1979.
Fast-acting changes in the crustacean Artemia salina. Leach
respiratory rate after discontinuation of the influence of
crude oil and derivatives.
Izv.Inst.ryb.Resurc.(Varna), 17, 85-95.
700. MAYNARD, N.G., GEBELEIN, C.D. & ZSOLNAY, A., 1977.
The effects of pelagic hydrocarbons on the rocky intertidal
flora and fauna of Bermuda.
In: Proceedings of the 1977 Oil Spill Conference (Prevention,
Behavior, Control, Cleanup), New Orleans, Louisiana, March
8-10, 1977. Washington D.C., American Petroleum Institute,
Publ. No. 4284, p. 499-504.
701. MAYO, D.W., COGGER, C.G., DONOVAN, D.J., GAMBARDELLA, R.A.;
JIANG, L.C. & QUAN, J., 1975.
The ecological, chemical and histopathological evaluation
of an oil spill site. Part 2. Chemical studies.
Mar.Pollut.Bull., 6, 166-170.
702. MAZMANIDI, N.D. & BAZHASHVILI, T.R., 1975.
Effects of dissolved petroleum products on the embryonic
development of the Black Sea flounder.
Hydrobiol.J. (Engl.Transl.Gidrobiol.Zh.), 11(5), 39-43

703. MAZMANIDI, N.D. & KOVALEVA, G.I., 1975.
The effect of dissolved petroleum products on some of the aspects of carbohydrate metabolism in fishes and invertebrates.
J. Ichthyol. (Engl. Transl. Vopr. Ikhtiol.), 15(5), 811-816.
704. MAZMANIDI, N.D., KOVALEVA, G.I., KOTOV, A.M., BAZHASHVILI, T.R., DIASAMIDZE, N.M. & ZAMBAKHIDZE, N.P., 1976.
On the effect of petroleum products on the Black Sea hydrobionts.
Rybn Khoz., 5, 24-28.
705. MECKLENBURG, T.A., RICE, S.D. & KARINEN, J.F., 1977.
Molting and survival of king crab (Paralithodes camtschatica) and coonstripe shrimp (Pandalus hypsinotus) larvae exposed to Cook Inlet crude oil water-soluble fraction.
In: Wolfe, D.A., ed. *Fate and effects of petroleum hydrocarbons in marine ecosystems and organisms. Proceedings of a Symposium, held in Seattle, Wash., Nov. 10-12, 1976.* New York, Pergamon Press, p. 221-228.
706. MERTENS, E.W., 1973.
A literature review of the biological impact of oil spills in marine waters.
In: *Background Papers for a Workshop on Inputs, Fates and Effects of Petroleum in the Marine Environment. Vol. 2. Physical, Chemical and Biological Fates, Chronic, Acute and Health Effects.* Washington D.C., National Academy of Sciences, p. 744-757. (AD-783 990)
707. MERTENS, E.W., 1976.
The impact of oil on marine life: a summary of field studies.
In: *Proceedings of a Symposium on Sources, Effects and Sinks of Hydrocarbons in the Aquatic Environment, held in Washington D.C., 9-11 August, 1976.* Arlington, Virginia, American Institute of Biological Sciences, p. 508-515.
708. MERTENS, E.W. & ALLRED, R.C., 1977.
Impact of oil operations on the aquatic environment.
In: *Petroleum Industry and the Environment. Seminar papers and documents. Vols. 1 & 2. Petroleum Meeting, Paris, March 29 - April 1, 1977.* Nairobi, United Nations Environment Programme, p. 591-619.
709. MERTENS, E.W. & GOULD, J.R., 1976.
The effects of oil on marine life: An overview of research sponsored by the American Petroleum Institute.
In: *Proceedings from the First International Symposium on Industrial Wastes in the Environment, held in Caracas, Venezuela, Nov. 14-19, 1976,* 16 p.
710. MERTENS, E.W. & HAXBY, L.P., 1975.
Recent advances in understanding the effects of oil in the marine environment.
In: *Proceedings 9th World Petroleum Congress, Vol. 6. Conservation and Safety.* London, Applied Science Publishers, p. 305-313.

711. MEYERHOFF, R.D., 1975.
 Acute toxicity of benzene, a component of crude oil, to
 juvenile striped bass, (Morone saxatilis).
J.Fish.Res.Board Can., 32(10), 1864-1866.
712. MEYERS, S.P., AHEARN, D.G., CROW, S. & BERNER, N., 1973.
 The impact of oil on marshland microbial ecosystems.
In: Ahearn, D.G. & Meyers, S.P., eds. The microbial
degradation of oil pollutants. Proceedings of a Workshop,
Atlanta, Georgia, 4-6 Dec. 1972. Baton Rouge, La., Louisi-
ana State University, Center for Wetland Resources, p. 221-
228.
713. MICHAEL, A.D., 1977.
 The effects of petroleum hydrocarbons on marine populations
 and communities.
In: Wolfe, D.A., ed. Fate and effects of petroleum hydro-
carbons in marine organisms and ecosystems. Proceedings of
a Symposium, 10-12 Nov. 1976, Seattle, Wash. New York,
Pergamon Press, p. 129-137.
714. MICHAEL, A.D. & BROWN, B., 1978.
 Effects of laboratory procedure on fuel oil toxicity.
Environ.Pollut., 15(4), 277-288.
715. MICHAEL, A.D., VAN RAALTE, C.R. & BROWN, L.S., 1975.
 Long-term effects of an oil spill at West Falmouth, Massa-
 chusetts.
In: Proceedings of a Joint Conference on the Prevention, and
Control of Oil Spills, sponsored by the American Petroleum
Institute, Environmental Protection Agency and U.S. Coast
Guard, held in San Francisco, California, March 25-27, 1975.
Washington D.C., American Petroleum Institute, p. 573-582.
716. MICHEL, P., 1976.
 Cinétique d'épuration in situ de moules contaminées par un
 gas-oil.
Sci.Pêche, 259, 1-7.
717. MICHEL, P., 1976.
 Pollution par les hydrocarbures; interaction avec les
 biocénoses.
In: Pérès, J.-M., éd. La pollution des eaux marines. Paris,
Gauthier-Villars, p. 105-116.
718. MICHEL, P. & ABARNOU, A., 1978.
 AMOCO CADIZ: informations sur la contamination des espèces
 exploitées.
Actes Colloq.Cent.natl Exploit.Océans, 6, 143-150.
719. MIDDLEDITCH, B.S., BASILE, B. & CHANG, E.S., 1979.
 Alkanes in seawater in the vicinity of the Buccaneer Oil-
 field.
Bull.environ.Contam.Toxicol., 21(3), 413-420.
720. MIDDLEDITCH, B.S., CHANG, E.S. & BASILE, B., 1979.
 Alkanes in plankton from the Buccaneer Oilfield.
Bull.environ.Contam.Toxicol., 21(3), 421-427.

721. MIDDLEITCH, B.S., CHANG, E.S. & BASILE, B., 1979.
Alkanes in barnacles (Balanus tintinnabulum) from the
Buccaneer Oilfield.
Bull.environ.Contam.Toxicol., 23(1-2), 6-12.
722. MIDDLEITCH, B.S., CHANG, E.S., BASILE, B. & MISSLER, S.R., 1979.
Alkanes in fish from the Buccaneer Oilfield.
Bull.environ.Contam.Toxicol., 22(1-2), 249-257.
723. MILLER, D.S., BUNKER, C.J., BURNHAM, E.B., RATNER, M.C., PEAKALL,
D.B. & KINTER, W.B., 1976.
Effects of crude oil ingestion on plasma osmoregulation in
salt-stressed white Pekin ducks (Anas platyrhynchos).
Bull.Mt Desert Isl.biol.Lab., 16, 79-80.
724. MILLER, D.S., PEAKALL, D.B. & KINTER, W.B., 1978.
Ingestion of crude oil: sublethal effects in herring gull chicks.
Science (Wash.D.C.), 199, 315-317.
725. MILLER, D.L., CORLISS, J.P., FARRAGUT, R.N. & THOMPSON, H.C., 1978.
Accumulation and elimination of the polynuclear aromatic hydro-
carbon chrysene by mangrove snapper (Lutjanus griseus) and pink
shrimp (Penaeus duorarum).
Miami, Florida, Unpublished manuscript from the South-east
Fisheries Center, Miami Laboratory, NMFS, National Oceanic
and Atmospheric Administration, 18 p.
726. MILLER, M.C., HATER, G.R. & VESTAL, J.R., 1978.
Effect of Prudhoe Bay crude oil on carbon assimilation by
planktonic algae in an Arctic pond.
In: Adriano, D.C. & Leer Brisbin, I., eds. DOE (U.S. Dept.
of Energy Symposium Series), Environmental chemistry and
cycling processes. Augusta, Ga, USA, Aprl. 28 - May 9, 1976.
Oakridge, Tenn., USA, Department of Energy, Technical Infor-
mation Center, p. 833-850.
727. MILLS, E.R. & CULLEY, D.D., 1972.
Toxicity of various off-shore crude oils and dispersants to
marine and estuarine shrimp.
Proc.Southeast.Game Fish.Comm., 25(1971), 642-650.
728. MILOVIDOVA, N.YU., 1974.
The effect of oil pollution on some coastal crustaceans of
the Black Sea.
Hydrobiol.J. (Engl.Transl.Gidrobiol.Zh.), 10(4), 76-79.
729. MILOVIDOVA, N.YU. & KARGOPOLOVA, I.N., 1975.
Effect of oil pollution on the condition of a population of
Gammarus aequicauda Mart.
Biol.Morya (Kiev), 35, 124-127.
730. MINCHEW, C.D., BROWN, L.R. & LADNER, C.M., 1979.
The occurrence of "white eye syndrome" in shrimp (Penaeus aztecus).
In: Proceedings 1979 Oil Spill Conference (Prevention, Be-
havior, Control, Cleanup), Washington D.C., American Petro-
leum Institute, Publ. No. 4308, p. 537-539.

731. MINCHEW, C.D. & YARBROUGH, J.D., 1977.
The occurrence of fin rot in mullet (Mugil cephalus) associated with crude oil contamination of an estuarine pond-ecosystem.
J.Fish Biol., 10(4), 319-323.
732. MIRONOV, O.G., 1967.
Effects of small concentrations of petroleum and petroleum products on the development of eggs of Black Sea flatfish.
Vopr.Ikhtiol., 7(3), 577-580.
733. MIRONOV, O.G., 1971.
The effects of oil pollution on flora and fauna of the Black Sea.
In: Proceedings of a Conference on Marine Pollution and its Effects on Living Resources and Fish, held in Rome, Dec. 1970. Rome, FAO, E-92, p. 172.
734. MIRONOV, O.G., 1972.
Effects of oil pollution on the flora and fauna of the Black Sea.
In: Ruivo, M., ed. Marine pollution and sea life, London, Fishing News (Books) Ltd., p. 222-224.
735. MIRONOV, O.G., 1975.
Biological aspects of marine hydrocarbon pollution.
In: Pearson, E.A. & De Fraja Frangipane, E., eds. Marine pollution and marine waste disposal. (Supplement to Progress in Water Technology). Proceedings of the 2nd International Congress, San Remo, 17-21 December 1973. Oxford, Pergamon Press, p. 175-182.
736. MIRONOV, O.G., 1979.
Aspects of petroleum hydrocarbon metabolism in marine animals.
In: Abstracts from the 14th European Marine Biology Symposium, Protection of Life in the Sea, Helgoland, 23-29 Sept. 1979, p. 65.
737. MIRONOV, O.G., 1979.
Scientific basis for oil pollution biological monitoring in the Mediterranean Sea.
In: Commission Internationale pour l'Exploration Scientifique de la Mer Méditerranée. IVes Journées d'Etudes sur les Pollutions Marines en Méditerranée. Workshop on Pollution of the Mediterranean. Monaco, C.I.E.S.M.M., p. 91-92.
738. MIRONOV, O.G. & AVDEEVA, S.U., 1978.
Development of a protozoa community on oil in sea water.
Biol.Nauki (Mosc.), 10, 48-50.
739. MIRONOV, O.G. & SHCHEKATURINA, T.L., 1976.
Hydrocarbons in marine organisms.
Hydrobiol.J. (Engl.Transl.Gidrobiol.Zh.), 12(6), 1-9.

740. MIRONOV, O.G. & SHCHEKATURINA, T.L., 1979.
Oil change in excretory products of mussels (Mytilus gallo-provincialis).
Mar.Pollut.Bull., 10(8), 232-233.
741. MITCHELL, D.M. & BENNETT, H.J., 1972.
The susceptibility of bluegill sunfish Lepomis macrochirus, and channel catfish Ictalurus punctatus to emulsifiers and crude oil.
Proc.La Acad.Sci., 35, 20-26.
742. MITCHELL, R., FOGEL, S. & CHET, I., 1972.
Bacterial chemoreception: an important ecological phenomenon inhibited by hydrocarbons.
Water Res., 6, 1137-1140.
743. MIX, M.C., RILEY, R.T., KING, K.I., TRENHOLM, S.R. & SCHAFFER, R.L., 1977.
Chemical carcinogens in the marine environment. Benzo(a)pyrene in economically-important bivalve molluscs from Oregon estuaries.
In: Wolfe, D.A., ed. Fate and effects of petroleum hydrocarbons in marine organisms and ecosystems. Proceedings of a Symposium, 10-12 Nov. 1976, Seattle, Wash. New York, Pergamon Press, p. 421-431.
744. MIX, M.C. & SCHAFFER, R.L., 1979.
Benzo(a)pyrene concentrations in mussels (Mytilus edulis) from Yaquina Bay, Oregon during June 1976 - May 1978.
Bull.environ.Contam.Toxicol., 23(4-5), 677-684.
745. MOMMAERTS-BILLET, F., 1973.
Growth and toxicity tests on the marine nanoplanktonic alga Platymonas tetrathale G.S. West in the presence of crude oil and emulsifiers.
Environ.Pollut., 4(4), 261-282.
746. MONAGHAN, P.H. & KOONS, C.B., 1975.
Research needed to determine chronic effects of oil on the marine environment.
Mar.Pollut.Bull., 6, 157-159.
747. MOORE, M.N., 1979.
Cellular responses to polycyclic aromatic hydrocarbons and phenobarbital in Mytilus edulis.
Mar.environ.Res., 2(4), 255-264.
748. MOORE, M.N., LIVINGSTONE, D.R., DONKIN, P., BAYNE, B.L., WIDDOWS, J. & LOWE, D.M., 1979.
Mixed function oxydases and xenobiotic detoxication/toxication systems in bivalve molluscs.
In: Abstracts from the 14th European Marine Biology Symposium, Protection of Life in the Sea, Helgoland, 23-29 Sept. 1979, p. 68-69.
749. MOORE, M.N., LOWE, D.M. & FIETH, P.E.M., 1978.
Lysosomal responses to experimentally injected anthracene in the digestive cells of Mytilus edulis.
Mar.Biol.(Berl.), 48, 297-302.

750. MOORE, S.F., 1973.
 Towards a model of the effects of oil on marine organisms.
In: Background Papers for a Workshop on Inputs, Fates, and
 Effects of Petroleum in the Marine Environment. Vol. 2.
 Physical, Chemical and Biological Fates, Chronic, Acute and
 Health Effects. Washington D.C., National Academy of Sciences, p. 635-654.
751. MOORE, S.F., 1976.
 Offshore oil spills and the marine environment.
Technol.Rev.(Camb.), 78(4), 61-67.
752. MOORE, S.F. & DWYER, R.L., 1974.
 Effects of oil on marine organisms: a critical assessment
 of published data.
Water Res., 8, 819-827.
753. MOORE, S.F. & MCLAUGHLIN, D.B., 1978.
 Design of field experiments to determine the ecological
 effects of petroleum in intertidal ecosystems.
Water Res., 12(2), 1091-1100.
754. MORGAN, W.S.G. & KÜHN, P.C., 1974.
 A method to monitor the effects of toxicants upon breathing
 rate of large mouth bass (Micropterus salmoides Lacépède).
Water Res., 8(1), 67-77.
755. MORRIS, B.F., CADWALLADER, J., GEISELMAN, J. & BUTLER, J.N., 1976.
 Transfer of petroleum and biogenic hydrocarbons in the Sargassum
 community.
In: Windom, H.L. & Duce, R.A., eds. Marine pollutant transfer.
 Lexington, Mass., Lexington Books/D.C. Heath and Company,
 p. 235-259.
756. MORRIS, R.J., 1973.
 Uptake and discharge of petroleum hydrocarbons by barnacles.
Mar.Pollut.Bull., 4(7), 197-199.
757. MORROW, J.E., 1973.
 Oil-induced mortalities in juvenile Coho and Sockeye salmon.
J.mar.Res., 31(3), 135-143.
758. MORROW, J.E., 1974.
 Effects of crude oil and some of its components on young
 Coho and Sockeye salmon.
In: US Environmental Protection Agency, Office of Research
 and Development, Ecological Research Series EPA 660/3-73-018,
 p. 1-37.
759. MORROW, J.E., GRITZ, R.L. & KIRTON, M.P., 1975.
 Effects of some components of crude oil on young Coho salmon.
Copeia, 2, 326-331.
760. MORTON, B. & WU, R.S.S., 1977.
 The toxic effects of hydrocarbons upon the naupliar and
 adult stages of Balanus (Crustacea: Cirripedia).
Mar.Pollut.Bull., 8(10), 232-236.

761. MOTOHIRO, T. & ISEYA, Z., 1976.
Effects of water polluted by oil on aquatic animals. II.
n-paraffins, aromatic hydrocarbons and crude oil concentration on taint in scallop (*Pecten yessoensis*).
Bull.Fac.Fish.Hokkaido Univ., 26(4), 367-371.
762. MOULDER, D.S. & VARLEY, A., 1971.
A bibliography on marine and estuarine oil pollution.
Plymouth, England, Marine Biological Association of United Kingdom, 129 p.
763. MOULDER, D.S. & VARLEY, A., 1975.
A bibliography on marine and estuarine oil pollution.
Supplement 1.
Plymouth, England, Marine Pollution Information Centre,
Marine Biological Association of United Kingdom, 152 p.
764. MOULDER, D.S. & VARLEY, A., 1978.
A bibliography on marine and estuarine oil pollution.
Supplement 2.
Plymouth, England, Marine Pollution Information Centre,
Marine Biological Association of United Kingdom, 156 p.
765. MOULDER, D.S. & VARLEY, A., 1979.
A bibliography on marine and estuarine oil pollution.
Supplement 3.
Plymouth, England, Marine Pollution Information Centre,
Marine Biological Association of United Kingdom, 119 p.
766. MULKINS-PHILLIPS, G.J. & STEWART, J.E., 1974.
Effects of four dispersants on biodegradation and growth of bacteria on crude oil.
Appl.Microbiol., 28(4), 547-552.
767. MULKINS-PHILLIPS, G.J. & STEWART, J.E., 1974.
Effect of environmental parameters on bacterial degradation of Bunker C oil, crude oils and hydrocarbons.
Appl.Microbiol., 28, 915-922.
768. MULLET, J.A.J., BAKER, J. & RUSSELL, G., 1979.
Effects of oil and oil dispersant on sub-littoral macrophytes.
A field study.
In: Abstracts from the 14th European Marine Biology Symposium, Protection of Life in the Sea, Helgoland, 23-29 Sept. 1979,
p. 70.
769. MUSTONEN, M. & TULKKI, P., 1972.
The PALVA oil tanker disaster in the Finnish SW archipelago.
IV. Bottom fauna in the oil polluted area.
Aqua Fennica, 1972, 137-141.

770. NADEAU, R.J. & BERGQUIST, E.T., 1977.
Effects of the March 18, 1973 oil spill near Cabo Rojo,
Puerto Rico on tropical marine communities.
In: Proceedings 1977 Oil Spill Conference (Prevention,
Behavior, Control, Cleanup), held in New Orleans, Louisiana,
March 8-10, 1977. Washington D.C., American Petroleum
Institute, Publ. No. 4284, p. 535-538.
771. NADEAU, R.J. & ROUSH, T.H., 1972.
Biological effects of oil pollution. Selected bibliography II.
Cincinnati, Ohio, US Environmental Protection Agency, Office
of Research and Monitoring, Environmental Protection Techno-
logy Series No. EPA-R2-72-055, 69 p.
772. NAGELL, B., 1972.
Synpunkter på mekanismer för direkt giftverkan av och gift-
utlösning från en oljeemulsion.
Medd.svenska Havsforskarföreningen, 7, 5 p.
773. NAGELL, B., NOTINI, M. & GRAHN, O., 1974.
Toxicity of four oil dispersants to some animals from the
Baltic Sea.
Mar.Biol.(Berl.), 28, 237-243.
774. NEFF, J.M., 1974.
Oil pollution and shellfish.
In: Walt, D.S., ed. Proceedings 8th National Shellfish
Sanitation Workshop, held in New Orleans, Louisiana, 16-18
January, 1974, p. 72-76.
775. NEFF, J.M., 1975.
Accumulation and release of petroleum-derived aromatic hydro-
carbons by marine animals.
Am.Chem.Soc.Petrol.Chem.Div., Preprints, 20, 839-850.
776. NEFF, J.M., 1979.
Polycyclic aromatic hydrocarbons in the aquatic environment.
London, Applied Science Publishers Ltd., 262 p.
777. NEFF, J.M. & ANDERSON, J.W., 1975.
Accumulation, release, and distribution of benzo(a)pyrene-C¹⁴
in the clam Rangia cuneata.
In: Proceedings of a Joint Conference on Prevention and
Control of Oil Spills, sponsored by the American Petroleum
Institute, Environmental Protection Agency and U.S. Coast
Guard, held in San Francisco, California, March 25-27, 1975.
Washington D.C., American Petroleum Institute, p. 469-471.
778. NEFF, J.M., ANDERSON, J.W., COX, B.A., LAUGHLIN, R.B., ROSSI,
S.S. & TATEM, H.E., 1976.
Effects of petroleum on survival, respiration and growth of
marine animals.
In: Proceedings of a Symposium on Sources, Effects and Sinks
of Hydrocarbons in the Aquatic Environment, held in Washington
D.C., 9-11 August 1976. Arlington, Virginia, American Insti-
tute of Biological Sciences, p. 516-539.

779. NEFF, J.M., COX, B.A., DIXIT, D. & ANDERSON, J.W., 1976.
Accumulation and release of petroleum-derived aromatic hydrocarbons by four species of marine animals.
Mar.Biol.(Berl.), 38(3), 279-289.
780. NELSON, K.F., NORTH, D.S. & FARRIER, D.S., 1979.
Concentration-dependence of the effect of an in-situ oil shale retort-produced water on metabolism.
Bull.environ.Contam.Toxicol., 23(6), 747-752.
781. NELSON-SMITH, A., 1968.
A classified bibliography on oil pollution.
In: Carthy, J.D. & Arthur, D.R., eds. The biological effects of oil pollution on littoral communities. Proceedings of a Symposium held at the Orielton Field Centre, Pembroke, Wales. Supplement to vol. 2 of Field Studies. London, Field Studies Council, p. 165-196.
782. NELSON-SMITH, A., 1970.
The effects of oil pollution on shore life.
In: Proceedings of the Symposium on the Effects of Industry on the Environment, Orielton, Pembroke, 1970. London, Field Studies Council, p. 36-42.
783. NELSON-SMITH, A., 1970.
The problem of oil pollution of the sea.
Adv.mar.Biol., 8, 215-306.
784. NELSON-SMITH, A., 1971.
Effects of oil on marine plants.
In: Hepple, P., ed. Water pollution by oil. London. The Institute of Petroleum, p. 273-280.
785. NELSON-SMITH, A., 1972.
Oil pollution and marine ecology.
London, Paul Elek (Scientific Books), 260 p.
786. NELSON-SMITH, A., 1972.
Effects of the oil industry on shore life in estuaries.
Proc.R.Soc.Lond. B Biol.Sci., 180(1061), 487-496.
787. NELSON-SMITH, A., 1975.
Effects of long-term, low level exposure to oil.
In: Cole, H.A., ed. Petroleum and the continental shelf of North-West Europe. Vol. 2. Environmental Protection. Barking, Essex, Applied Science Publishers, p. 105-113.
788. NELSON-SMITH, A., 1977.
Biological consequences of oil spills.
In: Lenihan, J. & Fletcher, W.W., eds. Environment and Man. Vol. 5. The marine environment. Glasgow, Blackie, p. 46-69.
789. NIAUSSAT, P. & AUGER, C., 1970.
Distribution of benzo(a)pyrene and perylene in various organisms of the Clipperton Lagoon ecosystem.
C.R.hebd.Séances Acad.Sci.Sér.D Sci.nat., 270, 2702-2705.

790. NICHOLSON, N.L. & CIMBERG, R.L., 1971.
The Santa Barbara oil spill of 1969: A post-spill survey
of the rocky intertidal.
In: Straughan, D., ed. Biological and oceanographical
survey of the Santa Barbara Channel oil spill 1969-1970.
Volume 1. Biology and bacteriology. Los Angeles. University
of Southern California, Allan Hancock Foundation,
p. 325-399.
791. NICOL, J.A.C., DONAHUE, W.H., WANG, R.T. & WINTERS, K., 1977.
Chemical composition and effects of water extracts of petro-
leum on eggs of sand dollar, Melitta quinquesperforata.
Mar.Biol.(Berl.), 40(4), 309-316.
792. NORRELL, S.A. & JOHNSTON, M.H., 1976.
Effects of oil on microbial component of an intertidal
silt-sediment ecosystem.
In: Hood, D.W. & Burrell, D.C., eds. Assessment of the
Arctic marine environment: selected topics. Fairbanks,
Alaska, University of Alaska, Institute of Marine Sciences,
p. 305-327. (Occ.Publ.No. 4)
793. NORTH, W.J., 1973.
Position paper on effects of acute oil spills.
In: Background Papers for a Workshop on Inputs, Effects
and Sinks of Petroleum in the Marine Environment. Vol. 2.
Physical, Chemical and Biological Fates, Chronic, Acute
and Health Effects. Washington D.C., National Academy
of Sciences, p. 758-777. (AD-783 990)
794. NOTINI, M., 1978.
Long-term effects of an oil spill on Fucus macrofauna in
a small Baltic bay.
J.Fish.Res.Board Can., 35(5), 745-753.
795. NOTINI, M. & HAGSTRØM, Å., 1974.
Effects of oils on Baltic littoral community.
In: Marine Pollution Monitoring (Petroleum). Proceedings
of a Symposium and Workshop held at the National Bureau of
Standards, Gaithersburg, Maryland. National Bureau of Stan-
dards Special Publication No. 409, p. 251-254.
796. NUNES, P. & BENVILLE, P.E., 1978.
Acute toxicity of the water-soluble fraction of Cook Inlet
crude oil to the Manila clam.
Mar.Pollut.Bull., 9(12), 324-330.
797. NUNES, P. & BENVILLE, P.E., 1979.
Uptake and depuration of petroleum hydrocarbons in the
Manila clam, Tapes semidecussata Reeve.
Bull.environ.Contam.Toxicol., 21(6), 719-726.
798. NUNES, P. & BENVILLE, P.E., 1979.
Effects of the water-soluble fraction of Cook Inlet crude oil
on the marine alga, Dunaliella tertiolecta.
Bull.environ.Contam.Toxicol., 21(6), 727-732.

799. NUZZI, R., 1973.
Effects of water soluble extracts of oil on phytoplankton.
In: Proceedings of the Joint Conference on Prevention and Control of Oil Spills, held in Washington D.C., 13-15 March 1973. Washington D.C., American Petroleum Institute, p. 809-813.
800. O'BRIEN, P.Y. & DIXON, P.S., 1976.
The effects of oils and oil components on algae: a review.
Br.phycol.J., 11, 115-142.
801. OGATA, M. & MIYAKE, Y., 1973.
Identification of substances in petroleum causing objectionable odour in fish.
Water Res., 7(10), 1493-1504.
802. OGATA, M. & MIYAKE, Y., 1975.
Compound from floating petroleum accumulating in fish.
Water Res., 9, 1075-1078.
803. OGATA, M. & MIYAKE, Y., 1978.
Identification of organic sulfur compounds transferred to fish from petroleum suspension.
Proc.Jpn.Acad.Ser.B Phys.biol.Sci., 54(7), 423-427.
804. OGATA, Y. & MIYAKE, Y., 1978.
Disappearance of aromatic hydrocarbons and organic sulfur compounds from fish flesh reared in crude oil suspension.
Water Res., 12(12), 1041-1044.
805. OGATA, M., MIYAKE, Y., KIRA, S., MATSUNAGA, K. & IMANAKA, M., 1977.
Transfer to fish of petroleum paraffins and organic sulfur compounds.
Water Res., 11(4), 333-338.
806. OGATA, M., MIYAKE, Y. & YAMASAKI, Y., 1979.
Identification of substances transferred to fish or shellfish from petroleum suspension.
Water Res., 13(7), 613-618.
807. OGATA, M. & OGURA, T., 1976.
Petroleum components and objectionable malodorous substances in fish flesh polluted by boiler fuel oil.
Water Res., 10, 407-412.
808. OLLA, B.L. & SAMET, C., 1975.
Behavior of marine organisms as a measure of petroleum contamination.
In: Cronin, L.E. & Smith, R.E., eds. Marine environmental implications of offshore and gas development in the Baltimore Canyon region of the Mid-Atlantic coast. Proceedings of the Estuarine Research Federation Outer Continental Shelf Conference and Workshop, Dec. 2-4, 1974. Wachapreague, Virginia, Estuarine Research Federation, p. 437-450.
(ERF 75-1)

809. ONUF, C.P., 1973.
The biological and ecological effects of oil pollution
in tropical waters - an annotated bibliography.
Washington D.C., Smithsonian Institution, Office of
International and Environmental Programs, 67 p.
810. ONUF, C.P., 1973.
An analysis of the main scientific papers dealing with
long term low level effects of oil pollution, May 9th, 1973.
In: Background Papers for a Workshop on Inputs, Fates and
Effects of Petroleum in the Marine Environment. Vol. 2.
Physical, Chemical, and Biological Fates, Chronic, Acute
and Health Effects. Washington D.C., National Academy
of Sciences, p. 655-670. (AD-783 990)
811. O'SULLIVAN, A.J., 1978.
The AMOCO CADIZ oil spill.
Mar.Pollut.Bull., 9, 123-128.
812. O'SULLIVAN, A.J. & RICHARDSON, A.J., 1967.
The TORREY CANYON disaster and intertidal marine life.
Nature (Lond.), 214, 448-542.
813. OTT, F.S., HARRIS, R.P. & O'HARA, S.C.M., 1978.
Acute and sublethal toxicity of naphthalene and three methylated
derivatives to the estuarine copepod, Eurytemora
affinis.
Mar.environ.Res., 1(1), 49-58.
814. OTTWAY, S.M., 1971.
The comparative toxicities of crude oils.
In: Cowell, E.B., ed. The ecological effects of oil
pollution on littoral communities. Barking, Essex,
Applied Science Publishers, p. 172-180.
815. OTTWAY, S.M., 1973.
The toxicity of oil to animals subjected to salinity stress.
Rep.Oil Pollut.Res.Unit, Field Stud.Counc., 1972, 24-30.
816. OVERFIELD, J.L., 1972.
Development of a non-toxic simulated oil for marine testing
programs.
Paper presented at the 4th Annual Offshore Technology Con-
ference, Houston, Texas, 1-3 May 1972. OTC No. 1524, 8 p.
817. ORITSLAND, N.A., 1975.
Appendix A. Insulation in marine mammals: the effect of
crude oil on ringed seal pelts.
In: Smith, T.G. & Geraci, J.R., eds. Effect of contact
and ingestion of crude oil on ringed seals. Victoria B.C.,
Department of the Environment, Beaufort Sea Project, Tech.
Rep.No. 5, p. 48-66.
818. PALMORK, K.H., 1974.
Polysykliske aromatiske hydrocarboner i det marine miljø.
Nordforsk Miljøvårdsekretariatet Publikation, 1974, 4, 99-125.

819. PALMORK, K.H. & SOLBAKKEN, J.E., 1979.
 Accumulation and metabolism of phenanthrene in Norway lobster (*Nephrops norvegicus*).
 ICES C.M.Pap.Rep., No. C.M.1979/E:53, 8 p.
820. PALMORK, K.H. & WILHELMSEN, S., 1974.
 Undersøkelse av fisk fra oljeforurenset område av Gisundet.
 Fisk og Havet, Serie B, 4, 13 p.
821. PALOMO, C., ACOSTA, J., DE ANDRES, J.R., HERRANZ, P., REY, P. & SANZ, J.L., 1978.
 Contribution to the study of the impact caused to the shoreline of La Coruna (Spain) by the oil spill due to the accident to the petroleum ship MONTE URQUIOLA in May 1976.
 Bol.Inst.esp.Oceanogr., 245, 131-162.
822. PANCIROV, R.J. & BROWN, R.A., 1977.
 Polynuclear aromatic hydrocarbons in marine tissues.
 Environ.Sci.Technol., 11, 989-992.
823. PARADIS, M. & ACKMAN, R.G., 1975.
 Differentiation between natural hydrocarbons and low level Diesel oil contamination in cooked lobster meat.
 J.Fish.Res.Board Can., 32(2), 316-320.
824. PARKER, P.L., WINTERS, K., VAN BAALEN, C., BATTERTON, J.C. & SCALAN, R.S., 1976.
 Petroleum pollution: chemical characteristics and biological effects.
 In: Sources, Effects and Sinks of Hydrocarbons in the Aquatic Environment. Proceedings of the Symposium, Washington D.C., 9-11 August, 1976. Arlington, Virginia, American Institute of Biological Sciences, p. 257-269.
825. PARSONS, R., 1972.
 Some sublethal effects of refinery effluent upon the winkle *Littorina saxatilis*.
 Rep.Oil Pollut.Res.Unit, Field Stud.Counc., 1972, 21-23.
826. PARSONS, R., 1972.
 Note on the recovery of *Littorina saxatilis* from pollution with refinery effluent when under osmotic stress.
 Rep.Oil Pollut.Res.Unit, Field Stud.Counc., 1972, 31.
827. PARSONS, T.R. & LI, W.K.W., 1974.
 Effect of very low levels of hydrocarbons on the growth of marine organisms.
 In: Annual Report to the Science Foundation - International Decade of Ocean Exploration: Controlled Ecosystem Pollution Experiment (CEPEX), May 1, 1973 - May 1, 1974. Washington D.C., US National Science Foundation, Section 6, 9 p.
828. PARSONS, T.R., LI, W.K.W. & WATERS, R., 1976.
 Some preliminary observations on the enhancement of phytoplankton growth by low levels of mineral hydrocarbons.
 Hydrobiologia, 51(1), 85-89.

829. PATRICK, R., 1975.
 4. Effects.
 In: Petroleum in the marine environment. Workshop on
 Inputs, Fates and Effects of Petroleum in the Marine
 Environment. Airlie, Virginia, May 21-25, 1973.
 Washington D.C., National Academy of Sciences, p. 73-103.
830. PATTEN, B.G., 1977.
 Sublethal biological effects of petroleum hydrocarbon
 exposures: fish.
 In: Malins, D.C., ed. Effects of petroleum on Arctic and
 sub-arctic marine environments and organisms. Vol. II.
 Biological effects. New York, Academic Press, p. 319-335.
831. PAULUIS, C.D.A., 1979.
 The environmental impact of refinery effluents. Part II.
 Aqueous effluents discharged by oil refineries.
 In: The environmental impact of refinery effluents. The
 Hague, CONCAWE, Report No. 5/79, p. II-1 - II-28. (Pre-
 pared by CONCAWE's Water Pollution Special Task Force No. 8).
832. PAYER, H.D. & SOEDER, C.J., 1975.
 Accumulation of polycyclic aromatic hydrocarbons in culti-
 vated microalgae.
Naturwissenschaften, 62, 536-537.
833. PAYNE, J.F., 1976.
 Field evaluation of benzopyrene hydroxylase induction as
 a monitor for marine petroleum pollution.
Science (Wash.D.C.), 191, 945-946.
834. PAYNE, J.F., 1977.
 Mixed function oxydases in marine organisms in relation to
 petroleum hydrocarbon metabolism and detection.
Mar.Pollut.Bull., 8(5), 112-116.
835. PAYNE, J.F., KICENIUK, J.W., SQUIRES, W.R. & FLETCHER, G.L., 1978.
 Pathological changes in a marine fish after a 6-month exposure
 to petroleum.
J.Fish.Res.Board Can., 35(5), 665-667.
836. PAYNE, J.F., MALONEY, R. & RAHIMTULA, A., 1979.
 Are petroleum hydrocarbons an important source of mutagens
 in the marine environment?
 In: Proceedings 1979 Oil Spill Conference (Prevention,
 Behavior, Control, Cleanup), held in Los Angeles, California,
 March 19-22, 1979. Washington D.C., American Petroleum
 Institute, Publ. No. 4308, p. 533-536.
837. PAYNE, J.F. & MARTINS, I., 1978.
 Crankcase oils: are they a major mutagenic burden in the
 aquatic environment?
Science (Wash.D.C.), 200(4339), 329-330.
838. PAYNE, J.F. & MAY, N., 1978.
 Oxidative transformation of complex mixtures of pollutant
 aromatic hydrocarbons by fish.
Chemosphere, 7(10), 815-819.

839. PAYNE , J.F. & MAY, N., 1979.
Further studies on the effect of petroleum hydrocarbons
on mixed-function oxidases in marine organisms.
In: Khan, M.A.Q., Lech, J.J. & Menn, J.J., eds. Pesticide
and xenobiotic metabolism in aquatic organisms.
Washington D.C., American Chemical Society, p. 339-347.
840. PAYNE, J.F. & PENROSE, W.R., 1975.
Induction of aryl hydrocarbon (benzo[a]pyrene) hydroxylase
in fish by petroleum.
Bull.environ.Contam.Toxicol., 14(1), 112-116.
841. PEAKALL, D.B., MILLER, D.S., BUTLER, R.G., KINTER, W.B. &
HALLETT, D., 1980.
Sub-lethal effects of ingested crude oil on black guillemots:
A combined field and laboratory study.
Ambio, 9(1), 28-30.
842. PEARSON, J.D., 1976.
Sublethal effects of oil. Effects on sea grass.
In: Outer Continental Shelf Environmental Assessment Program.
Environmental assessment of the Alaskan continental shelf.
Vol. VIII. Boulder, Colorado, US National Oceanic and
Atmospheric Administration, Environmental Research Laboratories,
p. 337-381. NTIS No. PB-261 407.
843. PELKONEN, K. & TULKKI, P., 1972.
The PALVA oil tanker disaster in the Finnish SW archipelago.
III. The littoral fauna of the oil polluted area.
Aqua Fennica, 1972, 129-136.
844. PEQUEGNAT, W.E., 1975.
Some effects of platforms on the biology of the continental
shelf.
In: Cronin, L.E. & Smith, R.E., eds. Marine environmental
implications of offshore and gas development in the Baltimore
Canyon region of the Mid-Atlantic coast. Proceedings of the
Estuarine Research Federation Outer Continental Shelf Con-
ference and Workshop, Dec. 2-4, 1974. Wachapreague, Virginia,
Estuarine Research Federation, p. 455-466. (ERF 75-1)
845. PERCY, J.A., 1973.
Oil and Arctic marine invertebrates.
In: Mackay, D. & Harrison, W., eds. Oil and the Canadian
environment. Proceedings of a Conference, sponsored by the
Institute of Environmental Sciences and Engineering, Univer-
sity of Toronto, 16 May 1973. Toronto, University of Toronto,
p. 71-74.
846. PERCY, J.A., 1976.
Responses of Arctic marine crustaceans to crude oil and
oil-tainted food.
Environ.Pollut., 10(2), 155-162.

847. PERCY, J.A., 1977.
Effects of dispersed crude oil upon the respiratory metabolism of an Arctic marine amphipod, Onisimus (Boekisimus) affinis.
In: Wolfe, D.A., ed. Fate and effects of petroleum hydrocarbons in marine ecosystems and organisms. Proceedings of a Symposium, held in Seattle, Wash., Nov. 10-12, 1976.
New York, Pergamon Press, p. 192-200.
848. PERCY, J.A., 1977.
Effects of oil on Arctic marine organisms: a review of studies conducted by the Arctic Biological Station.
ICES C.M.Pap.Rep., No. C.M.1977/E:26, 24 p.
849. PERCY, J.A., 1977.
Effects of crude oil on Arctic marine invertebrates.
In: Arctic Biological Station. A series of four reports on the marine ecology of the Mackenzie delta and Tuktoyaktuk peninsula region. Ste-Anne-de-Bellevue, Quebec, Arctic Biological Station, p. 31-99.
850. PERCY, J.A., 1977.
Responses of Arctic marine benthic crustaceans to sediments contaminated with crude oil.
Environ.Pollut., 13(1), 1-10.
851. PERCY, J.A., 1978.
Effects of chronic exposure to petroleum upon the growth and molting of juveniles of the Arctic marine isopod crustacean Mesidotea entomon.
J.Fish.Res.Board Can., 35(5), 650-656.
852. PERCY, J.A. & MULLIN, T.C., 1975.
Effects of crude oils on Arctic marine invertebrates.
Victoria B.C., Department of the Environment, Beaufort Sea Project, Tech.Rep.No. 11, 167 p.
853. PERCY, J.A. & MULLIN, T.C., 1977.
Effects of crude oil on the locomotory activity of Arctic marine invertebrates.
Mar.Pollut.Bull., 8(2), 35-40.
854. PERKINS, E.J., GRIBBON, E. & LOGAN, J.W.M., 1973.
Oil dispersant toxicity.
Mar.Pollut.Bull., 4(6), 90-93.
855. PHILPOT, R.M., JAMES, M.O. & BEND, J.R., 1976.
Metabolism of benzo(a)pyrene and other xenobiotics by microsomal mixed-function oxidases in marine species.
In: Sources, Effects and Sinks of Hydrocarbons in the Aquatic Environment. Proceedings of the Symposium, Washington D.C., 9-11 August, 1976. Arlington, Virginia, American Institute of Biological Sciences, p. 185-199.
856. PLATT, H.M. & MACKIE, P.R., 1979.
Distribution and fate of aliphatic and aromatic hydrocarbons in Antarctic fauna and environment.
In: Abstracts from the 14th European Marine Biology Symposium, Protection of Life in the Sea, Helgoland, 23-29 Sept. 1979, p. 77-78.

857. POHL, R.J., FOUTS, J.R. & BEND, J.R., 1975.
Response of hepatic microsomal mixed-function oxidases in the little skate, Raja erinacea, and the Winter flounder, Pseudopleuronectes americanus to pretreatment with TCDD (2,3,7,8-tetrachlorodibenzo-p-dioxin) or DBA (1,2,3,4-dibenzanthracene).
Bull.Mt Desert Isl.biol.Lab., 15, 64-66.
858. PONAT, A., 1975.
Untersuchungen über den Einfluss von Rohöl auf Überlebensfähigkeit und Sauerstoffverbrauch von Idotea baltica und Gammarus salinus.
Kiel.Meeresforsch., 31, 26-31.
859. PORTMANN, J.E. & CONNOR, P.M., 1968.
The toxicity of several oil-spill removers to some species of fish and shellfish.
Mar.Biol.(Berl.), 1(4), 322-329.
860. PRIEUR, D. & HUSSENOT, E., 1978.
Echouage de mammifères marins pendant la marée noire de l'AMOCO CADIZ.
Penn Bed (Brest), 11(94), 361-364.
861. PROUSE, N.J. & GORDON, D.C. Jr., 1974.
The effects of three oils on the growth of the dinoflagellate Dunaliella tertiolecta, and the diatom Fragilaria sp. in axenic batch cultures.
ICES C.M.Pap.Rep., No. C.M.1974/E:41, 6 p.
862. PROUSE, N.J. & GORDON, D.C. Jr., 1976.
Interactions between the deposit feeding polychaete Arenicola marina and oiled sediment.
In: Sources, Effects and Sinks of Hydrocarbons in the Aquatic Environment. Proceedings of the Symposium, Washington D.C., 9-11 August, 1976. Arlington, Virginia, American Institute of Biological Sciences, p. 408-422.
863. PROUSE, N.J., GORDON, D.C. Jr. & KEIZER, P.D., 1976.
Effects of low concentrations of oil accommodated in sea water on the growth of unicellular marine phytoplankton cultures.
J.Fish.Res.Board Can., 33(4), 810-818.
864. PULICH, W.M., WINTERS, K. & VAN BAALEN, C., 1974.
The effect of a No. 2 fuel oil and two crude oils on the growth and photosynthesis of microalgae.
Mar.Biol.(Berl.), 28, 87-94.
865. RADCLIFFE, D.R. & MURPHY, T.A., 1969.
Biological effects of oil pollution - bibliography. A collection of references concerning the effects of oil on biological systems.
Federal Water Pollution Control Administration, Report No. 15080, FHU 10/69, 46 p. NTIS No. PB-188 206.

866. RAMSEIER, R.O., 1971.
Oil pollution in ice-infested waters.
In: Proceedings of the International Symposium on the Identification and Measurement of Environmental Pollutants, held in Ottawa, Canada, 14-17 June, 1971, p. 271-276.
867. RASMUSSEN, B., 1974.
Oil activity and fishery problems on the Norwegian continental shelf.
In: Society for Underwater Technology. Fisheries and Hydrocarbons, a Symposium, held in London, 27 Nov. 1974. London, British Petroleum Ltd., p. 64-66.
868. RAVANKO, O., 1972.
The PALVA oil tanker disaster in the Finnish SW archipelago.
V. The littoral and aquatic flora of the polluted area.
Aqua Fennica, 1972, 142-144.
869. REIMER, A.A., 1975.
Effects of crude oil on corals.
Mar.Pollut.Bull., 6, 39-43.
870. REIMER, A.A., 1975.
Effects of crude oil on the feeding behaviour of the zoanthid Palythoa variabilis.
Environ.Physiol.Biochem., 5(4), 258-266.
871. REISH, D.J., 1978.
Marine and estuarine pollution.
J.Water Pollut.Control Fed., 50(6), 1424-1469.
872. RENZONI, A., 1973.
Influence of crude oil, derivatives and dispersants on larvae.
Mar.Pollut.Bull., 4(1), 9-13.
873. RENZONI, A., 1974.
Influence of toxicants on marine invertebrate larvae.
Thalassia jugosl., 10, 197-211.
874. RENZONI, A., 1975.
Toxicity of three oils to bivalve gametes and larvae.
Mar.Pollut.Bull., 6(8), 125-128.
875. REVELLE, R., WENK, E., KETCHUM, B.H. & CORINO, E.R., 1971.
Ocean pollution by petroleum hydrocarbons.
In: Matthews, W.H., Smith, W.H. & Goldberg, E.D., eds. Man's impact on terrestrial and oceanic ecosystems. Cambridge, Massachusetts, Massachusetts Institute of Technology Press, p. 297-318.
876. REYNARD, S., 1973.
Reproductive potential of limpets near a refinery effluent in Milford Haven.
Rep.Oil Pollut.Res.Unit, Field Stud.Counc., 1973, 44-46.

877. REYNOLDS, J.H., MIDDLESEX, E.J., PORCELLA, D.B. & GRENNY, W.J., 1975.
Effects of temperature on oil refinery waste toxicity.
J.Water Pollut.Control Fed., 47(11), 2674-2693.
878. RICE, S.D., 1973.
Toxicity and avoidance tests with Prudhoe Bay oil and pink salmon fry.
In: Proceedings of the Joint Conference on Prevention and Control of Oil Spills, held in Washington D.C., March 13-15, 1973. Washington D.C., American Petroleum Institute, p. 667-670.
879. RICE, S.D. & KARINEN, J.F., 1976.
Acute and chronic toxicity, uptake and depuration, and sub-lethal metabolic response of Alaskan marine organisms to petroleum hydrocarbons.
In: Outer Continental Shelf Environmental Assessment Program. Environmental assessment of the Alaskan continental shelf. Vol. VIII. Boulder, Colorado, US National Oceanic and Atmospheric Administration, p. 25-47.
880. RICE, S.D., KORN, S. & KARINEN, J.F., 1977.
Lethal and sublethal effects on selected Alaskan marine species after acute and long-term exposure to oil and oil components.
In: Outer Continental Shelf Environmental Assessment Program. Environmental assessment of the Alaskan continental shelf. Vol. XII. Effects. Boulder, Colorado, US National Oceanic and Atmospheric Administration, p. 23-43.
881. RICE, S.D., MOLES, D.A. & SHORT, J.M., 1975.
The effect of Prudhoe Bay crude oil on survival and growth of eggs, alewife, and fry of pink salmon, Oncorhynchus gorbuscha.
In: Proceedings of a Joint Conference on Prevention and Control of Oil Spills, held in San Francisco, California, March 25-27, 1975. Washington D.C., American Petroleum Institute, p. 503-507.
882. RICE, S.D., MOLES, A., TAYLOR, T.L. & KARINEN, J.F., 1979.
Sensitivity of 39 Alaskan marine species to Cook Inlet crude oil and No. 2 fuel oil.
In: Proceedings 1979 Oil Spill Conference (Prevention, Behavior, Control, Cleanup), held in Los Angeles, California, March 19-22, 1979. Washington D.C., American Petroleum Institute, Publ. No. 4308, p. 549-554.
883. RICE, S.D., SHORT, J.W., BRODERSON, C.C., MECKLENBURG, T.A., MOLES, D.A., MISCH, C.J., CHEATHAM, D.L. & KARINEN, J.F., 1976.
Acute toxicity and uptake-depuration studies with Cook Inlet crude oil, Prudhoe Bay crude oil, No. 2 fuel oil and several subarctic marine organisms.
Seattle, Washington, National Marine Fisheries Service, Northwest Fisheries Center, 90 p.

884. RICE, S.D., SHORT, J.W. & KARINEN, J.F., 1976.
Toxicity of Cook Inlet crude oil and No. 2 fuel oil to
several Alaskan marine fishes and invertebrates.
In: Sources, Effects and Sinks of Hydrocarbons in the
Aquatic Environment, Proceedings of the Symposium, held
in Washington D.C., 9-11 August, 1976. Arlington, Virginia,
American Institute of Biological Sciences, p. 395-406.
885. RICE, S.D., SHORT, J.W. & KARINEN, J.F., 1977.
Comparative oil toxicity and comparative animal sensitivity.
In: Wolfe, D.A., ed. Proceedings of a Symposium on Fate and
Effects of Petroleum Hydrocarbons in marine Ecosystems and
Organisms, held in Seattle, Washington, Nov. 10-12, 1976.
New York, Pergamon Press, p. 78-94.
886. RICE, S.D., THOMAS, R.E. & SHORT, J.W., 1977.
Effect of petroleum hydrocarbons on breathing and coughing
rates and hydrocarbon uptake-depuration in pink salmon fry.
In: Vernberg, F.J., Calabrese, A., Thurberg, F.P. & Vernberg,
W.B., eds. Physiological responses of marine biota to
pollutants. New York, Academic Press, p. 259-278.
887. RINKEVICH, B. & LOYA, Y., 1976.
Harmful effects of crude oil on a Red Sea coral population.
Isr.J.Zool., 25(4), 205. (Abstract)
888. RINKEVICH, B. & LOYA, Y., 1979.
Laboratory experiments on the effects of crude oil on the
Red Sea coral Stylophora pistillata.
Mar.Pollut.Bull., 10(11), 328-330.
889. ROESIJADI, G. & ANDERSON, J.W., 1979.
Condition index and free amino acid content of Macoma
inquinata exposed to oil-contaminated marine sediments.
In: Vernberg, W.B., Calabrese, A., Thurberg, F.P. & Vern-
berg, F.J., eds. Marine pollution: functional responses.
New York, Academic Press, p. 69-84.
890. ROESIJADI, G., ANDERSON, J.W. & BLAYLOCK, J.W., 1978.
Uptake of hydrocarbons from marine sediments contaminated
with Prudhoe Bay crude oil: influence of feeding type of
test species and availability of polycyclic aromatic
hydrocarbons.
J.Fish.Res.Board Can., 35(5), 608-614.
891. ROESIJADI, G., WOODRUFF, D.L. & ANDERSON, J.W., 1978.
Bioavailability of naphthalenes from marine sediments
artificially contaminated with Prudhoe Bay crude oil.
Environ.Pollut., 15(3), 223-230.
892. ROSENBERG, D.M. & SNOW, N.B., 1975.
Effects of crude oil on zoobenthos colonization of artificial
substrates in subarctic ecosystems.
Verh.Int.Verein.Limnol., 19, 2172-2177.

893. ROSENTHAL, H. & ALDERDICE, D.F., 1975.
Sublethal effects of pollutants on marine fish eggs and larvae.
In: 13th Pacific Science Congress, Record of Proceedings.
Vol. 1. Vancouver, Canada, Pacific Science Association,
p. 73. (Abstract)
894. ROSENTHAL, H. & GUNKEL, W., 1967.
Wirkungen von Rohöl-Emulgatorgemischen auf marine Fischbrut und deren Nährtiere.
Helgol.wiss.Meeresunters., 16(3), 315-320.
895. ROSSI, S.S., 1977.
Bioavailability of petroleum hydrocarbons from water, sediments and detritus to the marine annelid, Neanthes arenaceodentata.
In: Proceedings 1977 Oil Spill Conference (Prevention, Behavior, Control, Cleanup), held in New Orleans, Louisiana, March 8-10, 1977. Washington D.C., American Petroleum Institute, Publ. No. 4284, p. 621-626.
896. ROSSI, S.S. & ANDERSON, J.W., 1975.
Pre-exposure induced changes in the toxicity of a crude and a refined oil for the polychaetous annelid, Neanthes arenaceodentata.
Am.Zool., 15(3), 788. (Abstract no. 604)
897. ROSSI, S.S. & ANDERSON, J.W., 1976.
Toxicity of water-soluble fractions of No. 2 fuel oil and South Louisiana crude oil to selected stages in the life history of the polychaete, Neanthes arenaceodentata.
Bull.environ.Contam.Toxicol., 16(1), 18-24.
898. ROSSI, S.S. & ANDERSON, J.W., 1977.
Accumulation and release of fuel-oil-derived diaromatic hydrocarbons by polychaete Neanthes arenaceodentata.
Mar.Biol.(Berl.), 39(1), 51-55.
899. ROSSI, S.S. & ANDERSON, J.W., 1977.
Effect of No. 2 fuel oil and South Louisiana crude oil water-soluble fractions on haemoglobin compensation and hypoxia tolerance in the polychaetous annelid, Neanthes arenaceodentata (Moore).
Mar.Sci.Commun., 3(2), 117-131.
900. ROSSI, S.S. & ANDERSON, J.W., 1978.
Effects of No. 2 fuel oil water-soluble-fractions on growth and reproduction in Neanthes arenaceodentata (Polychaeta: Annelida).
Water, Air, Soil Pollut., 9(2), 155-170.
901. ROSSI, S.S. & ANDERSON, J.W., 1978.
Petroleum hydrocarbon resistance in the marine worm Neanthes arenaceodentata (Polychaeta: Annelida), induced by chronic exposure to No. 2 fuel oil.
Bull.environ.Contam.Toxicol., 20, 513-521.

902. ROSSI, S.S., ANDERSON, J.W. & WARD, G.S., 1976.
Toxicity of water-soluble fractions of four tests oils for
the polychaetous annelids, Neanthes arenaceodentata and
Capitella capitata.
Environ.Pollut., 10(1), 9-18.
903. ROSSI, S.S. & NEFF, J.M., 1978.
Toxicity of polynuclear aromatic hydrocarbons to the marine
polychaete, Neanthes arenaceodentata.
Mar.Pollut.Bull., 9, 220-223.
904. ROUBAL, G. & ATLAS, R.M., 1977.
Use of ¹⁴C radiolabelled hydrocarbon spiked crude oil to
assess oil biodegradation potential in the Beaufort Sea.
ASM Abstr.Annual Meeting, Q83, p. 275.
905. ROUBAL, W.T., COLLIER, T.K. & MALINS, D.C., 1977.
Accumulation and metabolism of carbon-14 labelled benzene,
naphthalene, and anthracene by young Coho salmon (Oncorhynchus
kisutch).
Arch.environ.Contam.Toxicol., 5(4), 513-529.
906. ROUBAL, W.T., STRANAHAN, S.I. & MALINS, D.C., 1978.
The accumulation of low molecular weight aromatic hydrocarbons
of crude oil by Coho salmon (Oncorhynchus kisutch) and starry
flounder (Platichthys stellatus).
Arch.environ.Contam.Toxicol., 7, 237-244.
907. RUIVO, M., editor, 1972.
Marine pollution and sea life.
West Byfleet, Surrey, U.K., Fishing News (Books) Ltd., 624 p.
908. RUTHERFORD, C.L., BUIKEMA, A.L., ARMANT, D.R. & CAIRNS, J., 1979.
Simple method for screening petroleum effluents by in vitro
enzyme inhibition.
Bull.environ.Contam.Toxicol., 21(1-2), 79-84.
909. RUTZLER, K. & STERRER, W., 1970.
Oil pollution damage observed in tropical communities
along the Atlantic seaboard of Panama.
Bioscience, 20(4), 222-224.
910. SABO, D.J. & STEGEMAN, J.J., 1977.
Some metabolic effects of petroleum hydrocarbons in marine
fish.
In: Vernberg, F.J., Calabrese, A., Thurberg, F.P. & Vernberg,
W.B., eds. Physiological responses of marine biota to pollu-
tants. New York, Academic Press, p. 279-288.
911. SAGE, B.L., 1973.
Oil in the North Sea, an outline of geological exploration,
production, and environmental aspects.
Paper presented at a Symposium on Oil in Scottish Waters,
held in Stirling, 18 April, 1973. Oban, Scottish Marine
Biological Association, 16 p.

912. SAMAIN, J.F., LE FEVRE, J., MOAL, J., DANIEL, J.Y. & BOUCHER, J., 1978.
 Evolution de la biomasse et de la physiologie du zooplankton sur la côte nord de Bretagne en relation avec l'échouage de l'AMOCO CADIZ: résultats préliminaires pour la période du 16 mars au 20 mai.
Actes Colloq.Cent.natl Exploit.Océans, 6, 193-208.
913. SAMAIN, J.F., MOAL, J. & COUM, A., 1979.
 Effects of the AMOCO CADIZ oil spill on zooplankton ecophysiology - a new possibility of ecological survey.
In: Abstracts from the 14th European Marine Biology Symposium, Protection of Life in the Sea, Helgoland, 23-29 Sept. 1979, p. 87.
914. SAMAIN, J.F., MOAL, J., DANIEL, J.Y., BOUCHER, J. & LE FEVRE, J., 1979.
 Ecophysiological effects of oil spills from AMOCO CADIZ on pelagic communities - Preliminary results.
In: Proceedings 1979 Oil Spill Conference (Prevention, Behavior, Control, Cleanup), held in Los Angeles, California, March 19-22, 1979. Washington D.C., American Petroleum Institute, Publ. No. 4308, p. 175-185.
915. ST.AMANT, L.S., 1971.
 Impact of oil on the Gulf Coast.
Trans.N.Am.Wildl.nat.Resour Conf., 36, 206-219.
916. ST.AMANT, L.S., 1972.
 The petroleum industry as it affects marine and estuarine ecology.
J.Petrol.Technol., 24, 385-392.
917. ST.AMANT, L.S., 1973.
 Some considerations on the chronic effects of petroleum in the marine environment.
In: Background Papers for a Workshop on Inputs, Fates and Effects of Petroleum in the Marine Environment. Vol. 2. Physical, Chemical and Biological Fates, Chronic, Acute and Health Effects. Washington D.C., National Academy of Sciences, p. 671-689. (AD-783 990)
918. SANBORN, H.R., 1977.
 Effects of petroleum on ecosystems.
In: Malins, D.C., ed. Effects of petroleum on Arctic and subarctic marine environments and organisms. Vol. II. Biological effects. New York, Academic Press, p. 337-357.
919. SANBORN, H.R. & MALINS, D.C., 1977.
 Toxicity and metabolism of naphthalene: A study with marine larval invertebrates.
Proc.Soc.exp.Biol.Med., 154, 151-155.

920. SANDERS, H.L., 1973.
Some biological effects related to the West Falmouth oil spill.
In: Background Papers for a Workshop on Inputs, Fates and Effects of Petroleum in the Marine Environment. Vol. 2. Physical, Chemical and Biological Fates, Chronic, Acute and Health Effects. Washington D.C., National Academy of Sciences, p. 778-800. (AD-783 990).
921. SANDERS, H.L., 1977.
The West Falmouth spill - FLORIDA, 1969.
Oceanus, 20(4), 15-24.
922. SANDERS, H.L., 1978.
FLORIDA oil spill impact on the Buzzards Bay benthic fauna: West Falmouth.
J.Fish.Res.Board Can., 35(5), 717-730.
923. SANDERS, H.L., GRASSLE, J.F. & HAMPSON, G., 1972.
The West Falmouth oil spill. I. Biology.
Springfield, Virginia, National Technical Information Service, 49 p.
924. SASAMURA, Y., 1977.
Environmental impact of the transportation of oil.
In: Petroleum Industry and the Environment. Seminar Papers and Documents. Vols. 1 & 2. Petroleum Meeting, Paris, March 29 - April 1, 1977. Nairobi, United Nations Environment Programme, p. 165-228.
925. SASSEVILLE, J.L. & LECLERC, M., 1975.
Problématique de l'impact du transport des huiles brutes par oléoduc sur l'écosystème aquatique.
Ste Foy, Québec, INRS-Eau, Institut National de la Recherche Scientifique, 24 p.
926. SAWADA, N. & OHTSU, H., 1975.
Inhibitory effects of oil dispersants on the fertilization of sea urchin eggs.
Mem.Ehime Univ.nat.Sci.Ser.B (Biol.), 7, 97-100.
927. SAWARD, D., 1972.
Some physiological and behavioural aspects of the effects of phenol upon plaice.
Copenhagen, International Council for the Exploration of the Sea, Fisheries Improvement Committee, C.M.1972/E:23, 5 p.
928. SCARRATT, D.J., 1974.
Impact of spills and clean-up technology on living natural resources, and resource-based industry.
Fish.Res.Board Can.Tech.Rep.No. 428, 141-158.
929. SCARRATT, D.J. & ZITKO, V., 1972.
Bunker C oil in sediments and benthic animals from shallow depths in Chedabucto Bay, N.S..
J.Fish.Res.Board Can., 29, 1347-1350.

930. SCHEIER, A. & GOMINGER, D., 1976.
A preliminary study of the toxic effects of irradiated vs non-irradiated water soluble fractions of No. 2 fuel oil.
Bull.environ.Contam.Toxicol., 16(5), 595-603.
931. SCHRAMM, W., 1972.
The effects of oil pollution on gas exchange in Porphyra umbilicalis when exposed to air.
In: Nisizawa, K., ed. Proceedings of the 7th International Seaweed Symposium, held in Sapporo, Japan, 8-12 August 1971. Tokyo, University of Tokyo Press, p. 309-315.
932. SCHRAMM, W., 1972.
Untersuchungen über den Einfluss von Ölverschmutzungen auf Meeresalgen. 1. Die Wirkung von Rohölfilmen auf den CO₂-Gaswechsel ausserhalb des Wassers.
Mar.Biol.(Berl.), 14, 189-198.
933. SEARS, J.R., 1972.
Effect of seawater extracts of crude oil on photosynthesis by seaweeds.
J.Phycol.(Suppl.), 8, 11. (Abstract)
934. SEKERAH, A. & FOY, M.G., 1978.
Acute lethal toxicity of Corexit 9527/Prudhoe Bay crude oil mixtures to selected Arctic invertebrates.
Spill Technol.NewsL., 3(2), 37-41.
935. SHARP, J.R., FUCIK, K.W. & NEFF, J.M., 1979.
Physiological basis of differential sensitivity of fish embryonic stages to oil pollution.
In: Vernberg, W.B., Calabrese, A., Thurberg, F.P. & Vernberg, F.J., eds. Marine pollution: functional responses. New York, Academic Press, p. 85-110.
936. SHAW, D.G., PAUL, A.J., CHEEK, L.M. & FEDER, H.M., 1976.
Macoma balthica: An indicator of oil pollution.
Mar.Pollut.Bull., 7(2), 29-30.
937. SHAW, D.G., PAUL, A.J. & SMITH, E.R., 1977.
Responses of the clam Macoma balthica to Prudhoe Bay crude oil.
In: Proceedings of the 1977 Oil Spill Conference (Prevention, Behavior, Control, Cleanup), held in New Orleans, Louisiana, March 8-10, 1977. Washington D.C., American Petroleum Institute, Publ. No. 4284, p. 493-494.
938. SHCHEKATURINA, T.L. & MIRONOV, O.G., 1978.
Hydrocarbon characteristics of organs and tissues of some Mediterranean fish.
Vopr.Ikhtiol., 18(6), 1147-1150.
939. SHELTON, R.G.J., 1971.
Effects of oil and oil dispersants on the marine environment.
Proc.R.Soc.Lond.B Biol.Sci., 177, 411-422.

940. SHELTON, R.G.J., 1971.
Oil pollution and commercial fisheries in Britain.
In: Hepple, P., ed. Water pollution by oil: Proceedings of a Seminar held at Aviemore, 4-8 May, 1970. London, Institute of Petroleum, p. 377-379.
941. SHELTON, R.G.J., 1975.
Effects on fisheries.
In: Cole, H.A., ed. Petroleum and the continental shelf of North-West Europe. Vol. 2. Environmental protection, Barking, U.K., Applied Science Publishers, p. 75-83.
942. SHELTON, R.G.J., 1975.
Pollution hazards to commercial fisheries.
In: Society for Underwater Technology. Fisheries and Hydrocarbons, a Symposium, held in London, 27 Nov., 1974. London, British Petroleum Ltd., p. 1-6.
943. SHELTON, R.G.J., 1976.
Environmental effect of oil and the chemicals used to control it on fisheries.
In: Wardley-Smith, J., ed. The control of oil pollution on the sea and inland waters. London, Graham and Trotman Ltd., p. 51-57.
944. SHERMAN, K., 1977.
The ARGO MERCHANT oil spill and fishery resources of Nantucket shoals: a preliminary assessment of impact.
ICES C.M.Pap.Rep. No. C.M.1977/E:58, 39 p.
945. SHIELS, W.E., GOERING, J.J. & WOOD, D.W., 1973.
Crude oil phytotoxicity studies.
Occas.Publ.Inst.mar.Sci.Univ.Alaska, 3, 413-446.
946. SHINDLER, D.B., SCOTT, B.F. & CARLISLE, D.B., 1975.
Effect of crude oil on populations of bacteria and algae in artificial ponds subject to Winter weather and ice formation.
Verh.Int.Verein.Limnol., 19, 2138-2144.
947. SIDHU, G.S., VALE, G.L., SHIPTON, J. & MURRAY, K.E., 1972.
A kerosene-like taint in mullet (*Mugil cephalus*).
In: Ruivo, M., ed. Marine pollution and sea life, London Fishing News (Books) Ltd., p. 546-550.
948. SIMONAVICHENE, B.I. & DANYULITE, G.P., 1978.
Effect of oil on conditioned feeding reflexes in goldfish.
Liet.TSR Mokslu Akad.Darb.Ser.C Biol.Mokslai, 1, 105-110.
949. SIMPSON, A.C., 1970.
The TORREY CANYON disaster and fisheries.
Lab.Leaf.Fish.Lab.Lowestoft, No. 18, 43 p.
950. SMITH, J.E., editor, 1968.
TORREY-CANYON - Pollution and marine life.
Report by the Plymouth Laboratory of the Marine Biological Association of the United Kingdom, London, Cambridge University Press, 196 p.

951. SMITH, J.W., 1973.
Pollution of water by oil.
In: Odabasi, H. & Ulug, S.E., eds. Environmental problems and their international implications: papers presented at the Conference on International Implications of Environmental Problems, held at the Merchant Marine Academy, Istanbul, Turkey, July 21-28, 1971. Boulder, Colorado, Associated University Press, p. 111-125.
952. SMITH, J.W., editor, 1976.
The control of oil pollution on the sea and inland waters: the effect of oil spills on the marine environment and methods of dealing with them.
London, Graham and Trotman Ltd., 251 p.
953. SMITH, J.W., 1976.
Environmental effect of oil and the chemicals used to control it.
In: Smith, J.W., ed. The control of oil pollution on the sea and inland waters. London, Graham and Trotman Ltd., p. 47-51.
954. SMITH, M., 1974.
Oil spill removal. A bibliography with abstracts.
Springfield, Virginia, US National Technical Information Service, 119 p. (NTIS WIN 74 037)
955. SMITH, R.L. & CAMERON, J.A., 1977.
Acute effects - Pacific herring roe in the Gulf of Alaska.
In: Outer Continental Shelf Environmental Assessment Program. Environmental assessment of the Alaskan continental shelf. Vol. XII. Effects. Boulder, Colorado, US National Oceanic and Atmospheric Administration, p. 596-635.
956. SMITH, R.L. & CAMERON, J.A., 1979.
Effect of water soluble fraction of Prudhoe Bay crude oil on embryonic development in Pacific herring.
Trans.Am.Fish.Soc., 108(1), 70-75.
957. SMITH, T.G. & GERACI, J.R., 1975.
Effect of contact and ingestion of crude oil on ringed seals.
Victoria, B.C., Canada, Department of the Environment, Beaufort Sea Project, Tech.Rep.No. 5, 66 p.
958. SNOW, N.B. & ROSENBERG, D.M., 1975.
The effects of crude oil on the colonization of artificial substrates by zoobenthos organisms.
Fish.mar.Serv.Res.Dev.tech.Rep., 55, 35 p.
959. SOIKKALI, M. & VIRTANEN, J., 1972.
The PALVA oil disaster in the Finnish south-western archipelago. II. Effects of oil pollution on the Eider Somateria mollissima population in the archipelagos of Kökar and Föglö, south-west Finland.
Aqua Fennica, 1972, 122-128.

960. SOLBAKKEN, J.E. & PALMORK, K.H., 1979.
 Accumulation and metabolism of phenanthrene in rainbow trout (Salmo gairdneri).
 ICES C.M.Pap.Rep.No. C.M. 1979/E:51, 9 p.
961. SOLBAKKEN, J.E., PALMORK, K.H., NEPPELBERG, T. & SCHELINE, R.R., 1979.
 Distribution of radioactivity in coalfish (Pollachius virens) following intragastric administration of (9-14C) phenanthrene. Bull.environ.Contam.Toxicol., 23, 100-103.
962. SOLBAKKEN, J.E., PALMORK, K.H., NEPPELBERG, T. & SCHELINE, R.R., 1980.
 Urinary and biliary metabolites of phenanthrene in the coal-fish (Pollachius virens).
 Acta Pharmacol.Toxicol., 46(2), 127-132.
963. SOTO, C., HELLEBUST, J.A. & HUTCHINSON, T.C., 1975.
 The effects of aqueous extracts of crude oil and naphthalene on the physiology and morphology of a freshwater green alga. Verh.Int.Verein.Limnol., 19, 2145-2154.
964. SOTO, C., HELLEBUST, J.A. & HUTCHINSON, T.C., 1975.
 Effect of naphthalene and aqueous crude oil extracts on the green flagellate Chlamydomonas angulosa. II. Photosynthesis and the uptake and release of naphthalene. Can.J.Bot., 53, 118-126.
965. SOTO, C., HELLEBUST, J.A. & HUTCHINSON, T.C., 1977.
 Effect of naphthalene and aqueous crude oil extracts on the green flagellate Chlamydomonas angulosa. III. Changes in cellular composition. Can.J.Bot., 55(22), 2765-2777.
966. SOTO, C., HELLEBUST, J.A., HUTCHINSON, T.C. & SAWA, T., 1975.
 Effect of naphthalene and aqueous crude oil extracts on the green flagellate Chlamydomonas angulosa. I. Growth. Can.J.Bot., 53, 109-117.
967. SOUTHWARD, A.J. & SOUTHWARD, E.C., 1978.
 Recolonization of rocky shores in Cornwall after use of toxic dispersants to clean up the TORREY CANYON spill. J.Fish.Res.Board Can., 35(5), 682-706.
968. SPEARS, R.W., 1971.
 Evaluation of the effects of oil, oilfield brine and oil removing compounds.
In: A.I.M.E. Environmental Quality Conference, Washington D.C., June 7-9, 1971. New York, American Institute of Mining, Metallurgical and Petroleum Engineers, p. 199-216.
969. SPIES, R.B. & DAVIS, P.H., 1979.
 The infaunal benthos of a natural oil seep in the Santa Barbara Channel. Mar.Biol.(Berl.), 50(3), 227-238.

970. SPIES, R.B. & DES MARAIS, D., 1979.
Evidence for trophic enrichment of an infaunal community
in a natural petroleum seep.
In: Abstracts from the 14th European Marine Biology Symposium,
Protection of Life in the Sea, Helgoland, 23-29
Sept. 1979, p. 94.
971. SPOONER, M.F., 1967.
Biological effects of the TORREY CANYON disaster.
J.Devon Trust Nat.Conserv. (July Suppl.), 12-19.
972. SPOONER, M.F., 1970.
Some ecological effects of marine oil pollution.
In: Proceedings of a Joint Conference on Prevention and
Control of Oil Spills. New York, December 15-17, 1969.
New York, American Petroleum Institute, p. 313-316.
973. SPOONER, M.F., 1971.
Effects of oil and emulsifiers on marine life.
In: Hepple, P., ed. Water pollution by oil. Proceedings
of a Seminar held at Aviemore, 4-8 May, 1970. London,
Institute of Petroleum, p. 375-376.
974. SPOONER, M.F. & CORKETT, C.J., 1979.
Effects of Kuwait oils on feeding rates of copepods.
Mar.Pollut.Bull., 10(7), 197-202.
975. SPRAGUE, J.B., 1971.
Measurement of pollutant toxicity to fish. 3. Sublethal
effects and "safe" concentrations.
Water Res., 5, 245-266.
976. SPRAGUE, J.B., 1971.
Sublethal oil spill fumble.
Mar.Pollut.Bull., 2, 83-84.
977. SPRAGUE, J.B. & CARSON, W.G., 1970.
Toxicity tests with oil dispersants in connection with
oil spill at Chedabucto Bay, Nova Scotia.
Fish.Res.Board Can.Tech.Rep.No. 201, 1-30.
978. SPRAGUE, J.B. & LOGAN, W.J., 1979.
Separate and joint toxicity to rainbow trout of substances
used in drilling fluids for oil exploration.
Environ.Pollut., 19(4), 269-282.
979. STAINKEN, D.M., 1975.
Preliminary observations on the mode of accumulation of
No. 2 fuel oil by the soft shell clam, Mya arenaria.
In: Proceedings of a Joint Conference on Prevention and
Control of Oil Spills, held in San Francisco, California,
March 25-27, 1975. Washington D.C., American Petroleum
Institute, p. 463-468.

980. STAINKEN, D.M., 1976.
The effect of a No. 2 fuel oil and a South Louisiana crude oil on the behaviour of the soft shell clam, Mya arenaria L.. Bull.environ.Contam.Toxicol., 16(6), 724-729.
981. STAINKEN, D.M., 1976.
A descriptive evaluation of the effects of No. 2 fuel oil on the tissues of the soft shell clam, Mya arenaria L.. Bull.environ.Contam.Toxicol., 16(6), 730-737.
982. STAINKEN, D.M., 1977.
The accumulation and depuration of No. 2 fuel oil by the soft shell clam, Mya arenaria L..
In: Wolfe, D.A., ed. Fate and effects of petroleum hydrocarbons in marine ecosystems and organisms. Proceedings of a Symposium, held in Seattle, Wash., Nov. 10-12, 1976. New York, Pergamon Press, p. 313-322.
983. STAINKEN, D.M., 1978.
Effects of uptake and discharge of petroleum hydrocarbons on the respiration of the soft-shell clam, Mya arenaria. J.Fish.Res.Board Can., 35(5), 637-642.
984. STANDRING, K.T. & CADBURY, C.J., 1978.
Firth of Forth oil pollution incident, February 1978. Mar.Pollut.Bull., 9(12), 335-339.
985. STANSBY, M.E., 1978.
Flavors in fish from petroleum pickup. Mar.Fish.Rev., 40, 13-17.
986. STANSBY, M.E. & DIAMANT, I., 1978.
Subject classified literature references on effects of oil pollution in Arctic and subarctic waters.
Seattle, Washington, US National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Northwest and Alaska Fisheries Center, 201 p.
987. STAVELAND, J.T., 1979.
Effects on hatching in Littorina littorea after an oil spill. Mar.Pollut.Bull., 10, 255-258.
988. STEBBINGS, N.E., 1970.
Recovery of salt marsh in Brittany 16 months after heavy pollution by oil. Environ.Pollut., 1, 163-167.
989. STEELE, R.L., 1977.
Effects of certain petroleum products on reproduction and growth of zygotes and juvenile stages of the alga Fucus edentatus de la Pyl. (Phaeophyceae: Fucales).
In: Wolfe, D.A., ed. Fate and effects of petroleum hydrocarbons in marine ecosystems and organisms. Proceedings of a Symposium, held in Seattle, Wash., Nov. 10-12, 1976. New York, Pergamon Press, p. 138-142.

990. STEGEMAN, J.J., 1974.
Hydrocarbons in shellfish chronically exposed to low levels of fuel oil.
In: Vernberg, F.J. & Vernberg, W.B., eds. Pollution and physiology of marine organisms. New York, Academic Press, p. 329-347.
991. STEGEMAN, J.J., 1976.
Biological and ecological effects of petroleum in the marine environment.
In: Second IOC/WMO Workshop on Marine Pollution (Petroleum) Monitoring, Paris, UNESCO, 37 p. (Distribution limited)
992. STEGEMAN, J.J., 1977.
Fate and effects of oil in marine animals.
Oceanus, 20, 59-66.
993. STEGEMAN, J.J., 1978.
Influence of environmental contamination on cytochrome P-450 mixed-function oxygenases in fish. Implications for recovery in the Wild Harbor Marsh.
J.Fish.Res.Board Can., 35(5), 668-674.
994. STEGEMAN, J.J., 1979.
Temperature influence on basal activity and induction of mixed function oxygenase activity in Fundulus heteroclitus.
J.Fish.Res.Board Can., 36, 1400-1405.
995. STEGEMAN, J.J. & SABO, D.J., 1975.
Uptake and release of petroleum hydrocarbons by marine organisms and some metabolic implications.
In: Cronin, L.E. & Smith, R.E., eds. Marine environmental implications of offshore and gas development in the Baltimore Canyon region of the mid-Atlantic coast. Proceedings of the Estuarine Research Federation Outer Continental Shelf Conference and Workshop, Dec. 2-4, 1974. Wachapreague, Virginia, Estuarine Research Federation, p. 339-350.
996. STEGEMAN, J.J. & SABO, D.J., 1976.
Aspects of the effects of petroleum hydrocarbons on intermediary metabolism and xenobiotic metabolism in marine fish.
In: Sources, Effects and Sinks of Hydrocarbons in the Aquatic Environment. Proceedings of the Symposium, held in Washington D.C., 9-11 August, 1976. Arlington, Virginia, American Institute of Biological Sciences, p. 424-436.
997. STEGEMAN, J.J. & TEAL, J.M., 1973.
Accumulation, release and retention of petroleum hydrocarbons by the oyster Crassostrea virginica.
Mar.Biol.(Berl.), 22(1), 37-44.
998. STIRLING, H.P., 1977.
Effects of a spill of marine diesel oil on the rocky shore fauna of Lamma Island, Hong Kong.
Environ.Pollut., 12, 93-117.

999. STOSS, F.W. & HAINES, T.A., 1979.
The effects of toluene on embryos and fry of the Japanese Medaka (*Oryzias latipes*) with a proposal for rapid determination of maximum acceptable toxicant concentration.
Environ.Pollut., 20(2), 139-148.
1000. STRAUGHAN, D., 1971.
The influence of oil and detergents on recolonization in the upper intertidal zone.
In: Proceedings of Joint Conference on Prevention and Control of Oil Spills, held in Washington D.C., 15-17 June, 1971.
Washington D.C., American Petroleum Institute, p. 437-440.
1001. STRAUGHAN, D., 1971.
Breeding and larval settlement of certain intertidal invertebrates in the Santa Barbara Channel following pollution by oil.
In: Straughan, D., ed. Biological and oceanographical survey of the Santa Barbara Channel oil spill 1969-1970. Volume 1. Biology and bacteriology. Los Angeles, California, University of Southern California, Allan Hancock Foundation, p. 223-237.
1002. STRAUGHAN, D., 1971.
Oil pollution and fisheries in the Santa Barbara Channel.
In: Straughan, D., ed. Biological and oceanographical survey of the Santa Barbara Channel oil spill 1969-1970. Volume 1. Biology and bacteriology. Los Angeles, California, University of Southern California, Allan Hancock Foundation, p. 245-254.
1003. STRAUGHAN, D., 1971.
What has been the effect of the spill on the ecology of the Santa Barbara Channel?
In: Straughan, D., ed. Biological and oceanographical survey of the Santa Barbara Channel oil spill 1969-1970. Volume 1. Biology and bacteriology. Los Angeles, California, University of Southern California, Allan Hancock Foundation, p. 401-426.
1004. STRAUGHAN, D., 1972.
Factors causing environmental changes after an oil spill.
J.Petrol.Tech., 24, 250-254.
1005. STRAUGHAN, D., 1972.
Ecological effects of the Santa Barbara oil spill.
In: Holmes, R.E. & DeWitt, F.A. Jr., eds. Proceedings of the Santa Barbara Oil Symposium: Offshore Petroleum Production, an Environmental Inquiry, Santa Barbara, California, December 16-18, 1970. Washington D.C., National Science Foundation, p. 173-182.
1006. STRAUGHAN, D., 1972.
Biological effects of oil pollution in the Santa Barbara Channel.
In: Ruivo, M., ed. Marine pollution and sea life. West Byfleet, Surrey, U.K., Fishing News (Books) Ltd., p. 355-359.

1007. STRAUGHAN, D., 1973.
Biological studies of the Santa Barbara oil spill.
In: American Association of Petroleum Geologists, 1973
Annual Meeting, Santa Barbara Channel Revisited, AAPG
Trip 3, sepm Seg., p. 4-16.
1008. STRAUGHAN, D., 1976.
Temperature effects of crude oil in the upper intertidal
zone.
Los Angeles, California, University of Southern California,
Allan Hancock Foundation, 54 p. (Report No. EPA-600/2-76-127)
1009. STRAUGHAN, D., 1976.
Sublethal effects of natural chronic exposure to petroleum
in the marine environment.
Los Angeles, California, University of Southern California,
Allan Hancock Foundation, 119 p.
1010. STRAUGHAN, D., 1976.
Biological survey of intertidal areas of the Straits of
Magellan in January 1975, five months after the METULA oil
spill.
Boulder, Colorado, US National Oceanic and Atmospheric
Administration, 57 p. (NOAA Tech.Mem.ERL MESA-10)
1011. STRAUGHAN, D., 1977.
Effects of natural chronic exposure to petroleum hydrocarbons
on size and reproduction in Mytilus californianus (Conrad).
In: Vernberg, F.J., Calabrese, A., Thurberg, F.P. & Vernberg,
W.B., eds. Physiological responses of marine biota to pollu-
tants. New York, Academic Press, p. 289-298.
1012. STRAUGHAN, D., 1977.
The sublethal effects of natural chronic exposure to petroleum
on marine invertebrates.
In: Proceedings 1977 Oil Spill Conference (Prevention,
Behavior, Control, Cleanup), held in New Orleans, Louisiana,
March 8-10, 1977. Washington D.C., American Petroleum
Institute, Publ. No. 4284, p. 563-568.
1013. STRAUGHAN, D., 1979.
Distribution of tar and relationship to changes in inter-
tidal organisms on sandy beaches in Southern California.
In: Proceedings 1979 Oil Spill Conference (Prevention,
Behavior, Control, Cleanup), held in Los Angeles, California,
March 19-22, 1979. Washington D.C., American Petroleum
Institute, Publ. No. 4308, p. 591-601.
1014. STRAUGHAN, D. & ABBOTT, B.C., 1971.
The Santa Barbara oil spill: ecological changes and natural
oil leaks.
In: Hepple, P., ed. Water pollution by oil. Proceedings
of a Seminar held at Aviemore, 4-8 May, 1970. London,
Institute of Petroleum, p. 263-272.

1015. STRAUGHAN, D. & HADLEY, D., 1978.
Experiments with Littorina species to determine the relevancy of oil spill data from Southern California to the Gulf of Alaska.
Mar.environ.Res., 1(2), 135-163.
1016. STRAUGHAN, D. & LAWRENCE, D.M., 1975.
Investigation of ovicell hyperplasia in bryozoans chromically exposed to natural oil seepage.
Water, Air, Soil Pollut., 5, 39-45.
1017. STRUHSAKER, J.W., 1977.
Effects of benzene (a toxic component of petroleum) on spawning Pacific herring, Clupea harengus pallasi.
NOAA (Nat.ocean.atmos.Adm.) Fish.Bull., 75, 43-49.
1018. STRUHSAKER, J.W., ELDRIDGE, M.B. & ECHEVERRIA, T., 1974.
Effect of benzene (a water soluble component of crude oil) on eggs and larvae of Pacific herring and northern anchovy.
In: Vernberg, F.J. & Vernberg, W.B., eds. Pollution and physiology of marine organisms. New York, Academic Press, p. 253-284.
1019. STURDEVANT, D.C., 1972.
The influence of crude oil on the serum proteins of the Sockeye salmon.
Fairbanks, Alaska, University of Alaska, M.S. Thesis, 43 p.
1020. SUÈSS, M.J., 1973.
Polynuclear aromatic hydrocarbon pollution of the marine environment.
In: Background Papers for a workshop on Inputs, Fates and Effects of Petroleum in the Marine Environment. Vol. 2. Physical, Chemical and Biological Fates, Chronic, Acute and Health Effects. Washington D.C., National Academy of Sciences, p. 801-808. (AD-783 990)
1021. SULLIVAN, C.E., 1971.
A comparative study of the effects of emulsifiers BP 1002 and BP 1100 on three mud sand species.
Rep.Oil Pollut.Res.Unit, Field Stud.Counc., 1971, 14-21.
1022. SULLIVAN, J.B., 1974.
Marine pollution by carcinogenic hydrocarbons.
In: Marine Pollution Monitoring (Petroleum). Proceedings of a Symposium and Workshop held at the National Bureau of Standards, Gaithersburg, Maryland, May 13-17, 1974, sponsored by the Intergovernmental Oceanographic Commission, the World Meteorological Organization and the US Department of Commerce. Washington D.C., US Government Printing Office, p. 261-263.
1023. SWEDMARK, M., GRANMO, A. & KOLLBERG, S., 1973.
Effects of oil dispersants and oil emulsions on marine animals.
Water Res., 7(11), 1649-1672.

1024. SZARO, R.C., 1979.
Bunker C fuel oil reduces Mallard egg hatchability.
Bull.environ.Contam.Toxicol., 22(6), 731-732.
1025. SZARO, R.C. & ALBERS, P.H., 1977.
Effects of external application of No. 2 fuel oil on common Eider eggs.
In: Wolfe, D.A., ed. *Fate and effects of petroleum hydrocarbons in marine ecosystems and organisms.*
Proceedings of a Symposium, Seattle, Wash., Nov. 10-12, 1976. New York, Pergamon Press, p. 164-167.
1026. SZARO, R.C., DIETER, M.P., HEINZ, G.H. & FERRELL, J.F., 1978.
Effects of chronic ingestion of South Louisiana crude oil on Mallard ducklings.
Environ.Res., 17(3), 426-436.
1027. TAGGER, S., DEVEZE, L. & LEPESTIT, J., 1979.
Sur l'épuration biologique d'une zone littorale marine affectée par des rejets d'hydrocarbures.
Environ.Pollut., 18(4), 275-288.
1028. TAKAHASHI, F.T. & KITTREDGE, J.S., 1973.
Sublethal effects of the water soluble component of oil: chemical communication in the marine environment.
In: Ahearn, D.G. & Meyers, S.P., eds. *The microbial degradation of oil pollutants. Proceedings of a Workshop*, Atlanta, Georgia, 4-6 December 1972. Baton Rouge, Louisiana, Louisiana State University, Center for Wetland Resources, p. 259-264.
1029. TARZWELL, C.M., 1970.
Standard methods for determination of relative toxicity of oil dispersants and mixtures of dispersants and various oils to aquatic organisms.
In: *Proceedings of a Joint Conference on Prevention and Control of Oil Spills*, held in New York, Dec. 15-17, 1969. Washington D.C., American Petroleum Institute, p. 179-186.
1030. TARZWELL, C.M., 1970.
Comments on standard methods for the determination of the relative toxicity of oil dispersants and mixtures of dispersants and various oils to aquatic organisms.
In: *Proceedings of the Industry-Government Seminar on Oil Spill Treating Agents*, held in Washington D.C., 8-9 April, 1970. Washington D.C., American Petroleum Institute, p. 80-85.
1031. TARZWELL, C.M., 1971.
Toxicity of oil and oil dispersant mixtures to aquatic life.
In: Hepple, P., ed. *Water pollution by oil. Proceedings of a Seminar held at Aviemore, Scotland, 4-8 May, 1970.* London, Institute of Petroleum, p. 163-172.
1032. TATEM, H.E., 1975.
The toxicity and physiological effects of oil and petroleum hydrocarbons on estuarine grass shrimps Palaemonetes pugio (Holthuis).
College Station, Texas, Texas A&M University, Ph.D. Thesis, 133 p.

1033. TATEM, H.E., 1977.
Accumulation of napthalene by grass shrimp: effects on respiration, hatching, and larval growth.
In: Wolfe, D.A., ed. Fate and effects of petroleum hydrocarbons in marine organisms and ecosystems. Proceedings of a Symposium, held in Seattle, Wash., Nov. 10-12, 1976. New York, Pergamon Press, p. 201-209.
1034. TATEM, H.E. & ANDERSON, J.W., 1973.
The toxicity of four oils to Palaemonetes pugio (Holthuis) in relation to uptake and retention of specific petroleum hydrocarbons.
Am.Zool., 13(4), 1307. (Abstract no. 261)
1035. TATEM, H.E., COX, B.A. & ANDERSON, J.W., 1978.
The toxicity of oils and petroleum hydrocarbons to estuarine crustaceans.
Estuarine coastal mar.Sci., 6, 365-373.
1036. TAYLOR, T.L. & KARINEN, J.F., 1977.
Response of the clam, Macoma balthica (Linnaeus), exposed to Prudhoe Bay crude oil as unmixed oil, water-soluble fraction, and oil-contaminated sediment in the laboratory.
In: Wolfe, D.A., ed. Fate and effects of petroleum hydrocarbons in marine ecosystems and organisms. Proceedings of a Symposium, held in Seattle, Wash., Nov. 10-12, 1976. New York, Pergamon Press, p. 229-237.
1037. TAYLOR, T.L., KARINEN, J.F. & FEDER, H.M., 1976.
Response of the clam, Macoma balthica (Linnaeus) exposed to Prudhoe Bay crude oil as unmixed oil, water-soluble fraction, and sediment-adsorbed fraction in the laboratory.
In: Outer Continental Shelf Environmental Assessment Program. Environmental assessment of the Alaskan continental shelf. Vol. VIII. Boulder, Colorado, US National Oceanic and Atmospheric Administration, p. 48-87.
1038. TAYLOR, T.L., KARINEN, J.F. & FEDER, H.M., 1976.
Response of the clam, Macoma balthica (Linnaeus) exposed to Prudhoe Bay crude oil as unmixed oil, water-soluble fraction, and sediment-adsorbed fraction in the laboratory. Appendix B. Corvallis, Oregon, U.S. Environmental Protection Agency, Office of Research and Development, Corvallis Environmental Research Laboratory, p. 293-321. (Rep. No. EPA-600/3-76-086)
1039. TEAL, J.M., 1976.
Hydrocarbon uptake by deep sea benthos.
In: Proceedings of a Symposium on Sources, Effects and Sinks of Hydrocarbons in the Aquatic Environment, held in Washington D.C., 9-11 August, 1976. Arlington, Virginia, American Institute of Biological Sciences, p. 359-371.
1040. TEAL, J.M., 1977.
Food chain transfer of hydrocarbons.
In: Wolfe, D.A., ed. Fate and effects of petroleum hydrocarbons in marine organisms and ecosystems. Proceedings of a Symposium, held in Seattle, Wash., Nov. 10-12, 1976. New York, Pergamon Press, p. 71-77.

1041. TEAL, J.M. & FARRINGTON, J.W., 1977.
A comparison of hydrocarbons in animals and their benthic habitats.
In: McIntyre, A.D. & Whittle, K.J., eds. Petroleum hydrocarbons in the marine environment. Proceedings ICES Workshop, Aberdeen 9-12 Sept., 1975, International Council for the Exploration of the sea, 171, 79-83.
1042. TEAL, J.T. & STEGEMAN, J.J., 1973.
Accumulation, release and retention of petroleum hydrocarbons by the oyster Crassostrea virginica.
In: Proceedings, Workshop on Inputs, Fates and Effects of Petroleum in the Marine Environment. Vol. 2. Physical, Chemical and Biological Fates, Chronic, Acute and Health Effects. Washington D.C., National Academy of Sciences, p. 571-602.
1043. TEMPLETON, W.L., 1971.
Ecological effects of oil pollution.
J.Water Pollut.Control Fed., 43, 1081-1088.
1044. TEMPLETON, W.L., 1972.
Ecological effects of oil pollution.
J.Water Pollut.Control Fed., 44, 1128-1134.
1045. THOMAS, M.L.H., 1973.
Effects of Bunker C oil on intertidal and lagoonal biota in Chedabucto Bay, Nova Scotia.
J.Fish.Res.Board Can., 30, 83-90.
1046. THOMAS, M.L.H., 1975.
Impact of oil on tidal zone.
Can.Soc.environ.Biol.Annu.Meet., 1975, 187-207.
1047. THOMAS, M.L.H., 1977.
Long term biological effects of Bunker C oil in the intertidal zone.
In: Wolfe, D.A., ed. Fate and effects of petroleum hydrocarbons in marine ecosystems and organisms. Proceedings of a Symposium, held in Seattle, Wash., Nov. 10-12, 1976. New York, Pergamon Press, p. 238-245.
1048. THOMAS, M.L.H., 1978.
Comparison of oiled and unoiled intertidal communities in Chedabucto Bay, Nova Scotia.
J.Fish.Res.Board Can., 35, 707-716.
1049. THOMAS, R.E. & RICE, S.D., 1975.
Increased opercular rates of pink salmon (Oncorhynchus gorbuscha) fry after exposure to the water-soluble fraction of Prudhoe Bay crude oil.
J.Fish.Res.Board Can., 32(11), 2221-2224.

1050. THOMAS, R.E. & RICE, S.D., 1979.
The effect of exposure temperatures on oxygen consumption and opercular breathing rates of pink salmon fry exposed to toluene, naphthalene, and water-soluble fractions of Cook Inlet crude oil and No. 2 fuel oil.
In: Vernberg, W.B., Calabrese, A., Thurberg, F.P. & Vernberg, F.J., eds. Marine pollution: functional responses, New York, Academic Press, p. 39-52.
1051. THOMPSON, H.C., FARRAGUT, R.N. & THOMPSON, M.H., 1977.
Relationship of scarlet prawns (Plesiopenaeus edwardsianus) to a benthic oil deposit off the north-west coast of Aruba, Dutch West Indies.
Environ.Pollut., 13(4), 239-254.
1052. THOMPSON, S. & EGLINGTON, G., 1976.
The presence of pollutant hydrocarbons in estuarine epipelagic diatom populations.
Estuarine coastal mar.Sci., 4, 417-425.
1053. THOMPSON, S. & EGLINGTON, G., 1979.
The presence of pollutant hydrocarbons in estuarine epipelagic populations: II. Diatom slimes.
Estuarine coastal mar.Sci., 8(1), 75-86.
1054. THURBERG, F.P., GOULD, E. & DAWSON, M.A., 1978.
Some physiological effects of the ARGO MERCHANT oil spill on several marine teleosts and bivalve molluscs.
In: In the Wake of the ARGO MERCHANT, Kingston, Rhode Island, Center for Ocean Management Studies, University of Rhode Island, p. 103-108.
1055. TOKUDA, H., 1977.
Fundamental studies on the influence of oil pollution upon marine organisms. II. Lethal concentrations of oil-spill emulsifier components for marine phytoplankton.
Bull.Jpn.Soc.sci.Fish., 43(1), 103-106.
1056. TOKUDA, H., 1977.
Fundamental studies on the influence of oil pollution upon marine organisms. III. Effects of oil-spill emulsifiers and surfactants on the growth of Porphyra-layer.
Bull.Jpn.Soc.sci.Fish., 43(5), 587-594.
1057. TOKUDA, H., 1979.
Fundamental studies on the influence of oil pollution upon marine organisms. IV. The toxicity of mixtures of oil products and oil-spill emulsifiers to phytoplankton.
Bull.Jpn.Soc.sci.Fish., 45(10), 1289-1292.
1058. TOKUDA, H., 1979.
Fundamental studies on the influence of oil pollution upon marine organisms. V. The toxicity of the gelling compounds for petroleum to marine organisms.
Bull.Jpn.Soc.sci.Fish., 45(11), 1385-1388.

1059. TOKUDA, H. & ARASAKI, S., 1977.
Fundamental studies on the influence of oil pollution upon marine organisms. I. Lethal concentrations of oil-spill emulsifiers for some marine phytoplankton.
Bull.Jpn.Soc.sci.Fish., 43(1), 97-102.
1060. TRUDEL, B.K., 1978.
The effect of crude oil and crude oil/Corexit 9527 suspensions on carbon fixation by a natural marine phytoplankton community.
Spill Technol.NewsL., 3(2), 56-64.
1061. TSENG, W.Y. & CHAN, C.Y., 1979.
Effects of oil pollution on cage-cultured fish in Hong Kong.
In: Abstracts from the 14th European Marine Biology Symposium. Protection of Life in the Sea, Helgoland, 23-29 Sept. 1979, p. 99.
1062. UYSAL, H., 1979.
The effects of some pollutants on Mytilus galloprovincialis Lam. and Paracentrotus lividus Lam. in the Bays of Izmir and Aliaga.
In: Commission Internationale pour l'Exploration Scientifique de la Mer Méditerranée. IVes Journées d'Etudes sur les Pollutions Marines en Méditerranée. Workshop on Pollution of the Mediterranean. Monaco, C.I.E.S.M.M., p. 313-317.
1063. VALE, G.L., SIDHU, G.S., MONTGOMERY, W.A. & JOHNSON, A.R., 1970.
Studies on a kerosene-like taint in mullet (Mugil cephalus).
I. General nature of the taint.
J.Sci.Food Agric., 21, 429-431.
1064. VANDERHORST, J.R., ANDERSON, J.W., WILKINSON, P. & WOODRUFF, D.L., 1978.
Estimation of effects from oil on intertidal populations:
Experimental perturbation versus natural variation.
In: Proceedings of the Conference on Assessment of Ecological Impacts of Oil Spills. Arlington, Virginia, American Institute of Biological Sciences, p. 807-820.
1065. VANDERHORST, J.R., BEAN, R.M., MOORE, L.J., WILKINSON, P., GIBSON, C.I. & BLAYLOCK, J.W., 1977.
Effects of a continuous low-level No. 2 fuel dispersion on laboratory-held intertidal colonies.
In: Proceedings of the 1977 Oil Spill Conference (Prevention, Behavior, Control, Cleanup), held in New Orleans, Louisiana, March 8-10, 1977. Washington D.C., American Petroleum Institute, Publ. No. 4284, p. 557-561.
1066. VANDERHORST, J.R., GIBSON, C.I. & MOORE, L.J., 1976.
Toxicity of No. 2 fuel oil to coonstripe shrimp.
Mar.Pollut.Bull., 7(6), 106-108.

1067. VANDERHORST, J.R. & WILKINSON, P., 1978.
Evaluation of marine invertebrate species diversity as an oil toxicity indicator from laboratory studies.
In: Proceedings of the 4th Annual Toxicity Workshop, held in Vancouver, Canada, Nov. 8-11, 1977. Environment Canada Technical Report Series, February 1978.
1068. VANDERKOY, N., 1977.
The Ekofisk Bravo blow out.
Spill Technol.NewsL., 2(3), 15-25.
1069. VANDERMEULEN, J.H., 1977.
The Chedabucto Bay spill - ARROW, 1970.
Oceanus, 20(4), 31-39.
1070. VANDERMEULEN, J.H., 1977.
Absence of mutagenicity due to crude and refined oils in the alga Chlamydomonas reinhardtii.
ICES C.M.Pap.Rep. No. C.M.1977/E:69, 5 p.
1071. VANDERMEULEN, J.H., editor, 1978.
Symposium on recovery potential of oiled marine northern environments.
J.Fish.Res.Board Can., 35(5), 510-795.
1072. VANDERMEULEN, J.H. & AHERN, T.P., 1976.
Effects of petroleum hydrocarbons on algal physiology: review and progress report.
In: Lockwood, A.P.M., ed. Effects of pollutants on aquatic organisms. London, Cambridge University Press, p. 107-126.
1073. VANDERMEULEN, J.H., BUCKLEY, D.E., LEVY, E.M., LONG, B.F.N., MCLAREN, P. & WELLS, P.G., 1978.
Immediate impact of AMOCO CADIZ environmental oiling: oil behaviour and burial, and biological aspects.
Actes Colloq.Cent.natl Exploit.Océans, 6, 159-174.
1074. VANDERMEULEN, J.H., BUCKLEY, D.E., LEVY, E.M., LONG, B.F.N., MCLAREN, P. & WELLS, P.G., 1978.
Sediment penetration of AMOCO CADIZ oil, potential for future release and toxicity.
Mar.Pollut.Bull., 9(11), 292-293.
1075. VANDERMEULEN, J.H., BUCKLEY, D.E., LEVY, E.M., LONG, B.F.N., MCLAREN, P. & WELLS, P.G., 1979.
Sediment penetration of AMOCO CADIZ oil, potential for future release, and toxicity.
Mar.Pollut.Bull., 10(8), 222-227.
1076. VANDERMEULEN, J.H. & GORDON, D.C., 1976.
Reentry of 5-year-old stranded Bunker C fuel oil from a low-energy beach into the water, sediments, and biota of Chedabucto Bay, Nova Scotia.
J.Fish.Res.Board Can., 33(9), 2002-2010.

1077. VANDERMEULEN, J.H., KEIZER, P.D. & PENROSE, W.R., 1977.
Persistence of non-alkane components of Bunker C oil in
beach sediments of Chedabucto Bay, and lack of their
metabolism by molluscs.
In: Proceedings of the 1977 Oil Spill Conference (Preven-
tion, Behavior, Control, Cleanup), held in New Orleans,
Louisiana, March 8-10, 1977. Washington D.C., American
Petroleum Institute, Publ. No. 4284, p. 469-473.
1078. VARANASI, U., GMUR, D.J. & TRESELER, P.A., 1979.
Influence of environmental temperature on metabolism of
dieretary naphthalene in starry flounder.
Fed.Proc., 38(3/1), 1149. (Abstract)
1079. VARANASI, U., GMUR, D.J. & TRESELER, P.A., 1979.
Influence of time and mode of exposure on biotransformation
of naphthalene by juvenile starry flounder (Platichthys
stellatus) and rock sole (Lepidopsetta bilineata).
Arch.environ.Contam.Toxicol., 8(6), 673-692.
1080. VARANASI, U. & MALINS, D.C., 1977.
Metabolism of petroleum hydrocarbons: accumulation and
biotransformation in marine organisms.
In: Malins, D.C., ed. Effects of petroleum on Arctic and
subarctic marine environments and organisms. Vol. II.
Biological effects. New York, Academic Press, p. 175-270.
1081. VASHCHENKO, M.A., 1979.
Effects of oil pollution on the development of sexual cells
of sea urchins.
In: Abstracts from the 14th European Marine Biology Symposium,
Protection of Life in the Sea, Helgoland, 23-29 Sept. 1979,
p. 100-101.
1082. VAUGHAN, B.E., editor, 1973.
Effects of oil and chemically dispersed oil on selected marine
biota - A laboratory study.
Washington D.C., American Petroleum Institute, Publ. No. 4191,
120 p.
1083. VELIKHANOV, E.E., 1976.
Effect of temperature on the sensitivity of young sturgeons
to petroleum poisoning.
Izv.Akad.Nauk az.SSR Ser.Biol.Nauk, 1, 92-96.
1084. VENEZIA, L.D., 1979.
Short- and long-term effects of some pollutants on benthic
copepods of genus Tisbe.
In: Commission Internationale pour l'Exploration Scientifique
de la Mer Méditerranée. IVes Journées d'Etudes sur les
Pollutions Marines en Méditerranée. Workshop on Pollution of
the Mediterranean. Monaco, C.I.E.S.M.M., p. 439-443.
1085. VENEZIA, L.D. & FOSSATO, V.U., 1977.
Characteristics of suspensions of Kuwait oil and Corexit 7664
and their short- and long-term effects on Tisbe bulbisetosa
(Copepoda, Harpacticoida).
Mar.Biol.(Berl.), 42(3), 233-238.

1086. VERMEER, R. & VERMEER, K., 1974.
Oil pollution of birds: An abstracted bibliography.
Ottawa, Canada, Canadian Wildlife Service, Pesticide Section,
Manuscript Reports No. 29, 68 p.
1087. VERMEER, R. & VERMEER, K., 1974.
The biological effects of oil pollution on aquatic organisms:
A summarized bibliography.
Ottawa, Canada, Canadian Wildlife Service, Pesticide Section,
Manuscript Reports No. 31, 68 p.
1088. VERNBERG, F.J., CALABRESE, A., THURBERG, F.P. & VERNBERG, W.B., 1977.
Physiological responses of marine biota to pollutants.
New York, Academic Press, 462 p.
1089. VERNBERG, W.B., CALABRESE, A., THURBERG, F.P. & VERNBERG, F.J., 1979.
Marine pollution: functional responses.
New York, Academic Press, 454 p.
1090. VERNBERG, F.J. & VERNBERG, W.B., 1974.
Pollution and physiology of marine organisms.
New York, Academic Press, 492 p.
1091. VON HOFE, E.H., GEHLY, E.B. & PUFFER, H.W., 1979.
Primary and secondary metabolism of benzo(a)pyrene by marine
fish.
Fed.Proc., 38(3/1), 692. (Abstract)
1092. VOSILENE, M.E., 1977.
Influence of oil on the content of norepinephrine in the
brain of gold fish and minnow.
Liet.TSR Moskslu Akad.Darb.Ser.C Biol.Mosklai, 1, 93-98.
1093. VOYKO, Y.V. & PETROV, Y.M., 1975.
Role of mussels *Mytilus edulis* in removal of petroleum pro-
ducts from seawater (under experimental conditions).
Hydrobiol.J.(Engl.Trans.Gidrobiol.Zh.), 11(2), 19-24.
1094. WAGEMANN, R., 1975.
Some environmental and toxicological aspects of a triaryl
phosphate synthetic oil.
Verh.Int.Verein.Limnol., 19, 2178-2184.
1095. WALKER, J.D. & COLWELL, R.R., 1973.
Microbial ecology of petroleum utilization in Chesapeake Bay.
In: Proceedings of a Joint Conference on Prevention and
Control of Oil Spills, Washington D.C., March 13-15, 1973.
Washington D.C., American Petroleum Institute, p. 685-690.
1096. WALKER, J.D. & COLWELL, R.R., 1975.
Some effects of petroleum on estuarine and marine micro-
organisms.
Can.J.Microbiol., 21, 305-313.
1097. WALKER, J.D. & COLWELL, R.R., 1976.
Petroleum: degradation by estuarine microorganisms.
Biodeter.Mater., 3, 197-204.

1098. WALKER, J.D., SEESMAN, P.A. & COLWELL, R.R., 1975.
Effects of petroleum on estuarine bacteria.
Mar.Pollut.Bull., 5(12), 186-188.
1099. WALKER, J.D., SEESMAN, P.A. & COLWELL, R.R., 1975.
Effect of South Louisiana crude oil and No. 2 fuel oil on
growth of heterotrophic microorganisms, including proteo-
lytic, lipolytic, chitinolytic and cellulolytic bacteria.
Environ.Pollut., 9, 13-33.
1100. WALKER, J.D., SEESMAN, P.A., HERBERT, T.L. & COLWELL, R.R., 1976.
Petroleum hydrocarbons: degradation and growth potential of
deep-sea sediment bacteria.
Environ.Pollut., 10, 89-99.
1101. WALKUP, P.C., 1971.
Water pollution by oil spillage.
J.Wat.Pollut.Control Fed., 43, 1069-1080.
1102. WALSH, F. & MITCHELL, R., 1973.
Inhibition of bacterial chemoreception by hydrocarbons.
In: Ahearn, D.G. & Meyers, S.P., eds. *The microbial degra-*
dation of oil pollutants. Proceedings of a Workshop, held in
Atlanta, Georgia, 4-6 Dec., 1972. Baton Rouge, Louisiana,
Louisiana State University, Center for Wetland Resources,
p. 275-278.
1103. WALTON, D.G., PENROSE, W.R. & GREEN, J.M., 1978.
The petroleum-inducible mixed-function oxidase of cunner
(*Tautoglabrus adspersus* Walbaum 1972): Some characteristics
relevant to hydrocarbon monitoring.
J.Fish.Res.Board Can., 35(12), 1547-1552.
1104. WANG, R.T. & NICOL, J.A.C., 1977.
Effects of fuel oil on sea catfish: feeding activity and
cardiac response.
Bull.environ.Contam.Toxicol., 18(2), 170-176.
1105. WARDLEY-SMITH, J., 1974.
Magellan Straits spill.
Mar.Pollut.Bull., 5, 163-164.
1106. WELLS, P.G., 1972.
Influence of Venezuelan crude oil on lobster larvae.
Mar.Pollut.Bull., 3(7), 105-106.
1107. WELLS, P.G., 1976.
Effects of Venezuelan crude oil on young stages of the
American lobster, *Homarus americanus*.
Guelph, Ontario, University of Guelph, Ph.D. Thesis.
1108. WELLS, P.G. & DOE, K.G., 1976.
Results of the E.P.S. oil dispersant testing program:
concentrates, effectiveness testing and toxicity to
marine organisms.
Spill Technol.NewsL., 1(5), 9-16.

1109. WELLS, P.G. & KEIZER, P.D., 1975.
Effectiveness and toxicity of an oil dispersant in large outdoor saltwater tanks.
Mar.Pollut.Bull., 6(10), 153-157.
1110. WELLS, P.G. & SPRAGUE, J.B., 1976.
Effects of crude oil on American lobster (*Homarus americanus*) larvae in the laboratory.
J.Fish.Res.Board Can., 33(7), 1604-1614.
1111. WHIPPLE, J.A., 1977.
Transport, retention, and effects of the water-soluble fraction of Cook Inlet crude oil in experimental food chains.
In: Outer Continental Shelf Environmental Assessment Program. Environmental assessment of the Alaskan continental shelf. Vol. XII. Effects. Boulder, Colorado, US National Oceanic and Atmospheric Administration, p. 674-678.
1112. WHITE, D.H., KING, K.A. & COON, N.C., 1979.
Effects of No. 2 fuel oil on hatchability of marine and estuarine bird eggs.
Bull.environ.Contam.Toxicol., 21(1-2), 7-10.
1113. WHITE, I.C., 1976.
Toxicity testing of oils and oil dispersants.
In: Lectures presented at the 4th FAO/SIDA training course on Toxicity Testing, Lysekil, Sweden, 13 Oct. - 29 Nov. 1975. (Suppl. to Rep.), Rome, F.A.O., p. 168-180. (FAO/SIDA/TF-INT 173 (SWE) - Suppl. I.)
1114. WHITE, I.C., 1978.
Assessment of the acute and sub-lethal effects of various pollutants on selected marine organisms and the fate of petroleum hydrocarbons in an estuary subjected to a refinery effluent.
In: Commission of the European Communities. Final Reports on Research Sponsored Under the First Environmental Research Programme (Indirect Action). Luxembourg, Commission of the European Communities, p. 382-385. (EUR 5970)
1115. WHITTLE, K.J. & MACKIE, P.R., 1976..
Hydrocarbons in marine zooplankton and fish. Part II.
Hydrocarbon levels.
In: Lockwood, A.P.M., ed. Effects of pollutants on aquatic organisms. Cambridge, Cambridge University Press, p. 85-105.
1116. WHITTLE, K.J., MACKIE, P.R. & HARDY, R., 1974.
Hydrocarbons in the marine ecosystem.
S.Afr.J.Sci., 70, 141-144.
1117. WHITTLE, K.J., MACKIE, P.R., HARDY, R. & MCINTYRE, A.D., 1974.
The fate of n-alkanes in marine organisms.
ICES C.M.Pap.Rep.No. C.M.1974/E:33, 9 p.

1118. WHITTLE, K.J., MURRAY, J., MACKIE, P.R., HARDY, R. & FARMER, J., 1977.
Fate of hydrocarbons in fish.
In: McIntyre, A.D. & Whittle, K.J., eds. Petroleum hydrocarbons in the marine environment. Proceedings ICES Workshop, Aberdeen 9-12 Sept., 1975. International Council for the Exploration of the Sea, 171, 139-142.
1119. WILDER, D.G., 1970.
The tainting of lobster meat by Bunker C oil alone or in combination with the dispersant Corexit.
Manuscript Rep.Ser.Fish.Res.Board Can.No. 1087, 25 p.
1120. WILDISH, D.J., 1972.
Acute toxicity of polyoxyethylene esters and polyoxyethylene ethers to S. salar and G. oceanicus.
Water Res., 6(7), 759-762.
1121. WILDISH, D.J., 1974.
Lethal response by Atlantic salmon parr to some polyoxyethylated cationic and nonionic surfactants.
Water Res., 8(7), 433-437.
1122. WILDISH, D.J., 1974.
Arrestant effect of polyoxyethylene esters on swimming in the winter flounder.
Water Res., 8(8), 579-583.
1123. WILDISH, D.J. & BEATTY, D., 1973.
In vitro hydrolysis of polyoxyethylene esters by tissues of the American eel and Atlantic salmon.
Bull.environ.Contam.Toxicol., 9, 212-217.
1124. WILDISH, D.J. & CARSON, W.G., 1972.
Acute lethality of some nonionic and cationic surfactants to Salmo salar L. and Gammarus oceanicus Segerstråle.
Manuscript Rep.Ser.Fish.Res.Board Can.No. 1212, 14 p.
1125. WILDISH, D.J. & LISTER, N.J., 1971.
The acute toxicity of the oil dispersant Gulf Agent 1009, LS-3712 to aquatic fauna.
Manuscript Rep.Ser.Fish.Res.Board Can.No. 976, 8 p.
1126. WILSON, K.W., 1972.
Toxicity of oil-spill dispersants to embryos and larvae of some marine fish.
In: Ruivo, M., ed. Marine pollution and sea life. West Byfleet, Surrey, U.K., Fishing News (Books) Ltd., p. 9-18.
1127. WILSON, K.W., 1974.
Toxicity testing for ranking oils and oil dispersants.
In: Beynon, L.R. & Cowell, E.B., eds. Ecological aspects of toxicity testing of oils and dispersants. Barking, Essex, Applied Science Publishers Ltd., p. 11-22.

1128. WILSON, K.W., 1974.
The ability of herring and plaice larvae to avoid concentrations of oil dispersants.
In: Blaxter, J.H.S., ed. *The early life history of fish: Proceedings of an International Symposium*, held in Oban, Scotland, May 17-23, 1973. Heidelberg, Springer-Verlag, p. 589-602.
1129. WILSON, K.W., 1976.
Effects of oil dispersants on the developing embryos of marine fish.
Mar.Biol.(Berl.), 36(3), 259-268.
1130. WILSON, K.W., 1977.
Acute toxicity of oil dispersants to marine fish larvae.
Mar.Biol.(Berl.), 40(1), 65-74.
1131. WINTERS, K., BATTERTON, J.C., O'DONNEL, R. & VAN BAALEN, C., 1977.
Fuel oils: chemical characterization and toxicity to microalgae.
In: Giam, C.S., ed. *Pollutant effects on marine organisms. Proceedings of a Workshop*, College Station, Texas, May 16-19, 1976. Lexington, D.C. Heath and Company, p. 167-189.
1132. WINTERS, K., BATTERTON, J.C. & VAN BAALEN, C., 1977.
Phenalen-1-one: occurrence in a fuel oil and toxicity to microalgae.
Environ.Sci.Technol., 11, 270-272.
1133. WINTERS, K., O'DONNELL, R., BATTERTON, J.C. & VAN BAALEN, C., 1976.
Water-soluble components of four fuel oils: Chemical characterization and effects on growth of microalgae.
Mar.Biol.(Berl.), 36, 269-276.
1134. WINTERS, K., VAN BAALEN, C. & NICOL, J.A.C., 1977.
Water soluble extractives from petroleum oils: chemical characterization and effects on microalgae and marine animals.
In: McIntyre, A.D. & Whittle, K.J., eds. *Petroleum hydrocarbons in the marine environment. Proceedings ICES Workshop*, Aberdeen 9-12 Sept., 1975, International Council for the Exploration of the sea, 171, 166-174.
1135. WOLFE, D.A., editor, 1977.
Fate and effects of petroleum hydrocarbons in marine organisms and ecosystems.
Proceedings of a Symposium, held in Seattle, Washington, Nov. 10-12, 1976. New York, Pergamon Press, 478 p.
1136. WOLFE, D.A., 1978.
The AMOCO CADIZ oil spill: A summary of observations made by U.S. scientists 23 March - 10 May, 1978.
Mar.Pollut.Bull., 9(11), 288-292.
1137. WOLFE, L.S. & HOULT, D.P., 1974.
Effects of oil under sea ice.
J.Glaciol., 13, 473-488.
1138. WOODIN, S.A., NYBLADE, C.F. & CHIA, F.S., 1972.
Effect of diesel oil spill on invertebrates.
Mar.Pollut.Bull., 3(9), 139-143.

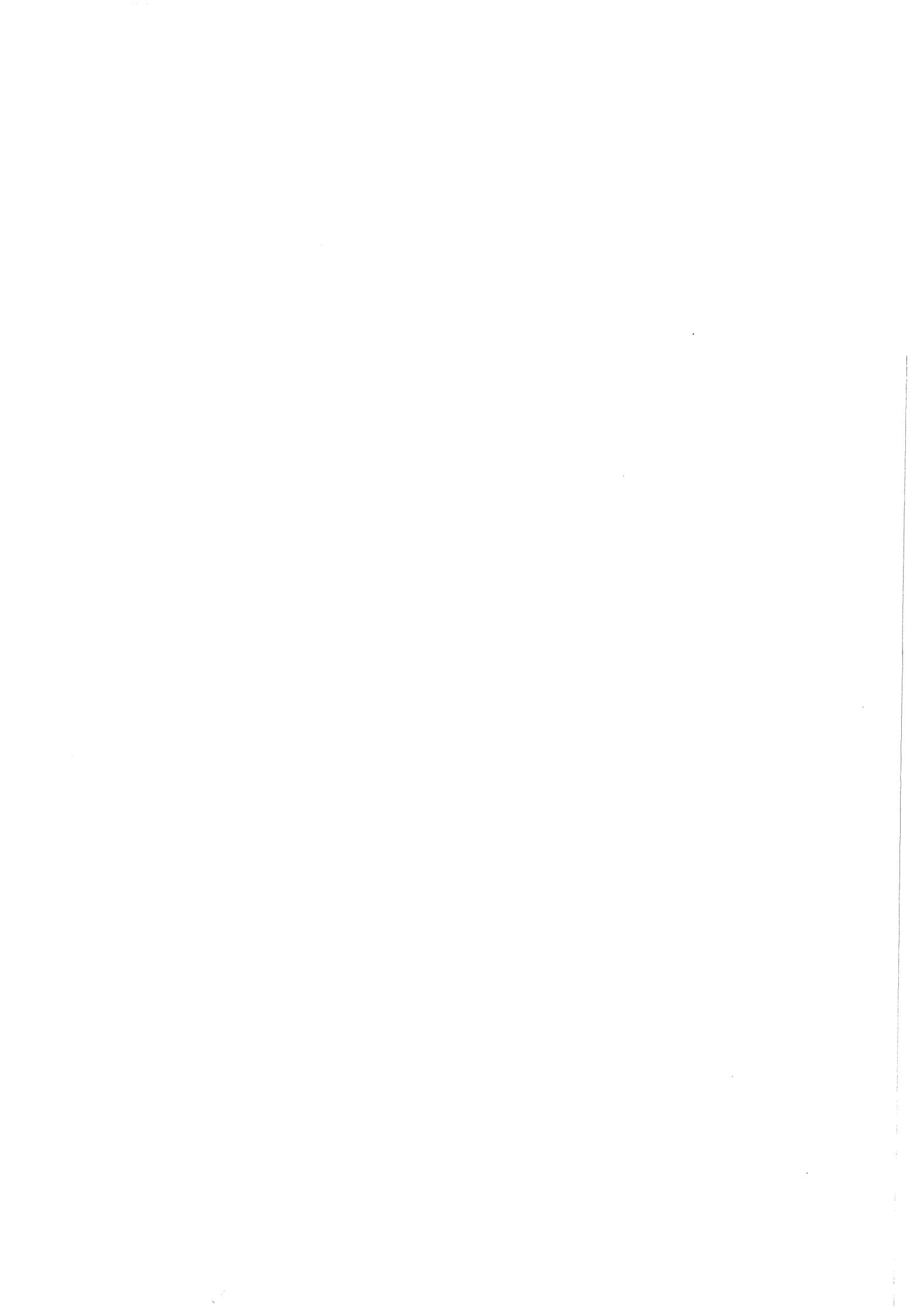
1139. WOOTTON, T.A., GRAU, C.R., ROUDYBUSH, T.E., HAHS, M.E. & HIRSCH, K.V., 1979.
Reproductive responses of quail to Bunker C oil fractions.
Arch.environ.Contam.Toxicol., 8(4), 457-464.
1140. WORMALD, A.P., 1976.
Effects of a spill of marine diesel oil on the meiofauna of a sandy beach at Picnic Bay, Hong Kong.
Environ.Pollut., 11, 117-130.
1141. YAMAMOTO, S., 1973.
Oil pollutants in the marine environment.
In: Berkowitz, J.B., Banus, M., Pryor, M.J., Horne, R., Howard, P.L., Whitnack, G.C., Weiss, H.V., eds. *Marine electro-chemistry*. Princeton, N.J., Electro-Chemical Society, p. 355-367.
1142. YARBROUGH, J.D. & CHAMBERS, J.E., 1977.
Crude oil effects on microsomal mixed-function oxidase system components in the striped mullet (Mugil cephalus).
Life Sci., 21(8), 1095-1100.
1143. YARBROUGH, J.D., HEITZ, J.R. & CHAMBERS, J.E., 1976.
Physiological effects of crude oil exposure in the striped mullet, Mugil cephalus.
Life Sci., 19, 755-760.
1144. YENTSCH, C.S., GILFILLAN, E.S. & SEARS, J.R., 1973.
The fate and behavior of crude oil on marine life.
University of Massachusetts, Gloucester Marine Station, 69 p.
1145. YEVICH, P.P., 1975.
Histopathological effects of oil pollution on marine life.
Paper presented to the NIEHS sponsored Marine Biomedical Research Meeting, February 13-14, 1975. Washington D.C., Smithsonian Institution.
1146. YEVICH, P.P. & BARSZCZ, C.A., 1976.
Gonadal and hematopoietic neoplasms in Mya arenaria.
Mar.Fish.Rev., 38(10), 42-43.
1147. YEVICH, P.P. & BARSZCZ, C.A., 1977.
Neoplasms in softshell clam, Mya arenaria, collected from oil-impacted sites.
Ann.Acad.Sci.(New York), 298, 409-426.
1148. YOUNG, G.P., 1977.
Effects of naphthalene and phenanthrene on the grass shrimp Palaemonetes pugio (Holthuis).
College Station, Texas, The Graduate College, Texas A&M University, Master's Thesis, 67 p.
1149. YOUNGBLOOD, W.W. & BLUMER, M., 1973.
Alkanes and alkenes in marine benthic algae.
Mar.Biol.(Berl.), 21(3), 163-172.

1150. YOUNGBLOOD, W.W., BLUMER, M., GUILARD, R.L. & FIORE, F., 1971.
Saturated and unsaturated hydrocarbons in marine benthic
algae.
Mar.Biol.(Berl.), 8(3), 190-201.
1151. ZACHARY, A. & COLWELL, R.R., 1979.
Gut-associated microflora of Limnoria tripunctata in marine
creosote-treated wood pilings.
Nature (Lond.), 282, 716-717.
1152. ZAJIC, J.E. & PANCHAL, C.J., 1976.
Production of emulsifying agents by bacteria and fungi.
ASM Abstr.Annual Meeting, 76, p. 183. (Abstract No. 018)
1153. ZAMBIBORSHCH, F.S. & LAY, B., 1977.
The survival of the young of the gray mullet Mugil saliens
in the presence of phenol.
Hydrobiol.J. (Engl.Transl.Gidrobiol.Zh.), 13(2), 82-84.
1154. ZINN, J., 1978.
Environmental planning for offshore oil and gas. Volume II.
Effects on coastal communities.
Washington D.C., US Fish and Wildlife Service, Biological
Services Program, 60 p. (FWS/OBS-77/13)
1155. ZITKO, V., 1971.
Determination of residual fuel oil contamination of aquatic
animals.
Bull.environ.Contam.Toxicol., 5(6), 559-564.
1156. ZITKO, V., 1975.
Aromatic hydrocarbons in aquatic fauna.
Bull.environ.Contam.Toxicol., 14(5), 621-631.
1157. ZOBOVA, N.A., SOLENOVA, L.G., MAZMANIDI, N.D. & IL'NITSKII, A.P.,
1976.
Accumulation of benz(a)pyrene by some Black Sea organisms under
experimental conditions.
Oceanology, Moscow, 16(3), 259-261.
1158. ZSOLNAY, A., 1979.
A confirmation of the correlation between hydrocarbons and
chlorophyll a in the upper euphotic zone.
Mar.Pollut.Bull., 10(4), 107-108.



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Forskningsprogram om Havforurensninger (FOH) ble opprettet ved kgl. res. av 5. mars 1976.

FOH ledes av et styre med seks medlemmer, hvorav forskningsrådene (NAV, NFFR og NTN) i fellesskap har oppnevnt tre representanter, Miljøverndepartementet og Fiskeridepartementet én representant hver samt styrets formann. Styret står ansvarlig overfor Miljøverndepartementet for gjennomføringen av forskningsprogrammet.

FOH's organisasjon omfatter uten styret, et fast sekretariat og faggrupper. Sekretariatet er administrativt knyttet til NAV og det ledes av en heltidsansatt sekretariatsleder, som er mellomleddet mellom styret og faggruppene og de enkelte institusjoner. Han tilrettelegger sakene for styret og leder den praktiske gjennomføringen i henhold til styrets beslutninger. Sekretariatet står også for en viss litteraturtjeneste og andre felles informasjons- og datainnsamlingsoppgaver.

Fem faggrupper innen biologisk, fysisk og kjemisk oceanografi har utarbeidet statusrapporter innen de respektive fagområder, samt fremmet forslag til forskningsprosjekter. På grunnlag av blant annet disse rapporter har styret vedtatt en Rammeplan for FOH (juni 1977).

FOH finansieres primært ved midler over statsbudsjettet (Miljøverndepartementet), men det forutsettes at også forskningsrådene skal bidra til finansieringen. En del av forskningsprogrammet vil inngå i institusjonenes vanlige virksomhet og finansieres over institusjonenes ordinære budsjetter.

The Norwegian Marine Pollution Research and Monitoring Programme (FOH) was established by Royal Decree on 5 March 1976.

The programme is administered by a committee of six, consisting of a chairman, proposed jointly by the Ministry of the Environment and The Ministry of Fisheries, one representative from each of these Ministries and three proposed jointly by the research councils (NAV, NFFR and NTN). The committee is responsible to the Ministry of the Environment for effecting the programme.

In addition to the committee, FOH's organization includes a permanent secretariat and scientific groups. The secretariat is administratively attached to NAV and is led by a full-time head who acts as liaison between the committee, the scientific groups and the individual research institutes. He is responsible for preparing matters for discussion by the committee and sees to it that their decisions are put into practice. The secretariat is also responsible for the collection of certain relevant literature and other tasks of a general nature connected with the spread of information and collection of data.

Five scientific groups concerned with biological, physical and chemical oceanography have each prepared reports on the status of research within the relevant scientific fields and made proposals for definite research projects. On the basis of these reports, the committee has worked out a preliminary framework for the programme (June 1977).

FOH is financed primarily from the fiscal budget (Ministry of the Environment), but it is assumed that the research councils will also contribute to the programme. A certain amount of the research will be incorporated into the normal activities of the research institutes and will thus be financed from the institution budgets.