

cheal tube through the rat's mouth to a depth of approximately 3/4 in. into the trachea. Sound traveling through the impedance tube and tracheal tube and reflecting from the lung was measured with the two microphones and recorded by a two channel FFT analyzer. The analyzer calculated the transfer function between the microphones and, from this transfer function, the complex lung acoustic impedance was calculated. The impulse response was also computed from the transfer function, and was further processed, by the Ware-Aki area inversion algorithm, to produce the effective airway cross-sectional area as a function of depth into the lung from the trachea.

2:30

KK4. Target strengths of Antarctic krill. K. G. Foote (Institute of Marine Research, 5024 Bergen, Norway), I. Everson, D. G. Bone, and J. L. Watkins (British Antarctic Survey, High Cross, Madingley Road, Cambridge CB3 0ET, United Kingdom)

Encaged aggregations of *Euphausia superba* have been ensouffled at 38 and 120 kHz and the echo energy measured. Derived estimates of target strength are considerably lower than previously measured values.

2:45

KK5. Study of intensity in the focal lobe for a focused ultrasonic stone removal device. V. R. Singh and Ravinder Agarwal (Instrumentation, National Physical Laboratory, New Delhi-110012, India)

In modern surgical practice, the operative procedures for stone removal are still finding difficulty in their acceptance by the patients. Thus it gives motivation for finding a new and alternative, noninvasive technique for the removal of kidney stones. Focused ultrasound is used in the disruption of such stones. Intensity pattern parameters in the focal lobe are studied for a transducer used for removal of kidney stones.

WEDNESDAY AFTERNOON, 24 MAY 1989

CROUSE AUDITORIUM, 3:30 P.M.

Plenary Session

W. Dixon Ward, Chairman
President, Acoustical Society of America

Presentation of Awards

R. Bruce Lindsay Award to Mark F. Hamilton
Gold Medal to Lothar W. Cremer

Musical Demonstration and Lecture

Professor William Headlee will give a recital on the Syracuse University Holtkamp Organ, preceded by a short lecture on its history.