JANUARY MEETING

Buffalo-Niagara Frontier Chapter No.10 A. S. T. M. E.

THURSDAY, JANUARY 9, 1964

AT THE TRAP & FIELD CLUB, CAYUGA ROAD, CHEEKTOWAGA, N. Y.

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Characteristics of Lasers

BY

DR. FRANK K. TITTEL

General Electric Advanced Technology Laboratory

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Dinner at 6:30 P. M.
$3.00 per person for dinner.

Meeting 8:00 P.M.
No charge for Meeting or Refreshments.

PETER G. WEBER - Program Chairman - Phone 834-5797

Our Speaker . . .

FRANK K. TITTEL

Dr. Tittel received a BA degree in Physics from Oxford University, England, in 1955, and a PhD from the same university in 1958. His thesis was entitled, "Precision Measurements of the Properties of the Free Electron." The same year Dr. Tittel was appointed a junior research officer with both research and teaching duties at the Clarendon Laboratory, Oxford. His work was principally in the design and construction of a microwave electron resonance spectrometer of high sensitivity and precision.

In 1959, Dr. Tittel joined the General Electric Company as a physicist in the Electronics Laboratory working on the study and analysis of optically pumped microwave devices. This resulted in the development of a low noise microwave preamplifier pumped with visible light. Late in 1960 he started work in the field of optical masers. This has involved an experimental and theoretical analysis of a number of potential maser materials and various experimental problems of light excitation sources for optical pumping in solids. He has contributed to the successful operation of a number of maser devices working at optical frequencies.

In March 1963 Dr. Tittel became a member of the Advanced Technology Laboratories in Schenectady, to continue work on basic laser concepts.

Dr. Tittel is a member of the British Institute of Electrical Engineers. He is co-author of "Optical Pumping of Microwave Masers," Proc. IEEE 51, 185 (1963); "The Magnetic Moment of the Proton II. The Value in Bohr Magnetrons," Roy. Soc. Proc. A, Feb. (1963); "Parametric Photon Interactions and Their Applications," Lasers and Applications Symposium, Ohio State University, pg. 192, Nov. (1962); "High Repetition Rate Pulsed Lasers," Laser Symposium Proceedings, Brooklyn Polytechnic Institute, April 1963.