

The Department of Mechanical Engineering presents:

Distinguished Speaker

Dr. Tadahiro Ohmi

Professor

The New Industry Hatchery Center

Tohoku University, Sendai City Japan

Friday, November 6th

11:10AM-12:00PM

Bourns Hall A265

Innovative Thin Film Manufacturing of Silicon-Based Photovoltaics

Abstract: By some estimates, the energy required to produce a photovoltaic cell is greater than the energy that this cell will produce over its useful life. For solar energy to be a meaningful part of a sustainable energy future, we must use abundant materials and efficient manufacturing processes. The New Industry Hatchery Center at Tohoku University is investigating thin-film manufacturing processes for silicon-based photovoltaics. Theoretical calculations and preliminary experimental results indicate that it is feasible to make solar cells with efficiencies of 20%, at affordable costs, and with less energy input than output.

Bio: Dr. Ohmi is a Professor in the New Industry Hatchery Center at Tohoku University in Sendai City, Japan, where he has been a member of the faculty since 1972. He leads a large research group investigating manufacturing processes and techniques. He received the B.S., the M.S., and Ph.D. degrees in electrical engineering from Tokyo Institute of Technology, Tokyo, in 1961, 1963, and 1966, respectively. He is named in more than 2,000 research papers and 1,800 patent applications. Dr. Ohmi is a member of the Institute of Electronics, Information and Communication Engineers of Japan (IEICE, Fellow), the Japan Society of Applied Physics (JSAP), the Electrochemical Society (ECS), and the Institute of Electrical and Electronics Engineers (IEEE, Fellow).

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