GEORGE A. MAUL

Department of Marine and Environmental Systems
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George A. Maul is Professor of Oceanography and Head of the Department of Marine and Environmental Systems in the College of Engineering at the Florida Institute of Technology. He earned a B.S. (with honors) in Marine Transportation from the State University of New York Maritime College at Fort Schuyler and was granted a U.S. Merchant Marine Officer's license in 1960; in 1974 he was awarded the Ph.D. in Physical Oceanography from the University of Miami's Rosenstiel School of Marine and Atmospheric Science.

From 1960 through 1969, he held ranks from Ensign through Lieutenant Commander as a commissioned officer in the U.S. Coast and Geodetic Survey; from 1969 to 1984 he was a Research Oceanographer and from 1984 to 1994 a Supervisory Oceanographer with the National Oceanic and Atmospheric Administration at the Atlantic Oceanographic and Meteorological Laboratory in Miami. He has been Chief Scientist on numerous oceanographic cruises, and has published over 100 refereed articles and book chapters on oceanography, 30 technical reports, 60 abstracts, and 7 books including *Introduction to Satellite Oceanography* (1985), *Climatic Change in the Intra-Americas Sea* (1993), and *Small Islands: Marine Science and Sustainable Development* (1996). During his tenure with NOAA he earned five Outstanding Performance Awards and three Distinguished Authorship Awards. His current research interests include quantifying the impact of climate and global change on society, establishing operational forecasts of coastal ocean circulation, developing a global sea-level/weather network for climate studies and for sustained economic development, determining absolute sea level change, studies of interannual variability in the circulation and climate of the ocean, satellite altimetry research, Earth System Science, Engineering, Management, & Education, and tsunami warnings in the Intra-Americas Sea Region.

During 1989-1995 he served two terms as Vice Chairman of the Subcommission for the Caribbean and Adjacent Regions of the Intergovernmental Oceanographic Commission of UNESCO, and since 1987 he has served as Chairman of the United Nations Environment Program Joint Task Team on Climatic Changes in the Wider Caribbean Region. Dr. Maul is a member of the American Geophysical Union, the American Meteorological Society, *Omicron Delta Kappa* (National Leadership Honor Society), *Sigma Xi* (Scientific Research Society), and the Florida Academy of Sciences. In 1999 he was elected a Fellow of the Marine Technology Society. He has served as a member of the Interim Working Group for the Inter-American Institute for Global Change Research, is Chairman of the IOCARIBE Group of Experts on Ocean Processes and Climate, Chairman of the Organizing Committee for the IOC Symposium on Small Island Oceanography, is the IAPSO Commission for Mean Sea Level and Tides Representative to the IUGG International Association of Geodesy Special Study Group on Vertical Datum Investigation, Co-Director of INSMAP'86, '90, '94, and '98 the International Symposium on Marine Positioning; a member of the IOC Group of Experts on GLOSS (global sea level observing system), was an Invited Speaker at the International Workshop on Climate Variability, Global Change and its Impacts for Latin America and the Caribbean, *Pacem in Maribus*, 23rd Annual Conference International Ocean Institute (Malta), Celebrating the 50th Anniversary of the United Nations, and at the WMO/UNEP International Workshop "The Rising Challenge of the Sea", and is Chairman of the IOCARIBE Tsunami Steering Group of Experts. He served on the editorial boards of *Marine Geodesy, Remote Sensing of Environment,* and *Journal of Earth System Science Education.*

Prof. Maul teaches physical oceanography, meteorology, hydrographic surveying, and earth system science at Florida Tech, created their meteorology and hydrographic engineering programs, and founded the University's Center for Remote Sensing; in 1997 he was named College of Engineering Teacher of the Year by the Florida Tech Student Government, and in 1998 he earned the Faculty Senate Award for Excellence in Teaching.

SELECTED BOOKS

1985 Maul, G.A. *Introduction to Satellite Oceanography*. © Martinus Nijhoff Publishers, Dordrecht/ Boston/Lancaster, 606 pp.

1993 Maul, G.A. (author/editor). *Climatic Change in the Intra-Americas Sea*. © United Nations Environment Program, Edward Arnold Publishers, London, 389 pp.

1996 Maul, G.A. (author/editor), *Small Islands: Marine Science and Sustainable Development*. © American Geophysical Union, Coastal and Estuarine Studies No. 51, Washington, 467 pp.

SELECTED RECENT ARTICLES

1996 Martin, D.M., J.L. Chapin, and G.A. Maul. State-of-the-art sea level and meteorological monitoring systems in the Intra-Americas Sea. *Mar. Geod. J.* , 19(2): 105-114.

1997 Maul, G.A., M. Bushnell, N.J. Bravo, and D.V. Hansen. Observed Sea Surface Height and Modeled Dynamic Height Anomaly Departures in the Tropical Pacific Ocean: 1986-1989. *Oceanologica Acta*, 20(4): 569-584.

1998 Mooers, C., G. Maul. Intra-Americas Sea Circulation. Chapter 7 in: A.R. Robinson & K.H. Brink (editors), *The Sea*, Volume 11, John Wiley & Sons, New York, pp: 183-208.

1999 Pugh, D.T., and G.A. Maul. Coastal Sea Level Prediction for Climate Change. In: *Coastal Ocean Prediction*. Amer. Geophys. Union, Coastal & Estuarine Studies No. 56, pp: 377-404.

2000 Pratt, R.W., and G.A. Maul. Sea Surface Height Variability of the Intra-Americas Sea from TOPEX/Poseidon Satellite Altimetry: 1992-1995. *Bull. Mar. Sci.* (in press).

Proposed CUAP Research Area: *Evaluating Air and Water Quality, Waste Disposal, Environmental Infrastructure and Sustained Economic Growth in Hungary.* Managing the quality of the environment is a fundamental governmental and intergovernmental responsibility of all nations. For a developing nation such as Hungry, where the citizenry have not focused on these issues, the entire notion of trained environmental managers may seem unaffordable. However, as part of a unified Europe, each country will be expected to put some resources into training specialists and developing effective management systems to fully participate in the regional family of nations. Environmental resource management must be based on firm scientific principles that can be quantified, calibrated, and translated into action plans. Accordingly, students must be educated as both scientists and managers, who make socioeconomic decisions across board sectors of national needs including public health, agriculture, industry, education, transportation, and information technology. We propose to jointly merge expertise in meteorology, hydrology, environmental science, ecology, business, and engineering to objectively evaluate the host country's needs in air and water quality, waste disposal, environmental infrastructure, and sustained economic growth. An exchange program is envisioned for students and faculty whereby the highly technical aspects of the training would occur at Florida Tech, and both parties to the proposal would jointly manage the internships in the host country. The long-term goal would be to transition the education of environmental managers and the practical application of the necessary principles to the host country.

Annual Project Costs: travel and subsistence subsidy.