

JOHN G. WINDSOR, JR.

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Professor, Marine & Environmental Chemistry
Division of Marine & Environmental Systems
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EDUCATION

- B.S., PMC Colleges, 1969 (Chemistry)
- M.A., College of William and Mary, 1972 (Marine Science)
- Ph.D., College of William and Mary, 1977 (Marine Science)

PROFESSIONAL INTERESTS

Organic geochemical processes; the transport and fate of naturally occurring and anthropogenically produced chemicals in the environment; environmental trace organic analysis; application of high resolution gas chromatography (HRGC), high performance liquid chromatography (HPLC) and gas chromatography mass spectrometry (GC/MS) to sediment, seawater, air and tissue analysis. Volatile organic carbon analysis (VOC). Dissolved oxygen depletion and eutrophication in coastal waters. Long term fate of the Indian River Lagoon system. The historical perspective of pollution. Environmental science education; research experiences for undergraduates, high school and college faculty, and secondary school students.

EXPERIENCE

- 1995- Program Chair, Environmental Sciences, Division of Marine & Environmental Systems, Florida Institute of Technology, Melbourne, FL
- 1992- Professor, Division of Marine & Environmental Systems, Florida Institute of Technology, Melbourne, FL
- 1982-1992 Associate Professor, Department of Oceanography & Ocean Engineering, Florida Institute of Technology, Melbourne, FL
- 1978-1982 Senior Project Scientist, Environmental Chemistry and Emissions Laboratory, Northrop Services, Inc., Research Triangle Park, North Carolina.
- 1976-1978 Research Associate, Department of Chemical Engineering, Massachusetts Institute of Technology, Cambridge, Massachusetts.
- 1969-1976 Research Assistant, Department of Geological & Chemical Oceanography, Virginia Institute of Marine Science, Gloucester Point, Virginia.
- 1965-1969 Research/Teaching Assistant, Dept of Chemistry, PMC Colleges, Chester, PA.

RELEVANT PUBLICATIONS: 37

THESIS and DISSERTATION SUPERVISION: 12

ENVIRONMENTAL RESOURCES MANAGEMENT SUPERVISION: 7

THESIS AND DISSERTATION COMMITTEES: 59

RECENT PROFESSIONAL SERVICE

- National Estuary Program for Indian River Lagoon
Chairman, Technical Advisory Committee, 1991-1995
Appointed as Member, Management Committee, 1991-1995
- 1989-1992 FIT Tech. Advisory Committee to Florida Advanced Technology Center
- 1991-1992 Laboratory Directory at Florida Advanced Technology Center
- 1992-1995 Senior Technical Advisor, Florida Advanced Technology Center

AWARDS

- 1989 Distinguished Service Award - Florida Junior Academy of Sciences
- 1989 FIT Corporation Faculty Award for Community Service
- 1990 FIT Faculty Service Award
- 1990 FIT Corporation Faculty Award for Community Service
- 1997-1998 Faculty Excellence Award for Teaching
- 1999 Award for Innovation “The Whole Earth Course”

SOME HIGHLIGHTS OF ENVIRONMENTAL SCIENCE EDUCATION ACTIVITIES

1. Dr. Windsor developed the Science Education at Sea (SEAS) program at Florida Tech. Field trips onboard Florida Tech research vessels have been conducted for more than eight years now. The focus of the workshops on the water have been man's impact on the environment. More than 5000 students and faculty have measured water quality, collected plankton and fish, and sediments.
2. Dr. Windsor directed the Marine Field Projects Program at Florida Tech for five years. Students in the Department of Oceanography and Ocean Engineering participate in field studies during the summer preceding their senior year. Dr. Windsor integrated science teachers into the program. During the summer, they participate in all the field studies and generate curricula for the science programs at their home schools.
3. Dr. Windsor serves as a consultant to the Florida Advanced Technology Center for their environmental education outreach program. Water quality modeling is being evaluated in middle school classrooms. Schools adopt a monitoring station and evaluate the water quality throughout the year. The data is being considered for inclusion into U.S. EPA National Estuary Program and Storm water Monitoring Program.
4. For more than fifteen years Dr. Windsor has conducted workshops throughout the year for science teachers. The workshops teachers to new and exciting areas of science including analysis techniques for environmental science and new developments in pollution studies.

Proposed CUAP Research Area: *Collaboration to build a strong environmental science program within BUTE.* At Florida Tech, two undergraduate options (environmental science and meteorology) and two graduate options (environmental science and environmental resource management) are available. Graduate course work in environmental science is normally developed around the specialized areas of remote sensing, environmental biology, environmental chemistry, environmental systems and environmental restoration. Research in environmental science has been largely water oriented, with major research funding primarily occurring in the areas of hydrology, limnology, environmental modeling, remote sensing, environmental chemistry and contaminant transport. Details on the Environmental Sciences program at Florida Tech and expertise of the faculty can be found at: http://www.fit.edu/AcadRes/dmes/env_sci.html In collaboration with BUTE faculty, in Year 1 we propose to develop 2- and 4- year programs in Environmental Technology for BUTE. In Year 2 we will implement educational programs at BUTE via internet. A site visit and evaluation will be performed in Year 3. As other sources of funding and the level of collaboration with BUTE faculty permit, we may expand this program to include additional curriculum development in Environmental Resources Management and/or an undergraduate environmental science Applied Field Research program.

Principal Investigator: J. Windsor (Florida Tech); BUTE collaborators TBD.
Annual budget requested: \$3,000 (for travel and subsistence)