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EDUCATION:

Ph.D. in Aerospace Engineering and Engineering Mechanics, Univ. of Cincinnati 1991
M.S. in Aerospace Engineering, Penn State University 1989
B.S. in Mechanical Engineering, National Technical University, Athens, Greece 1986

PROFESSIONAL EXPERIENCE:

2000–Present Associate Professor, Civil & Environmental Eng., Georgia Tech
1995–2000 Assist. Professor, Civil & Environmental Eng., Georgia Tech
1994–1995 Assist. Research Scient., Iowa Inst. Hydraulic Research, Univ. of Iowa
1991–1994 Postdoct. Assoc., Iowa Inst. Hydraulic Research, Univ. of Iowa

HONORS:

National Academy of Engineering 8th Annual Symposium on Frontiers of Engineering
Invited Participant, Irvine, CA, (2002).
Co-advisor of Ph.D. thesis awarded the 2001 American Water Works Association Academic Achievement Award.
NSF Faculty Early Career Development (CAREER) award, Division of Civil and Mechanical Systems (1999 to 2003).

JOURNAL EDITORIAL BOARDS:

Associate Editor, ASCE Journal of Hydraulic Engineering (2002-2005)

GRADUATE AND POSTDOCTORAL ADVISING (in past 5 years):

Postdoctoral fellows: Y. Ventikos, S. C. Jones, J. Paik, A. Gilmanov; Ph.D. students: S. C. Jones, H. Tang, T. Lackey, L. Ge; MS student: K. Stewart

CURRENT RESEARCH SUPPORT:

National Science Foundation, Department of Energy, Oak Ridge National Laboratory, Georgia Department of Transportation, American Water Works Association.

OTHER COLLABORATORS (in past 48 months):

I. Mezic, D. R. Webster, T. W. Sturm, A. Yoganathan, E. Balara

SELECTED PUBLICATIONS:

1. “Experiments on Lagrangian Transport in Steady Vortex Breakdown Bubbles in a Confined Swirling Flow,” (with D.R. Webster and T.C. Lackey) *Journal of Fluid Mechanics* **466**, 215-248 (2002).
2. “Ergodic Theory and Experimental Visualization of Invariant Sets in Chaotically Advectioned Flows,” (with I. Mezic) *Physics of Fluids 14* **7**, 2235-2243 (2002).
3. “Chaotic Advection in Stationary Vortex Breakdown Bubbles: Silnikov’s Chaos and the Devil’s Staircase,” (with Y. Ventikos and T.C. Lackey) *Journal of Fluid Mechanics* **444**, 257-297 (2001).
4. “The Three-Dimensional Structure of Confined Swirling Flows with Vortex Breakdown,” (with Y. Ventikos) *Journal of Fluid Mechanics* **426**, 155-175 (2001).
5. “Second-Order Godunov Method for Wave Problems in Coupled Solid-Water-Gas Systems,” (with H.S. Tang) *Journal of Computational Physics* **155**, 1-26 (1999).
6. “Transition from Bubble Vortex Breakdown to a Columnar Vortex in a Closed Cylinder with a Rotating Lid,” (with Y. Ventikos) *International Journal of Heat and Fluid Flow* **19**, 446-458 (1998).