

1. Name and Academic Rank

Darrell W. Guillaume, Associate Professor

2. Degrees with fields, institution, and date

1997 Doctor of Philosophy
Mechanical and Aerospace Engineering
Specialization: Thermal and Fluid Sciences
University of California, Irvine

1987 Master of Science in Mechanical Engineering
Specialization: Thermal and Fluid Sciences
San Diego State University

1983 Bachelor of Science in Mechanical Engineering
San Diego State University

3. Number of years service on this faculty, including date of original appointment and dates of advancement in rank

Date of original Appointment: 1/99

Number of years service: 6

4. Other related experience--teaching, industrial, etc.

Academic Experience:

1999-2002 Assistant Professor
California State University, Los Angeles

1998 Lecturer
California State University, Los Angeles

1997 to 1998 Post-Doctoral Researcher and Lecturer
University of California, Irvine

1991 to 1997 Graduate Student Researcher and Teaching Assistant
University of California, Irvine

1986 to 1987 Graduate Assistant
San Diego State University, San Diego

Industrial Experience:

1990 to 1992 Project Engineer
Bird (Medical) Products Corporation, Riverside CA

1988 to 1990 Senior Mechanical Engineer
Bird (Medical) Products Corporation, Riverside CA

1985 to 1986 Senior Engineer
Ametek/McCrometer Division, Hemet CA

1984 to 1985 Mechanical Engineer
Ametek/McCrometer Division, Hemet CA

5. Consulting, patents, etc.

Consulting: Pulmonetics Systems, Inc. Colton, CA (2003 – Present)

Patents: Variable Orifice Flow Sensing Apparatus (U.S. Serial Number 4993269)
Ventilator Exhalation Valve (U.S. Serial Number 5127400)

6. State(s) in which registered

1987 Registered Professional Mechanical Engineer (California)
License Number M024943

7. Principal publications of last five years

- Guillaume, D. W. & LaRue, J. C. (2005). Comparing the Flow on the Bounded and Unbounded Sides of a Plate. International Journal of Heat and Mass Transfer, 48, pp. 1384-1387.
- Guillaume, D. W. & Judge, T. A. (2004). Improving the Efficiency of a Jet Pump Using a Swirling Jet. Review of Scientific Instruments, 75, pp. 553-555.
- Guillaume, D. W. & LaRue, J. C. (2003). Investigation of Peak Frequencies in the Flopping Regime with a Two-Cylinder Array. Journal of Fluids and Structures, 17, pp. 331-335.
- Guillaume, D. W. & LaRue, J. C. (2003). The Effect of Multi-Plate Array Spacing on Grid-Generated Turbulence. Journal of Fluids and Structures, 17, pp. 485-490.
- Guillaume, D. W. (2002). A Comparison of Peak Frequency-Time Plots Produced with Hilbert and Wavelet Transforms. Review of Scientific Instruments, 73, pp. 98-101.
- Guillaume, D. W. & LaRue, J. C. (2002). Comparison of the Numerical and Experimental Flowfield Downstream of a Plate Array. Journal of Fluids Engineering, 124, pp. 284-286.
- Guillaume, D. W. & Jolly III, J. L. (2001). Demonstrating the Achievement of Lower Temperatures with Two-Stage Vortex Tubes. Review of Scientific Instruments, 72, pp. 3446-3448.
- Guillaume, D. W. & LaRue, J. C. (2001). Using Matlab to Graphically Illustrate Potential Flow and Related Transformations. Computers in Education Journal, 11, pp. 23-36.
- Guillaume, D. W. & LaRue, J. C. (2001). Comparison of the Vortex Shedding Behavior of a Single Plate and a Plate Array. Experiments in Fluids, 30, pp. 22-26.
- Guillaume, D. W. & LaRue, J. C. (2000). Investigation of the Flopping Regime of Two-, Three-, and Four-Plate Arrays. Journal of Fluids Engineering, 122, pp. 1-6.
- Guillaume, D. W. & LaRue, J. C. (2000). Temporal and Spatial Unmixedness Downstream of a Plate Array. Physics of Fluids, 12, pp.1497-1508.

8. Scientific and professional societies of which a member

- American Society of Mechanical Engineers
- American Society of Engineering Education
- American Institute of Aeronautics and Astronautics

9. Honors and awards

- Mechanical Engineering Professor of the Year, 2001, 2002, 2003, 2004, 2005
- UCI Excellence in Undergraduate Teaching Award, 1996 and 1997
- Graduate Assistance in Areas of National Need, Fellowship, 1996
- Tau Beta Pi Engineering Honor Society
- Pi Tau Sigma Mechanical Engineering Honor Fraternity

10. Institutional and professional service in the last five years

- Recruitment:
- Continuously Visits High School and Community Colleges
- Department Committee Service
- 2002 – Present Associate Chair
- College Committee Service
- 1999 – Present Student Assessment Coordinator

11. Professional development activities in the last five years

- Attendance at Teaching Related Courses, Workshops, and Conferences:
- 3/22/04 Southern California Forum on Outcomes Assessment, California State Polytechnic University, Pomona, California
 - 5/24/02 – 5/28/02 Pacific Planning Assessment & Institutional Research Conference, Honolulu, Hawaii
 - 4/10/02 – 4/12/02 78th Annual WASC Meeting, San Diego, CA