

RESUME

PERSONAL DATA

Fa-Chung (Fred) Wang
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EDUCATION

Ph.D. – Texas A&M University, College Station, TX 1972 (Physics)
M.S. – Texas A&M University, College Station, TX 1968 (Physics)
B.S. – Tunghai University, Taichung, Taiwan, 1962 (Physics)

EXPERIENCE

Professor, Physics Department, Prairie View A&M University, Prairie View, TX (1995 - current)
Associate Professor, Physics Department, Prairie View A&M University, Prairie View, TX (1988-1995).
Assistant Professor, Physics Department, Prairie View A&M University, Prairie View, TX (1983-1988).
Assistant Professor: Physics Department, National Central University, Taiwan (1973-1975).
Lecturer: Physics Department, Texas A&M University, College Station, TX (1969-1973).

Research: Core Investigator: NASA Research Grant, Orbital Debris (1997 -1998)
Core Investigator: NASA/PVAMU Center for Applied Radiation Research (1995-2000).
Associate Director: NASA/PVAMU Lab for Radiation Studies (1993-1995).
Core Investigator: NASA/PVAMU Lab for Radiation Studies (1992-1995).
Principal Investigator: NASA Research Grant NAG9-332, “Susceptibility of MOS Device to Alpha Particle” (1989-1993).
Principal Investigator: NASA Contract No. NAS9-17406, “Products Resulting from Interactions of Atomic Oxygen with Spacecraft Materials” (1985-1989).
Visiting Scientist: AT&T Bell Labs., Allentown, Penn., Alpha Particle Sensitivity (Summer, 1985).
Co-Investigator: NASA Grant, “Charged Particle”, E.E. Dept., PVAMU (1984-1987).

Services:

- Chair, Tenure and Promotion Review Committee, Physics department, 2006 - 2009
- Member, Search Committee for Head, Department of biology, 2005
- Review Panelist, Young Scholar Program, National Science Foundation, 1987.
- Faculty Senator, Prairie View A&M University, 1987-1989, 2000-2002, 2002-2004.
- Contributing member of University Committee on Research, PVAMU 1989-1992.
- Member, Tenure & Promotion Review Committee, College of Arts & Sciences, 1989-1993, 2000-2002.
- Judge and Team Leader, Houston Regional Science & Engineering Fair, 1985-1993.
- Member, Evaluation Committee, National Science Teachers Association Convention, Houston, TX 1991.

- Reviewer of physics Text Books: 1. “ Fundamentals of Physics” Holliday, Resnick & Walker, 4th ed., 1993. 2. “Physics for Scientists & Engineers”, Fishbane, Gasiorowicz, & Thornton, 2nd ed., 1996.
- Feature Speaker at NASA/Goddard Space Flight Center Asian American Career Development Workshop, Title: “Understanding and Communicating—A Look at Issues Concerning Asian-American”, May 1993.

SELECTED PUBLICATIONS AND RESEARCH ACTIVITIES

1. “Assessing Student Learning at the Course Level in Science Courses—Can We Reconcile Large Classes, Multiple Choice Tests, and True Learning Assessment?” 9th Annual Texas A&M University Assessment Conference, Feb. 23, 2009
2. “Assessment of Physics Teaching and Training at PVAMU”, Poster ,AAPT Summer Meeting, 2007
3. “Correlation of Radiation Hardened 16K, CMOS SRAMS LET Threshold Results Obtained at BNL and TAMU Cyclotron Institute”; Chair for Space Sciences section, and member of Technical Committee. Proceeding of PV E&A Symposium, March 1994.
4. “Effects of Alpha Particle on VLSI Substructures”; Chair for Space Radiation Environment sections; and Chair of Local Arrangements. PVAMU-NASA/JSC Conference on Materials, Devices, Circuits and Bio-systems, Nov ’93.
5. “Radiation Testing and Facilities”, Chair for Electronic Materials Section, and member of Technical Program Committee, Proceeding of PV E&A Symposium, March 1993.
6. “Characteristics of Near-Field Wakes Behind Smooth-to-Rough Circular-Cylinder Pole Towers”. Proceedings of the Eleventh Annual Energy Sources Technology Conference. New Orleans, Louisiana, Jan 10-13, 1988.
7. “Simulation of natural Space Radiation Effects on VLSI Technology”. Proceeding of the Electrochemical Society, Honolulu, Hawaii, October, 1987.
8. “UHV Deposition System for Quench Condensation and in situ Study of Amorphous Transition Metal Alloy Films”. Review of Scientific Instruments 58, 1271, 1987.
9. “Charge Anomaly at MOS Interfaces Submitted to 1 Mev Proton Radiation”. Proceeding of NASA-PVAMU conference on Natural Space Radiation & VLSI Technology. Houston, TX., January, 1987.

AREAS OF RESEARCH INTERESTS

Material Sciences, Radiation Effects, Physics Education Research (PER).

HONOR Listed in Who’s Who Among Asian Americans, first ed., 1994.