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EDUCATION

A.B. 1975 Princeton University, Physics,
M.S. 1979 University of Maine at Orono, Physics,
Ph.D. 1987 Massachusetts Institute of Technology, Physics,

PROFESSIONAL EXPERIENCE (14 years of service to UMaine)

2001 - Present Director, Center for Science and Mathematics Education
Research, UMaine
1999 – Present Professor, Department of Physics and Astronomy,
UMaine
1998 – Present Chair, Department of Physics and Astronomy,
UMaine
1993 - 1999 Associate Professor, Department of Physics and
Astronomy, UMaine.
1986 - 1993 Assistant Professor, Department of Physics and
Astronomy, UMaine.

OTHER PROFESSIONAL EXPERIENCE:

1996 - present Consultant for Educational Testing Service
1998 – present Book Department Editor, *Computing in Science and
Engineering*
1992–1998 Book Department Editor, *Computers in Physics*.
1981-1986 Doctoral thesis research with Professor A.N. Berker,
Physics Department, M.I.T.; American Association of
University Women Predoctoral Fellow; IBM Predoctoral
Fellow; Josephine de Karman Fellow; research assistant,
teaching assistant.
1979 - 1980 Research Associate with Professor W. Unertl (UMaine
Physics Department) and Professor A. H. Clark (NSF
Experimental Program to Stimulate Competitive Research
in Maine), UMaine.
1977 - 1979 Teaching assistant, UMaine.
1975 - 1977 Engineer, New Product Research and Development,
Gillette Advanced Technology Laboratory, Cambridge,
MA.

SABBATICAL

Fall, 1996 Proposal writing in the area of phase transitions in nonequilibrium
systems (submitted and funded by NSF in 1997).

Susan R. McKay (continued)

PROFESSIONAL SOCIETIES

American Physical Society, New England Section of the American Physical Society
(Executive Committee, 1988-1990; Educational Outreach Committee, 1989-1990),
Sigma Xi Scientific Research Society, Sigma Pi Sigma, Materials Research Society

HONORS AND AWARDS

Invited article "Guiding Graduate Students through the Transition from Student to Teacher"; S.R. McKay in the Newsletter of the Forum on Education of the American Physical Society, pp. 6-7 (Summer, 1994).

Departmental nominee Excellence in Graduate Teaching and Research Award, College of Sciences: 1996, 1997.

PRINCIPAL PUBLICATIONS (past 5 years)

"Calculated Properties of Field-Induced Aggregates in Ferrofluids"; F.M. Ytreberg and S.R. McKay, Phys.Rev.E **61**, 4107 (2000)

"A Second Mechanism for Transitions in a Reaction Diffusion System"; F.M. Ytreberg and S.R. McKay, Phys. Rev. E **59**, 3367 (1999)

"Reentrance and Multistriped Phases in the Blume-Emery-Griffiths Model with Biased Diffusion"; G. Seshaiyar and S.R. McKay, in Phase Transformations and Systems Driven Far from Equilibrium, eds E. Ma, P. Bellon, M. Atzmon, R. Trivedi; (Materials Research Society, Pittsburgh, PA, 1998), p. 267.

"The Secondary Averaging Approach to the Weakly Nonlinear van der Pol Oscillator Driven by a Quasiperiodic Force"; A.B. Belogortsev and S.R. McKay, Phys. Let. A **217**, 15 (1996).

"Renormalization-Group Theory of the Random-Field Ising Model in Three Dimensions"; A. Falicov, A.N. Berker, and S.R. McKay, Phys. Rev. B **51**, 8266 (1995).

PROFESSIONAL DEVELOPMENT AND SERVICE (past 5 years)

Departmental representative to the New England Board of Higher Education's Minority Doctoral Scholars Program and the American Physical Society's Career and Professional Development Liaison Program.

Member of the Program Advisory Committee for the Greater Boston Area Statistical Mechanics Meetings. (1999-present)

Steering Committee, American Physical Society's Conference of Department Chairs in Physics and Astronomy (2000).

Academic Advisor for 17 Engineering Physics majors.

Research Advisor for 7 undergraduate research projects (completed).

Thesis Advisor for 6 Ph.D. and 4 M.S. students (completed) and 4 Ph.D. students in progress.