RICHARD M. MARTIN

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Education:

University of Tennessee, Knoxville, Engineering Physics, S.B., 1964
University of Chicago, Physics, S.M., 1966, Ph.D., 1969

Appointments:

2008–	Stanford University, Consulting Professor, Dept. of Applied Physic
1987–	University of Illinois at Urbana-Champaign, Professor of Physics
1986–89	Stanford University, Consulting Professor, Dept. of Applied Physics
1971–87	Xerox Palo Alto Research Center, Palo Alto, CA., Principal Scientist
1969–71	Bell Labs, Murray Hill, NJ. Limited term appointment, Theory Group
1960–63	Union Carbide Corp., Oak Ridge, TN. Cooperative work-study program

Visiting Positions:

1/06-6/06	Universitat Autonoma Barcelona and Ecole Polytechnique, Palaiseau, France
5/01–7/02	Lawrence Livermore National Laboratory, Sabbatical Scholar
8/94–8/95	Max-Planck-Institut für Festkorperforschung, Stuttgart, Germany
5/94–7/94	Inst. for Theoretical Physics, UC Santa Barbara
9/80–6/81	Université de Paris VI and Universite de Paris-Sud at Orsay, France
2/74–8/74	Max-Planck-Institut für Festkorperforschung, Stuttgart, Germany

Selected Publications (Total ~ 250):

R. M. Martin, *Electronic Structure Basic Theory and Practical Methods*, Cambridge University Press, 2004; reprinted in 2005 and 2008, Japanese translation 2010, 2012.

I. Souza, T. J. Wilkens, and R. M. Martin, "Polarization and localization in insulators: generating function approach", Phys. Rev. B 62, 1666–1683 (2000).

P. Ordejon, D. A. Drabold, R. M. Martin, and M. P. Grumbach, "Linear system size scaling methods for electronic structure calculations," Phys. Rev. B 51, 1456–1476 (1995).

.G. Galli, R. M. Martin, R. Car, and M. Parrinello. Melting of diamond at high pressure. Science **250**, 1547-1549 (1990).

.O. H. Nielsen and R. M. Martin. Quantum-mechanical theory of stress and force. Phys. Rev. B **32**, 3780-3791 (1985).

J. W. Allen and R. M. Martin. Kondo volume collapse and the gamma-alpha transition in cerium. Phys. Rev. Lett. **49**, 1106-1110 (1982).

R. M. Pick, M. H. Cohen, and R. M. Martin. Microscopic theory of force constants in the adiabatic approximation. Phys. Rev. B **1**, 910-920 (1970).

Honors:

Von Humboldt Foundation Senior Scientist Award; Fellow, American Physical Society and American Association for the Advancement of Science; NSF Graduate Fellow 1964-9.

Service to Science Community:

Executive Committees, Am. Phys. Soc. DCOMP (2004–08) and DCMP (1994–97). Assoc. editor, Rev. Mod. Phys., for condensed matter theory, 1997–2000. Founder of *Materials Computation Center at the University of Illinois*. Organizing committees, *Workshop on Computational Physics*, Trieste, Italy, and *New Methods for Electronic Structure Calculations, USA*. Director of short courses on Electronic Structure in Illinois, India and South Africa. Lecturer in many other courses.

Science in developing Countries:

Chair of International Advisory Committee: African School for Electronic Structure Methods and Applications. Organizer in 2010 and 2012, planning for series and supporting activities until 2020.