## Professor Roberto Car - BioSketch

Ralph W. Dornte \*31 Professor in Chemistry, Professor of Physics, the Program in Applied and Computational Mathematics, the Princeton Institute for the Science and Technology of Materials, and the Princeton Institute for Computational Science and Engineering (PICSciE) Princeton University, Princeton, NJ 08544-1009 Phone: (609) 258-2534, FAX: (609) 258-6746 E-mail: rcar@princeton.edu URL: www.princeton.edu/chemistry/faculty/profiles/car/

Education and Training undergraduate and graduate studies (1965-1971) at Politecnico di Milano, Milan, Italy, Doctor degree (physics) 1971; postdoctoral training: Physics Dept., University of Milan, Milan, Italy (1973-1974); Physics Dept., Politecnico di Milano, Milan, Italy (1975-1976)

## **Research and Professional Experience**

- 1999-present Professor in Chemistry and the Princeton Institute for the Science and Technology of Materials, Princeton University; electronic structure theory, classical and quantum simulations in condensed phase, liquid and amorphous states of matter; phase transitions; quantum transport
- 1991-1999 Professor of Condensed Matter Physics, University of Geneva, Switzerland; Director, IRRMA, EPFL, Lausanne, Switzerland; classical and quantum simulations in condensed phase, nanostructures, phase transitions
- 1990-1991 Professor, Condensed Matter Physics, SISSA, Trieste, Italy; classical and quantum simulations in condensed phase
- 1984-1990 Associate Professor, Condensed Matter Physics, SISSA, Trieste, Italy; ab-initio molecular dynamics, studies of liquid and amorphous systems
- 1981-1983 Visiting fellow, IBM T.J. Watson Research Center, Yorktown Heights, electronic structure of defects in semiconductors
- 1977-1981 1<sup>st</sup> Assistant and Lecturer (1980), Dept. of Physics, EPFL, Lausanne, Switzerland, electronic structure and geometry of small metallic clusters

## Selected Honors

- 2016 Elected Member of the National Academy of Sciences
  2016 National Award in Theoretical Chemistry of the American Chemical Society
  2012 Enrico Fermi Prize of the Italian Physical Society.
  2011 Doctor Degree Honoris Causa, EPFL, Lausanne, Switzerland
  2010 Berni J. Alder CECAM Prize in Computational Physics
- 2009 Sidney Fernbach Award of the IEEE Computer Society
- 2009 Dirac Medal and Prize of the International Centre for Theoretical Physics (ICTP)
- 2008 Humboldt Research Award for Senior U.S. Scientists
- 2005 Doctor Degree Honoris Causa, University of Trieste, Italy.
- 1995 A. Rahman Prize of the American Physical Society
- 1990 Hewlett-Packard Prize of the European Physical Society

## **Synergistic Activities**

- 2014- Editor of the Springer Series in Surface Science
- 2004- Advisory Board of the Fritz Haber Institute of the Max-Planck Society
- 2009- International Advisory Board of the Psi-k network on electronic structure theory
- 1989- Advisory Board of the U.S. Workshop on Electronic Structure (ES)