



Giacinto Scoles

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Personal Data: Born in Torino, Italy in 1935, Married to Lim Giok-Lan in 1964, Canadian Citizen from 1977, US Citizen since 1996. Speaks and writes: English, Dutch, French, Italian and Spanish. **Education:** M. Sc. | February 1959 | University of GENOVA Major: Chemistry Minor: Physics **Libera DOCENZA** | 1965 | UNIVERSITY OF GENOVA Major: Physics (equivalent to a D. Sc.) Minor: Structure of MATTER (MATERIALS SCIENCE).

Scoles has supervised the PhD thesis of more than 90 students. Of these more than 40 are employed as tenured or tenure-track Professors ca. 25 in academia and ca. 15 in equivalent jobs in industrial research labs. One is President of a University, another is VP for research at a major university and one Scientific Director of a Synchrotron facility and 3 others directors of medium-large research labs. Scoles has just seen the completion of the thesis of 6 graduate students 2 at the university of Udine Faculty of Medicine, and 4 at the nanotechnology program of the University of Trieste. **Invited Presentations** to peer-reviewed, internationally established conferences and/or international advanced schools Scoles has given a total of ~ 60 invited papers at International Conferences and a total of about 70 invited seminars in the last 15 years. **Brief summary of research interests** Scoles scientific career has spanned an unusually long length of time and an equally unusually broad range of subjects. The general philosophy was to exploit new physical ideas and novel instrumentation to solve outstanding problems in chemistry and materials science before, and biology and medicine now. Much before the coming of age of Nanotechnology and Nanoscience, particular emphasis was given to the behavior of nano systems and materials. His half-century-long research career in a few lines: '50s - Mass spectroscopy isotope effects in phase transitions; '60s - Transport properties and intermolecular forces (non spherical); '70s - Intermolecular forces (spherical) and crossed molecular beam scattering; '80s - Noble gas clusters and their surfaces (spectroscopy on); '90s - Surface science of organic thin films, fluid He clusters and H. R. IR mol. beam spectroscopy; '00s - Manipulation of biomolecules and biomolecular interactions at the nanoscale; '10s - Nanomedicine at the cellular level and cancer diagnostics (counting CTCs).

Societies Membership 2000 Elected Foreign Member of the Dutch Royal Academy of Arts and Sciences; 1997 Elected Fellow of the Royal Society of London for Improving Natural Knowledge (U.K.).

Current Employment Donner Professor of Science Emeritus, Princeton University, Princeton, NJ 08544, USA; ASSOCIATE RESEARCHER | NANOTEC lab of CNR | From SEPT 2016 to date; Distinguished Adjunct Prof. of Biology and Physics, Temple University, Philadelphia, PA, (USA); Distinguished member of the Research Staff of ELETTRA Synchrotron in Basovizza (TS) Italy.

Honours 2013 Hershbach Prize for the Dynamics of molecular collisions; 2006 Benjamin Franklin Medal in Physics (with J.P.Toennies) from the Franklin Institute; 2003 Creativity Award from the NSF 2003-5; 2003 Earle K. Plyler Prize for Molecular Spectroscopy from the A.P.S. (with Lehmann); 2002 Peter Debye Award in Physical Chemistry from the American Chemical Society; 2000 Honorary Science Doctorate from the University of Waterloo; 1996 Recipient of an Honorary Doctorate in Physics from the University of Genoa.

Publications Scoles has published about 300 papers in refereed journals that have collected about 21,000 citations. His H-index is 77.