

Name: GERALDINE (Geri) RICHMOND

Current Appointment: Presidential Chair and Professor of Chemistry, University of Oregon E-mail: <u>richmond@uoregon.edu</u>

Area of Research/Teaching

Probing molecular structure & interactions at surfaces and interfaces

Geraldine (Geri) Richmond is the Presidential Chair in Science and Professor of Chemistry at the University of Oregon. Her research using laser spectroscopy and computational methods focusses on understanding environmentally and technologically important processes that occur at water, semiconductor and mineral surfaces. The studies have relevance to current issues in energy production, environmental remediation and atmospheric chemistry. Over 200 publications have resulted from the studies conducted in her laboratory with undergraduate, graduate students and postdoctoral associates. Her teaching activities in the classroom and beyond focus on science literacy, science policy and building a strong and diverse science and engineering workforce in the U.S. and globally. Richmond received her B.S. in Chemistry from Kansas State University and her Ph.D. in Physical Chemistry from the University of California, Berkeley.

Richmond is a member of the National Academy of Sciences, the American Academy of Arts and Sciences and is a Fellow of the American Chemical Society (ACS), the American Physical Society (APS), the Association for the Advancement of Science (AAAS) and the Association for Women in Science. Throughout her career she has served in a leadership role on many international, national and state governing and advisory boards. Richmond recently finished her term as President of AAAS, the largest general scientific professional organization in the world and is currently the Chair of the Board of AAAS. She is also currently serving as a member of the National Science Board (President Obama appointee) and the U.S. Science Envoy to the Lower Mekong River Countries of Vietnam, Laos, Cambodia, Burma and Thailand (Secretary Kerry appointee). She is the founding and current director of COACh (http://coach.uoregon.edu), a grass-roots organization formed in 1998 that has helped in the career advancement of thousands of scientists and engineers in the U.S., Asia, Africa and Latin America. Awards for her scientific accomplishments include the National Medal of Science, the ACS

Olin-Garvan Medal, the Spiers Medal of the Royal Society of Chemistry, the ACS Joel H. Hildebrand Award in Theoretical and Experimental Studies of Liquids and the APS Davisson-Germer Prize. Awards for outreach and science capacity building efforts include the Presidential Award for Excellence in Science and Engineering Mentoring, the ACS Award for Encouraging Women in the Chemical Sciences, the Council on Chemical Research Diversity Award and the ACS Charles L. Parsons Award.



Water at hydrophobic

Geri Richmond Professor of Chemistry, Univ. of Oregon Ph.D: Physical Chemistry BS: Chemistry



Ion adsorption and transport at organic/ aqueous interfaces

Polyelectrolyte assembly at oil/water interfaces



Nanoparticle assembly





Experimental and theoretical studies of:

Photocarrier dynamics of solar active materials



Thin film growth on semiconductor and mineral surfaces





Structure and dynamics of surfactant and phospholipid adsorption

H-bonding and structure at vapor-water interfaces



Structure and chemistry of model aerosol surfaces



Gaseous adsorption and reactivity at water surfaces



Surface chemistry of strong acid solutions

