

Prof. Kazue KURIHARA

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Professor Kazue Kurihara received Ph.D. in Chemistry from University of Tokyo in 1979. After working at various organizations including University of Tokyo, Texas A&M University, Clarkson University and Kyoto University, she was appointed as a group leader at JRDC ERATO program in 1987, then promoted as an associate professor at Nagoya University in 1992, and professor at Tohoku University in 1997.

Prof. Kurihara has been working in the field of interdisciplinary research in colloid and interface science, physical chemistry, biophysics, materials science and nanoscience. Started her carrier in the field of bio-mimetic chemistry, specifically on photoreactions in micelles and lipid bilayer liposomes. She extended her research to preparation of nanoparticles of noble metal catalysts and semiconductors in microemulsions and in vesicles, which presented very early examples of this kind of research, then to molecular recognition on surface monolayers when she demonstrated, for the first time, that the efficient hydrogen bonding interaction is possible at the air-water interface. Since early 90's, she has been actively involved in surface forces measurement both in developing measurement methodology and understanding surface forces in liquid media. In recent years, she is well known in her study on confined liquids, for which her original resonance shear measurement is employed. This study revealed interesting properties of confined water, ionic liquids, liquid crystals, lubricant oils etc. Her group has recently completed the surface forces apparatus for opaque samples, which has extended scope of the surface forces measurement not only to new samples but to electrochemistry and spectroscopy.