## 1999 IOTA SIGMA PI AGNES FAY MORGAN RESEARCH AWARD

## Professor Nancy Makri, University of Illinois

Professor Nancy Makri is the recipient of the **1999 lota Sigma Pi Agnes Fay Morgan Research Award**. This annual award is given for research achievement in chemistry or biochemistry. The nominee must be a woman chemist or biochemist, not over forty years of age at the time of her nomination.

Dr. Makri earned a B.S. in 1985 from the University of Athens and a Ph.D. in 1989 from the University of California at Berkeley. She followed her formal education with a two year fellowship at Harvard. In the spring of 1992, she accepted a faculty position at the University of Illinois where she is currently a Professor of Chemistry.

Dr. Makri has been presented with a number of awards and honors, including the prestigious National Science Foundation Young Investigator Award in 1993, the Annual Medal of the International Academy of Quantum Molecular Science in 1995 and a Camille Dreyfus Teacher Scholar Award in 1997 among others before being named an Agnes Fay Morgan Research Award recipient.

Author of over 50 publications, Dr. Makri is well known for her research in Theoretical Quantum Dynamics. She has specialized in the theoretical understanding of quantum mechanical processes in large molecules and in condensed phases. The Schroedinger Equation can only be solved exactly for small molecules. Dr. Makri and her group have developed new theoretical descriptions and simulation methods to overcome this limitation. These methods to study proton and electron transfer reactions and relaxation processes in biological systems.

Dr. Makri was nominated for the Agnes Fay Morgan Research Award specifically for her work with photosynthesis and the charge transfer reactions which occur in photosynthetic systems. These systems are not well characterized, and Dr. Makri's work has contributed substantially to an understanding of them. Dr. Makri was unable to attend the Triennial Convention because of a conflict with a theoretical chemistry meeting at which she was a speaker. Her award was presented for us at the conference by one of the conference organizers.