

photo courtesy of Wayne Lewis

## 2007 AGNES FAY MORGAN AWARD Dr. Anna I. Krylov, University of Southern California

Dr. Anna Krylov is the **2007 recipient of the Agnes Fay Morgan 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.

Anna I. Krylov (born in Donetsk, Ukraine) received her M.Sc. (1990) in Chemistry from Moscow State University (Russia), and her Ph.D. (1996) in Physical Chemistry from the Hebrew University of Jerusalem under the supervision of Prof. Benny Gerber. After spending two years as a postdoctoral fellow in Prof. M. Head-Gordon's group at UC Berkeley, she started her research in electronic structure theory and methodology in the Department of Chemistry at University of Southern California, where she is currently an Associate Professor. The focus of her research is on open-shell and electronically excited species.

Prof. Krylov is best known for her discovery and development of the Spin-Flip method for accurate and efficient calculations of diradicals, triradicals, and bond-breaking. By using the Spin-Flip method, Krylov's group has characterized electronic structure and bonding patterns in several diradicals and triradicals, including dehydro-meta-xylylene, the first example of an organic molecule with the open-shell doublet ground state.

Prof. Krylov has published more than 50 papers in peer-reviewed journals, delivered more than 70 invited conference talks and university seminars, and organized several symposia. She received numerous awards, including the Dirac medal, the Sloan Research Award, the CAREER Award, and the Dreyfus New Faculty Award. She is a member of the Advisory

Board for the Journal of Physical Chemistry A, and the Board of Directors of Q-Chem, Inc.

Prof. Krylov gratefully acknowledges support by the National Science Foundation and Department of Energy. During her tenure at USC, she also received support from the Wise Research Fund (USC), the Petroleum Research Fund, as well as the Sloan, Dreyfus, and Zumberg foundations.

Anna Krylov enjoys outdoor sports (skiing, hiking, backpacking), and is an avid rock climber. She has climbed at an advanced level (up to 5.12a) extensively throughout the United States, as well as in South Africa and New Zealand.