FOMMS 2003

Foundations of Molecular Modeling and Simulation

July 6 – 11, 2003

Keystone Resort, Colorado

This is the second international conference dealing with applications and theory of computational quantum chemistry and molecular simulation. The motivation for this conference is the need for precise control of product properties and the development of a microscopic and mesoscopic understanding that allows creation and design of new products to meet specific marketplace demands. During the past fifteen years, theoretical and algorithmic advances along with the revolution in computing technology have made it possible for design questions of practical importance to be addressed by these methods. The advances offered by these methods will continue to make inroads in the chemical and related industries in the coming decade.

Format and Topics for the Conference

The content of the meeting will be balanced between molecular simulation and computational chemistry. The format will follow the highly successful FOMMS 2000 conference. All talks will be invited. Two poster sessions will provide opportunities for attendees to present their work. One afternoon will be devoted to a software/hardware demonstration session for providers to showcase their products and services. There will be large blocks of time available for informal discussions. Receptions will be held to facilitate interaction between conference participants. Each invited talk will represent a state-of-the-art review and will be rigorously reviewed and edited. Accepted papers (both poster and invited) will be published in an archival medium.

Topics of special interest include the following:

- Nanotechnology
- Molecular Materials Design
- Conceptual Chemical Process Design
- Molecular Scale Reaction Engineering
- Molecular Rheology
- Multiple Time Scale and Mesoscopic Simulation Techniques
- Future Trends in Molecular Modeling, Simulation and Design

The meeting will be informal and the dress code will be casual.

The conference is presented by the non-profit educational CACHE Corporation (Computer Aids for Chemical Engineering) and by CoMSEF (Computational Molecular Science and Engineering Forum) of the American Institute of Chemical Engineers; local

arrangements will be coordinated by Alliance LLC. The conference chairs are Jim Ely of Colorado School of Mines and George Jackson of Imperial College. For more details on the conference or submitting a contributed paper see:

http://www.mines.edu/Academic/chemeng/conferences/fomms/