

BERKELEY CATALYSIS CENTER??

Seminar

What is the date?

Where is the lecture?

What time?

Dr. Charles A. Mims

***Department of Chemical Engineering & Applied Chemistry
University of Toronto
Toronto, Canada***

Heterogenous Catalysts - How Do They Really Work and Why Should We Care?

ABSTRACT:

Heterogeneous catalysts continue to be our most useful agents of chemical change. Catalysts with improved activities and selectivities are in urgent demand for a wide variety of critical areas related to energy conversion, green processes, pollution abatement and others. The search for such new and improved catalysts continues to rely on a combination of rational investigations based on mechanistic ideas as well as serendipitous discoveries. The mechanisms of heterogeneous catalysis are very difficult to investigate, however, and this critical information is often known in only the most primitive terms. This lecture will highlight examples of the direct as well as "behind the scenes" benefits of catalytic mechanism research in catalytic and electrocatalytic applications.

BIO:

B.Sc. University of Texas, Austin 1967

Ph.D. University of California, Berkeley 1972

Dr. Mims spent 15 years in industrial R & D at Exxon Research and Engineering (now ExxonMobil), in both development and corporate research laboratories. He also spent one year as a visiting scientist at M.I.T. In 1990, he joined the Department of Chemical Engineering and Applied Chemistry at the University of Toronto as NSERC Industrial Research Chair. He is the Director of Surface Interface Ontario--a regional user facility for surface analysis.

Dr Mims' research interests include surface chemistry and reactivity, especially applied to catalysis and electrocatalysis