Green Chemistry Symposium II
An idea whose time is right; the role of the University

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Timing, scope and nature of problem

- **Scope: Global chemical production is expected to double every 25 years between now and 2033, EPA expects 600 new hazardous waste sites each month adding to 77,000 current sites.**
- **Problem: the chemical data gap: lack of standardized information on the toxicity of most chemicals,**
- **Safety gap: lack of information to be able to systematically identify and prioritize chemical hazards**
- **Technology gap: lack of government investment in green chemistry research and development. (Wilson)**

History

- Environmental and Occupational laws in the 1970s
- Toxic Substances Control Act
- GAO report: EPA does not routinely assess the human health and environmental risks of existing chemicals and faces challenges in obtaining information in obtaining the information.
- U.S. Supreme Court decision(Mass vs. EPA-Massachusetts has standing to sue
- European Union-REACH

The University of California's mission as providing leadership on societal issues

- COEH
- Development and implementation of concepts, programs, and the intellectual leadership for green chemistry; provide the intellectual infrastructure

The future

- NAS report-new directions, and innovative approaches in testing chemicals for toxicity to humans.
- 60,000-80,000 chemicals in commerce

- The NAS report recognizes the need for substantial research to enable communication and problem-solving across disciplines. Important role for the university in the context of green chemistry
- Nanotechnology

The future

- In addition to science, engineering, and material science there will be significant policy, law and economic issues that will have to be addressed.

- UCLA contribution:
- Identification, tracking and evaluation of hazardous chemicals and technologies
- Identification and assessment of existing and emerging alternative chemicals and technologies
- Identification and analysis of legal, economic and social barriers to and drivers of the diffusion of alternatives
- Development and evaluation of tools for business and policymakers seeking to implement alternatives.

- The university will therefore need to play a key role in working with State Agencies, industry, environmental groups to address the complex set of issues that will emerge. We are committed to playing a key role and this is an undertaking whose time is relevant, desperately needed and timely.