

Objectives of the Conference

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Structure

- First day
 - Long, but ends with a reception!
 - Three-minute poster presentations followed by poster viewing
- Second day
 - Ends early to allow for social interactions
- Third day
 - Presentations in the morning and panel discussion in the afternoon
 - Conference summary at the end

Objectives

- Foster continued research and development of photochemical models through:
 - Identifying the strengths and weaknesses of atmospheric chemical mechanisms (both detailed and condensed) currently available to simulate ozone, particulate matter, and hazardous air pollutants for all seasons
 - Discussing and encouraging improvements in the accuracy and/or efficiency of chemical mechanisms, including the development and evaluation of new mechanisms
 - Exploring the role of quantum chemistry in the determination of the pathways, yields, and products of important reactions
 - Discussing methods for condensing detailed chemical mechanisms for 3-dimensional Eulerian models
 - Reviewing numerical techniques that improve the accuracy and efficiency of chemical solvers in photochemical models
 - Envisioning future atmospheric chemical mechanisms for regulatory applications

Guidance to Speakers

- Please emphasize
 - The current status of the mechanism/numerical technique you are developing/using (both positive and negative)
 - Improvements you are proposing/demanding
 - The future “big picture” for your mechanism/numerical technique and what are your short/long-term needs/goals
- Please leave about five minutes for questions and answers

Specific Questions – Short Term

- From your viewpoint, what are the most pressing short-term needs (i.e. current applications) for improving chemical mechanisms? Please consider any of the following, or other areas that you think are important:
 - Research needs
 - Implementation issues
 - Methods to better address policy needs
 - Improving confidence in model predictions

Specific Questions – Long Term

- What are the most important areas for longer-term improvement (i.e. significantly improving future applications)?
- What should government and industry (local, national, and global) be doing to make sure we have appropriate chemical mechanisms? Are we on the right path? How do we make sure we continue to make progress and motivate new faculty and students?

Further Considerations

- Publication of conference proceedings as a regular issue of the Atmospheric Environment?
- This conference as a regular event?
- Next Step: A conference with emphasis on mechanisms for secondary particulates?
- A Chemical Kinetics Database (in collaboration with combustion researchers)?

Thank You!

- Victoria Evans and Donna Reid of the Air Quality Research Center of UC Davis
- The Organizing Committee
- Dick Derwent and Peter Wiesen for encouraging the European participation
- All of you for coming and actively participating in the proceedings