Technical Program Overview:
Leapfrogging Opportunities for Air Quality Improvement

Judith C. Chow\textsuperscript{a,b} (judith.chow@dri.edu)
John G. Watson\textsuperscript{a,b}
Junji Cao\textsuperscript{b}

\textsuperscript{a} Desert Research Institute
\textsuperscript{b} Institute of Earth Environment, Chinese Academy of Sciences

Presented at
A\&WMA’s International Specialty Conference
Xi’an, China
May 11, 2010
What is Leapfrogging?

To progress by large jumps instead of small increments with the help of others.
Conference Objectives

- Identify leapfrogging methods for air quality assessment and management

- Provide networking opportunities and share worldwide experience

- Produce lasting contributions to the scientific and policy literature
Received 360 Abstracts from 38 Countries
(Proceedings on flash drive)
Breakdown of Attendees by Region

- China (Incl. Hong Kong & Taiwan), 51%
- North America (Incl. USA, Canada & Mexico), 25%
- South America (Incl. Argentina & Chile), 2%
- Europe (Incl. Finland, Austria, France, Germany, Italy, Netherlands, Norway, Poland, Spain, Sweden, Croatia, Turkey & UK), 9%
- Middle East (Incl. Iran & Saudi Arabia), 1%
- Africa (Incl. Nigeria and S. Africa), 2%
- Other Asia (Incl. Japan, Mongolia, Philippines, Thailand, Singapore, India, & Uzbekistan), 3%
- Australia, 1%
- Korea, 8%
Conference Overview

• Six Professional Development Courses
• Five plenary, forty platform, and two poster sessions
• Twenty-one vendor exhibits
• Pre- & post conference study tours
• Two conference evening receptions
• One banquet/cultural performance
## Professional Development Courses

<table>
<thead>
<tr>
<th>Subject</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ultrafine Particle Measurement and Data Analysis</td>
<td>Prof. Peter McMurry</td>
</tr>
<tr>
<td>Recent Advances for Real-world Source Measurements of Emission Factors and Emission Profiles</td>
<td>Prof. Eric Fujita</td>
</tr>
<tr>
<td>Integrated and Semi-Continuous Monitoring of PM$_{2.5}$ Mass and Constituents including Semi-Volatile Material</td>
<td>Prof. Delbert Eatough</td>
</tr>
<tr>
<td>Database Management for Long-term Visibility Networks</td>
<td>Dr. Bret Schichtel and Prof. Rudolf Husar</td>
</tr>
<tr>
<td>Quality Assurance for Air Quality and Environmental Monitoring Programs</td>
<td>Prof. Richard J. Tropp and Mr. Richard Egami</td>
</tr>
<tr>
<td>Exposure Assessment and Risk Management</td>
<td>Dr. David Harlos</td>
</tr>
<tr>
<td>Title</td>
<td>Speaker</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>Cities Leaping Forward to High Quality Urban Living</td>
<td>Dr. Christine Loh</td>
</tr>
<tr>
<td>Global Health Impact of Air Pollution: Epidemiological Evidence and Biological Mechanisms</td>
<td>Prof. James Zhang</td>
</tr>
<tr>
<td>Air Pollution and Human Health – Similarities and Differences between Results Gained from Developed Countries and China</td>
<td>Prof. Bingheng Chen</td>
</tr>
<tr>
<td>Leapfrogging Opportunities for Vehicles and Fuels</td>
<td>Dr. Alan Lloyd</td>
</tr>
<tr>
<td>Air Pollution Control Strategy in China</td>
<td>Academician Jiming Hao</td>
</tr>
</tbody>
</table>
I. Ambient Measurements
II. Emission Inventory and Characterization
III. Effects on Health, Visibility, and Ecosystems
IV. Air Quality Modeling
V. Energy and Air Quality Management
Percent Distribution by Technical Topic

- Energy and Air Quality Management: 17%
- Ambient Measurements: 27%
- Emission Inventory and Characterization: 18%
- Effects on Health, Visibility, and Ecosystems: 22%
- Air Quality Modeling: 16%
Speaker and Chair Instructions

• Speaker: Stay on time: 12 minute presentation, 3 minute questions. What you have to say is important, but so are the presentations of the following speakers.

• Chair: Keep speaker on time. Show time marks, Don’t ask for questions if time is up. Stand up and stand beside speaker at 12 minutes if he or she keeps talking. **Pull the plug after 13 minutes!**

• Chair: Keep to the schedule. If a presentation is missing, lead a discussion. **Do not move up the next presentation until its scheduled time.**
Vendor Exhibits

• Set-up
  – 13:00 – 17:00, May 10th

• Exhibition Hours
  – 10:00 – 17:45, May 11th and 12th
  – 10:00 – 12:00, May 13th

• Take down
  – 12:00 – 15:00, May 13th
Outstanding Achievement Awards

- Outstanding Student Platform Presentation (check with Prof. Mark Rood at registration desk to be sure you’re on the judging list)
- Outstanding Student Poster
- Outstanding Poster
- Outstanding Author
  - Highest Number of Submissions
- Outstanding Professor
  - Highest number of international students at conference
- Outstanding Session Chair
  - For recruiting and organizing
- Outstanding Exhibit
Join us at the
Conference Summary and Awards Ceremony Sessions

15:30 – 17:00
Thursday

May 13, 2010
Acknowledgement of Scientific Steering Committee

- Chair: John G. Watson

- May Ajero
- Harold Annegarn
- Zhipeng Bai
- Stefano Cernuschi
- Luis Alonso Diaz Robles
- Dale Evarts
- Neil Frank
- Zhaolin Gu
- Kebin He
- Carey Jang
- Timothy C. Keener
- Dennis Leaf
- Allan Legge
- Frank S.C. Lee
- Ching-Ho Lin
- Shaw Liu
- Giovanni Lonati
- C.V. Mathai
- Hiroaki Minoura

- Kihong Park
- Kevin Percy
- Bret Schichtel
- Christian Siegneur
- Young Sunwoo
- Wladyslaw W. Szymanski
- Xiaoyan Tang
- Xuexi Tie
- Semra Tuncel
- Laura Venegas
- Qidong Wang
- Xinhong Wang
- C.Y. Wu
- Ronald Wyzga
- Jian Zhen Yu
- Liya Yu
- Chung-Shin Yuan
- James Zhang
- Ralf Zimmermann
Acknowledgment of Additional Session Chairs

- Tom Baldwin
- Bingheng Chen
- Lung-Wen Antony Chen
- Yan Cheng
- Jeffrey Collett
- Ke Du
- Delbert Eatough
- Guenter Engling
- Qingyan (Jacqueline) Fu
- Eric Fujita
- Mark Green
- Jiming Hao
- David Harlos
- S. Kent Hoekman
- Min Hu
- Rudolf Husar
- Mike Kilburn
- Michael Kleinman
- Naresh Kumar
- Alexis Lau
- Ying Li
- Peter McMurry
- Ray Minjares
- Deliang Tang
- Jay Turner
- A. Scott Voorhees
- Gehui Wang
- Xiaoliang Wang
- Fumo Yang
Acknowledgement of Local Organizing Committee and Exhibition Co-chairs

- **Local Organizing Committee:**
  - Jeanne Ng
  - Yinchang Feng
  - Jun Tao
  - Zhenxing Shen
  - Renjian Zhang
  - Shichun Zou

- **Exhibition Co-chairs:**
  - Tom Merrifield
  - Feng Annie Chen
Acknowledgement of Exhibitors

- Apex Instruments, Inc.
- ATC Ample
- Atmoslytic, Inc.
- BGI Instruments
- BMET
- Casella Measurement
- CIMEL Electronique
- Ecotech
- Focused Photonics, Inc.
- Grimm Aerosol Technik
- Magee Scientific
- Met One Instruments
- Metrohm
- Shallow-sea Technology Ltd.
- Shanghai Thunder
- Teledyne Advanced Pollution Instrumentation
- Thermo Fisher Scientific
- Tisch Environmental
- TSI
- URG
- Wuhan Tianhong Instruments
Acknowledgement of Conference Organizers and Sponsors

Air & Waste Management Association

Desert Research Institute

Institute of Earth Environment, Chinese Academy of Sciences

U.S. Environmental Protection Agency

China Light and Power

National Natural Science Foundation of China