

CBE Milestone Celebration: Carmichael Symposium

Thursday, April 9, 2026

Richey Ballroom, Iowa Memorial Union

The Department of Chemical and Biochemical Engineering has a long and distinguished history of outstanding research and graduate student training. This is best exemplified by the pioneering work of Karl Kammermeyer (department head 1949-1972) on membrane separations initiated in the late 1940s. Greg Carmichael, the Karl Kammermeyer Professor, has been part of CBE for nearly 50 years and served as department chair for 14 years and associate dean for research and graduate studies in the college for another dozen years. The research conducted by his students and colleagues on air quality and climate change has greatly advanced our fundamental understanding of key atmospheric processes and our ability to reduce air pollution worldwide. The symposium is an opportunity to celebrate and share the research accomplishments of alumni and collaborators.

8:00 – 9:00 a.m.

Registration and continental breakfast

9:00 – 9:15 a.m.

Opening remarks

- **Ann McKenna**, Dick and Judy Smith Dean of the College of Engineering, University of Iowa
- **Jun Wang**, Departmental Executive Officer, Chemical and Biochemical Engineering, University of Iowa
- **Greg Carmichael**, Karl Kammermeyer Professor of Chemical and Biochemical Engineering, University of Iowa

9:15 – 10:30 a.m.

Session 1

Chair: Chip Levy, Geophysical Fluid Dynamics Laboratory, Princeton University (retired)

- **Charlie Stanier**, CLEAResult Energy Consulting
Midwestern U.S. Air Quality and the University of Iowa's Role
- **Giuseppe Calori**, Deputy Director, Arianet, Italy
FARM: Life and Adventures of a STEM Offspring
- **Itsushi Uno**, Professor, Kyushu University (retired)
The Path to the Global Dust Paper: The Importance of Synchronicities

- **Kevin Christ**, Director and Professor of Chemical Engineering, Ohio University
Ohio University Air Quality Center: Research Overview
- **Beiming Tang**, Postdoctoral Fellow, NOAA ARL
Development of DAFCOM, a Machine Learning Based Downstream Application for NOAA UFS-AQM System
- **Hyerim Kim**, PhD Candidate, Department of Chemical and Biochemical Engineering, University of Iowa
Influence of Biomass Burning Emissions in Southeast Asia

10:30 – 10:40 a.m.

Group photo

10:40 – 11:00 a.m.

Break

11:00 a.m. – 12:30 p.m.

Session 2

- **Yang Zhang**, CoE Distinguished Professor and Associate Chair for Research, Civil and Environmental Engineering, Northeastern University
- **Meng Gao**, Professor, Department of Geography, Baptist University, Hong Kong
From Graduate Student to Colleague: The Enduring Mentorship of Greg Carmichael
- **Jerry Schnoor**, Professor Emeritus, Civil and Environmental Engineering, University of Iowa
35 Years of CGRER
- **Rao Kotomarthi**, Chief Scientist, Environmental Science Division, Argonne National Laboratory
Modeling Atmosphere: From Parallel Computing to Coding Agents
- **Jackie (Qingyan) Fu**, Deputy Director of Shanghai Academy of Environmental Sciences
- **Sarath Guttikunda**, Founder/Director, UrbanEmissions.Info, Pune, India
Action on AQ to Awareness -- Bridging the Gaps from Public Officials to High Schoolers
- **Hongliang Zhang**, Dean and Professor, School of Environment and Architecture, University of Shanghai for

Science and Technology, Shanghai

From Models to Meaning: My Journey with Greg Carmichael and a Bridge Between China and the U.S.

12:45 – 2:00 p.m.

Lunch

2:00 – 3:30 p.m.

Session 3

Chair: Young Sunwoo, Professor, Department of Civil and Environmental Engineering, Konkuk University, Seoul, Korea, & Director General of IUAPPA, the International Union of Air Pollution Prevention and Environmental Protection Associations

- **Sarika Kulkarni**, Scientific Computing Liaison, California Air Resources Board
An Incredible Surreal Career Journey – Atmospheric Scientist to Scientific Computing Liaison
- **Kuruvilla John**, Professor & Chair of Mechanical Engineering, University of North Texas
Multi-decadal Changes in Air Pollution, Sources, and Chemical Characteristics in North Texas
- **Bhupesh Adhikary**, Climate Action Lead, International Centre for Integrated Mountain Development (ICIMOD), Nepal
Climate Change, Air Pollution in the IGP-HF, and My Journey to Move Mountains
- **Behrooz Roozitalab**, Scientist IV, NSF NCAR Atmospheric Chemistry Observations and Modeling Laboratory
Everything Everywhere All at Once; Air Quality Edition
- **Scott Spak**, Associate Professor, School of Planning and Public Affairs, University of Iowa
Good, Good: Learning from Greg Carmichael's Approach to Science, Mentoring, and Working with Policymakers
- **Meng Zhou**, Assistant Research Scientist, University of Iowa Technology Institute
Lighting the Night: Application of VIIRS DNB for Monitoring Wildfire and Smoke Transport at Night

- **Xuemei Wang**, Dean of the School of Environmental Sciences, Jinan University, Guanghua, China
- **Youhua Tang**, Principal Investigator, National Air Quality Forecast Guidance, NRL NOAA
Evaluating the Chemical Transport Models with Aircraft Observations: Challenges and Issues from Recent Field Experiments

Short videos

3:30 – 4:00 p.m.

Greg Carmichael, Karl Kammermeyer Professor of Chemical and Biochemical Engineering
Odyssey of a Chemical Engineer

4:00 p.m.

End of symposium

Please join us for the [banquet](#) at 6:00 p.m. in the International Ballroom of the IMU.