

## **Highlights from the 50th Anniversary of CACHE Conference**

CACHE celebrated the 50th anniversary of its founding with a Conference on the Future of Cyber-Assisted Chemical Engineering, held July 19-20, 2019 in Breckenridge, CO, which brought together thought leaders, innovators, educators, and industrial practitioners who are concerned with preparing a workforce of chemical engineers with the skill sets needed to accelerate the penetration of data analytics, management of massive data sets, artificial intelligence, data-driven and first principles models and simulations at all levels of organizational decision making in government, industry and academia.

The meeting kicked-off with a tag team review of CACHE accomplishments, by Brice Carnahan, Warren Seider, Larry Evans and Tom Edgar. This was followed by overviews of current CACHE initiatives by Frank Doyle (Systems Biology), Peter Cummings (Molecular Modeling) and Richard Braatz (Process Systems). The first day ended with a reception and poster presentations by young faculty.

The second day included plenary talks on the future directions in cyber-enabled ChE education by Evan Sorensen, Tom Adams, Richard Turton, Linda Broadbelt and David Beck, followed by a panel discussion with active audience participation. After lunch, young faculty provided concise summaries of their poster presentations in an innovation forum. Speakers included Jason Bara, Bryan Boudouris, Alexander Dowling, Ashlee Ford Versypt, Rachel Getman (who was forced to Skype in due to flight problems), Andrew Paluch, Joathan Verrett, Roman Voronov and Bin Wang. A second innovation forum session included Selen Cremaschi, Helen Durand, Federico Galvanin, Hohannes Hachmann, Joseph Kwon, Robert Pantazes, Zachary Ulissi, Kirti Yenkie, Fani Boukouvala and Victor Zavala. Martha Grover and Robert Hesketh then discussed the objectives of a survey on computing in chemical engineering.

The meeting ended with a reception and poster session, followed by a conference dinner. The Speaker, John Anderson (President, NAE) gave an entertaining history of his experience with computing in chemical engineering and provided a toast exactly at the time (8:17 pm MDT) of the 50<sup>th</sup> anniversary of the Apollo 11 landing.

The program is available on the conference website at: <http://cache50th.org>.

We have the following conference dissemination plans. Chemical Engineering Progress: (i) September/October -- a brief article with highlights of 50<sup>th</sup> Anniversary Meeting, (ii) November/December -- a four-part series on CACHE History and Current Activities, (iii) Early 2020 -- 5 part mini-issue involving the Plenary Speakers. Also, Chemical Engineering Education will have a Special issue in 2020 with numerous papers from the young faculty participants on Innovations in Chemical Engineering Education.

A program has also been scheduled for Wednesday afternoon (3:30-6:00 pm) at the AIChE Annual Meeting in Orlando, which will highlight the accomplishments and current activities of CACHE. A reception will follow this session.



Photos of the past and current Trustees (top), and of the Conference Chair (Rex Reklaitis), Co-Chair (Wayne Bequette) and After Dinner Speaker (John Anderson) below.

