Separations Division of AIChE

American Institute of Chemical Engineers

Highlights from the Annual Awards Banquet Atlanta, November 17, 2014

The 2014 AIChE Separations Division Awards Banquet was held November 17 at the Hilton Atlanta Hotel. Division members are shown mingling before the formal program begins (upper photos). Nicholas Urbanski, Awards Program Coordinator, makes sure all is ready (lower left, in the orange shirt, with Andrei Merenov, Anand Vennavelli, and Glenn Lipscomb), and Immediate Past Chair Linda Wang congratulates current Chair Glenn Lipscomb on a very successful year (lower right). See pages 6 - 14 for more photos.

Words from the Chair…

It has been an honor to serve as Chair of the Separations Division during 2014. The Division is fortunate to have outstanding leadership in all positions. Moreover, this leadership is volunteered. Without the commitment of all involved, the Division would not be able to provide the outstanding service to its members and the global separations community that it does. This note addresses three main topics:
1) programming, 2) awards, and 3) leadership.

Programming

The primary service of the Division is technical programming at the AIChE Spring and Annual Meetings. This activity is coordinated by the eight area chairs. I would like to thank each chair for their service this past year:

- Anand Vennavelli 2a (Distillation & Absorption),
- Christopher Burcham 2b (Crystallization & Evaporation),
- Megan Donaldson 2c (Extraction),
- Lauren Greenlee 2d (Membrane-Based Separations),
- Krista Walton 2e (Adsorption & Ion Exchange),
- Seyi Odueyungbo 2f (Fluid-Particle Separations),
- Jessica Molek 2g (Bioseparations), and
- Stephen Ritchie 2h (General Topics & Other Methods).

The area chairs are critical to the success of the Division.

At the Spring Meeting held March 30 – April 3, 2014 in New Orleans, LA, the Division sponsored or co-sponsored 10 oral presentation sessions with 46 papers, including those associated with a Topical Distillation Symposium, and one poster session with 25 papers. At the Annual Meeting held November 16 – 21, 2014 in Atlanta, GA, the Division sponsored or co-sponsored 75 oral presentation sessions with 435 papers and five poster sessions with 116 papers. *Thus, Division programming in 2014 consisted of 85 oral presentation sessions with 481 papers and six poster sessions with 141 papers*. These remarkable numbers reflect the combined efforts of the area chairs in developing relevant programming for Division members.

We believe offering increased programming benefits our membership, but AIChE has asked us to reduce it. We were asked to cut ~10 sessions from the 2014 Annual Meeting because we had exceeded the Division allotment. We routinely were allowed to do this in the past but it appears there will be more resistance in the future.

The Division opposed the requested reduction and ultimately no sessions were cut last year. Additionally, we voiced our desire to run more sessions than the proposed allotments for future meetings if space is available. If space is not available, we understand the need to control session numbers and will do so.

Paper presentation times can vary widely from session to session. To improve the quality of our programming, we recommended that all areas provide no less than 25 minutes for each paper. Almost all sessions were organized as recommended and we hope this will have a positive impact on quality.

Awards

Another significant Division activity is recognition of the outstanding service and research contributions of its members. Award winners for the past year included:

- *Gerhold Award,* sponsored by UOP, Inc., for outstanding contributions to research, development, or application of separations technology:
  Timothy C. Frank

- *Kunesh Award,* sponsored by Fractionation Research, Inc., for outstanding contributions by an individual under the age of 40:
  Jeffrey R. McCutcheon

- *Founders Award,* for outstanding service to the Separations Division:
  Andre R. Da Costa

- *Graduate Student Research Awards, Distillation and Absorption:*
  Michael Basden and Gautham M. Ramapriya

- *Graduate Student Research Awards, Membrane-Based Separations:*
  Kyle E. Hart and Yuexiao Shen

- *Graduate Student Research Awards, Crystallization and Evaporation:*
  Mo Jiang

- *Graduate Student Research Awards, Professor Dibakar Bhattacharyya Award:*
  Li Xiao

The deadline for submitting nominations for 2015 is May 1 and submission instructions are provided on the AIChE web site.

Two new awards were approved at the fall planning meeting. The Separations Division Innovation Award will recognize outstanding contributions to scientific, technological, or industrial areas involving separations technologies that have significant measurable commercial, environmental or societal value. The Separations Division Education/Outreach Award provides up to $5,000 in support of educational and outreach activities related to separation technologies. The first call for both awards will be released in early 2015.

Leadership

Working with the Division leadership has been richly rewarding. Many have served in their positions for extended periods of time and deserve special recognition.

Especially noteworthy are the enduring contributions of Treasurer Neil Yeoman and Secretary Atanas Serbezov. Neil and Atanas provide the glue that holds the division together. This coming year Neil will receive some assistance with the Treasurer's work from newly appointed Assistant Treasurer Tarun Poddar, a Director of the Separations Division.

Paul Bryan has served as Gerhold Award coordinator and Sharon Robinson as Chemical Engineering Technology Operating Council (CTOC) liaison for approximately a decade. Nick Urbanski has served as Awards Coordinator for five years. He will step down in 2015, but the Division has been fortunate to have his service in this labor-intensive position which enabled recognition of Division members at our annual awards dinner; in 2014 the dinner attracted nearly 100 attendees! We still are searching for someone to take Nick's place for 2015.

I have benefited immensely from the mentoring and advice provided by Immediate Past Chair Nien-Hwa (Linda) Wang. It has been a great pleasure to work with 1st Vice Chair Timothy Frank and 2nd Vice Chair Scott Husson.

Roger Whitley has done a tremendous job managing the Division web site. Marcus Mello has developed a strong LinkedIn group for the Division to complement the web site. Tim Frank published the Division newsletter last year and plans to continue providing this nice summary of Division activities.

Leadership related activities this past year include:

Separations Division Advisory Council
The Division formed a new Advisory Council consisting of past chairs; all enthusiastically agreed to participate. The Council is chaired by Mark Pilling and charged with envisioning new Division activities and evaluating current ones. One topic that the Council will consider is how to use effectively the increasing funds of the Division, which are approaching $80,000, in support of its mission.

Young Professionals Committee
For several years, the Division has supported leadership development among younger AIChE members through financial support of the Young Professionals' Social at the Spring Meeting. The social attracted over 100 individuals in New Orleans and received overwhelmingly positive feedback. We plan to continue our support as it also provides a venue to recruit new members.

ACS GCI Industrial Roundtables
The Division provided a letter of support for a proposal submitted by the ACS Green Chemistry Institute (GCI) Industrial Roundtables for a NIST Advanced Manufacturing Technology Consortia Program Planning Award. The proposal entitled "Sustainable Separation Processes: Creating a Roadmap to Accelerate Industrial Application of Less Energy-Intensive Alternative Separations (ALTSEP)" seeks funding to prioritize research, development, and demonstration needs in energy efficient separations through a series of workshops. The Division will recommend workshop participants from its membership. Participation costs will be borne by the grant.

Skype Conferencing
In an effort to increase leadership participation in planning meetings, Skype teleconferencing was used at the Spring Meeting. Several individuals were able to participate in the conference call and we plan to continue its use in future meetings.

Student Membership Increase
Our membership numbers jumped by nearly 1500 in 2014. Thanks to Marcus and Roger, we believe our enhanced presence on-line through LinkedIn and the AIChE web site has attracted new members, but this dramatic increase is due primarily to how AIChE handles student memberships – students may join any Division for free. Student interest obviously is significant, and we need to consider how to engage students such that they become members after graduation. However, the Division will not see a concomitant increase in revenue from membership dues until they do so.

Please join me in welcoming Tim Frank as Division Chair for 2015. Tim is the recipient of the 2014 Gerhold Award and is well known for his innovative work in separations at The Dow Chemical Company. I know Tim will do an excellent job as I join the ranks of the past chairs.

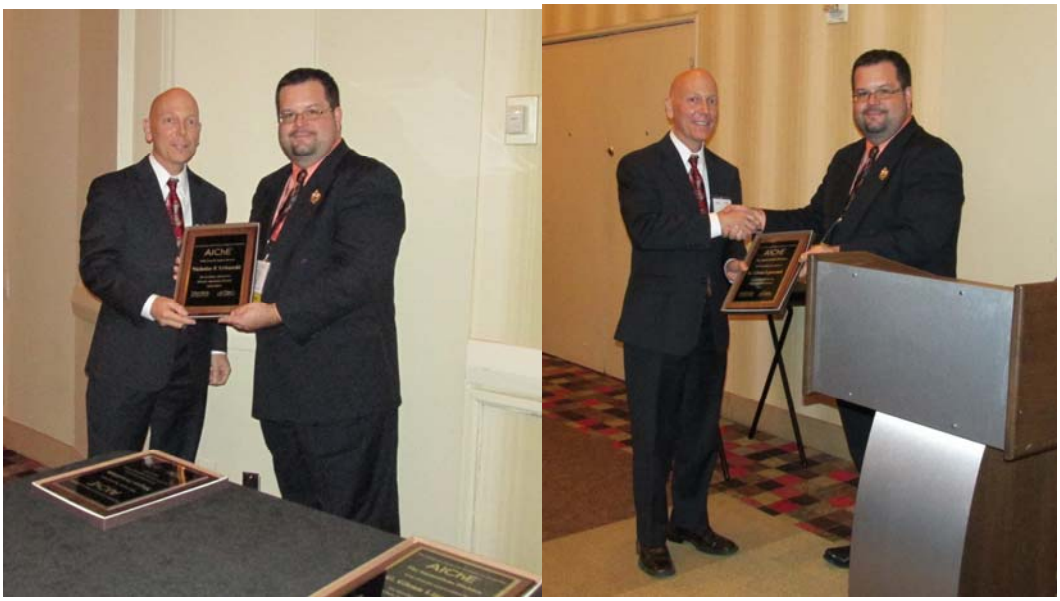
Best wishes,

Glenn Lipscomb

Separations Division Chair, 2014

Scenes from the Annual Awards Banquet

The annual Separations Division Awards Banquet was held Monday, November 17, 2014 during the AIChE Fall Meeting. The venue was the Hilton Atlanta Hotel. Professor Glenn Lipscomb, the 2014 Chair of the Separations Division, presided over the evening's activities. Nicholas Urbanski served as the Awards Program Coordinator in charge of planning for the awards and making the banquet arrangements. The following is a collection of photos from the evening.



Current Chair, Glenn Lipscomb, is shown thanking Nicholas Urbanski, Director and Awards Program Coordinator, for his service to the Division. And Nicholas returns the favor, thanking Glenn for leading the Division through a very successful year.

Glenn Lipscomb presents Mark Davis with a plaque to commemorate his service as Director (2010-2014). Mark is the newly elected 2nd Vice Chair, in line to become Chair of the Division in 2017. Tim Frank and Scott Husson will take on the Chair position in 2015 and 2016, respectively.

The Division awarded six graduate students with awards for their research in separations. Here, Glenn Lipscomb congratulates Michael Basden, Ph.D. candidate at the University of Texas at Austin, on receiving an award for research in Distillation and Absorption (Area 2a).

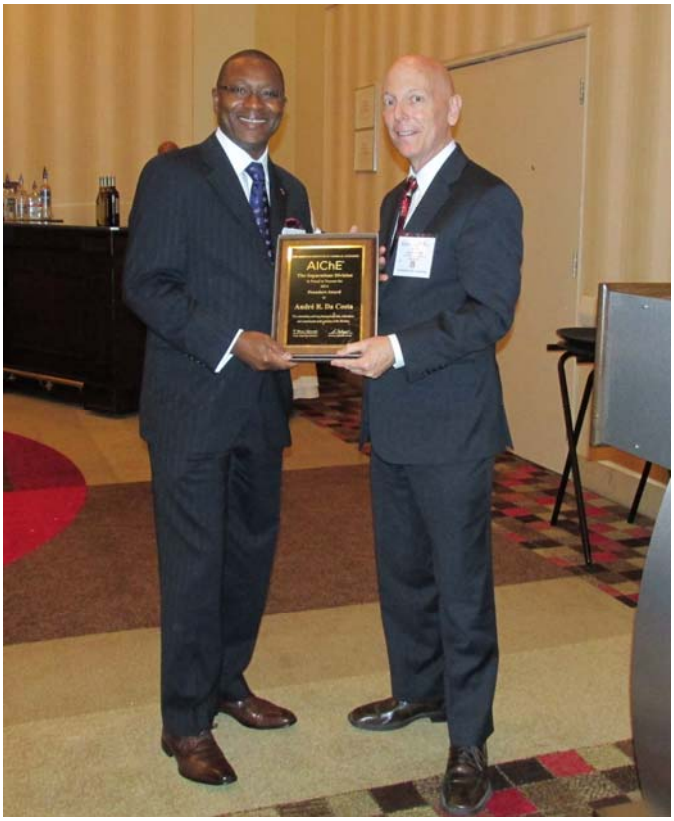
Kyle Hart, Ph.D. candidate at The Pennsylvania State University, is recognized for research in Membrane-Based Separations (Area 2d).

Mo Jiang, Ph.D. candidate at Massachusetts Institute of Technology, receives an award for research in Crystallization and Evaporation (Area 2b).

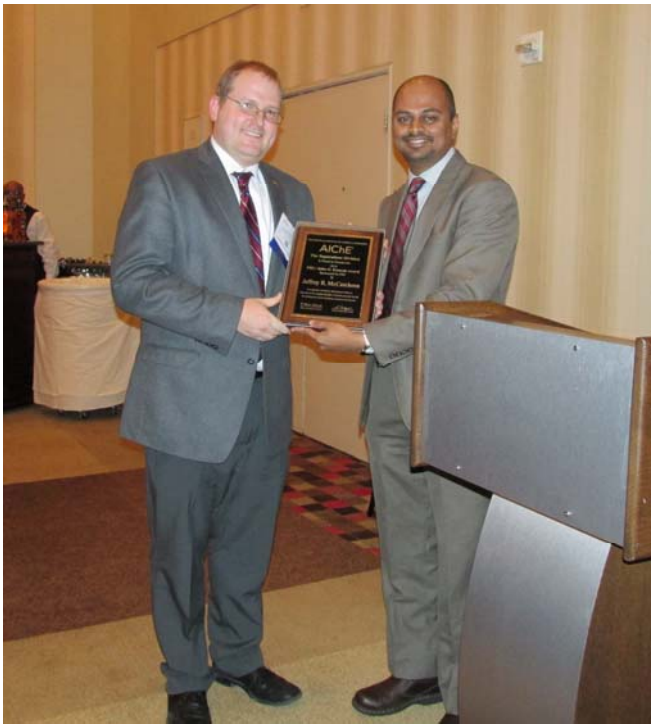
Gautham Ramapriya, Ph.D. candidate at Purdue University, receives recognition for his work in Distillation and Absorption (Area 2a).

Yuexiao Shen, Ph.D. candidate at The Pennsylvania State University, receives a Graduate Student Award in Membrane-Based Separations (Area 2d).

Li Xiao, Ph.D. candidate at the University of Kentucky, accepts the Professor Dibakar Bhattacharyya Graduate Student Research Award for research in functionalization of membranes for tunable separations.



André Da Costa is shown receiving the Founders Award for many years of service to the Separations Division.



Jeffery McCutcheon, Professor at the University of Connecticut, accepts the 2014 John G. Kunesh Award for outstanding contributions to separations R&D from Anand Vennavelli of Fractionation Research, Inc.

Tim Frank is shown receiving the 2014 Clarence Gerhold Award for excellence in separations R&D. The award was presented by Linda Cheng of the sponsoring organization, UOP, LLC (A Honeywell Company).

Martha and Tim Frank

Gail and Mark Pilling

The Division also held a member's planning meeting during the conference in Atlanta. Here, Glenn Libscomb, current Chair, is shown with Scott Husson, in line to be Chair in 2016.

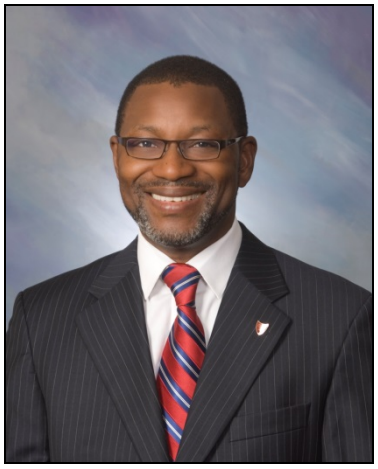
Neil Yeoman reviews the Division's solid financial position. The Division has greatly benefited from Neil's service as Treasurer and chief financial steward since 1990.

Atanas Serbezov, Secretary, reviews the Division's business report.

And Glenn Lipscomb leads the business discussion.

Meet the Award Winners

By Nicholas Urbanski



Dr. André R. Da Costa
Recipient of the 2014 Separations Division Founders Award

This award recognizes outstanding service to the Separations Division. The recipient must have a considerable record of service to the Separations Division and the separations area, performed above and beyond the expected duties, and participated extensively in a variety of division activities with documented evidence of sustained service over an extended period of time.

This year, the AIChE Separations Division is pleased to recognize Dr. André R. Da Costa (Pacific Gas and Electric Company) for outstanding and long-lasting leadership, dedication and commitment to the mission of the Division.

Dr. André R. Da Costa left his native Angola as a teenager to study Chemical Engineering at the Mendeleev University of Chemical Technology in Moscow in the 1970s. Later, he pursued doctoral studies in Australia and worked in North America, Europe, Australia, Asia and Africa. While in Moscow, he met and married his college sweetheart Brenda, a native of the tropical island of Mauritius and, had a son Christopher.

André's work in Separations began in the 1980s at the University of New South Wales during his Ph.D. studies in fluid mechanics and mass transfer in spiral-wound modules for Ultrafiltration. This work unveiled the transport mechanism and proposed optimal spacer designs for that complex module geometry.

In the late 1990s, André moved from Australia to the San Francisco Bay Area and joined AIChE. Knowing AIChE's outstanding reputation, his objective was to explore its vast resources and participate in the advancement of the profession. André already had considerable experience having been chair of IChemE for the State of Victoria, Australia. Following an outstanding service to NorCal AIChE - the third largest AIChE section, in various capacities, including Chair, André was elected Director of the Separations Division with responsibility for the awards program and later served as Chair of the Division. During his leadership, André promoted and improved awareness of the awards program. He led a successful fundraising campaign to support the awards and both funding and nominations submittals increased. André provided effective leadership of technical programming development, which lead to an increase in the number of sessions at National meetings.

André was always ready to address and resolve challenges facing the Division and recruited Area Chairs to address gaps in the technical programming. André was also an advocate of expanding the role of divisions beyond technical programming, particularly collaborating with Local Sections and increasing AIChE membership. He coined and introduced the term "Beyond Programming", which is widely used by the Executive Board of the Programming Committee (EBPC) and across many Divisions.

André continued promoting and creating opportunities for the Separations Division's areas as he co-chaired the 2006 AIChE Annual Meeting in San Francisco and during his service as Chair of EBPC. During his two terms on the AIChE Board of Directors as Director and Treasurer, Andre maintained the Division informed of global Institute matters and was active in the process of establishing a pipeline to promote Separations Division talent to the Institute's leadership roles. André held more than 20 leadership positions with AIChE and is a Fellow of AIChE, IChemE and Engineers Australia. André was a referee for The Journal of Membrane Science for over a decade and has been a member of a research proposal panel review for the National Science Foundation. André has been a member of the scientific committee of several international conferences. He is the recipient of several awards.

André is an avid traveler and is fluent in English, Portuguese, Spanish, French and Russian. During his college years, André used to read Russian poetry and participated in theatre and musical performances.

Graduate Student Research Awards

In an effort to encourage graduate students to excel, to promote a high level of interest in the field of separations, to identify future leaders in the field, and to strengthen the cooperation between academia and industry in the separations field, the Separations Division of AIChE has established a Graduate Student Research Award program. In 2014, the Graduate Student Awards Program has been underwritten by Chevron Energy Technology Company and by the Separations Division of AIChE.

Graduate Student Research Awards recognize outstanding work by graduate students in one of the Separations Division Program Areas: Distillation & Absorption (Area 2a), Crystallization & Evaporation (Area 2b), Extraction (Area 2c), Membrane-based Separations (Area 2d), Adsorption & Ion Exchange (Area 2e), Fluid Particle Separations (Area 2f), and Bioseparations (Area 2g).

For 2014, the Separations Division is pleased to recognize the following students for excellence in separations research (in alphabetical order):

Michael Basden
Distillation & Absorption
Professor Bruce Eldridge
The University of Texas at Austin

Mo Jiang
Crystallization and Evaporation
Professor Richard Braatz
Massachusetts Institute of Technology

Yuexiao Shen
Membrane-based Separations
Professor Manish Kumar
The Pennsylvania State University

Kyle Hart
Membrane-based Separations
Professor Coray Colina
The Pennsylvania State University

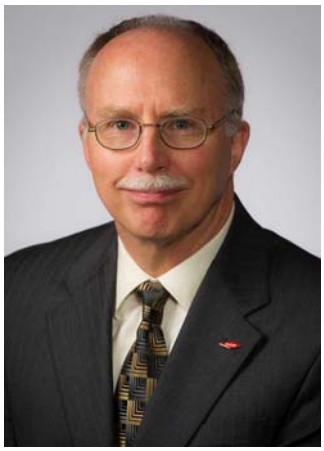
Gautham Ramapriya
Distillation and Absorption
Professor Rakesh Agrawal
Purdue University

Each award comprises a $200 check and a plaque. Nominees must be (have been) graduate students since the last Annual AIChE meeting and/or the following calendar year. A nomination package includes: (1) A single nomination letter detailing the student's strengths and accomplishments, by a faculty member who must be a member of AIChE; (2) A single research paper (published or otherwise) contributing to separations fundamentals or applications. This paper may be co-authored by others, but the student nominee must have been the primary author. The paper should be of a quality acceptable for publication in journals such as *AIChE Journal* or *Chemical Engineering Science*; and (3) The student's CV.

Nominations for 2014 Graduate Student Awards are due by May 1, 2014.
For more information, go to
http://www.aiche.org/community/awards/separations-division-graduate-student-research-award.

Professor Dibakar Bhattacharyya Graduate Student Research Award

Another award given for excellence in research by a graduate student is the Dibakar Bhattacharyya Award. This award recognizes excellence in membrane-based separations research and is given to recognize Professor Bhattacharyya's support and overall long-term commitment to student development. In 2014, the award was given to Li Xiao, a Ph.D. candidate at the University of Kentucky, for research in functionalization of membranes for tunable separations.



Dr. Timothy C. Frank
Recipient of the 2014 Clarence Gerhold Award

This award, sponsored by UOP, LLC (A Honeywell Company), recognizes an individual's outstanding contribution in research, development, or in the application of chemical separations technology.

The AIChE Separations Division is pleased to announce Dr. Timothy C. Frank (The Dow Chemical Company) as the recipient of the 2014 Clarence G. Gerhold Award for research, development, and commercialization of innovative distillation, extraction, adsorption, and crystallization technologies, and for contributions to the literature promoting excellence in chemical engineering practice.

Tim Frank is a Dow Fellow and Associate R&D Director at The Dow Chemical Company. He currently leads the Process Separations Group in Dow's Engineering & Process Science Laboratory, with responsibility for planning and oversight of Dow research programs in chemical separations. Over a span of 30 years at Dow, Tim has led the development and commercialization of an exceptionally wide variety of separation processes – for petrochemical processing (continuous and batch, commodities and specialties), for bioprocessing (vegetable-oil and fermentation-based processes), and for environmental protection (air and water emissions control).

Tim is known for rapid conceptualization and screening of separation process options involving distillation, extraction, crystallization, and adsorption, and for emphasizing strong collaboration with others in developing and implementing new technologies. Team efforts have included development of enhanced distillations for solvent recovery and recycle; pressure-swing adsorption processes for air emissions control and for drying organics; crystallization and extraction processes used in the manufacture of a variety of agricultural chemicals and other specialty products; and patented innovations including the use of glycol ethers for recovery of recombinant proteins from bacterial cultures, and chiral resolution of propylene glycol ethers via reactive distillation. Tim is also known for implementing systematic design methods within Dow. These include enhanced approaches to specifying solvents for process and product applications, guidelines for liquid-liquid phase separation, and a new method for correlating the effect of temperature on infinite-dilution activity coefficients – as an aid to screening and modeling a variety of separation options.

Dr. Frank is Section Editor and co-author of Section 15 on liquid-liquid extraction in Perry's Chemical Engineers' Handbook (8th Edition) and co-author of 24 publications and 11 granted patent families with others pending. His Ph.D. is from the University of Colorado – Boulder. He was elected a Fellow of AIChE in 2010.

The deadline for submitting a nomination package for the next Gerhold Award is May 1, 2014 (Note: Some older web pages erroneously refer to May 31 or some later date). Starting in 2010 the award is presented in even years to nominees from industry or non academic entities, and in odd years to nominees from academia. Nominees can indicate in which category they want to be considered. The criteria used for selection shall be consistent with the category. For more information, go to http://www.aiche.org/community/awards/clarence-larry-g-gerhold-award .

Past Gerhold Award Recipients

1992 – C.J. King	1993 – A.D. Randolph
1994 – J.R. Fair	1995 – G.E. Keller
1996 – R.W. Rousseau	1997 – R.T. Yang
1998 – M. Larson	1999 – W.J. Koros
2000 – G. Belfort	2001 – R. Agrawal
2002 – N.N. Li	2003 – H.Z. Kister
2004 – M.F. Doherty	2005 – C. Eckert
2006 – E. Cussler	2007 – W.S. Ho
2008 – K.K.Sirkar	2009 – D. Bhattacharyya
2010 – N. Yeoman	2011 – R.D. Noble
2012 – S. Kulprathipanja	2013 – B.D. Freeman

Clarence G. Gerhold, A Pioneer in Chemical Processes

*"Within three months of his arrival at UOP's Riverside Laboratory in 1929, Clarence G. "Larry" Gerhold developed a new cracking process, called thermal reforming, that used gasoline, rather than crude oil, as a feedstock. He was also the prime inventor of UOP processes that separate aromatics from other hydrocarbons. These processes contributed to the explosive growth in the aromatic derivatives branch of the petrochemical industry. His work at Riverside was the basis for the ultimate development of the UOP® Sorbex® processes, which provide continuous adsorption separations. Gerhold was appointed manager of the Riverside laboratory in 1945"**

Clarence "Larry" Gerhold was one of the nation's outstanding innovators in conceiving and implementing new processes in the petroleum, refining, and petrochemical industries. His 78 patents serve as clear evidence of his technical leadership and innovation. From 1929, when he conceived of thermal reforming, to Simulated Moving Bed (SMB) chromatography and the SORBEX adsorptive separation process, he had always explored the unconventional possibilities instead of simply following evolutionary paths.

Clearly Clarence Gerhold was one of Universal Oil Products' most prolific people. He had an early vision of modern petroleum processing and for his entire career worked to promote this vision. Importantly, he had the determination to push through developments which at the time were given little hope for commercial acceptance.

An important example of his accomplishments is the Platforming process. There was general skepticism when platimum-promoted catalysts were suggested by UOP's Vladimir Haensel in 1947. Larry took a different approach. He analyzed the possible problems and persuaded the researchers to develop viable solutions. He convinced management of the need for rapid commercialization of the process. He worked with all the process development and design functions to move forward. His efforts were instrumental in the development and implementation of a commercially-successful operation within 2-1/2 years of the first laboratory experiment!

Larry championed many UOP processes: thermal reforming, catalytic polymerization, dehydrogenation, the UDEX extraction process (co-developed by UOP and The Dow Chemical Company), and the UOP SORBEX adsorption separation process including invention of SMB chromatography. His solutions to problems overcame obstacles to commercial realization, and his vision and persistence resulted in new directions for these developing industries.

*Excerpt taken from "UOP Riverside Laboratory, A National Historic Chemical Landmark" (American Chemical Society (ACS), Division of the History of Chemistry and The Office of Public Outreach, 1995), used with permission of ACS.

Dr. Jeffrey R. McCutcheon
Recipient of the 2014 FRI/John G. Kunesh Award

This award, sponsored by Fractionation Research, Inc., FRI, recognizes outstanding contributions to the academic, scientific, technological, industrial, or service areas involving separations technologies for individuals under the age of 40.

This year, the AIChE Separations Division is pleased to recognize Dr. Jeffrey R. McCutcheon (University of Connecticut) for his efforts to help usher in the emergent discipline of osmotic processes through the development of novel membrane structures and materials. Jeffrey McCutcheon is an Associate Professor in the Department of Chemical & Biomolecular Engineering and at the University of Connecticut. He received a B.S. in Chemical Engineering from the University of Dayton and his Ph.D. in Chemical Engineering from Yale University.

At the University of Connecticut, Dr. McCutcheon serves as a Center Faculty at the Center for Environmental Sciences and Engineering, Director the Chemical & Biomolecular Engineering REU-Site, and Director of the UConn Piloting Facility. Since his appointment in Fall of 2008, he has established the Sustainable Water and Energy Laboratory (SWEL), an interdisciplinary research environment that supports 10 graduate students and 4 undergraduate researchers. His primary research efforts are focused on engineered osmotic processes, including forward osmosis (FO) and pressure retarded osmosis (PRO). His work has resulted in 32 publications, 2 book chapters, 4 pending patents, and a number of invited seminars around the world.

Jeffrey McCutcheon is the recipient of the 3M Nontenured Faculty Grant, the Solvay Advanced Polymers Young Faculty Award, and is a DuPont Young Faculty. He is a Director in the American Institute of Chemical Engineers Separations Division and serves on the North American Membrane Society (NAMS) Board of Directors. He is co-chair for a number of upcoming international membrane meetings, including the ACS workshop on "Advances in Materials and Processes for Polymeric Membrane Mediated Water Purification" to be held in Pacific Grove, California, in Spring 2015, the NAMS Annual Meeting to be held in Boston, Massachusetts, in Summer 2015, and the Gordon Research Conference on Membranes and Membrane Processes to be held in Summer 2016.

Jeffrey hosts Science Friction, a weekly science themed news-talk radio program on WHUS Storrs, 91.7 FM, where he covers science news from UConn and beyond through interviews with STEM students, researchers, and educators. Jeff and his wife Jennifer live in Tolland, Connecticut, with their 11-month old daughter, Mary Kathleen.

The deadline for submitting a nomination package for the next Kunesh Award is May 1, 2014. This award is presented in memory of John G. Kunesh, past Separations Division Chairman and Technical Director of Fractionation Research, Inc. (FRI). His dedication to the distillation industry and service to those working in it serve as a model for all those practicing engineering disciplines. John actively challenged, mentored, and encouraged young engineers to succeed.

The Kunesh Award continues this encouragement by recognizing outstanding contributions to the academic, scientific, technological, industrial, or service areas involving separations technologies by individuals under the age of 40. Criteria considered in selecting an awardee include: Significant discoveries, important research, development of new processes and products, introduction of new education concepts, service to the Separations Division, or outstanding service to the separations community. For more information, go to

http://www.aiche.org/community/awards/frijohn-g-kunesh-award.

Past Kunesh Award Recipients

2010 – S.M. Husson
2010 – N.F. Urbanski
2011 – I.C. Escobar
2012 – S. Nair
2013 – M.A. Carreon

John G. Kunesh, A Mentor to Chemical Engineers

Dr. John G. Kunesh mentored and supervised many young chemical engineers. The majority of those engineers are still contributing globally in the Separations field.

John Kunesh received B.S., M.S., and Ph.D. degrees from Carnegie Mellon University, the latter in 1971. His first industry position was with UOP in Des Plaines, Illinois, where he soon became the Manager of twenty engineers within the Design Engineering group of the Process Division. For six years, he led UOP's Training Group for New Design Engineers. He also led UOP's Design Engineering Course for Client Personnel.

In 1976, John left UOP for Hydrocarbon Research, Inc., in New Jersey, where he soon became their Vice President of Process Design. Among his achievements there was management of engineering for a new coal liquefaction plant design. In 1984, John joined Fractionation Research, Inc. (FRI) as their Technical Director, a position which he held for 18 years. John and his FRI group contributed appreciably to global distillation. FRI testing included studies of high-capacity trays, packing distributors, structured packing, high-capacity structured packing, and high-performance random packing. FRI's Design Rating Program was initially authored during John's tenure.

John was an AIChE Separations Division Director for 6 years, and its Chair in 2004. Anyone who knew or worked for John enjoyed, respected, and learned from him. The Separations world benefitted greatly from John's time in it.

The Separations Division of AIChE

2014 Officers, Directors, and Chair Holders

ELECTED OFFICERS AND DIRECTORS (2014)

CHAIR: Glenn Lipscomb	**1st VICE CHAIR**: Tim Frank
IMMEDIATE PAST CHAIR: Nien-Hwa (Linda) Wang	**2nd VICE CHAIR**: Scott Husson
TREASURER: Neil Yeoman	**SECRETARY**: Atanas Serbezov
DIRECTOR: Mark Davis (2010-2014)	**DIRECTOR**: Nicholas Urbanski (2010-2014)
DIRECTOR: Isabel Escobar (2011-2015)	**DIRECTOR**: Sharon Robinson (2011-2015)
DIRECTOR: Marcus Dutra e Mello (2012-2016)	**DIRECTOR:** Roger Whitley (2012-2016)
DIRECTOR: Jeff McCutcheon (2013-2017)	**DIRECTOR**: Tarun Poddar (2013-2017)
DIRECTOR: Kathleen Mihlbachler (2014-2018)	**DIRECTOR**: Anand Vennavelli (2014-2018)

SPECIFIC ROLES SERVING THE DIVISION (2014)

AWARDS PROGRAM COORDINATOR: Nicholas Urbanski	**AIChE CHEMICAL TECHNOLOGY OPERATING COUNCIL (CTOC) LIAISON**: Sharon Robinson
GERHOLD AWARD COORDINATOR: Paul Bryan	**NEWSLETTER EDITOR:** Tim Frank
MEMBERS COORDINATOR: Marcus Mello	**WEBMASTER:** Roger Whitley
ADVISORY COUNCIL CHAIR: Mark Pilling	**STAFF LIAISON:** Diane Shuster

AREA CHAIRS (2014)

CHAIR: Area 2a (Distillation & Absorption) Anand Vennavelli	**VICE CHAIR:** Area 2a (Distillation & Absorption) Dan Summers
	VICE CHAIR: Area 2a (Distillation & Absorption) Žarko Olujić
CHAIR: Area 2b (Crystallization & Evaporation) Christopher Burcham	**VICE CHAIR:** Area 2b (Crystallization & Evaporation) Maria Tsianou
CHAIR: Area 2c (Extraction) Megan Donaldson	**VICE CHAIR:** Area 2c (Extraction) George Goff
CHAIR: Area 2d (Membrane-Based Separations) Lauren Greenlee	**VICE CHAIR:** Area 2d (Membrane-Based Separations) Jeff McCutcheon
CHAIR: Area 2e (Adsorption & Ion Exchange) Krista Walton	**VICE CHAIR:** Area 2e (Adsorption & Ion Exchange) Matthias Thommes
CHAIR: Area 2f (Fluid-Particle Separations) Seyi Odueyungbo	**VICE CHAIR:** Area 2f (Fluid-Particle Separations) Isaac Gamwo
CHAIR: Area 2g (Bioseparations) Jessica Molek	**VICE CHAIR:** Area 2g (Bioseparations) Stephen Theil
CHAIR: Area 2h (General Topics & Other Methods) Stephen Ritchie	**VICE CHAIR:** Area 2h (General Topics & Other Methods) Alice He

2015 Officers, Directors, and Chair Holders

ELECTED OFFICERS AND DIRECTORS (2015)

CHAIR: Tim Frank	**1st VICE CHAIR**: Scott Husson
IMMEDIATE PAST CHAIR: Glenn Lipscomb	**2nd VICE CHAIR**: Mark Davis

TREASURER: Neil Yeoman	**SECRETARY**: Atanas Serbezov

DIRECTOR: Isabel Escobar (2011-2015)	**DIRECTOR**: Sharon Robinson (2011-2015)
DIRECTOR: Marcus Dutra e Mello (2012-2016)	**DIRECTOR:** Roger Whitley (2012-2016)
DIRECTOR: Jeff McCutcheon (2013-2017)	**DIRECTOR**: Tarun Poddar (2013-2017)
DIRECTOR: Kathleen Mihlbachler (2014-2018)	**DIRECTOR**: Anand Vennavelli (2014-2018)
DIRECTOR: Megan Donaldson (201-2019)	**DIRECTOR:** Christopher Burcham (2015-2019)

SPECIFIC ROLES SERVING THE DIVISION (2015)

AWARDS PROGRAM COORDINATOR: Nicholas Urbanski	**AIChE CHEMICAL TECHNOLOGY OPERATING COUNCIL (CTOC) LIAISON**: Sharon Robinson
GERHOLD AWARD COORDINATOR: Paul Bryan	**NEWSLETTER EDITOR:** Tim Frank
MEMBERS COORDINATOR: Marcus Mello	**WEBMASTER:** Roger Whitley
ADVISORY COUNCIL CHAIR: Mark Pilling	**STAFF LIAISON:** Diane Shuster
ASSISTANT to the TREASURER: Tarun Poddar	

AREA CHAIRS (2015)

CHAIR: Area 2a (Distillation & Absorption) Anand Vennavelli	**VICE CHAIR:** Area 2a (Distillation & Absorption) Žarko Olujić
	VICE CHAIR: Area 2a (Distillation & Absorption) Dan Summers
CHAIR: Area 2b (Crystallization & Evaporation) Christopher Burcham	**VICE CHAIR:** Area 2b (Crystallization & Evaporation) Marina Tsianou
CHAIR: Area 2c (Extraction) George Goff	**VICE CHAIR:** Area 2c (Extraction) Megan Donaldson
CHAIR: Area 2d (Membrane-Based Separations) Lauren Greenlee	**VICE CHAIR:** Area 2d (Membrane-Based Separations) Jeff McCutcheon
CHAIR: Area 2e (Adsorption & Ion Exchange) Krista Walton	**VICE CHAIR:** Area 2e (Adsorption & Ion Exchange) Matthias Thommes
CHAIR: Area 2f (Fluid-Particle Separations) Seyi Odueyungbo	**VICE CHAIR:** Area 2f (Fluid-Particle Separations) Isaac Gamwo
CHAIR: Area 2g (Bioseparations) Jessica Molek	**VICE CHAIR:** Area 2g (Bioseparations) Allen Hersel, Steve Thiel
CHAIR: Area 2h (General Topics & Other Methods) Stephen Ritchie	**VICE CHAIR:** Area 2h (General Topics & Other Methods) Alice He