

**MINUTES**  
**COUNCIL**  
**AMERICAN CHEMICAL SOCIETY**  
August 24, 2016  
Philadelphia, Pennsylvania

The Council of the American Chemical Society met in Philadelphia, Pennsylvania, on August 24, 2016, beginning at 8:20 a.m. Donna J. Nelson, President of the Society and of the Council, presided. The following Councilors, Alternate Councilors, and accredited representatives were present:

**Ex-Officio:** John E. Adams, Paul S. Anderson, Tom J. Barton, George M. Bodner, Ronald Breslow, Allison A. Campbell, William F. Carroll, Jr., Pat N. Confalone, Thomas M. Connelly, Jr., Ned D. Heindel, Rigoberto Hernandez, Catherine T. Hunt, Nancy B. Jackson, Paul W. Jagodzinski, Thomas H. Lane, Lee H. Latimer, Flint H. Lewis, Ingrid Montes, E. Ann Nalley, Donna J. Nelson, Gordon L. Nelson, Attila E. Pavlath, Laura E. Pence, Dorothy J. Phillips, Elsa Reichmanis, Barbara A. Sawrey, Diane Grob Schmidt, Kathleen M. Schulz, Bassam Z. Shakhshiri, Edel Wasserman, Marinda Li Wu.

**Bylaw:** Lynne P. Greenblatt, Anne T. O'Brien.

**Divisions:** **Agricultural & Food Chemistry**, Michael Appell, John W. Finley, Michael J. Morello, Agnes M. Rimando. **Agrochemicals**, Rodney M. Bennett, Jeanette M. Van Emon. **Analytical Chemistry**, Kimberly Agnew-Heard, Karl S. Booksh, Michelle V. Buchanan, Roland F. Hirsch. **Biochemical Technology**, Arindam Bose, Cynthia H. Collins\*, Sadettin Ozturk, Sharon P. Shoemaker. **Biological Chemistry**, Christine S. Chow, Wendy L. Kelly, Aimin Liu\*, Thomas J. Magliery. **Business Development & Management**, Janet L. Bryant. **Carbohydrate Chemistry**, Anthony S. Serianni. **Catalysis Science & Technology**, Anne M. Gaffney, Charles Peden, Israel E. Wachs. **Cellulose and Renewable Materials**, Kevin J. Edgar, Lucian A. Lucia. **Chemical Education**, Cheryl B. Frech\*, Sally B. Mitchell, Richard S. Moog\*. **Chemical Health & Safety**, Samuella B. Sigmann\*, Frankie K. Wood-Black. **Chemical Information**, Charles F. Huber\*, Svetlana Korolev, Bonnie Lawlor. **Chemical Toxicology**, Frederick A. Beland, Penny Beuning. **Chemistry & The Law**, James C. Carver, Alan M. Ehrlich. **Colloid & Surface Chemistry**, Jennifer A. Hollingsworth, John N. Russell, Jr.\*, Maria M. Santore. **Computers in Chemistry**, Luke E.K. Achenie\*, Terry R. Stouch\*, Ralph A. Wheeler. **Energy & Fuels**, Joe D. Allison, Semih Eser, Elise B. Fox, Lisa Houston. **Environmental Chemistry**, V. Dean Adams, Alan W. Elzerman, Jurgen H. Exner, Martha J.M. Wells. **Fluorine Chemistry**, David A. Dixon. **Geochemistry**, James D. Kubicki. **History of Chemistry**, Roger A. Egolf, Mary Virginia Orna. **Industrial & Engineering Chemistry**, Martin A. Abraham, Spiro D. Alexandratos, Mary K. Engelman, Melanie J. Moser. **Inorganic Chemistry**, Debbie C. Crans, Marina A. Petrukhina, Silvia Ronco, Sheila R. Smith\*. **Medicinal Chemistry**, Jane V. Aldrich, William J. Greenlee, Amy S. Ripka. **Organic Chemistry**, Huw M.L. Davies, Robert E. Maleczka, Jr.\*, Cynthia A. Maryanoff, Brian M. Stoltz. **Physical Chemistry**, Teresa L. Head-Gordon, Judy E. Kim\*, Kirk A. Peterson. **Polymer Chemistry**, Frank D. Blum, Mary Ann Meador, Robert B. Moore, John Pochan. **Polymeric Materials: Science & Engineering**, Benny D. Freeman, Julie L.P. Jessop, Theodore Provder\*, Dean C. Webster. **Professional Relations**, R. Daniel Libby. **Rubber**, John M. Long. **Small Chemical Businesses**, Joseph E. Sabol.

**Local Sections:** **Akron**, James E. Duddey, Daryl L. Stein. **Alabama**, Tracy P. Hamilton. **Ames**, Maria Bohorquez\*. **Auburn**, Christian R. Goldsmith. **Baton Rouge**, Bryan K. Franklin. **Binghamton**, Wayne E. Jones, Jr. **Brazosport**, Carolyn Ribes. **California**, G. Bryan Balazs, Mark D. Frishberg, Sheila Kanodia, Alex M. Madonik, Eileen M. Nottoli, Paul F. Vartanian, Xiaoxi Wei\*, Elaine S. Yamaguchi. **California Los Padres**, Payam Minoofar\*\*. **Carolina-Piedmont**, Matthew K. Chan, Daniel Rabinovich. **Central Arizona**,

\*Alternate Councilor

\*\*Temporary Substitute Councilor

Douglas J. Sawyer. *Central New Mexico*, Kristin M. Omberg, Donivan R. Porterfield. *Central New York*, Alyssa C. Thomas. *Central North Carolina*, Robert A. Yokley. *Central Ohio Valley*, Gary D. Anderson. *Central Pennsylvania*, Lori S. Van Der Sluys. *Central Texas*, Debra A. Feakes, Barry J. Streusand. *Central Utah*, Jennifer B. Nielson. *Central Wisconsin*, C. Marvin Lang. *Chattanooga*, Maurice Smith\*\*. *Chemical Society of Washington*, Allison Aldridge, Joseph M. Antonucci, Christopher W. Avery, Regina J. Cody, Richard M. Goodman\*, Monika I. Konaklieva, N. Bhushan Mandava\*, Kim M. Morehouse, Jason E. Schaff. *Chicago*, Charles E. Cannon, David S. Crumrine, Russell W. Johnson, Michael G. Koehler, Fran K. Kravitz, Margaret S. Levenberg, Milt Levenberg, Inessa Miller, Barbara E. Moriarty, Susan M. Shih. *Cincinnati*, Bruce S. Ault, Susan A. Hershberger\*, Richard J. Mullins. *Cleveland*, Dwight W. Chasar. *Coastal Georgia*, Will E. Lynch. *Colorado*, Susan MacGregor Batenhorst, Lawrence J. Berliner, Sandra J. Bonetti, Connie Gabel, Helen B. Gerhard\*, Susan M. Schelble. *Columbus*, Joan M. Esson, Edmund T. King, Virginia H. Songstad. *Connecticut Valley*, Ronald D. Archer, Kevin R. Kittilstved, Julianne M.D. Smist, Frank J. Torre. *Corning*, Roger F. Bartholomew. *Dallas-Fort Worth*, Jason L. McAfee, Denise L. Merkle\*, Linda D. Schultz, E. Thomas Strom. *Dayton*, Steven Trohalaki. *Decatur-Springfield*, Harry J. Elston. *Delaware*, John Gavenonis, Tiffany N. Hoerter, Martha G. Hollomon, Margaret J. Schooler. *Detroit*, Mark A. Benvenuto, James M. Landis, Jr., Anthony F. Sky. *East Central Illinois*, Amy Nicely. *East Tennessee*, Alan A. Hazari, John Z. Larese. *East Texas*, Philip Verhalen\*. *Eastern New York*, Mary K. Carroll, Warren D. Hull, Jr. *Eastern North Carolina*, Satinder Ahuja. *Erie*, Matthew S. Heerboth\*. *Florida*, Béla S. Buslig, George Christou\*. *Georgia*, Lissa Dulany, David S. Gottfried, Mark B. Mitchell\*, Terence E. Say, C. David Sherrill. *Greater Houston*, Carolyn A. Burnley, Lawrence W. Dennis, Amber S. Hinkle, Valerie Moore\*, Mamie W. Moy. *Green Mountain*, Willem R. Leenstra. *Hampton Roads*, Dmitry Liskin\*\*. *Heart O'Texas*, Darrell G. Watson. *Huron Valley*, Ellene T. Contis. *Idaho*, Raymond P. Anderson\*. *Illinois Heartland*, Gregory Ferrence. *Indiana*, Christina Bodurow, Beth Lorsbach, Brian M. Mathes, Robert A. Pribush. *Indiana-Kentucky Border*, Jeffery W. Seyler. *Inland Northwest*, Jeffrey A. Rahn. *Kalamazoo*, Lydia E.M. Hines. *Kanawha Valley*, Madan M. Bhasin. *Kansas City*, Eckhard Hellmuth, Sarah J. Leibowitz\*. *Kentucky Lake*, Charles M. Baldwin. *LaCrosse-Winona*, Claude L. Mertzzenich. *Lake Superior*, Donald K. Harriss. *Lehigh Valley*, Jeanne R. Berk, Lorena Tribe. *Louisiana*, Alvin F. Bopp. *Louisville*, James F. Tatera. *Maine*, Mitchell R.M. Bruce. *Mark Twain*, Dawood Afzal. *Maryland*, Merle I. Eiss, Dana Ferraris, Jan E. Kolakowski, Paul J. Smith, Stephanie Watson. *Michigan State University*, Timothy Shannon\*\*. *Middle Georgia*, Robert J. Hargrove. *Mid-Hudson*, George W. Ruger. *Midland*, Tina M. Leaym, Dale J. LeCaptain. *Milwaukee*, Joseph J. Piatt. *Minnesota*, Marilyn Duerst, Sarah M. Mullins, Danae R. Quirk Dorr, Michael Wentzel\*, Wayne C. Wolsey. *Mobile*, Larry Yet\*. *Mojave Desert*, Peter Zarras. *Mo-Kan-Ok, The Tri-State*, Khamis S. Siam. *Montana*, Janice E. Alexander. *Nashville*, Kara M. Allen\*, Ruth A. Woodall. *Nebraska*, James M. Takacs. *New Haven*, Gerald J. Putterman, Kap-Sun Yeung. *New York*, Ronald P. D'Amelia, Barbara R. Hillery, Neil D. Jespersen, Hiroko I. Karan, Pamela K. Kerrigan, Patricia A. Redden, Jaimelee I. Rizzo, Frank Romano, Justyna Widera. *North Alabama*, Yu Lei\*. *North Carolina*, James L. Chao, Alexandra B. Ormond\*, Melissa A. Pasquinelli, Laura S. Sremaniak, Alan E. Tonelli\*. *North Jersey*, Amy M. Balija, Jeannette E. Brown, Alan B. Cooper, Jacqueline A. Erickson, Stan S. Hall, Elizabeth M. Howson, Diane Krone, Les W. McQuire, Monica R. Sekharan, William H. Suits. *Northeast Georgia*, Maurice E. Snook\*. *Northeast Tennessee*, John Engelman, II. *Northeast Wisconsin*, Martin D. Rudd. *Northeastern*, Michaeline F. Chen, Mukund S. Chorghade\*, Michael P. Filosa, Patrick M. Gordon\*, Morton Z. Hoffman, Leland L. Johnson, Jr.\*, Doris I. Lewis, Robert L. Lichter, Patricia A. Mabrouk, Kenneth C. Mattes\*, S. B. Rajur\*, Andrew Scholte\*, Mary Jane Shultz, Michael Singer, Ruth E. Tanner. *Northeastern Ohio*, Sarah S. Preston. *Northern New York*, Rajesh Sunasee\*. *Northern Oklahoma*, Maziar Sardashti. *Northern West Virginia*, Edwin L. Kugler\*. *Northwest Louisiana*, Ernest W. Blakeney, Jr.\*\*. *Oklahoma*, Allen W. Apblett. *Ole Miss*, Jason E. Ritchie. *Omaha*, Richard Lomneth. *Orange County*, Robert S. Cohen, Sanda P. Sun, Sandra P. Thompson\*. *Oregon*, Richard L. Nafshun. *Orlando*, Darlene K. Slattery. *Ozark*, Eric Bosch. *Panhandle Plains*, Mary E. Graff. *Penn-Ohio Border*, Doris L. Zimmerman. *Pensacola*, Allan M. Ford. *Permian Basin*, Kathryn Louie. *Philadelphia*, Anthony W. Addison, Georgia Arbuckle-Keil, Melissa B. Cichowicz, Deborah H. Cook, Ella L. Davis, Anne S. DeMasi, Rick Ewing, Mark A. Forman, Kathryn Lysko, James K. Murray, Jr., John Tierney. *Pittsburgh*, Michelle Coffman\*, Richard S. Danchik, Robert Mathers, Vincent M. Mautino. *Portland*, Warren T. Ford\*. *Princeton*, Allen N. Jones, Louise M. Lawter. *Puerto Rico*, Néstor M. Carballeira, Jorge L. Colón\*. *Puget Sound*, Gary D. Christian, Craig B. Fryhle, Gregory L. Milligan, Despina Strong, Mark Wicholas. *Purdue*, Suzanne C. Bart. *Red River Valley*, Harmon B. Abrahamson. *Rhode Island*, Peter J. Bonk. *Richland*, Richard A. Hermens. *Rio Grande Valley*, Michael D. Johnson. *Rochester*, D. Richard Cobb, Todd E.

Pagano. **Rock River**, Dennis N. Kevill. **Sabine-Neches**, John A. Whittle. **Sacramento**, John R. Berg. **St. Louis**, Lisa M. Balbes, Lawrence Barton, Donna G. Friedman, Theodore C. Gast. **San Antonio**, Larry C. Grona. **San Diego**, Thomas R. Beattie, Hui Cai, Desiree Grubisha, John G. Palmer, J. Kenneth Poggenburg, Jr., David M. Wallace. **San Gorgonio**, Eileen M. DiMauro, J. Ernest Simpson. **San Joaquin Valley**, Hubert Muchalski\*\*. **Santa Clara Valley**, Bonnie A. Charpentier, George J. Lechner, Sally B. Peters, Peter F. Rusch, Herbert B. Silber, Heidi R. Vollmer-Snarr\*, Ean Warren. **Savannah River**, Christopher J. Bannochie. **Sierra Nevada**, Laina M. Geary. **Sioux Valley**, Jetty L. Duffy-Matzner. **Snake River**, Don L. Warner. **South Carolina**, William H. Breazeale, Jr., Scott R. Goode. **South Florida**, Milagros Delgado, Lisa V. Milenkovic\*, Zaida C. Morales-Martinez. **South Jersey**, Jennifer L. McCulley. **South Texas**, Jingbo Louise Liu\*. **Southeastern Pennsylvania**, Gregory P. Foy. **Southern Arizona**, Brooke B. Massani\*. **Southern California**, Brian B. Brady, Robert de Groot, Thomas R. LeBon\*, Sofia Pappatheodorou\*, Eleanor D. Siebert, Barbara P. Sitzman. **Southern Illinois**, Rachel Morgan Theall. **Southern Nevada**, Kazumasa Lindley. **Southwest Georgia**, Jesse G. Spencer. **Susquehanna Valley**, Dee Ann Casteel. **Tampa Bay**, Marie Bourgeois, Sidney S. White, Jr.\*. **Texas A&M**, David E. Bergbreiter. **Toledo**, Katherine A. Wall\*. **Trenton**, Benny C. Chan, Matthew C. Crowe. **University of Arkansas**, Colin Heyes\*. **University of Missouri**, Justin R. Walensky. **Upper Ohio Valley**, Kevin Pate. **Upper Peninsula**, Martin Thompson\*. **Virginia**, Kristine S. Smetana, Ann M. Sullivan, Linette M. Watkins. **Wabash Valley**, Edward A. Mottel. **Wakarusa Valley**, Joseph A. Heppert. **Washington-Idaho Border**, Richard V. Williams. **Western Carolinas**, Lucy P. Eubanks, George L. Heard. **Western Connecticut**, Linda Farber, L. Kraig Steffen. **Western Maryland**, Peggy S. Biser. **Western Michigan**, Mark A. Thomson. **Wichita**, D. Paul Rillema. **Wichita Falls-Duncan**, Keith R. Vitense. **Wilson Dam**, Michael B. Moeller. **Wisconsin**, Martha L. Casey, Ieva L. Reich. **Wyoming**, Jane V. Thomas.

**Nonvoting Councilors:** Elizabeth P. Beckham, Brian A. Bernstein, Paul A. Bouis, Anna G. Cavinato, Mark C. Cesa, Wendy D. Cornell, Denise L. Creech, Alicia E. Harris, Madeleine Jacobs, Mary M. Kirchhoff, Natalie LaFranzo, Jennifer Maclachlan, Michael B. McGinnis, Anthony M. Noce, Christi Pearson, Barbara F. Polansky, Max B. Saffell, David T. Smorodin, Simanco R. Staley, Frank E. Walworth, Marleen G. Weidner.

The preceding list of attendees at the Council meeting includes the following: 31 Ex- Officio Councilors; 2 Bylaw Councilors; 84 Division Councilors (71 elected, 13 alternate); 320 Local Section Councilors (271 elected, 43 alternate, 6 temporary); and 21 Nonvoting Councilors (staff and others). Approximately 55 observers were in attendance.

### Resolutions

The Council ADOPTED the following resolution presented by the Council Policy Committee (CPC) Vice-Chair Alan M. Ehrlich:

1. BE IT RESOLVED That the Council of the American Chemical Society commemorate the passing of the following Councilors, remembering them with respect and affection, and extending sincerest condolences to their families in their bereavement:

- Dr. Karl S. Vorres, retired from Argonne National Laboratory, Councilor for the Division of Fuel Chemistry from 1990 to 2000.

- Dr. Malcolm H. Chisholm, distinguished university professor and chair of the department of chemistry and biochemistry, Ohio State University, Councilor for the Southern Indiana Section from 1997 to 1999.

- Dr. George H Wahl, Jr., professor emeritus, North Carolina State University, Councilor for the Chemical Health & Safety Division from 1997 to 2005 and 2008 to 2010.

- Dr. Elizabeth M. Derrick, professor emeritus, Valdosta State University, Councilor for the Southwest Georgia Section from 1994 to 2011.

- Dr. Marshall Phillips, research chemist, U.S. Department of Agriculture National Animal Disease Center, Councilor for the Division of Agricultural and Food Chemistry from 1992 to 2009.
- Dr. John G. Verkade, university professor, department of chemistry, Iowa State University, Councilor for the Ames Section from 1974 to 1987 and Ex Officio Councilor (Board Member, District V) from 1987 to 1994.
- Dr. Mordecai D. Treblow, senior scientist, Mead Imaging, Councilor for the Pittsburgh Section from 1984 to 1992 and 1997 to 2002 and Ex Officio Councilor (Board Member, District II) from 1992 to 1995.
- Dr. Christine H. Jaworek-Lopes, associate professor of chemistry, Emmanuel College, Councilor for the Northeastern Section from 2006 to 2008 and 2015 to 2016.
- Dr. Kimberly O. Pacheco, professor, department of chemistry and biochemistry, University of Northern Colorado, Councilor for the Colorado Section from 2003 to 2011.

Councilors observed a moment of silence following the presentation of the preceding resolution.

#### Approval of Minutes

2. VOTED to approve, as amended, the minutes of the meeting of March 16, 2016.

#### Election of Members to Elected Committees

**D. Richard Cobb**, chair, Committee on Nominations and Elections (N&E), introduced the candidates for election to the CPC and N&E:

3. In accordance with the provisions of Bylaw III, Sec. 3, a, (3), the Committee on Nominations and Elections presented the following nominees for election to membership on the Council Policy Committee (CPC) beginning in 2017: Harmon B. Abrahamson, Karl S. Booksh, Dwight W. Chaser, Ella L. Davis, Lissa A. Dulany, Gregory M. Ferrence, John W. Finley, Doris L. Lewis, Kim M. Morehouse, Barbara E. Moriarty, Sally B. Peters, Martin D. Rudd, Julianne M. D. Smist, and Andrea B. Twiss-Brooks. By electronic ballot, the Council ELECTED Harmon B. Abrahamson, Lissa A. Dulany, Andrea B. Twiss-Brooks, and Sally B. Peters for a 2017-2019 term, Martin D. Rudd for a 2017-2018 term, and Karl S. Booksh and Ella L. Davis for a one-year term, 2017.

4. In accordance with the provisions of Bylaw III, Sec. 3, b, (3), CPC presented the following nominees for election to membership on N&E beginning in 2017: Anthony W. Addison, Spiro D. Alexandratos, Lisa M. Balbes, Alan M. Ehrlich, Stan S. Hall, Alan A. Hazari, Amber S. Hinkle, Neil D. Jespersen, James M. Landis, Jr., Thomas H. Lane, Will E. Lynch, and V. Michael Mautino. By electronic ballot, the Council ELECTED Lisa M. Balbes, Thomas H. Lane, Amber S. Hinkle, Alan M. Ehrlich, and Alan A. Hazari for a 2017-2019 term and Neil D. Jespersen for a one-year term, 2017.

**Les W. McQuire**, vice-chair, N&E, introduced the candidates for election to the Committee on Committees (ConC):

5. In accordance with the provisions of Bylaw III, Sec. 3, c, (3), N&E presented the following nominees for election to membership on ConC beginning in 2017: Gary D. Anderson, Sandra B. Bonetti, Dee Ann Casteel, D. Richard Cobb, Jacqueline A. Erickson, Emilio X. Esposito, Robert J. Hargrove, Martha G. Hollomon, Wayne E. Jones, Jr., and Stephanie J. Watson. By electronic ballot, the Council ELECTED Wayne E. Jones, Jr., D. Richard Cobb, Stephanie J. Watson, Dee Ann Casteel, and Emilio X. Esposito for a 2017-2019 term.

#### Reports of Society Officers

**President Donna J. Nelson** updated Council on several activities at this national meeting in Philadelphia. There were 10 presidential symposia at this meeting, each organized in response to the concerns of

various ACS member communities. Five programs celebrated agreements signed between ACS and other scientific societies – the Chinese Chemical Society, National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE), the Mexican Chemical Society, the Chinese American Chemical Society, and the Atlantic Basin Conference on Chemistry.

Dr. Nelson also reported that in conjunction with the “Diversity - Quantification - Success” symposium held last March in San Diego, a video of Dr. Vaneica Young was created. Dr. Young is the first and currently the only female Black professor to have risen through faculty ranks and retired from a chemistry department of a top research university in the U. S. The theme of the San Diego meeting was “Computers in Chemistry.” Dr. Young and her computer scientist sister were filmed together because they were very close and influenced each other’s lives and careers significantly. Capturing histories of such role models who are the first to achieve such milestones helps to build minority communities in science.

Dr. Nelson concluded her report by providing background information on the special discussion item on the agenda later for this meeting. She stated that Council will hear some results selected as the most important from topics such as supply and demand, career opportunities for undergraduate professionals, preparing graduates for industry, unemployment challenges, and global factors. Councilors will be able to suggest additional points which merit attention.

**President-Elect Allison A. Campbell** provided an update on her presidential symposia and initiatives for 2017. For the spring national meeting next April in San Francisco, she has organized two symposia, “Science for a Sustainable Energy Future” and “Holy Grails in Chemistry - Celebrating the 50th Anniversary of *Accounts of Chemical Research*.” There will be two symposia at the fall meeting in Washington, D.C. - “The Chemistry of Our Planet” and “Building a Safety Culture across the Chemical Enterprise.”

Dr. Campbell has grouped her initiatives around science advocacy and literacy. She has established a working group to plan approaches to educate congressional stakeholders and advocate for the importance of chemistry. The group is partnering with the Committee on Public Affairs & Public Relations and the Office of Public Affairs to ensure alignment of effort and to reach the largest possible audience throughout the initiatives. Additionally, a course on teaching ACS members how to effectively communicate their science to the general public has been developed and will debut within the ACS Career Navigator in September.

As part of her presidential theme, “Chemistry as a Global Enterprise,” Dr. Campbell reported that she continues to work with the Committee on International Activities to further promote collaborations between ACS members and scientists around the globe. A successful workshop in Kuala Lumpur took place earlier this year to develop a Global Chemists’ Code of Ethics.

**Immediate Past President Diane Grob Schmidt** provided an update on several key agreements stemming from her October 2015 meeting with the Cuban Chemical Society. In June, ACS hosted Luis Montero, Dionisio Silva, and Carlos Rodriguez, members of governance from the Cuban Chemical Society, for a high-profile panel discussion at the National Press Club on U.S.-Cuba scientific collaborations. Panelists included Dr. Vaughn Turekian, Science and Technology Advisor to the U.S. Secretary of State, Dr. Luis Echegoyen from the University of Texas-El Paso, and Ms. Kathleen Larmett of the National Council of University Academic Researchers. The Cuban scientists were able to meet with senior leaders from the American Physical Society, Materials Research Society, American Society for Microbiology, American Association for the Advancement of Science, National Science Foundation, the House Science, Space and Technology Committee, and science attachés from dozens of foreign embassies. Another outcome of this great collaboration has been the successful symposium in Philadelphia honoring the legacy of Dr. Ernest Eliel.

Dr. Schmidt also reported that the Kavli Symposium on Chemical Neurotransmissions held at this meeting was a great success. This session, co-organized by Drs. Anne Andrews and Paul Weiss, focused on the grand challenge put forth by the White House through the BRAIN Initiative – a comprehensive effort to accelerate technologies for studying the brain at the overlap between neuroscience, nanoscience, and big data.

Dr. Schmidt concluded her final report to Council as member of the presidential succession by thanking the Council and the Society as a whole, saying that serving the Society has been the most rewarding highlight of her career.

**Board Chair Pat N. Confalone** reported that at this national meeting, the Board of Directors considered a number of key strategic issues and responded with several actions. The Board received and discussed reports from the Task Force on Governance Design, the Committee on Grants and Awards, the Committee on Planning, the Society Committee on Budget and Finance, and the ACS Governing Board for Publishing.

The Board voted to approve the Society's nominees for the 2017 Perkin Medal, the 2017 National Science Board Public Service Award, and the 2017 Alan T. Waterman Award; the revised rescission procedures for the national awards and ACS Fellows designation; the reappointment of editors-in-chief for two ACS journals; the advance member registration fee of \$445 for national meetings held in 2017; and also authorized several program funding requests.

Dr. Confalone shared that the Board is seeking ways to engage ACS stakeholders to identify opportunities and issues for governance improvement that will enable ACS to advance its mission in a streamlined and simplified manner. The Board and CPC are creating a new task force that will look at the Society's future governance needs. Per the Board's discussion, the chair's report to Council provided additional details on a proposed Society-wide initiative to ensure an agile, efficient, and effective ACS. Additionally, the Board is considering proposed changes to certain Board committees' duties and roles.

The Board discussed the history, role, and contributions of its Standing Committee on Corporation Associates and the responsibility of ACS to effectively capture the needs of industrial members and their corporations.

The presidents of Chemical Abstracts Service (CAS) and the ACS Publications Division shared with the Board details on their financial performance and highlighted editorial and new product developments. Executive Director and Chief Executive Officer Thomas M. Connelly, Jr., and his direct reports updated the Board on issues relating to Human Resources, ACS Finances, and Education.

The Board heard reports from members of the presidential succession on their key priorities and activities as they relate to those of the Board and for the purposes of coordinating their ongoing activities on behalf of the Society.

**Executive Director and Chief Executive Officer Thomas M. Connelly, Jr.**, reported on a number of important developments across the Society. He stated that he is committed to reversing the five-year decline in membership; international membership now constitutes 17 percent of our total; the Corporation Associates program is being updated and strengthened; new alliances are being implemented with sister societies in Europe, Mexico, China, and India, and in the U.S. with the National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE) and the Chinese American Chemical Society; the first-ever Atlantic Basin Conference on Chemistry will be held in January 2018; ACS Publications and CAS continue to perform well; chemical laboratory safety is receiving needed emphasis within the Society; and the Society's financial performance remains strong.

**Alan M. Ehrlich**, committee vice-chair, reported that the committee agreed to participate in the joint Board-CPC Task Force on Governance Design, as reported previously by Board Chair Pat N. Confalone. Additionally, the first meeting of the CPC Future Council Representation Working Group was held to address the question: "What would Council look like if we created it from scratch?"

Dr. Ehrlich reported that CPC voted to concur with ConC's proposal to increase the size of the Committee on Ethics from nine to 12 members; supported the Committee on Membership Affairs' Petition To Extend the Unemployed Members' Dues Waiver; continued to sponsor the Petition for Removal of Officers and Councilors, and approved at this meeting the edited procedures document; supported the Petition on the Rights of Affiliates and recommended that N&E develop guidance for units whose bylaws allow voting in their unit elections by affiliates. CPC voted to establish a working group to

formalize procedures for Council handout approvals. CPC approved a request from the Committee on Nomenclature, Terminology, and Symbols to participate in the travel reimbursement program for Non-Councilors.

#### Committee on Committees (ConC)

**Wayne E. Jones, Jr.**, committee chair, reported that performance reviews for the Committees on Analytical Reagents and Chemical Abstracts Service have been completed and are on the Council agenda for action.

6. VOTED to approve the continuation of the Committee on Analytical Reagents; and to approve the continuation of the Committee on Chemical Abstracts Service, subject to confirmation by the Board of Directors.

Dr. Jones also reported that the ConC Subcommittee on Diversity has been conducting a demographic survey of the 29 Council-related committee personnel. On July 26, the survey was officially launched and was sent to 680 committee personnel that included committee chairs, members, associates, and consultants. The committee is currently developing its recommendations for 2017 committee chairs, members, associates, and consultant appointments for consideration by the President-Elect and the Chair of the Board of Directors. ConC will also conduct its annual New Chairs Training Session in Dallas, Texas, January 27-29, 2017, as part of the ACS Leadership Institute.

On behalf of Council, ConC recognized 38 Councilors who will have served the statutory limit or otherwise completed their service on ACS governance committees at the end of 2016; six committee chairs who will have served the statutory limit on the committee they chair; and 32 Councilors observing 15, 20, 25, 30, 35, or 40 years of service as members of the Council.

#### Nominations and Elections (N&E)

**D. Richard Cobb**, committee chair, reported the results of the morning's elections to the Council Elected Committees (see items 3-5).

N&E received positive feedback on the format of the Town Hall Meeting for Directors-at-Large, which was held Sunday.

Ballots for the 2016 fall national election will be mailed on September 28, with a voting deadline four weeks later by October 28. Members will have the option to vote electronically or by paper ballot. Mr. Cobb then announced the names of candidates for President-Elect (2017), Directors-at-Large (2017-19), District II Director (2017-19), and District IV Director (2017-19).

The committee developed slates of potential nominees for President-Elect for 2018 and Directors of Districts III and VI for 2018-2020, as well as a slate of potential candidates for Director-at-Large for 2018-2020.

N&E received reports from its subcommittees and the Vote 2020 Task Force. The Vote 2020 Task Force is part of a multiyear, multiphase effort to take a holistic look at the entire ACS national election process and to seek input and study new concepts in which to run ACS elections by the year 2020.

#### Reports of Society Committees and the Committee on Science

##### Budget and Finance (B&F)

**Kristen M. Omberg**, committee chair, reported that B&F reviewed the Society's 2016 probable year-end financial projection, which expects a Net Contribution from Operations of \$17.3 million, or \$3.9 million more than the Approved Budget. Total revenues are projected to be \$528.8 million, essentially on budget, and 3.3 percent more than the prior year. Total expenses are projected at \$511.5 million, which is favorable to the Approved Budget, and 3.3 percent more than 2015.

The committee considered several program funding requests for 2017, and on its recommendations, the Board subsequently approved funding for the Atlantic Basin Conference on Chemistry, the ChemIDP Program, and the International Student Chapter Program.

#### Education (SOCED)

**Diane Krone**, committee chair, reported that the committee received an update from government affairs staff in the Office of Public Affairs on federal science education policy and voted to continue the current Science Education Policy Statement.

The committee was informed of recent activities related to the American Association of Chemistry Teachers (AACT). More than 3,900 individuals, 88 percent of whom are K-12 teachers, are now AACT members. This represents a 20 percent increase in membership since spring.

SOCED discussed the process of Society Program Portfolio Management (SPPM) and passed a resolution that recognizes the value of regular review along with its concern that reporting requirements may be diverting staff time from education programs. SOCED recommends a careful review of the time needed for the SPPM process.

#### Science (ComSci)

**Mark C. Cesa**, committee chair, reported that ComSci recently completed a series of three forums on the emerging field of advanced materials, focused on energy, computation, and cross-sector partnerships, and featuring experts from academia, industry, and government. The committee is developing a document that would include key principles and success stories of strategic, chemistry-related university-industry collaborations. ComSci voted to recommend Board approval of a policy statement on forensics that updates the original statement from 2013 and to recommend Board approval of a revised policy statement on chemical regulation. The committee submitted an ACS Board-approved nomination for the 2016 Presidential National Medal of Science and has begun work on new nominations for both the 2017 National Medal of Science and the Dreyfus Award.

#### Special Discussion

The Council conducted a special discussion to gather input on proposed recommendations from the ACS Presidential Task Force on the U.S. Employment of Chemists. In her introductory remarks, Dr. Nelson stated that the task force has been examining and considering all known influences that can impact employment in the chemical sciences. In preparation for the report's expected release later this year, Councilors were invited to share their thoughts and comments on the proposed suggestions to date as shown on the screens. Nearly 30 Councilors offered comments or made suggestions. Dr. Nelson concluded the discussion by thanking the Council and said a summary would be sent to the task force.

#### Reports of Standing Committees

##### Meetings and Expositions (M&E)

**John Pochan**, chair, reported that M&E accepted more than 9,000 papers for the Philadelphia meeting. As of the Council meeting, total attendance for the meeting was 12,800. The Exposition had 432 booths with 300 exhibiting companies. As part of M&E's comprehensive sustainability plan, print copies of the program book for Philadelphia were significantly reduced and a limited number were available for sale. Statistics show that 1,248 program books were sold. The mobile application has received 4,891 downloads, and the online program has received 2,543 downloads.

##### Divisional Activities (DAC)

**Rodney M. Bennett**, committee chair, reported that the committee is pursuing three primary goals over the coming years: enhancing communication with divisions; developing better ways for divisions to communicate with one another; increasing the percentage of ACS members who belong to at least one division to 66 percent by 2020 (from 36 percent at year-end 2015); and enhancing collaboration and networking among divisions.



Mr. Bennett also reported that at the spring 2017 national meeting, DAC will present to Council for its approval an updated formula for allocating dues funds to the divisions; DAC has received proposals seeking the establishment of two new probationary divisions: the Division of Space Chemistry and the Division of Materials Chemistry; and the committee voted to fund 11 Innovative Project Grants (IPG) totaling nearly \$69,000.

#### Local Section Activities (LSAC)

**Martin D. Rudd**, committee chair, announced that LSAC presented the 2015 Awards for Outstanding Performance for Local Sections to six sections at the 18th Annual ChemLuminary Awards celebration.

LSAC will award 19 Innovative Project Grants (IPG) this year, totaling \$30,300. This brings the total for 2016 to \$69,230. A total of \$15,600 was awarded to eight local sections hosting Leadership Development courses.

The committee received two petitions from local sections wishing to annex unassigned and adjacent territory.

7. VOTED to approve a petition from the Permian Basin Local Section to annex the Texas counties of Pecos and Brewster.

8. VOTED to approve a petition from the Upper Peninsula Local Section to annex the unassigned Michigan counties of Alger, Delta, Dickenson, Schoolcraft, Luce, Mackinac, and Chippewa, and Menominee County that is currently assigned to the Northwest Wisconsin Local Section.

#### Membership Affairs (MAC)

**James M. Landis**, committee chair, reported that as of June 30, the ACS membership was just over 155,000, and the number of international members has increased to more than 26,000. The Society's overall retention rate is 84 percent. MAC discussed ways to serve technicians, high school and two-year college students, and faculty. MAC also discussed potential joint ACS and AACT memberships and requested staff to provide recommendations at the spring national meeting.

MAC reviewed the Petition for Removal of Officers and Councilors and cannot make a recommendation because of a lack of consensus. MAC also reviewed the Petition on the Rights of Affiliates and unanimously supported it.

MAC has considered the Petition to Extend the Unemployed Members' Dues Waiver, which is up for action at this meeting. The committee supports the petitioners' intent to extend the unemployed members' dues waiver from two years to three years. MAC supports the alternate version of the petition as presented.

9. VOTED to approve a petition to amend the ACS Bylaws to extend the Unemployed Members' Dues Waiver, which will extend waivers for unemployed members' dues from the current two years to three years, subject to confirmation by the Board of Directors.

#### Economic and Professional Affairs (CEPA)

**William (Rick) Ewing**, committee chair, reported that data from the 2016 ACS Comprehensive Salary and Employment Survey show a drop in the ACS chemist unemployment rate to 2.6 percent. This represents the lowest unemployment rate since before the 2008 recession and shows parity with the U.S. college graduate unemployment rate, which also stands at 2.6 percent for 2016. For the first time, the largest employment segment for ACS members in the workforce is academia with that group passing manufacturing industry in the 2016 survey. The other workforce categories remained essentially unchanged.

Dr. Ewing then drew Council's attention to the *Chemical Professional's Code of Conduct*, which was presented to Council for consideration last spring. He stated that CEPA is aware of ongoing initiatives

around both safety and a global code of ethics and is monitoring their progress to ensure that the subsequent edition of the *Chemical Professional's Code of Conduct* takes these items into account as they are completed. CEPA's current revisions to the document are important to enact now to ensure continued relevancy of the document: specifically, the inclusion of temporary workers and the addition of safety to the first paragraph, which are both absent from the current version.

10. VOTED to approve the *Chemical Professional's Code of Conduct*, subject to confirmation by the Board of Directors.

#### Constitution and Bylaws (C&B)

**James C. Carver**, committee chair, reported that C&B has certified bylaws for nine local sections and one division since the beginning of this year. Since the spring meeting in San Diego, C&B has responded to eight local sections with bylaw reviews and expedited bylaws.

Mr. Carver then called Council's attention to two action items from the committee: Charter Bylaws for Divisions in Probationary Status and Charter Bylaws for New Local Sections, which provide a framework for the operation of new divisions and local sections. In addition to housekeeping changes, changes to the Society's Bylaws necessitated modifications to the charter bylaws, which were last approved by Council in 2009.

11. VOTED to approve the Charter Bylaws for Divisions in Probationary Status.

12. VOTED to approve the Charter Bylaws for New Local Sections.

New petitions to amend the Constitution or Bylaws must be received by the Executive Director no later than December 14 to be included in the Council agenda for consideration at the spring 2017 meeting in San Francisco.

#### Reports of Other and Joint Board-Council Committees

##### Younger Chemists (YCC)

**Natalie LaFranzo**, chair, reported that at this meeting that YCC focused its efforts on ensuring sustainable collaborative programming to provide valuable learning opportunities for its constituency and planned its strategy for increasing younger member involvement in the ACS national election. "Catalyze the Vote" will feature a Live Virtual Town Hall where younger members are able to ask questions of the candidates for ACS President-Elect in an interactive forum.

##### Women Chemists (WCC)

**Amber Charlebois**, chair, stated that the committee will observe its 90th anniversary in 2017 and will be revising its strategic plan. In 2016, WCC invested much of its energy in both promoting and recognizing the professional accomplishments of women in the Society.

WCC is partnering with the ACS Board Standing Committee on Grants and Awards and the Diversity and Inclusion Advisory Board to increase the number and quality of nominations for ACS National Awards from underrepresented groups. ACS National Awards nominees were 17 percent female in 2017, compared with 14 percent female in 2016. ACS membership is 29 percent female. Dr. Charlebois reminded Councilors that every local section, division, and Councilor needs to be part of the solution.

##### Senior Chemists (SCC)

**Thomas R. Beattie**, chair, highlighted some of the committee's recent programming activities as SCC strives to provide senior ACS members with challenging and enjoyable professional experiences that enable them to contribute to their communities. SCC received a demonstration of the Senior Chemists Group on the ACS Network, which was updated to encourage networking among senior chemists. Plans are under way for a symposium focused on stories of early industrial chemistry to be held at the 2017 national meeting in San Francisco, organized in partnership with YCC and the Division of the History of

Chemistry. The SCC mini-grant program was extended in 2016 to increase the number of local section senior chemist committees over the next three years.

#### Public Relations and Communications (CPRC)

**Jennifer L. Maclachlan**, chair, shared several important take-home messages from its cosponsored symposium, “Chemists & the Public: What Research Shows about Engagement & Communication”: ACS members and scientists in other fields show a lot of engagement with the public, but chemists are somewhat less likely than others to engage; scientists, including chemists, want to engage, but they also want to feel that they have the skills to be effective; university chemists are more willing to engage than those in industry; and scientists feel they do a so-so job at engagement, but they think outreach can make a difference. CPRC will be studying these and other reports with the goal of developing training and tools that will help ACS members and entities be effective communicators with a variety of public audiences.

#### Project SEED (SEED)

**Anna G. Cavinato**, chair, announced another successful SEED program in 2016 with the participation of 421 high school students. These students are currently placed in over 120 laboratories across the nation under the supervision of over 400 volunteer scientists and coordinators.

A task force has been formed to organize events to mark the 50th anniversary of Project SEED in 2018. The committee has set an ambitious goal to expand the program to all 50 states.

#### Minority Affairs (CMA)

**Madeleine Jacobs**, chair, reported that the committee sponsored or cosponsored a record five symposia and a luncheon at this meeting. This robust co-programming is aimed at diversifying speakers at national meeting symposia through several efforts: encouraging divisions to include language on their websites that encourages speakers from underrepresented groups to submit papers; requesting symposia organizers to proactively reach out to underrepresented minorities to invite their participation in technical programming at national meetings; and creating a directory on its website that can be used as a resource to create more diverse conference and symposium speakers lists. Ms. Jacobs also reported that to date a total of 2,840 students have taken part in the ACS Scholars Program, and 264 of these Scholars have received their Ph.Ds. in the chemical sciences and engineering. CMA continues to collaborate with the ACS Development Office to work toward building an endowment for the program.

#### International Activities (IAC)

**Ellene T. Contis**, chair, reported that at this meeting IAC was host to dignitaries from international sister societies and partners, and was involved in several professional, scientific, and global networking events, many organized as ACS presidential activities. These events and associated meetings helped to formulate a pathway forward for ACS to be more welcoming of chemists, chemical engineers, and chemistry educators with international interests and for connecting ACS members with the global practice of chemistry.

On behalf of the committee, Dr. Contis sought Council approval for the establishment of ACS International Chemical Sciences Chapters in China National Capital Area (JingJinJi), Iraq, and South Western China. The applications meet all requirements of Bylaw IX.

13. VOTED to approve the establishment of the Greater Beijing International Chemical Sciences Chapter, subject to confirmation by the Board of Directors.

14. VOTED to approve the establishment of the Southwestern China International Chemical Sciences Chapter, subject to confirmation by the Board of Directors.

15. VOTED to approve the establishment of the Iraq International Chemical Sciences Chapter, subject to confirmation by the Board of Directors.

### Ethics (ETHX)

**Keith R. Vitense**, chair, reported that the committee discussed several ways to take advantage of social media to help disseminate information regarding the activities of the committee and the challenges that would arise; reviewed a document tentatively titled “Research Ethics Information Profile for Authorship”; supported a request to provide a letter of support to an NSF grant application for the development of a research ethics checklist; and voted unanimously to develop an award for presentation at the ChemLuminary ceremony to recognize outstanding ethics-related programming by a local section.

### Environmental Improvement (CEI)

**Anthony M. Noce**, chair, announced that the committee has been reorganized to build a structure around its strategic plan and that CEI continues to focus its attention on increasing ACS leadership related to sustainability in the chemistry enterprise, and establishing partnerships with a wide array of ACS units. All divisions, committees, and units of the Society that are interested in projects focused on sustainability or public policy are encouraged to reach out to CEI to establish future partnerships.

CEI awarded Local Section Sustainability Grants this year to the Eastern New York, Northeastern, Houston, and Lehigh Valley local sections to deliver programming on sustainability and sustainable chemistry; and awarded ChemLuminary Awards for Sustainability to the Midland and Dallas-Fort Worth local sections.

During this meeting, CEI cosponsored three days worth of programming highlighted by the session, “The Debate: What Role Should We Play in the Biotechnology Era?”, which was designed to explore whether or not ACS should develop a policy statement in this area and, if so, what it might say.

### Community Activities (CCA)

**Michael B. McGinnis**, chair, reported on three major actions taken at this meeting. The committee voted to rebrand Chemists Celebrate Earth Day (CCED) to be a weeklong Chemists Celebrate Earth Week, starting in 2018. The committee also approved the theme for Chemists Celebrate Earth Week 2018 as “Dive into Marine Chemistry.” Finally, the committee approved a new ChemLuminary Award, “Outstanding Public Outreach Event by a Student Group,” to recognize a local section that coordinates and conducts a public outreach event (not associated with NCW or CCED), in which students from a high school, community college, and/or university played a major role.

### Chemical Safety (CCS)

**Elizabeth M. Howson**, chair, highlighted recent efforts taken by the committee to strengthen the culture of safety in educational institutions: collaborating with other prominent organizations; numerous publications and safety alerts; the establishment of the Task Force for Safety Education Guidelines; and the launch of a website, *Hazard Assessment in Research Laboratories*. The website is based on *Identifying and Evaluating Hazards in Research Laboratories*, a guide created by the CCS in response to a recommendation by the U.S. Chemical Safety Board.

### Chemical Abstracts Service (CCAS)

**Wendy D. Cornell**, chair, announced that CCAS is organizing a strategic planning retreat to be held early next year and invited Councilors and other members to help formulate a strategic plan to guide the committee in its partnership with CAS. The current CAS leadership has been in place for three years, making this an ideal time for the committee to explore new opportunities and priorities.

### Analytical Reagents (CAR)

**Paul A. Bouis**, chair, announced that the 11th edition of *Reagent Chemicals* became official in June of this year. The specifications found in *Reagent Chemicals* are the global standards for the quality of

chemicals used in analytical testing. The committee is responsible for developing and publishing these standards; its current challenge is to stay relevant in an increasingly digital world with a product whose major success has been in print form. An electronic version is tentatively scheduled for release in early 2017.

## New Business

### Resolution

The Council adopted the following resolutions:

16. BE IT RESOLVED That the Council of the American Chemical Society express to the officers and members of the Philadelphia Local Section, host section for the 252nd National Meeting, the sincere appreciation of the Council and of the entire Society for the cordial hospitality extended to all registrants at this meeting, and that the Council convey special thanks to the divisional program chairs and symposium organizers responsible for the outstanding technical sessions, as well as to headquarters staff, for the planning and execution that have ensured the success of the 252nd National Meeting.

17. BE IT RESOLVED That the Council of the American Chemical Society expresses to Donna J. Nelson, President of the Society in 2016, and second president in history from Oklahoma, its sincere appreciation for her service as its presiding officer and for her 41 years of service to the Society. The Council is thankful for her efforts to address the employment concerns of ACS members through a Presidential Task Force and symposia, and for her desire to foster international collaborations. The Council also urges continued support for her challenge to all members to strengthen the public perception of scientists; to promote diversity and inclusion throughout the chemical enterprise and STEM fields; and to partner with international scientific societies to promote stronger ties across borders. The Council thanks Dr. Nelson for her efforts to involve members in helping to make sure that the chemistry in TV series like "Breaking Bad" is good chemistry. The Council extends to President Nelson and her son Christopher its best wishes for their future endeavors and for her continuing professional and personal achievements.

Following the resolution, a comment was received from a Councilor urging the Board and the appropriate committees to examine carefully the appropriateness of congressional oversight of federally funded research; that scientists should not be subjected to fraud investigation or harassment simply for providing scientific results that some may see as controversial.

There being no further business, the meeting adjourned at 12:13 p.m.

Flint H. Lewis  
Secretary