Despite a very challenging year, 2011 was a year of great achievement for the American Chemical Society. On behalf of the ACS staff, I am pleased to present this summary of some of the highlights from the year, submitted by the ACS operating units that report to me and organized around the Society’s 2011 five strategic goals. These selected accomplishments were achieved through a robust partnership of ACS members, governance, and staff, often in partnership with other organizations. Although these are only selected accomplishments, the list is long. It does not include many of the activities carried out by ACS Technical Divisions and ACS Local Sections—or the many individual activities that our members undertake. ACS carries out so many activities that we often forget the incredible diversity of the ways in which we serve our members and the broader scientific enterprise worldwide.

During the year, the ACS Board of Directors led the development of a new strategic plan for ACS. This was an inclusive process that involved the ACS Board Committee on Planning; members; ACS Local Sections, Technical Divisions, and Committees; and staff. This was a “zero-based” plan that began with an environmental scan and input from all of the groups mentioned above. The result is the *ACS Strategic Plan for 2012 and Beyond*, approved by the ACS Board of Directors at its December 2011 meeting. The plan has four strategic goals and is posted at [http://www.acs.org/strategicplan](http://www.acs.org/strategicplan).

For information on the financial performance of ACS in 2011, go to [www.acs.org](http://www.acs.org), click on “About Us” and scroll down to click the link “ACS Financial Information.”

**GOAL 1— Provide Indispensable Information – ACS will be the indispensable professional and information resource for members and other chemistry-related practitioners.**

**CHEMICAL ABSTRACTS SERVICE (CAS)**

- **CAS Editorial Operations built databases at a record rate.**
  - CAS indexed publications at an all-time record amount of more than 1.33 million (2010: 1,256,610). This is a growth rate of 5.8%.
  - Reactions were collected at an all-time record level of more than 8.6 million (2010: 7,898,617). This is a growth rate of 9.6%.
  - Reaction procedures grew in SciFinder® to more than 3 million, an increase of greater than 65% in 2011, with thorough coverage from 2000 to the present for all ACS journal titles and English language patents from the five major patent offices.
  - Chinese language patents indexed increased more than 10% year-on-year from 2010 (101,600) to 2011 (more than 112,200).
• CAS Registry℠ new registrations grew by more than 9.3 million. At the end of the year, the CAS Registry contained nearly 65 million small molecules.

• CAS IT doubled its search capacity, enabling academic “unlimited use” agreements. In less than one year of intensive work, CAS IT overhauled the search engine complex, optimized many processes, added capital equipment, and more than doubled the search capacity for SciFinder users.

• New STN Alpha is released. The first milestone in the multi-year launch of the next generation STN® was reached as an alpha version was delivered to advisory council members around the world. This version contains the core of features and databases that will be developed into the first general release module in 2012. New STN has been developed in close collaboration with information professionals from Europe, North America, and Japan, and in partnership with STN co-host FizKarlsruhe of Germany.

• Multiple releases of SciFinder strengthened its market position. Three releases, including one in late December, brought a range of new features to SciFinder, including SciPlanner, BioActivity/Target Indicators, Substance Relevancy, and additional Reaction narratives. Through collaboration with ACS Publications, new graphics have been added to the table of contents for ACS Journal articles. One release in mid-year was dedicated to improving speed and overall performance with a 30% increase in speed for key tasks measured on average at global checkpoints.

• New program offers complimentary SciFinder to unemployed chemists. CAS initiated a program to offer continued access to SciFinder for chemists laid off from existing customer organizations. Access is continued to help chemists stay up-to-date in their field and to support them in job searches. The program was rolled out through the CAS website and communicated by sales representatives around the world.

ACS PUBLICATIONS DIVISION

• Manuscript submissions, publishing output, usage growth, and discoverability grew. In 2011, ACS Editors-in-Chief handled nearly 100,000 manuscript submissions through the editorial peer review process and ACS Publications published more than 36,000 accepted articles during the calendar year. In 2011, the global scientific community accessed and downloaded a record 77 million COUNTER-compliant full-text downloads from the ACS Publications Web Editions platform. This represents 8% growth over 2010. 27 ACS journals set all-time full text usage records in 2011. In addition, full-text requests for ACS Legacy Archives were up by 10%, and ACS Symposium peer-reviewed and SciFinder indexed eBooks up by 15% over prior year. Across the ACS portfolio, ACS journals retained or advanced their leadership positions against competing publications, as measured by their ranking by Thomson Reuters ISI Impact Factor or Total Citations in the scientific literature.
• **New ACS Pavilion debuts at the ACS National Meetings; exhibits elsewhere abound.**
ACS Publications led a cross-divisional initiative to improve ACS branding and impact at the ACS National Meetings, leading to a combined 5,000-square-foot ACS Pavilion, featuring 11 separate ACS operating units, including ACS Publications, Chemical Abstracts Service, and Membership & Scientific Advancement. In total, ACS Publications exhibited at 55 scientific and library conferences in 2011. Many of these shows featured a live ACS Publications booth survey or interactive “ACS iPad Challenge”, resulting in a more dynamic presence on-site and more productive exchanges with meeting attendees.

• **“Why I” branding and advertising campaigns and “Publishing Your Research 101” video series debut.**
ACS Publications kicked off a new “Why I” branding and advertising campaign at the ACS Fall National Meeting in Denver with a compelling video featuring endorsements from faculty, researchers, and students within the scientific community. The videos were shown throughout the exhibit hall and at the ACS Pavilion. Print and web advertisements were featured in *Science*, *Nature*, RSC’s *ChemWorld UK*, the *ACS Publications Web Editions* site, and *C&EN* throughout the fall, with an estimated 1.5 million impressions. The “Why I” campaign is focused on using real customer testimonials and images to help engage the community and echo the voices of actual researchers reinforcing ACS Publications’ leadership position. Additional advertising appeared in *Against the Grain*, *Chronicle of Higher Education*, *Library Journal*, and *Info Outlook* targeting library customers and information service professionals.

ACS Publications launched a new educational, web-based video series designed to support researchers with the process of writing, reviewing, submitting, and editing original scholarly research for publication in peer-reviewed articles. Episodes released in 2011 include: *How to Write a Paper to Communicate Your Research*, with Dr. George Whitesides (Harvard); *Writing your Cover Letter*, with Dr. Paula Hammond (MIT & Assoc. Editor *ACS Nano*), Dr. Tim Lodge (Univ. Minnesota & Editor-in-Chief, *Macromolecules*), and colleagues; *Selecting Peers to Suggest to Reviewers*, with Dr. Richard Eisenberg (University of Rochester & Editor-in-Chief, *Inorganic Chemistry*), and others; and *Submitting your Manuscript using the ACS Paragon Plus Environment*, with Dr. Sarah Tegen (Director Editorial Operations, ACS Publications).

• **New journals are launched.**
ACS Publications innovated with the development and publication of five new journals, including the successful publication of two new titles, *ACS Catalysis* and *ACS Medicinal Chemistry Letters*, and an early editorial and marketing launch of both *ACS Macro Letters* and *ACS Synthetic Biology* prior to their formal publishing launch in 2012.

• **New ways to “right size” collections for libraries are introduced.**
To offer ACS’s customers a range of more flexible options that allow libraries to “right-size” their collections, ACS introduced a number of new subscription assortments and pricing plans. These included *ACS Lab Packs*— an industry specific blend of journals and eBooks aimed at smaller R&D operations in the corporate world— and the *ACS Academic Core+*
pack, a subset of ACS journals that allow smaller non-research intensive academic institutions to easily meet the ACS Guidelines for Undergraduate Certification.

- **New editors-in-chief are added to the ranks of ACS journals.**
  Leading scientists were selected by Editor Search Committees that were convened in accordance of the ACS bylaws and appointed by the ACS Board of Directors. The new editors-in-chief are Jonathan Sweedler, James R. Eiszner Family Professor of Chemistry, University of Illinois Urbana Champaign, and Director, Carver Biotechnology Center and Neuroproteomics Center on Cell-Cell Signaling (*Analytical Chemistry*); and Chris Voigt, Associate Professor of Bioengineering and Co-director of the Synthetic Biology Institute at Massachusetts Institute of Technology (*ACS Synthetic Biology*). In addition, Professor Gunda Georg, University of Minnesota, and Professor Shaomeng Wang, University of Michigan, assumed their roles as Co-Editors-in-Chief of the *Journal of Medicinal Chemistry*.

- **Journals complete automated composition.**
  The Journal Composition Automation effort provided significant cost savings to the Publications Division. It automated much of the composition work done historically by vendors and helped speed articles through the production process. Conceptually, there are two main parts to the technology: the composition component that lays the article out according to very sophisticated rules and a second component that inspects the results and “grades” the work. If the “work” passes this test, no human intervention is required. If it does not pass the test, the article is sent to someone to inspect. Even in these cases, the amount of work required to be done to the article is much less than before this automated composition was applied to the article. This work was a joint project between the ACS Publications Division and Washington Operations Information Technology.

- **Mobile publishing innovations are expanded.**
  In 2011, ACS extended its mobile program to the Android environment. Like the Apple iOS version, ACS Mobile for Android provides mobile telephone and tablet users with an up-to-the-minute live stream of peer-reviewed researched published in ACS journals and is augmented with latest news from C&EN. In August 2011, a free dedicated C&EN Mobile app was introduced for iPhones, iPads, and Android mobile devices. The app makes *C&EN* Online Latest News, the CENtral Science network of blogs, and online job postings available to anyone and makes individual issues of C&EN available to nonmembers for $2.99 per issue. In October, subscription access to C&EN content via C&EN Mobile was established as a new, free ACS member benefit; members can access all new C&EN issues on their smartphone or tablet at no charge.

- **C&EN publishing automation is completed and social media take off.**
  Completion of the first phase of the C&EN Publishing Automation Program represents the completion of a multi-year program to create a digital, end-to-end workflow for C&EN; put *C&EN Online* on a state-of-the-art content management and delivery platform; and make C&EN mobile-compliant. This work was accomplished by C&EN working with the Washington Operations Information Technology staff. In June 2011, C&EN implemented a workflow system that renders all C&EN content in high-quality XML (extensible markup language). And on October 31, 2011, a completely redesigned *C&EN Online* launched on a
new content management and delivery system. Implementation of this automation positions C&EN to continue its evolution as the newsmagazine of the ACS for years to come and enables the magazine to make its content available to ACS members and other interested individuals in the format(s) of their choice—print, web, and mobile.

The C&EN Journal News & Community (JNC) unit introduced the Biological SCENE and the Materials SCENE as two new syndication channels to provide content—both relevant material from C&EN and original news features on papers in ACS journals—to 22 journals. Taken in conjunction with the Environmental SCENE, the Analytical SCENE, and JACS Research in C&EN (all of which were established in 2010), JNC is now providing syndicated material to 28 ACS journal homepages. C&EN’s blog network hosted its first blog carnival—a periodic collection of blog posts written loosely around a single theme that are then aggregated at the host blog—in September. Based on the theme, “Your Favorite Chemical Reaction,” the carnival garnered more than 20 entries and brought to our attention some new chemistry blogs we weren’t aware of before. C&EN’s Twitter followers and Facebook “likers” along with its YouTube videos grew extensively this year.

- **ACS publications helped to advance the International Year of Chemistry (IYC) 2011.** ACS Publications teamed with the Office of Public Affairs, the Education Division, and the Web Strategy and Operations group to publish the *ACS International Year of Chemistry Virtual Journal*. The journal was hosted on the Society’s IYC 365 site and highlighted health, environment, energy, and materials research from a number of ACS Publications’ products, including *Environmental Science & Technology*, *C&EN*, *Energy & Fuels*, and *Molecular Pharmaceutics*. The journal published 12 issues in 2011 and received approximately 10,000 downloads.

Editorially, C&EN made three significant contributions to the celebration of the International Year of Chemistry. The first was a special issue in the June 27, 2011, edition devoted to, “Celebrating IYC 2011.” It contained five essays by prominent scientists on ways chemistry contributes to the well-being of humanity; a biographical profile of Marie Curie, who received her Nobel Prize in Chemistry in 1911; a comment on IYC by ACS President Nancy Jackson; and an editorial on the celebration by Editor-in-Chief Rudy Baum. The second was a series of 12 “IYC Profiles” of ACS members native to foreign countries where there are very few ACS members. The chemists profiled work in Cuba, Fiji, Lebanon, Burkina Faso, Moldova, Azerbaijan, Vietnam, Ghana, Mauritius, Bosnia, Mongolia, and Honduras. Finally, CENtral Science introduced an IYC 2011 blog to chronicle events associated with the celebration throughout the year.

- **Collaboration with CAS continues.** ACS Publications continued to work closely with CAS to experiment with a number of features that utilize and expose CAS SciFinder tools within the ACS Web Editions platform, and vice-versa. In 2011, this collaboration included:
  - **Patent Limiter:** This is a tool that enables readers to use search terms to launch a SciFinder patent-only search within any of the journal or eBook articles on the ACS Web Editions site.
• **CAS Section Subject Index:** The ACS Web Editions site now allows users to search, browse, and discover content using CAS industry-standard subject taxonomy.

• **ACS Reference Quick view:** Authenticated users may quickly access multiple publisher article abstracts and metadata for references found in ACS journal articles without leaving the ACS Web Editions platform.

• **CAS SciFinder:** There is now a display of graphical abstract and table of contents elements from ACS journals within CAS records; an integration of experimental procedure sections from selected journals to enable SciFinder users easy access to reaction narratives and other experimental protocols.

• **New expanded member benefit program is launched.**
A new ACS Member Subscription Benefit product family was created and approved for introduction in 2012 in conjunction with the Membership and Scientific Advancement Division. This landmark program now offers every ACS member immediate and universal access to the entire portfolio of ACS’s journal and book publications, including access to the ACS Legacy Archive and the recently released C&EN Archive. Twenty-five of full-text articles may be downloaded annually by each member. In addition, new electronic subscription models, either for individual journals or across the entire collection, were introduced. Finally, by encouraging end-users to register for ACS IDs as a means of personalizing their reading experience, ACS Publications is now delivering permissioned content notifications to more than 166,000 ACS ID registrants — up 30% over 2010. ACS ID members opt in to a range of content and news alerts.

**MEMBERSHIP AND SCIENTIFIC ADVANCEMENT (M&SA) DIVISION**

• **Virtual meeting content was expanded.**
Membership & Scientific Advancement greatly extended the reach of 2011 national meeting content by expanding efforts to disseminate meeting presentations online. In all, 929 presentations were recorded and posted online following national meetings in 2011, a 25% increase over 2010. The content drew 14,000 unique visits to the site, and users expressed strong satisfaction with this offering. M&SA also facilitated governance approval of a meeting content selection process and a pilot pricing model to test at national meetings in 2012—to help cover the costs of the service.

• **Professional development offerings are revamped.**
Participation in the two main professional education product lines—short courses and online courses—rose 14% over 2010. Several new on-demand courses were added in 2011. A major new offering called Sci-Mind™ was developed for launch in 2012. SciMind™ will allow scientists to create custom learning paths based on individual education needs and learning style. In addition, 50 leadership development courses designed for ACS volunteer leaders in 2011 attracted more than 800 participants.

• **National and regional meetings draw more than 24,000 attendees.**
More than 24,000 attendees came to the Anaheim and Denver national meetings. More than 16,700 papers were submitted in 2011, and more special keynotes were offered as well— including The Kavli Foundation Innovations in Chemistry Lectures. The seven regional
meetings in 2011 attracted more than 6,200 participants. The average attendance per meeting was 890, exceeding the 2010 average of 760. In addition, ACS won a leading industry association award for implementing outstanding green meeting practices. ACS also challenged members to create a 30-second homemade video touting the ACS national meeting. The winning video earned its producer four free hotel nights at an ACS national meeting.

- **Weekly ACS webinars are huge success.**
  The ACS Webinars series drew an average of 480 participants per webinar in 2011. The live, one-hour webinars focus on career advancement, business innovation, and general interest science issues. More than 61,000 people registered for the webinars—with more than half attending live and a notable portion viewing the content on-demand. Overall, 92% of participants expressed their satisfaction with the webinars, even higher than the positive ratings in 2010 (89%).

**EDUCATION DIVISION/WASHINGTON IT**

- **Chemical Education Digital Library finds a new home in the “cloud.”**
  The Chemical Education Digital Library is a compilation of digital resources, tools, and online services—in essence a 24/7 aid for teaching and learning chemistry. The University of Wisconsin-Madison originally developed the site based on a National Science Foundation grant in 2006. In August, through the work of the Washington IT staff, the Chemical Education Digital Library successfully migrated from the University of Wisconsin to ACS. This extensive education resource site is hosted via the Amazon cloud and is ACS’s first use of the “cloud” for a major IT system.

**MEMBERSHIP AND SCIENTIFIC ADVANCEMENT (M&SA)/WASHINGTON IT**

- **ACS grows membership in 2011.**
  As of year-end 2011, the Society had 164,215 members, which is the highest membership number in the Society’s history and an increase of 1,104 over last year. The number of undergraduates grew from 14,575 in 2010 to 16,873, an increase from 8.9% to 10.3% of total members. The successful recruiting is a testimonial from our members and the new people who have joined that ACS is truly their professional home, we hope for life. Membership & Scientific Advancement, with great assistance from all of the operating units (CAS, ACS Publications, Education, Office of Research Grants, and others), and our members through local sections and technical divisions are responsible for this success. ACS carried out a lot of targeted recruiting, and specific micro-sites on our web for undergraduates were very helpful.
Better reporting for Local Sections and Technical Divisions is completed.
The FORMs application supports the annual reporting process for Local Sections and Technical Divisions. In 2011, ACS made many enhancements to this application, including additional reporting functions, user interface enhancements, new printing features, and additional features to ease the reviewing process. The annual reporting of activities for Local Sections and Technical Divisions is important to the participants as it affects the distribution of funds from ACS dues to support their activities. The comprehensive nature of the report requires multiple volunteers to contribute, review, and authorize each report. Improved technology will ensure that our members’ valuable time is used as effectively as possible and the results can be analyzed and add value to the ACS in general. In addition to supporting the internal operations of ACS, the annual reports could become a rich repository of information that can be used to communicate chemistry’s value to the public and policymakers.

Career assistance programs are expanded.
M&SA enabled thousands more members and prospective members to participate in 2011 career fairs through virtual platforms. For the first time, the career fair at the fall meeting in Denver enabled members to participate both on-site and online through a web-based virtual environment, where participants could view presentations and jobs, interact with employers and colleagues in real-time, and review multi-media career resources. The event drew more than 2,300 online participants: http://www.shakervirtualevents.com/acs/main.php. M&SA also launched a separate effort to assist job seekers through a new forum on the ACS Network to facilitate the exchange of job leads. The forum was announced and advanced in a series of five consecutive ACS Comments in C&EN on jobs in August and September. M&SA also facilitated the creation of a new Entrepreneurial Training Program as part of the new ACS Entrepreneurial Initiative, which will enable members to identify and pursue a career pathway and educational opportunities to become chemical entrepreneurs.

International activities are expanded.
M&SA provided staff assistance to the creation of a new ACS International Center to provide a one-stop resource for chemistry stakeholders to learn about global collaborations, educational opportunities, career benefits, business practices, and other information on the global practice of chemistry. With the assistance of M&SA, the ACS Board of Directors approved new criteria and procedures to guide and strengthen ACS’s role in responding to evidence of human rights infringements of chemical-related scientists worldwide.

The ACS Network continues to grow.
M&SA also helped boost participation in the ACS Network to 220,000, a 25% increase over 2010. M&SA exceeded its goal to increase Network participation among non-US, non-members by more than 30% in 2011, achieving a 120% increase for this segment.

Increasing diversity and inclusion.
M&SA increased its work with diversity partner organizations in 2011 to advance mutual goals. ACS worked with the National Association for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE) on a groundbreaking Percy Julian workshop event at ACS to encourage black middle school students in Washington, D.C., to
consider science careers. More than 100 students, parents, and educators participated in hands-on demonstrations, counselor sessions, and other science learning activities. M&SA also facilitated the transition and elevation of the ACS Joint Subcommittee on Diversity to a new Diversity and Inclusion Advisory Board to better coordinate and advance ACS diversity efforts, including a diverse membership.

- **Awards and recognition are highlighted.**
  M&SA organized successful awards selection processes and ceremonies for ACS National Awards, ChemLuminary Awards, Heroes of Chemistry, green chemistry awards, and various ACS regional and division awards. To improve publicity of the winners, M&SA worked with the Office of Public Affairs to feature winners in local and national media outlets and give visibility to the underlying science. ACS also inducted 213 members into the 2011 class of ACS Fellows, who were recognized during the annual Fellows ceremony at the fall national meeting.

**EDUCATION DIVISION**

- **Dow Chemical becomes sole sponsor of 44th International Chemistry Olympiad (IChO)**
  ACS and Dow announced in September that Dow pledged $2.5 million as the sole corporate sponsor of the 44th International Chemistry Olympiad (IChO), which will be held in the U.S. from July 21-30, 2012. In preparation for the 2012 Olympiad, ACS hosted the IChO steering committee meeting at ACS in December.

- **43rd International Chemistry Olympiad held.**
  The 43rd International Chemistry Olympiad was held in Ankara, Turkey, July 9-18. The U.S. team won two gold medals and two silver medals, the best performance of the U.S. team since 2001. Konstantin Borisov and Joe Tung earned gold medals, with Konstantin placing 9th in the overall competition. Tayyab Shah and Elmer Tan won silver medals.

- **International Year of Chemistry receives major NSF grant.**
  The National Science Foundation (NSF) awarded ACS $1,015,277 for the project entitled “Chemistry Challenge Kits and Outreach at Science Festivals for the International Year of Chemistry.” This grant provided funding to prepare and distribute 8,000 kits for middle school science teachers and to attend four science and engineering festivals in 2011-2012. The middle school curriculum book and kits, created by the ACS Education Division staff, contain four lessons on physical and chemical change with all the materials needed to carry out the hands-on experiments with students.

- **Chemistry in Context: Applying Chemistry to Society is released.**
  The 7th Edition of the textbook Chemistry in Context: Applying Chemistry to Society for chemistry (nonmajor) college students was released in January. The new opening chapter, “Chemistry for a Sustainable Future”, is designed to introduce students to the issue of global sustainability. The 6th Edition of Chemistry in the Community for high school students was released in June. This new edition features an extensive overhaul and reordering of the units, resulting in a modern, competitive and truly 21st century chemistry text based on
cutting-edge pedagogies.

- **Committee on Professional Training (CPT) celebrates its 75th anniversary.**
  The Committee on Professional Training (CPT) celebrated its 75th anniversary at the National Meeting in Anaheim. The celebration included the symposium “75 Years of the Committee on Professional Training: It’s Not Just About Approval.” Also in Anaheim, the Society Committee on Education (SOCED) hosted a reception to honor the volunteers who have organized special national meeting programs for undergraduate students over the past 20 years.

- **Chemistry Teacher Education Coalition (CTEC) advanced.**
  The ACS hosted an invitational planning workshop in June, with funding from NSF, to develop a framework for the proposed Chemistry Teacher Education Coalition (CTEC). The mission of CTEC is “To actively engage chemistry departments in the preparation of future chemistry teachers.” A meeting of the CTEC Advisory Board was held in December to provide guidance in preparing a full proposal to NSF.

**DEVELOPMENT OFFICE (PART OF THE OFFICE OF THE TREASURER AND CHIEF FINANCIAL OFFICER)**

- **Development Office exceeds fund-raising goal.**
  The Development Office raised more than $5.2 million in 2011. This exceeded the annual goal by more than $2 million and marks the second time in the past three years that Development has exceeded $5 million in gifts and pledges received. The funds are used for Project SEED, the ACS Scholars Program, the ACS Green Chemistry Institute, and to fund the International Chemistry Olympiad in 2012. The Development Office also created several 3-minute videos to promote the Society’s planned giving program, titled ACS Legacy Leaders, which recognizes individuals who have made life commitments to the Society. The planned giving program is laying a philanthropic foundation for the long-term future of the Society’s educational and green chemistry outreach programs.


- **International Year of Chemistry (IYC) 2011 receives recognition and publicity.**
  The Office of Public Affairs secured passage of a U.S. Senate resolution and resolutions in Minnesota, Tennessee, Ohio, and Pennsylvania, recognizing 2011 as the International Year of Chemistry; created an innovative *Chemistry 365* website populated with daily chemistry-related facts and vignettes; produced *Spellbound*, an 8-part IYC-themed video series featuring diverse groups of notable chemists; took U.S. leadership for the IYC Global Water Experiment which has involved 100 schools and generated media coverage for many of them; created content and served in an editorial capacity for the IYC 2011 virtual journal.
MEMBERSHIP AND SCIENTIFIC ADVANCEMENT (M&SA) DIVISION

- **New green chemical standard issued.**
  ACS Green Chemistry Institute (GCI)® gained consensus among various stakeholders and achieved the official issuance of a groundbreaking new standard related to green chemistry. More than a year in the making, the new standard sets criteria for defining and reporting environmental and health hazards of chemical products and processes to help suppliers and manufacturers make greener choices. The standard was developed in collaboration with NSF International.

- **Green Chemistry and Engineering Conference flourished.**
  The 15th Annual Green Chemistry and Engineering Conference was a major success, drawing 660 participants—a 42% increase over 2010. The number of international attendees (from 29 countries) increased 12% over 2010. Recordings of many presentations were made available online, as well as interviews and photos. The post-conference survey showed that 80% of respondents indicated that the conference was either very good or good. ACS GCI® also issued a special report on the key global challenges to advancing greener nanotechnology and helped secure increased federal support for green chemistry research.

- **Global partnerships were expanded.**
  M&SA also extended the global reach of ACS by supporting, visiting, and leveraging ACS International Chemical Sciences Chapters. M&SA facilitated a review of chapter activities and new guidance to chapters on their reporting and evaluation going forward. M&SA also advanced several global alliances to foster collaboration, with an emphasis on sustainability. Alliance partners included the Royal Society of Chemistry, Society of Chemical Industry, Chinese Chemical Society, Federation of Asian Chemical Societies, and the German Chemical Society.

OFFICE OF RESEARCH GRANTS

- **Grants awarded in 2011 from the ACS Petroleum Research Fund (PRF) increased.**
  The ACS Board Standing Committee on Grants and Awards awarded grants to those proposals recommended by the ACS PRF Advisory Board. In total, $16,445,000 funded 184 grants in these categories: New Directions, Doctoral New Investigator, Undergraduate Research, Undergraduate New Investigator, and Scientific Education. This was a significant increase from 2010 when $11.4 million in funding was provided for 131 grants.

- **ACS PRF Advisory Board limited the scope of fundable research.**
  At the May 2011 meeting of the ACS PRF Advisory Board, a decision was made that proposals in the alternate energy area of solar power, including photovoltaics and solar cells, will no longer be considered for funding. In addition to reducing the number of proposals not directly related to the petroleum field, this action allows ACS PRF to clearly demarcate
between fossil fuel research, which ACS PRF supports, and semiconductor-related research, which ACS PRF will no longer support.

- **ACS Regional Meeting symposium honors ACS PRF-funded research.**
  A symposium honoring ACS PRF-funded research in the Geosciences was convened at the ACS Western Regional meeting held in Pasadena, California November 10-12, 2011. This ACS Geochemistry Symposium was titled “Frontiers in Geochemistry: The Growing Legacy of ACS PRF-Funded Research in the Geosciences.”

- **Second competition established for Teva Scholars Grant Program.**
  Teva Pharmaceuticals USA Inc. and ACS signed a new Memorandum of Understanding that establishes a second competition of the Teva Scholars grant program. Grants will be awarded to faculty members in Ph.D.-granting departments at institutions in the U.S. who have received tenure within four years of the date of receipt of their application by ACS. These grants support research that utilizes organic chemistry and medicinal chemistry in hopes that successful results would be of potential practical benefit to the discovery of organic compounds useful as human medicines.

- **Request for proposals posted for The Herman Frasch Foundation for Chemical Research.**
  The Herman Frasch Foundation for Chemical Research, which supports research grants in agricultural chemistry, began accepting applications on September 15 for 2012-2017 grants. The Herman Frasch Fund is a small research program with emphasis on projects which promise practical benefit to agricultural development in the United States. The ACS Committee on Frasch Foundation Grants recommended new grants of $50,000 per year for the five-year period. Grantees will be notified in late spring 2012 and the grants will commence on July 1, 2012.

- **Irving S. Sigal Postdoctoral Fellowships publicized.**
  Detailed web pages for the Irving S. Sigal Postdoctoral Fellowships, one of four grant programs that the Office of Research Grants administers, were created and added to the ACS Funding & Awards website. The Irving S. Sigal Postdoctoral Fellowship provides two years of financial support for a scientist who has earned or will earn a doctoral degree during the academic year of the competition or the preceding year in a graduate chemistry department within the United States and who wishes to pursue postdoctoral research at the biology-chemistry interface. Chairs from 45 of the U.S. doctoral chemistry departments were invited to nominate one candidate for the ninth Irving S. Sigal Postdoctoral Fellowship competition. The Irving S. Sigal Postdoctoral Fellowship provides $50,000 per year for two years of research at one or more non-profit institutions in any country. Announcement of the Sigal Fellow is anticipated by late June 2012.
MEMBERSHIP AND SCIENTIFIC ADVANCEMENT (M&SA) DIVISION, EDUCATION DIVISION, AND OTHERS

• Global image of chemistry gets burnished during International Year of Chemistry (IYC) 2011.
  Membership & Scientific Advancement (M&SA) partnered with the Education Division to lead efforts to celebrate the International Year of Chemistry 2011 to raise awareness of chemistry’s value in solving global challenges. M&SA developed an IYC Bulletin targeting IYC planners worldwide (with a circulation of 4,400 people), and it secured 30 external partners who promoted IYC through their websites and conferences. M&SA also helped 28 ACS divisions incorporate IYC themes in their meeting programs and more than 150 local sections adopted IYC themes for their National Chemistry Week and Chemists Celebrate Earth Day events. These efforts included helping the ACS Saudi Chapter plan and deliver a major IYC Cornerstone celebration for the Arabian Gulf.

OFFICE OF PUBLIC AFFAIRS (PART OF THE OFFICE OF THE SECRETARY AND GENERAL COUNSEL)

• Local section public relations chairs are trained to “Sparkle”.
  The Office of Public Affairs (OPA) provided “Sparkle” training to Local Section Public Relations chairs, helping them achieve success and maintain momentum in their local outreach activities. Of the 47 chairs trained between October 2010 and May 2011, 75% had at least one news story by November 2011, and one section had 21. Eighty three percent of the local sections reported some tangible public relations effort. Many of them were successful in bringing recognition to the International Year of Chemistry through their activities as well.

• The profile of ACS in the media increased.
  ACS content resulted in nearly 15,000 articles in print and online news media outlets; reached a potential newspaper/magazine audience of 35 million people (up almost 20% from 2010); and appeared online on sites with a monthly average of 3.5 billion unique visits (up from 3.2 billion in 2010).

• New in-house unit provided high quality digital services.
  OPA’s Digital Services Unit provided professionally produced digital content, at significant cost savings versus external vendors, to many internal ACS clients. The Digital Services Unit produced 285 videos representing nearly 3,000 minutes of finished video (compared to 850 minutes for all of 2010) for 14 ACS business units.
OFFICE OF RESEARCH GRANTS

- **ACS PRF 55th Annual Report on Research is posted online.**
  The ACS Petroleum Research Fund’s 55th e-Annual Report was posted online (http://acswebcontent.acs.org/prfar/2010/). This is ACS PRF’s fourth online e-annual report. The viewer may read featured articles on researchers’ stories and progress reports. Under the “Grants Awarded” tab, the viewer may download a PDF that lists ACS PRF grantees for 2010. Under the “Reports” tab, the viewer may search the annual reports by title, principal investigator, or academic institution. Under “All e-Annual Reports” tab there are links to the current and the three previous e-annual reports (2007 through 2009).

GOAL 5—Advocate for the Profession – ACS will be a premier advocacy organization for members and the profession, creating and supporting the implementation of public policy statements.

OFFICE OF PUBLIC AFFAIRS (PART OF THE OFFICE OF THE SECRETARY AND GENERAL COUNSEL)

- **Policy statement and approval process is streamlined and strengthened.**
  Working with the Chair of the ACS Board Standing Committee on Public Affairs & Public Relations, the Office of Public Affairs staff helped to successfully revise Bylaw XII to clarify position development within the Society by various Society bodies. The road to success took two years of careful dialogue with several governance committees and the active involvement of ACS members concerned with “rights” of local sections. The revised bylaw preserves the rights of Society bodies to adopt positions appropriate to their jurisdictions (provided the position does not pre-empt the authority of another Society body) while clearly establishing the Board of Directors as the sole body that can adopt positions on behalf of the Society. The bylaw was adopted without dissent (a rare occurrence) at the ACS Council meeting in Denver in August 2011.

- **ACS President testified before Congress.**
  The Office of Public Affairs arranged for ACS President Dr. Nancy Jackson to testify before the House Science, Space, and Technology Committee’s Subcommittee on Research and Science Education on the NSF merit review process. Dr. Jackson reaffirmed that NSF merit-review is the global standard and is a highly effective way to select which scientific ideas and researchers to fund.

- **Science & the Congress program continued to educate members of Congress.**
  The Science & the Congress program had another very successful year, sponsoring 10 events that reached nearly 1,000 individuals. Topics in 2011 included jobs, patents, energy, nanotechnology, and the proper use of science in public policy. The program forged or strengthened relationships with 15 partners, including three new congressional partners. Science & the Congress continued to reach a broad public audience through a Global Challenges Discussion Series in cooperation with AAAS and Georgetown University.
ALL STRATEGIC PLAN GOALS—Support for ACS Governance and Operations

OFFICE OF THE SECRETARY AND GENERAL COUNSEL (INCLUDES OFFICE OF PUBLIC AFFAIRS, OFFICE OF STRATEGY DEVELOPMENT, AND GENERAL GOVERNANCE SUPPORT)

- **Development of the new *ACS Strategic Plan for 2012 and Beyond* is completed.**
  For the first time in five years, the ACS Board of Directors completed a “zero-based” revision of the ACS Strategic Plan. The Office of the Secretary and General Counsel and other units provided support throughout this process. Key goal areas were brainstormed at a January Strategic Issues Retreat, and the Planning Committee refined the list in March. Extensive engagement of members, staff, and other stakeholders took place over the summer, including communication with ACS committees, local sections and technical divisions, online surveys of members and staff, discussions with Councilors, and convening a group to draft an education goal. The Board of Directors approved the *ACS Strategic Plan for 2012 and Beyond* at its December meeting, and it is being rolled out to members and staff throughout 2012.

- **ACS Board experimented with new concepts to engage members.**
  The Office of the Secretary and General Counsel worked with the ACS Board of Directors to develop a concept for an entirely different Regular Board meeting (also known as the open session of the Board, held at National Meetings on Sundays). The meetings were changed to limit the number of oral reports and to focus on engaging ACS members in open forum discussions of meaningful topics. At the meeting in Denver, the new format was very successful and included more than 150 attendees during a discussion of “What the ACS is doing, or can do, to assist members who are facing employment challenges in uncertain economic times?”

- **The ACS election system was improved.**
  The Office of the Secretary and General Counsel worked with the Committee on Nominations and Elections to strengthen both the process used to identify and select nominees and candidates, and the process used by local sections and divisions to run their own elections. These activities included:
  - a detailed audit of the diversity of six years of past slates of officers and elected committees to help the Committee on Nominations and Election enhance its ability to identify candidates among the broad diversity of the Society’s membership.
  - the creation of a database searchable on several fields that help the Committee on Nominations and Elections to more effectively identify diverse nominees and candidates for Society officers and Council elected committees.
  - the creation of a tutorial for local sections and divisions on proper election procedures, including a document on frequently asked questions to help strengthen the validity and compliance of local section and division elections.
• ACS Washington facilities undertook sustainability initiatives.
As part of the Society’s ongoing sustainability efforts, ACS Facilities installed a 2,900 gallon irrigation tank that utilizes storm water run-off and graywater to irrigate the landscape of both the ACS Hach and Othmer buildings in Washington, D.C. This project combined with the installation of waterless urinals and low-flow water fixtures in the restrooms, has reduced the Society’s water consumption by 40%. In 2011 Facilities submitted recertification to the U.S. Green Building Council (USGBC) for the ACS Hach building in the Leadership in Energy and Environmental Design, Existing Building: Operations and Maintenance Version 2009 program. The ACS Hach building maintains gold certification and Facilities resubmitted documentation to achieve platinum certification in 2011. Platinum certification was achieved in 2012. The USGBC is the nation’s leading non-profit authority for green buildings and is the nationally accepted benchmark for the design, construction, and operation of high performance green buildings. For the third year in a row, ACS was awarded membership in the 2012 Green Power Leadership Club sponsored by the Environmental Protection Agency (EPA). By meeting the Leadership Club purchase requirements, ACS has joined an elite group of Green Power Partners who demonstrate exemplary environmental leadership.

• NetForum system was upgraded.
In 2011, the Society’s association management software, NetForum, was upgraded. This was a cross-functional effort between Washington IT, Finance, Administration, Publications Business Support, and Development. The upgrade was launched with completely new hardware and allowed for many opportunities for improved productivity in all operating units. With the 2010 upgrade, systems were consolidated for meeting registrations.