

Annual Report 2011

## OFFICERS' MESSAGE

### Introduction – A Once in a Lifetime Opportunity

In 2011 the American Chemical Society joined chemists worldwide to celebrate the [International Year of Chemistry 2011](#) (IYC 2011). This exciting global celebration, as declared by the United Nations, focused on the achievements of chemistry and the many positive ways that chemists and chemical engineers have improved people's lives. Under the unifying theme "Chemistry—our life, our future," we celebrated the year with a range of interactive, entertaining, and educational activities for all ages. We developed many online resources for members to participate in the [International Year of Chemistry](#). One of the tools is a daily web feature titled [365: Chemistry for Life](#) that highlights chemistry's contributions to humankind. As we experienced 2011, our members shared their passion for our science with others.

IYC 2011 provided many new and fruitful opportunities for ACS. The capstone was a grant for more than one million dollars from the National Science Foundation to the ACS Education Division to develop and distribute 8,000 hands-on chemistry kits for middle school teachers, and to attend four science and engineering festivals in 2011-2012, enabling ACS to continue the momentum begun during IYC 2011 to increase the public understanding and appreciation of chemistry.

ACS also secured passage of a U.S. Senate resolution recognizing 2011 as the International Year of Chemistry, with similar resolutions in state legislatures in Minnesota, Tennessee, Ohio, and Pennsylvania.

Another major achievement was receiving a \$2.5 million grant from the Dow Chemical Company to become the sole sponsor of the [44th International Chemistry Olympiad](#) that is being held in the U.S. for only the second time in its 44-year history. We greatly appreciate Dow's generosity and support!

2011 also was a challenging year. The global economy continued to struggle. Many of our members looked to ACS to help them find jobs and rewarding career paths. In response, ACS Career Services expanded its suite of services and conducted its first combined onsite and virtual [ACS Career Fair](#). The onsite portion of the Career Fair took place at the Denver Convention Center during the ACS 2011 Fall National Meeting, giving 775 job seekers the opportunity to interview for 261 open positions. Breaking all geographical barriers, the Virtual Career Fair portion made it possible for more than 2,000 job seekers around the world to talk to recruiters about 380 additional open positions. ACS Career Services also created an [Entrepreneurial Training Program](#) as part of the new ACS Entrepreneurial Initiative, which will help members identify and pursue pathways to become chemical entrepreneurs.

In light of the difficult economic climate, we are pleased to report that ACS ended 2011 with many [remarkable accomplishments](#) and with a positive [financial position](#). The Board of Directors is pleased to report that for the eighth consecutive year, ACS ended the year with a positive net contribution from operations. Continuing a tradition since the 1970's, the [Board of Directors](#) held a financial planning conference in June. The theme of the conference was ensuring the Society's financial sustainability and growth in a period of extraordinary change.

Looking toward the future, the Board of Directors led the development of the new [ACS Strategic Plan for 2012 and Beyond](#). The plan has four broad strategic goals that provide a blueprint for the Society to fully realize our Mission, "Advance the broader chemistry enterprise and its practitioners for the benefit of Earth and its people."

ACS members throughout the world can be assured that their Society will continue to achieve its mission by providing the important programs, products, and services they value and rely upon to advance their careers and improve people's lives.



**Nancy B. Jackson**  
President



**Bonnie A. Charpentier**  
Chair  
Board of Directors



**Madeleine Jacobs**  
Executive Director  
& CEO



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# ACS – Most Authoritative Source of New Research

ACS's creative innovation in information services made the International Year of Chemistry 2011 a banner year for chemists to find and publish groundbreaking research.

ACS Publications developed and published two new titles, *ACS Catalysis* and *ACS Medicinal Chemistry Letters*, and completed an early editorial and marketing launch of *ACS Macro Letters* and *ACS Synthetic Biology*.

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 research published in ACS journals and is augmented with the latest news from *Chemical & Engineering News (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. 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.

With a record 78 million full-text downloads from the ACS Publications Web Editions platform and #1 rankings in 14 subject categories by ISI Impact Factor or total citations, ACS journals are affirmed by the global chemistry community as the most trusted, most cited, and most read publications.

ACS Publications launched a new educational, web-based video series, *Publishing Your Research 101*, designed to support researchers with the process of writing, reviewing, submitting, and editing original scholarly research for publication in peer-reviewed journals.

Editorially, C&EN made three significant contributions to the celebration of the International Year of Chemistry. First, the cover story of the June 27, 2011, issue, "Celebrating IYC 2011," 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 one hundred years ago in 1911; a comment on IYC by ACS President Nancy Jackson; and an editorial on the celebration by Editor-in-chief Rudy Baum. Second, C&EN carried 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.

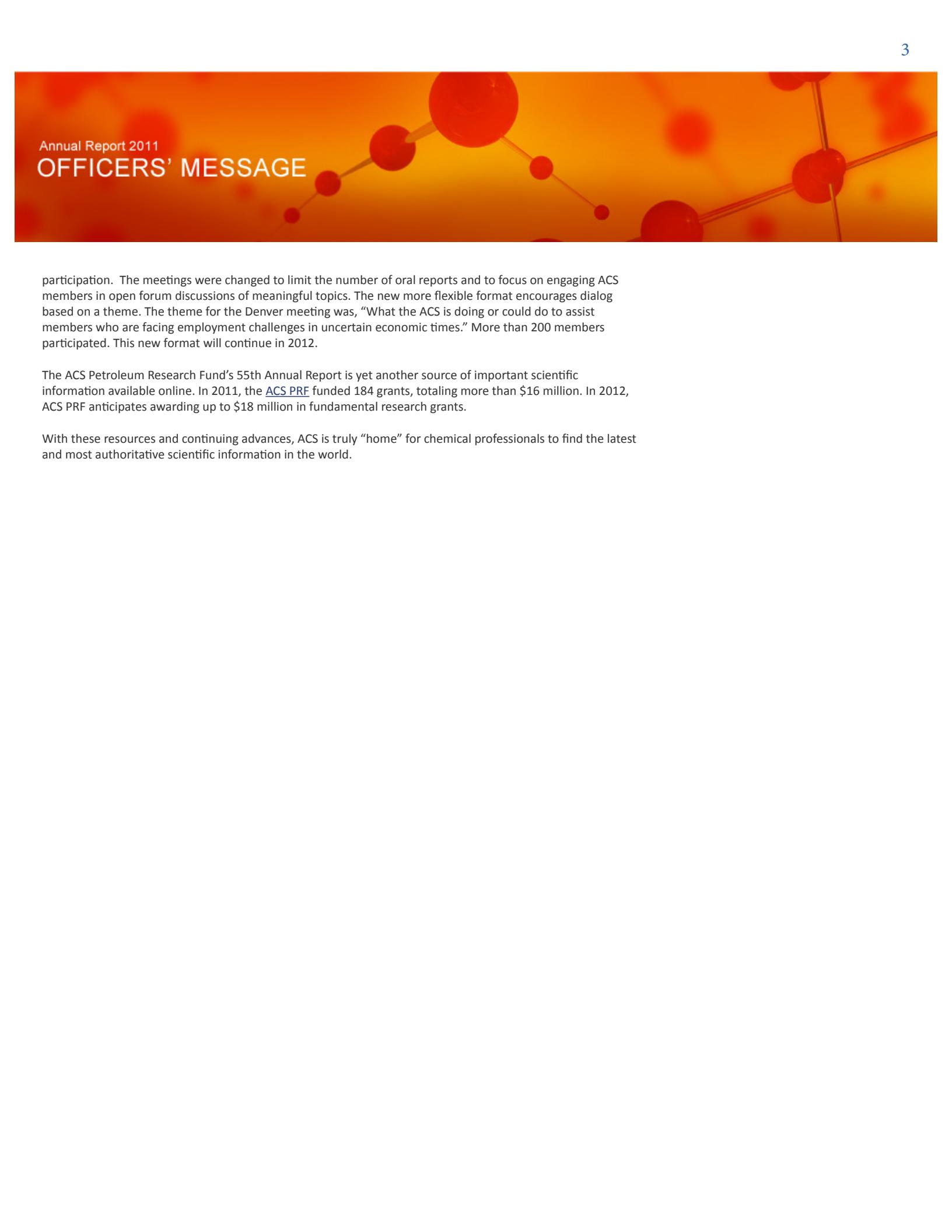
The *Chemical Abstracts Service (CAS)* set new milestones for database growth, analyzing more than 1.5 million patents, journal articles, and other disclosed research sources, for a new total of more than 35 million indexed records. CAS' reaction database saw even greater gains, with growth exceeding 8.7 million new reactions. Thanks to the more than 1,000 scientists around the world who assemble, curate, and assure the quality of the CAS databases, researchers can also explore the largest collection of disclosed chemical synthesis information, including more than 38 million single- and multi-step reactions from 1840 to the present.

CAS added more than 1.6 million reaction experimental procedures for all ACS journals and English language patents from major patent offices (i.e., USPTO, CIPO, EPO, UK-IPO, and WIPO) from 2000 through 2011. CAS also reached agreements with other publishers to add more experimental procedures that will be made available in *SciFinder* in early 2012. In 2011, the CAS REGISTRYSM, the world's largest collection of small molecules, celebrated registration of the 60 millionth substance.

CAS continued to innovate. SciFinder Mobile® was launched in April to provide SciFinder users with convenient smartphone access to the world's best chemical and related information.

More than 24,185 people participated in ACS National Meetings in Anaheim and Denver in 2011. Participants presented more than 16,700 papers at these two meetings. For those unable to attend or who missed a presentation, ACS posted 929 presentations online after the meetings concluded. In all, 23,897 unique visitors viewed these online presentations by year-end.

The Board of Directors initiated a new format for Open Board meetings in Denver to broaden ACS member

The background of the page features a stylized, abstract molecular structure composed of red and orange spheres (atoms) connected by thin grey lines (bonds). The overall effect is a glowing, organic network.

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participation. 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. The new more flexible format encourages dialog based on a theme. The theme for the Denver meeting was, "What the ACS is doing or could do to assist members who are facing employment challenges in uncertain economic times." More than 200 members participated. This new format will continue in 2012.

The ACS Petroleum Research Fund's 55th Annual Report is yet another source of important scientific information available online. In 2011, the [ACS PRF](#) funded 184 grants, totaling more than \$16 million. In 2012, ACS PRF anticipates awarding up to \$18 million in fundamental research grants.

With these resources and continuing advances, ACS is truly "home" for chemical professionals to find the latest and most authoritative scientific information in the world.



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### Focusing on What Matters Most

For more than 135 years, ACS has been chemistry's "hometown": the central gathering point for chemical professionals around the world to meet, share information, and find tools and guidance that enable them to become stronger and more marketable scientists.

Over the years, our focus has shifted as our members' needs have evolved. In the current, fluctuating economic climate, we are committed to supporting [career and leadership training](#), bolstering [international collaboration](#), [enhancing chemistry education](#) (particularly among underrepresented populations), and [promoting communication](#) to the general public in order to "put a human face on chemistry."

We made significant strides in each of these areas – all of which were emphasized during IYC 2011 – and were priorities this year during [Nancy Jackson's ACS presidency](#). We believe these efforts on behalf of our more than 164,000 members at year-end 2011 will yield tremendous benefits for them in the years ahead.

As we end 2011 and this once-in-a-lifetime global celebration of chemistry, we look forward to continuing to share the transforming power of chemistry with others.

Nancy B. Jackson, President

Bonnie A. Charpentier, Chair, Board of Directors

Madeleine Jacobs, Executive Director & CEO



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### Making International Connections

IYC 2011 was a fruitful year with many activities and events that brought attention to the nature, value and transformative power of chemistry. The Membership and Scientific Advancement Division (M&SA) organized activities and programs to spread the word domestically and internationally. During the IYC, we launched an IYC Partner Program, a partnership with 40 like-minded societies and institutions with the goal of creating synergies surrounding celebrations of IYC. Our IYC partners contributed activities in promoting the IYC, including posting the IYC logo on their websites; distributing literature and promotional items in bags during their annual meetings; posting IYC-related articles in their respective trade publications and blogs; featuring IYC-related symposia in their meetings' technical program; and hosting IYC-themed events.

We also produced the IYC Bulletin, a monthly electronic newsletter distributed to approximately 4,400 individuals in over 100 countries across the globe.

In addition, we ensured the visibility of IYC branding during the 2011 National and Regional Meetings through advertisements and specialty signage in strategic areas of convention centers and official hotels; a popular booth in the ACS pavilion; and distribution of promotional items such as lanyards, biodegradable cups, t-shirts, stickers, posters, and lapel pins.

We coordinated the presence of an IYC booth during the annual meetings of the American Crystallographic Association and ACS Green Chemistry Institute. We also had a booth presence at Labtech, the IYC cornerstone event for the Arabian Gulf.

We continued our participation in [the Chemical Sciences and Society Summit \(CS3\)](#), which is an annual event that brings together the best minds in chemical research from around the world and challenges them to propose innovative solutions for society's most pressing needs in the areas of health, food, energy, and the environment. This unique event boasts an innovative format, aiming to set the course of international science, and rotates each year among the participating nations. The 2011 meeting was held in Beijing, China, and brought together 30 leading scientists from China, Japan, Germany, the United Kingdom, and the United States focusing on the theme of "Chemistry for Better Health." The CS3 initiative is a collaboration among the Chinese Chemical Society, the German Chemical Society, the Chemical Society of Japan, the Royal Society of Chemistry and the ACS. It is supported by the National Natural Science Foundation of China, the German Research Foundation, the Japan Society for the Promotion of Science, the U.K. Engineering and Physical Sciences Research Council, and the U.S. National Science Foundation.

In 2011 the first mentor/mentee teams were selected for the [ACS Global Research Experiences, Exchanges, and Training Program \(GREET\)](#). The GREET program aims to provide intensive, high-impact international research experience and collaboration opportunities to teams of U.S. chemical scientists from both the private and public sector. GREET provides a novel approach and pathway for these individuals to establish lasting international collaborations so that their talents and expertise can be activated to benefit their own careers, institutions, nations, and to serve society. The inaugural teams established collaborations to solve problems of mutual interest with international partners in Tanzania, Sweden, France, Romania, and the U.K.

We developed a three-part training package specifically geared towards ACS International Chemical Sciences Chapters and other partners around the globe. The training package includes the following components: Outreach, Leadership, and the ABC's of Running a Chapter. The Outreach training module was translated into the Spanish language and distributed to ACS Local Sections with a heavily Spanish-speaking population, as well as to sister societies in Latin America and the Caribbean. The training was piloted in Hong Kong, Shanghai, and Thailand in the summer of 2011.



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### ACS Publications - Journals

Creative innovation and collaboration made the International Year of Chemistry a banner year for the Most-Trusted, Most-Cited, and Most-Read Journals in Chemistry and the Related Sciences.

ACS Publications expanded their outreach and continued to introduce innovations to the delivery of ACS content in 2011. By providing more than 36,000 original research articles faster than ever before, they enabled researchers around the globe to stay informed, advance their research efforts, and improve society with new discoveries and developments. With more than 78 million article accesses in 2011 and #1 rankings in 14 subject categories by ISI Impact Factor or total citations, ACS journals are affirmed by the global chemistry community as the most trusted, most cited, and most read publications.

Introduction of ACS Mobile continued. Winner of the 2010 PROSE Award from the Association of American Publishers for Best eProduct or Innovation in ePublishing and Best eProduct in the Physical Sciences & Mathematics, the app provides both Mac and Android users with an up-to-the-minute live stream of peer-reviewed research content published across the Society's portfolio of scholarly research journals, supplemented by "Latest News" from C&EN.

In addition to leading the way in digital publishing on the mobile frontier, ACS Publications continues to enhance delivery of content online via enhancements to the ACS Web Editions Platform, including robust SciFinder linking with the journals and peer reviewed eBooks content.

In partnership with CAS, the Division announced the integration of CA Section subject index topics to tag nearly 500,000 articles across all ACS web journals from 1996-2011 with CA Section subject assignments. Highlights of the effort included the addition of a "subject search" tab to the Quick Search menu on all web pages; the creation of 80 "subject landing pages" that showcase the ACS articles published within a given CA subject and provide functionality to allow users to follow articles under a CA subject via RSS; CA Section subject specific labeling of articles within search results, on articles, tables-of-contents pages and the journal homepage article display; and the ability to use CA subjects as a filter within our advanced search feature. The 80 CA Sections are grouped within five broad scientific categories: Applied; Biochemistry; Macromolecular; Organic; and Physical, Inorganic, and Analytical.

ACS Publications also expanded its portfolio of high quality, high impact journals in 2011. The first volume of *ACS Catalysis* was published with over 200 research articles and reviews in all the major fields of catalysis, led by Editor-in-chief Christopher W. Jones from the Georgia Institute of Technology. *ACS Medicinal Chemistry Letters*, introduced online in 2010, completed its first year of subscription access with more than 170 communications published in 2011.

To celebrate 2011 as the International Year of Chemistry, the Publications Division collaborated with ACS' Education Division and the Office of Public Affairs to develop a virtual journal entitled ACS International Year of Chemistry. The virtual journal published 12 issues in 2011 on the ACS' IYC 365 site and highlighted health, environment, energy, and materials research from a number of ACS publications.

Four ACS Publications Division special programs for members were approved in late 2011 as part of the portfolio of ACS Member Benefits for 2012. The programs, ACS Member Universal Access, ACS Member Articles on Command, ACS Member E-Passport, and ACS Member E-Subscriptions, provide members with new options to access the contents of ACS Web Editions, ACS Symposium Series e-books, and the C&EN Archives.

ACS on Campus, the Publications Division's popular outreach program that brings resources from ACS Publications, Chemical Abstracts Service, Membership & Scientific Advancement, Education, and ACS Careers to top universities in the U.S. and abroad, continued its expansion in 2011. Faculty, students, and librarians at selected institutions like Harvard and the Chinese Academy of Sciences participated in seminars on high-interest topics and the effective use of ACS web tools like SciFinder®, the ACS Network, and the Web Editions Platform.



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In 2011, the Publications Division introduced Publishing Your Research 101, a new educational, web-based video series designed to support authors and reviewers in writing, submitting, reviewing, and editing reports of original scientific research intended for publication in peer-reviewed journals. The first video of the series, "How to Write a Paper to Communicate Your Research," featured an interview with Dr. George M. Whitesides of Harvard.



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### ACS Publications – C&EN

C&EN completed the first phase of the C&EN Production Automation Program (CPAP). CPAP 1.0 represents the completion of a multiyear 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.

In August 2011, the free C&EN Mobile app launched 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, C&EN Mobile was established as a new, free ACS member benefit; members can access all new C&EN issues on their smartphone at no charge. In February 2012 the C&EN Mobile app received the 2011 PROSE Award for eProduct/ Best in Physical Sciences & Mathematics from the Association of American Publishers.

With the October 31, 2011 issue, a completely redesigned *C&EN Online* launched on a new content management and delivery system. Implementation of CPAP 1.0 positions C&EN to continue its evolution as a journalistic enterprise and enables the magazine to make its content available to ACS members and other interested individuals in the format(s) of their choice.

Editorially, C&EN made three significant contributions to the celebration of the International Year of Chemistry. First, the cover story of the June 27, 2011, issue, “Celebrating IYC 2011,” 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. Second, C&EN carried 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.

C&EN’s program of advertiser-sponsored webinars on technical topics hit full stride in 2011. Eleven C&EN staff members hosted a total of 21 webinars during the year, seven more than in 2010. The webinars attracted a total of almost 17,000 registrants; the average number of registrants per webinar increased 33% over 2010. Between 40% and 50% of registrants participated in the webinars, well above the industry average. The program has become a popular advertising choice and lead generation tool for companies who wish to showcase their chemistry and/or technology to the highly engaged ACS membership.

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 ACS’s attention some new chemistry blogs.

C&EN’s twitter feed (@cenmag) began the year with about 500 followers. As of year-end, more than 3,600 followers read, share, and interact with the magazine via this channel. C&EN’s Facebook page (<http://facebook.com/cenews>) added over 1,200 “likers” this year, bringing the total to over 2,800. About 1,500 of those users are active (they have viewed or interacted with C&EN’s page or posts) on a weekly basis. C&EN’s YouTube channel (<http://www.youtube.com/cenonline>) now has about 100 C&EN-created videos. The channel itself has received about 3,200 views, and the uploaded videos have received more than 122,500 views all together. Other major media outlets, such as the Wired and BoingBoing blogs, have embedded several of those videos.



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### Chemical Abstracts Service (CAS)

#### CAS — the World's Authority for Chemical Information

CAS databases are recognized by chemical and pharmaceutical companies, universities, government organizations and patent offices around the world as both the most comprehensive and authoritative sources of chemical and related information. CAS is the only organization in the world that is solely dedicated to finding, collecting, and organizing all publicly disclosed chemical substance information. By combining its databases with advanced search and analysis technologies (e.g., SciFinder® and STN®), CAS delivers the most current, complete, cross-linked and secure digital information environment for scientific discovery and research.

In 2011, [CAS](#) set new milestones for database growth, analyzing more than 1.5 million patents, journal articles and other disclosed research sources, for a new total of more than 35 million indexed records. CAS' reaction database saw even greater gains, with growth exceeding 8.7 million new reactions. Thanks to the more than 1,000 scientists around the world who assemble, curate, and assure the quality of the CAS databases, researchers can also explore the largest collection of disclosed chemical synthesis information, including more than 38 million single- and multi-step reactions from 1840 to the present. CAS added more than 1.6 million reaction experimental procedures for all ACS journals and English language patents from major patent offices (i.e., USPTO, CIPO, EPO, UK-IPO, and WIPO) from 2000 through 2011. CAS also reached agreements with other publishers to add more experimental procedures that will be made available in SciFinder in early 2012.

The CAS REGISTRY™ is the world's largest collection of small molecules. During 2011, CAS celebrated registration of the 60 millionth substance in the CAS REGISTRY. This therapeutic compound, originating in a Chinese patent application, was discovered by the [Institute of Materia Medica, Chinese Academy of Medical Sciences](#), one of the key drug research institutions in China. As of year-end 2011, CAS REGISTRY included nearly 65 million organic and inorganic substances, plus more than 63 million sequences. The continual growth and updating of the CAS REGISTRY database is reported with the REGISTRY counter on the CAS web site home page ([www.cas.org](http://www.cas.org)). This growth has been complemented by CAS' expanding coverage of predicted and experimental property values, spectra, and data tags, to more than 3.6 billion by year-end.

CAS' patent authority coverage expanded to include Malaysia in 2011. CAS now covers 62 patent authorities worldwide to ensure comprehensive patent information within its databases.

#### Enhancements to SciFinder Improve Access to CAS Content within the Researcher's Workflow

Three separate updates to the web version of [SciFinder](#) during 2011 provided scientists with new capabilities to further their research.

- In April, CAS released SciPlanner™, allowing researchers to more quickly identify synthesis options to design the best pathways and approaches to optimize their research. SciPlanner also assists non-synthetic chemists in organizing their search results to help them understand related research more effectively.
- An August release included operational enhancements to SciFinder, including upgraded browser support, post-processing Print and Export options, and better visibility for Keep Me Posted alerts.
- In December, improvements were implemented to help scientists quickly find the substance information that is most relevant to their research. New bioactivity and target indicator features allow scientists to easily assess the biological relevance of a specific substance or an entire substance answer set. Additional 13C and 1H NMR spectra and mass spectra increased the wealth of experimental data available to researchers. New substance relevance ranking was introduced so scientists can more effectively review answer sets and retrieve the substances that are most similar to their query. Scientists can also now preview more journal content in the summary and detail displays for references with the addition of table of contents graphics from ACS Publications. Finally, Mozilla Firefox 7 and 8, Apple Safari 5.1 and Macintosh OS X Lion (version 10.7) were added to the list of supported web browsers and operating systems.

In addition to these enhancements, SciFinder Mobile® was launched in April to provide SciFinder users with convenient smartphone access to the world's best chemical and related information.



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Organizations around the globe increasingly rely on SciFinder for accurate, timely chemistry and related information. In 2011, the United States Department of Energy chose SciFinder as the chemical information tool for all researchers at 17 sites across the nation, marking the first time the DOE has entered into a complex-wide agreement for any digital scientific information tool. Large contract research organizations abroad, including Syngene and TCG Lifesciences of India, selected SciFinder for its "reliable, high-quality content and advanced reaction planning tools."

### Unlimited Access to SciFinder is Available for Academic Institutions

Beginning in July, a new pricing program option, the Academic Unlimited Access Program, was introduced to academic institutions worldwide. Under this new program, academic users are no longer restricted by concurrent seats, so students and faculty from all departments across a campus benefit from unrestricted access to CAS' comprehensive content. Stanford University was the first school to choose this program. Schools worldwide have been increasingly moving to unlimited access and, in October, Eduserv selected unlimited access for its CHEST consortium of more than 47 academic institutions in the U.K. and Ireland, for SciFinder's "world class information scope and timeliness, to materially increase scientific research productivity and accelerate innovation."

### CAS and Its STN Partner, FIZ Karlsruhe, are Revolutionizing Patent Searching with a New STN, The Choice of Patent Experts

In October, CAS and its STN partner, FIZ Karlsruhe, announced development of a completely new STN. The new platform will bring improved efficiency and usability at the expert level, with powerful new elements including: project-oriented workflow; combined text and structure queries; simultaneous query and results interaction; real-time analysis of results; and virtually no system limits.

Another key feature of the new STN is that in addition to offering a wide range of advancements, it will retain the unique values of STN that are trusted by patent search professionals today, including the STN command line, search precision and high-quality content. The focus on patent search professionals also encompasses the STN commitment to maintain a secure and confidential research environment, as well as training and support by CAS' scientists.

### A New Program Provides Complimentary SciFinder Access to Former SciFinder Users Who are Now Unemployed

In November, CAS began offering unemployed scientists complimentary SciFinder access to assist in their efforts to secure employment. Scientists who previously had access to SciFinder through an organization that had the Enterprise-Wide Pricing (EWP) option but lost their jobs since Jan. 1, 2011, are eligible. This program is helping researchers stay current in their research areas while they seek new employment and identify employment opportunities with organizations and scientists with similar research strengths.

### CAS Embarks on a New Long-Term Research Initiative to Keep Pace with the Growth of Disclosed Chemical Information

In December, CAS and InfoChem announced a long-term collaboration in ChemInformatics to create new technologies to enhance the discovery of chemical patents and more. For example, a joint team is now researching and developing technology to identify chemical information in text and to semantically enrich chemical information documents. The partnership will explore ways to extract, derive, store, communicate and interpret chemical substance information.



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### Career Services

#### Helping Members Find Jobs and Rewarding Career Paths

In 2011, ACS continued to innovate and broaden its reach to support ACS members in their efforts to find new jobs and, at the same time, enable employers in all facets of the chemical enterprise to staff their organizations with the best talent in the chemical sciences. In addition, we continued to develop new products and services to support the professional aspirations of our members at all stages of their careers, enabling them to remain competitive in an ever-changing job market.

Underscoring our commitment to supporting members' career aspirations, the ACS conducted its first combined onsite and virtual [ACS Career Fair](#). The onsite portion of the Career Fair took place at the Denver Convention Center during the ACS 2011 Fall National Meeting, giving 775 job seekers the opportunity to interview for 261 open positions. Breaking all geographical barriers, the Virtual Career Fair portion made it possible for more than 2,000 job seekers around the world to talk to recruiters about 380 additional open positions.

Attendees at both the onsite and virtual portions of the Career Fair not only had the opportunity to interview, but also to build their job search skills and learn about the full spectrum of career opportunities for chemical professionals today. For example, Career Fair presentations in Denver were broadcast live via webcast in the virtual auditorium of the Virtual Career Fair, enabling hundreds of onsite and online job seekers to participate and interact with each other. All these webcasts were recorded and are available on demand at [ACS webinars](#). Among these webcast presentations was our keynote presentation *Entrepreneurship + Innovation = Jobs* given by Professor George Whitesides, former ACS President Joe Francisco, and ACS Executive Director & CEO Madeleine Jacobs.

Recognizing that to best help ACS members find jobs in today's economy, we must also create new jobs, ACS has launched the [ACS Entrepreneurial Initiative](#). Its mission is to provide the support members need to transform their innovative ideas into successful business ventures. As part of this initiative, we have launched the ACS Entrepreneurial Training Program—available to members via application—which offers three tested and proven curricula corresponding to the needs of ACS members at different stages of their entrepreneurial plans. In June 2012, the ACS Entrepreneurial Initiative will launch the ACS Entrepreneurial Resources Center, giving approved ACS member applicants access to a wide range of resources needed to advance their entrepreneurial endeavors. The ACS Entrepreneurial Initiative will continue to develop new resources and programs to support ACS entrepreneurs in all facets of planning, launching, and growing successful entrepreneurial ventures.



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### Promoting Education

Teaching and learning chemistry in the context of our world is a hallmark of the resources, services and products produced by ACS. Students and educators know that the ACS is synonymous with quality. ACS continues to be a leader in science education – to inspire students to seek knowledge and careers in science and prepare them for the realities of the global marketplace.

In 2011, we reached out to thousands of eager, young elementary and secondary school students in new and innovative ways. We provided a new generation of undergraduate and graduate students with opportunities to learn skills they will need to compete and succeed as they move forward with their careers.

One of our most successful efforts, the ACS Scholars Program, continues to help underrepresented minority students achieve their dreams of degrees and careers in a broad range of chemical sciences. In all, nearly 2,500 African-American, Hispanic/Latino, and Native American students have participated in the program since 1995. Of those, nearly 1,140 have earned bachelor's degrees in a chemical science and 37 percent have entered the chemical science workforce. More than 100 of these ACS Scholars have gone on to earn doctoral degrees in chemistry, chemical engineering or a related discipline.

The ACS Board of Directors voted to make the ACS Scholars Program a permanent program within the Society beginning January 1, 2012.

Another premier program, Project SEED, offers high school students the rare opportunity to work in academic, government or industrial research laboratories for an eight- to 10-week term. In 2011, the program placed 412 economically disadvantaged high school students in more than 145 research laboratories in 38 States, the District of Columbia, and Puerto Rico, under the supervision of 410 volunteer scientific mentors and coordinators.

The Project SEED Scholarship Subcommittee awarded 29 Project SEED College Scholarships to former SEED students for their freshman year totaling \$145,000. In addition, three new renewable Ciba Specialty Chemicals scholarships (\$5,000/year) were awarded for the 2011 – 2014 academic years.

The ACS High School Chemistry Club (ChemClub) program grew from a modest number of 15 clubs in 2005-2006 to 462 clubs at the end of 2011 – with nearly 13,000 high school chemistry students participating. The average number of students in a club is 27; the largest club has 150 students. During IYC 2011, 74 ACS High School Chemistry Clubs participated in the Global Water Experiment.

More than 12,000 students representing 135 ACS local sections participated in the U.S. National Chemistry Olympiad (USNCO). At the 43rd International Chemistry Olympiad, U.S. students competed against 269 other students representing 69 countries in Ankara, Turkey. The U.S. was among 18 delegations who won medals, winning two gold and two silver medals. This was our best performance since the 2001 competition.

The Science Coaches Program, that matches a teacher with a science coach, had phenomenal growth in 2011 – growing from 32 in 2010 to 119 teacher-science coach pairs in 2011. The program has teacher-science coach pairs in over 33 states, Canada, and an American school in Mexico.



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## PROGRAM HIGHLIGHTS

### Communicating the Value of Our Science

During IYC 2011, ACS successfully used a mixture of traditional and new, cutting-edge techniques to reach as broad an audience as possible to share the value of chemistry. One high-profile project was creation of a special chemistry issue of [Kids Discover](#) magazine, in print and online, which reaches more than 40,000 schools and 185,000 families.

ACS issued more than 1,000 print, electronic and social media news items in 2011, reaching an estimated potential audience of 3.5 billion people per month. In addition to a [Press Blog](#), which highlights prominent research from ACS' more than 40 peer-reviewed journals and other interesting scientific developments, we expanded our Digital Services Unit. This unit created popular general audience videos about the [Chemistry of Fireworks](#), the [Chemistry of Cheese](#), [Chemistry of Champagne](#), the [Periodic Table Table](#) and other topics. These videos received tens of thousands of views on YouTube and Vimeo, as well as coverage on *Time*, *Wired*, *Los Angeles Times*, *Washington Post*, *AOL News*, *Live Science* and many other sites.

Video also had a prominent role in the [Chemistry Ambassadors](#) program, which had more than 7,000 members at year-end. Founded in 2009, the program helps connect our members and their messages with the people who live in their communities. It's about encouraging our members to be compelling spokespersons and advocates for their profession, whether they have a lot of time, or a little. It's about connecting ACS' many and excellent resources with the audiences they are intended to serve. And doing it with a human face and voice.

To encourage that, we conducted more than 325 mini-media training sessions at ACS National Meetings in 2011. These 2- to 5-minute sessions helped members develop brief, effective "elevator" speeches they can use to describe their work to friends, neighbors and others. In many cases, the results as shown in this [short video](#) are truly remarkable.

In April, we continued the "Sparkle" communications workshops, which were a popular ACS fixture in the 1990s. This two-day seminar immersed local section volunteers in hands-on activities, including writing press releases and speaking with the media, that familiarized them with ways to work with the news media and build greater community awareness for the good works of their local sections. These workshops are scheduled to continue in 2012.

Good leadership begins with good communication. That's what more than 300 ACS members learned in Fort Worth in 2011 at the ACS Leadership Training Institute. This comprehensive curriculum that provides practical courses, including developing communications strategies, will help these leaders of the future advance their careers, and equip them with tools to more effectively take charge of ACS volunteer initiatives.

ACS offers members many [volunteer opportunities](#) to share chemistry with their communities. They can get involved at the local, regional, and national levels. There are opportunities for everyone – from student to seasoned professional – to participate in annual programs such as [National Chemistry Week](#) (NCW) and [Chemists Celebrate Earth Day](#) (CCED).

The 2011 NCW theme was, "Chemistry – Our Health, Our Future!" Chemists and chemistry enthusiasts were encouraged to build awareness of chemistry at the local level. Local sections, businesses, schools, and individuals organized or participated in events in their communities with a common goal: to promote the value of chemistry in everyday life. Please join us in 2012 as we celebrate 25 years of NCW.

In recognition of Earth Day, CCED brought focus to environmental causes, such as clean air, water, energy and sustainability. CCED's 2011 theme was, "Energy – It's Everywhere!" ACS offered events, contests, and educational resources for members, chemical educators, and chemistry enthusiasts to illustrate the positive role that chemistry plays in preserving the Earth.

One resource ACS offers each year for NCW and CCED is [Celebrating Chemistry](#), a newspaper designed to engage and educate children (Grades 4 - 6) in the basic principles of chemistry – available in both English and Spanish, and in print and online. It contains articles, experiments and puzzles.

Through all of these efforts, ACS helped members put a human face and voice on chemistry.



Annual Report 2011

## PROGRAM HIGHLIGHTS

### Nancy B. Jackson

#### 2011 ACS President Leads International Collaboration

The International Year of Chemistry (IYC 2011) was an excellent window of opportunity for ACS and its members to communicate the importance of chemistry to the public. During 2011, ACS promoted and contributed to IYC's national and global successes by creating new networks and programs. These were aligned with the International Union of Pure & Applied Chemistry (IUPAC) and United Nations Educational, Scientific & Cultural Organization (UNESCO) goals and objectives for this [IYC](#) historic year. Dr. Jackson participated in IYC 2011 opening ceremonies in both Philadelphia and Paris.

2011 provided many opportunities for international collaboration for Dr. Jackson and ACS. A notable highlight included the signing of a collaborative alliance between ACS and the Federation of Asian Chemical Societies (FACS). The three-year alliance is characterized by mutual benefits, impact, and commitment to cooperation in service to chemical scientists, engineers, and professionals represented by their respective organizations.

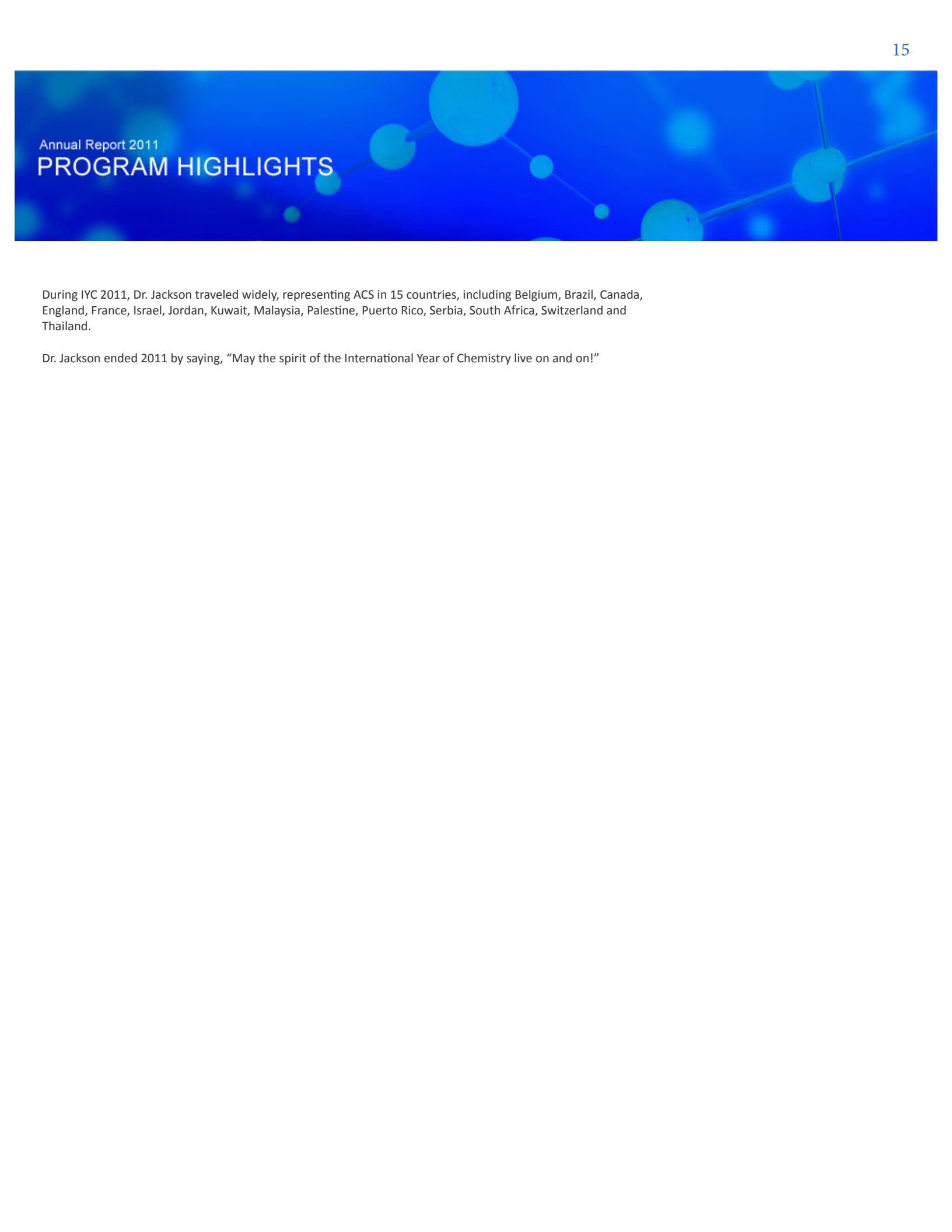
One way ACS engaged the global scientific community in celebrating IYC was with ["365: Chemistry for Life,"](#) a web feature that highlighted chemistry's contributions to humankind with a chemistry-related nugget of information for every day of the year. Another was the [IYC Bulletin](#), a unifying resource for IYC planners worldwide. In addition, the ACS [IYC Virtual Journal](#) repurposed content from ACS journals to illustrate the many ways chemistry improves everyday life for people around the world. One of [Dr. Jackson's top ten observations](#) from her IYC adventure was, "A remarkable and inspiring number of chemical scientists dedicate so much of their lives to the betterment of others – as educators, volunteers, mentors, researchers, and advocates – that it has been humbling and uplifting to spend my year among so many people I consider heroes."

Keeping with the IYC 2011 theme, Dr. Jackson sponsored Presidential Symposia at the national meetings in Anaheim and Denver on the value of chemistry to the public and the importance of international collaborations. They included "Hollywood Chemistry", "Asia-American Chemical Symposium," "Empowering Tomorrow's Science Super Heroes," and "Science on the Hollywood Screen."

One of Dr. Jackson's accomplishments this year was to establish an ACS Presidential Roundtable on Sustainable Manufacturing. The Roundtable includes representatives of Air Products, Dow, DuPont, Eastman Chemical, Praxair, Sandia National Laboratory, Weyerhauser, the American Institute of Chemical Engineers (AIChE) and the Council for Chemical Research. Their goal is to further enable innovation and integrate sustainability into the chemical and allied products industries. Specific plans include: completing and publishing roadmaps for different elements of a sustainable manufacturing research agenda, hosting a congressional briefing on the research agenda and associated policy and economic issues, featuring the sustainable manufacturing agenda in the publications and communications of ACS and all roundtable members, and highlighting the sustainable manufacturing agenda to U.S. policy leaders.

Another collaboration Dr. Jackson began with AIChE was a Sustainability Metrics for Energy Systems project. Established in response to industry interest, the partnership agreed on an objective to "enable a sound data-based framework to assist in effective decision making for energy research and technology development investment, as well as energy policy and regulation." The initial workshop in 2012 will address alternative and conventional hydrocarbon-based transportation fuels, with guests from government, industry, academia, national labs, and NGOs. Their presentations will result in a workshop report intended to build a broader framework when combined with additional future workshop reports.

Dr. Jackson represented ACS before the U.S. Congress. She testified before the House Science, Space, and Technology Committee's Subcommittee on Research and Science Education about the effectiveness of the merit review process used by the National Science Foundation (NSF) to decide which scientific research proposals to fund. "Assuring a balanced portfolio of research is critical," said Jackson, "especially now as we continue to work to ensure that our federal dollars are spent wisely." Jackson continued, "In tough economic times, it is vital to spend prudently. In order to do this, we need to guard against becoming too conservative in our decisions. Rather, we must continue to support a portfolio of research that leads to both improvements in existing ideas and technologies as well as to innovations. Now, more than ever, America needs pioneering research that will create economic renewal and jobs and will train the scientific workforce of the future."

The background of the slide is a solid blue color. Overlaid on the right side is a graphic of a molecular structure, consisting of several blue spheres of varying sizes connected by thin blue lines. The spheres are arranged in a roughly triangular shape, with one large sphere at the top and several smaller ones below and to the sides.

Annual Report 2011

## PROGRAM HIGHLIGHTS

During IYC 2011, Dr. Jackson traveled widely, representing ACS in 15 countries, including Belgium, Brazil, Canada, England, France, Israel, Jordan, Kuwait, Malaysia, Palestine, Puerto Rico, Serbia, South Africa, Switzerland and Thailand.

Dr. Jackson ended 2011 by saying, "May the spirit of the International Year of Chemistry live on and on!"

## Financial Highlights

Despite a sluggish and uneven economic recovery and heightened volatility in the global financial markets, the American Chemical Society (ACS) ended 2011 on a highly positive note with outstanding operating results. ACS ended 2011 with a net contribution from operations of \$20.1 million, the second highest on record. In addition, total revenues increased 1.8% over 2010. The 2011 financial results represent the eighth consecutive year of positive net contribution from operations. This strong operating performance is attributed to a combination of outstanding financial performance from the information services divisions (Chemical Abstracts Service and ACS Publications) and a continued emphasis on expense management across all operating units.

While operating performance continued to be strong, the Society's overall financial position deteriorated in 2011 due to the impact of declining interest rates on postretirement benefit plan liabilities. Unrestricted net assets decreased to \$139.5 million at December 31, 2011, from \$169.9 million in 2010. The decrease is primarily attributable to accounting charges related to the Society's underfunded postretirement benefit plans (i.e., defined benefit pension plan and retiree medical plan). In short, historically low interest rates have temporarily inflated postretirement benefit plan liabilities and caused the Society's unrestricted net assets to decline. In future years this phenomenon will reverse as interest rates gradually return to more normal levels.

In furtherance of its mission "Advance the broader chemistry enterprise and its practitioners for the benefit of Earth and its people," ACS continues to invest heavily in its information services units. These investments are made to strengthen the Society's position as the world's most trusted and comprehensive source of chemistry-related information. In support of this goal, several initiatives were undertaken in 2011. Two new journals, *ACS Catalysis* and *ACS Medicinal Chemistry Letters*, were launched; the ACS extended its mobile program to the Android environment and launched a free dedicated C&EN mobile application for iPhones, iPads, and Android mobile devices; and by year-end, ACS was publishing more than 40 peer-reviewed journals. In addition, the CAS Registry exceeded more than 65 million records for organic and inorganic substances, indexed publications reached an all-time high and reaction procedures grew in SciFinder to more than three million.

Looking ahead, the Society intends to vigorously pursue the goals set out in its new and highly focused Strategic Plan for 2012 and Beyond. Whether providing information resources, advancing member careers, improving education or communicating chemistry's values, ACS remains firmly committed to providing the highest quality programs, products and services to its diverse stakeholders, including members, educators, public policy makers and other chemistry professionals.

To access ACS audited financial statements and IRS Form 990 returns, visit the ACS website at [www.acs.org](http://www.acs.org). Click the About Us tab, scroll down and click on the link to ACS Financial Information, or [click here](#).

## Financial Summary

(\$ in Thousands)

| Statement of Financial Position                       | 2011              |                            |                     | 2010                |
|---|-------------------|----------------------------|---------------------|---------------------|
|   | ACS<br>Programs   | Petroleum<br>Research Fund | Total               | Total               |
|   | ASSETS            |                            |                     |                     |
| Cash and Cash Equivalents                             | \$ 28,555         | \$ 19,736                  | \$ 48,291           | \$ 39,215           |
| Accounts and Pledges Receivable                       | 81,146            | –                          | 81,146              | 70,306              |
| Inventories   | 2,850             | –                          | 2,850               | 4,841               |
| Investments   | 423,037           | 441,413                    | 864,450             | 897,149             |
| Interfund (Payable) Receivable                        | (12,587)          | 12,587                     | –                   | –                   |
| Collateral Held                                       | –                 | –                          | –                   | 63,102              |
| Other   | 15,159            | 25                         | 15,184              | 12,962              |
| Buildings, Land, and Other Property                   | 110,172           | –                          | 110,172             | 104,030             |
| <b>Total Assets</b>                                   | <b>\$ 648,332</b> | <b>\$ 473,761</b>          | <b>\$ 1,122,093</b> | <b>\$ 1,191,605</b> |
| LIABILITIES AND NET ASSETS                            |                   |                            |                     |                     |
| LIABILITIES   |                   |                            |                     |                     |
| Accrued Expenses and Accounts Payable                 | \$ 64,779         | \$ 10,495                  | \$ 75,274           | \$ 76,026           |
| Deferred Revenues                                     | 143,729           | –                          | 143,729             | 120,205             |
| Short and Long-Term Debt                              | 3,168             | –                          | 3,168               | 3,869               |
| Postretirement Benefits and Other                     | 209,205           | 3,915                      | 213,120             | 185,077             |
| Collateral Payable                                    | –                 | –                          | –                   | 63,102              |
| Total Liabilities                                     | 420,881           | 14,410                     | 435,291             | 448,279             |
| NET ASSETS  |                   |                            |                     |                     |
| Unrestricted  | 139,470           | –                          | 139,470             | 169,922             |
| Temporarily Restricted                                | 25,712            | 386,851                    | 412,563             | 438,122             |
| Permanently Restricted                                | 62,269            | 72,500                     | 134,769             | 135,282             |
| Total Net Assets                                      | 227,451           | 459,351                    | 686,802             | 743,326             |
| <b>Total Liabilities and Net Assets</b>               | <b>\$ 648,332</b> | <b>\$ 473,761</b>          | <b>\$ 1,122,093</b> | <b>\$ 1,191,605</b> |
| Statement of Activities                               |                   |                            |                     |                     |
| Statement of Activities                               | 2011              |                            |                     | 2010                |
|   | ACCS<br>Programs  | Petroleum<br>Research Fund | Total               | Total               |
|   | REVENUES          |                            |                     |                     |
| Electronic Services                                   | \$ 403,834        | \$ –                       | \$ 403,834          | \$ 390,386          |
| Dues  | 12,294            | –                          | 12,294              | 12,361              |
| Member Insurance Premiums, Refunds & Fees             | 11,299            | –                          | 11,299              | 14,482              |
| Printed Services                                      | 10,295            | –                          | 10,295              | 14,270              |
| Registration Fees and Booth Sales                     | 10,061            | –                          | 10,061              | 11,438              |
| Advertising   | 8,945             | –                          | 8,945               | 8,824               |
| Investment Income                                     | 9,948             | 60                         | 10,008              | 10,075              |
| Net Assets Released from Restriction                  | 5,618             | 20,867                     | 26,485              | 21,758              |
| Other   | 6,579             | –                          | 6,579               | 6,641               |
| <b>Total Unrestricted Revenues</b>                    | <b>478,873</b>    | <b>20,927</b>              | <b>499,800</b>      | <b>490,235</b>      |
| EXPENSES  |                   |                            |                     |                     |
| Information Services                                  | 354,249           | –                          | 354,249             | 345,707             |
| Member Programs and Services                          | 42,152            | –                          | 42,152              | 40,075              |
| Member Insurance Program                              | 14,781            | –                          | 14,781              | 14,582              |
| Grants and Awards                                     | 3,081             | 19,124                     | 22,205              | 17,146              |
| Administrative  | 36,354            | 1,803                      | 38,157              | 36,464              |
| Other   | 8,157             | –                          | 8,157               | 9,574               |
| <b>Total Expenses</b>                                 | <b>458,774</b>    | <b>20,927</b>              | <b>479,701</b>      | <b>463,548</b>      |
| Net Contribution                                      | 20,099            | –                          | 20,099              | 26,687              |
| Net Investment (Losses) / Gains                       | (535)             | –                          | (535)               | 19,096              |
| Change in Pension Funding Status and Other            | (50,016)          | –                          | (50,016)            | (35,199)            |
| <b>Change in Unrestricted Net Assets</b>              | <b>(30,452)</b>   | <b>–</b>                   | <b>(30,452)</b>     | <b>10,584</b>       |
| Contributions   | 6,089             | –                          | 6,089               | 3,416               |
| Investment Income and Net Investment (Losses) / Gains | 1,063             | (7,619)                    | (6,556)             | 63,407              |
| Net Assets Released From Restriction                  | (5,618)           | (20,867)                   | (26,485)            | (21,758)            |
| Other   | 980               | (100)                      | 880                 | –                   |
| <b>Change in Restricted Net Assets</b>                | <b>2,514</b>      | <b>(28,586)</b>            | <b>(26,072)</b>     | <b>45,065</b>       |
| Change in Total Net Assets                            | (27,938)          | (28,586)                   | (56,524)            | 55,649              |
| Beginning Total Net Assets                            | 255,389           | 487,937                    | 743,326             | 687,677             |
| <b>Ending Total Net Assets</b>                        | <b>\$ 227,451</b> | <b>\$ 459,351</b>          | <b>\$ 686,802</b>   | <b>\$ 743,326</b>   |

## Allocation of Dues & Member Status

The American Chemical Society is a 501(c)3 non-profit organization with a multidisciplinary membership of more than 164,000 chemists and chemical engineers.

### 2011 Allocation of Dues

| (\$ in Thousands)            |                  |             |
|------------------------------|------------------|-------------|
| C&EN                         | \$ 6,397         | 41%         |
| Support for Society Programs | 1,523            | 10%         |
| Member Services              | 4,374            | 28%         |
| Local Section Allotments     | 1,788            | 12%         |
| Division Allotments          | 1,352            | 9%          |
| <b>Total</b>                 | <b>\$ 15,434</b> | <b>100%</b> |

Excluding the impact of Local Section and Division Allotments, 2011 dues revenue totaled \$12,294,000 as reported on the Financial Summary page.

### Membership Status\*

| Year-End 2011                |                |
|------------------------------|----------------|
| Emeritus Member              | 13,470         |
| Regular Member               | 104,793        |
| Regular Student Member       | 20,287         |
| Undergraduate Student Member | 16,873         |
| Retired Member               | 5,469          |
| Society Affiliate            | 1,053          |
| Unemployed Member            | 2,270          |
| <b>Total</b>                 | <b>164,245</b> |

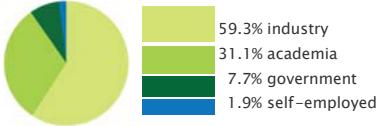
\*Source: ACS Demographics

### ACS Members in the Workplace 2011\*

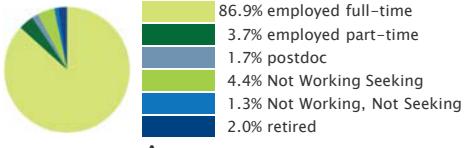
#### Highest Degree



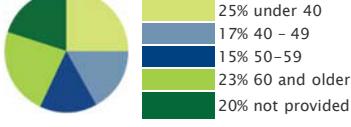
#### Employment Type



#### Employment Status



#### Age



#### Sex



### 2011 Division Year-End Membership Summary

| Division Name  | Division Total |
|--|----------------|
| Agricultural & Food Chemistry Division                   | 3,133          |
| Agrochemicals Division                                   | 1,167          |
| Analytical Chemistry Division                            | 8,502          |
| Biochemical Technology Division                          | 3,376          |
| Biological Chemistry Division                            | 7,634          |
| Business Development & Management Division               | 1,001          |
| Carbohydrate Chemistry Division                          | 788            |
| Catalysis Science and Technology Division (probationary) | 726            |
| Cellulose & Renewable Materials Division                 | 1,489          |
| Chemical Education Division                              | 5,337          |
| Chemical Health & Safety Division                        | 1,440          |
| Chemical Information Division                            | 1,016          |
| Chemical Toxicology Division                             | 1,371          |
| Chemistry & the Law Division                             | 1,237          |
| Colloid & Surface Chemistry Division                     | 2,581          |
| Computers in Chemistry Division                          | 2,280          |
| Environmental Chemistry Division                         | 5,077          |
| Fluorine Chemistry Division                              | 583            |
| Fuel Chemistry Division                                  | 1,445          |
| Geochemistry Division                                    | 811            |
| History of Chemistry Division                            | 764            |
| Industrial & Engineering Chemistry Division              | 4,721          |
| Inorganic Chemistry Division                             | 6,323          |
| Medicinal Chemistry Division                             | 10,717         |
| Nuclear Chemistry Division                               | 1,011          |
| Organic Chemistry Division                               | 15,681         |
| Petroleum Chemistry Division                             | 1,330          |
| Physical Chemistry Division                              | 5,898          |
| Polymer Chemistry Division                               | 4,942          |
| Polymeric Materials Science & Engineering Division       | 4,375          |
| Professional Relations Division                          | 978            |
| Rubber Division  | 1,791          |
| Small Chemical Businesses Division                       | 585            |
| <b>Total</b>   | <b>110,109</b> |

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# 2011 HIGHLIGHTS

## ACS by the Numbers

The American Chemical Society achieved some significant milestones in 2011 and we are pleased to present a summary of some of the highlights. These selected accomplishments were achieved through a robust partnership of American Chemical Society members, governance and staff, often in partnership with other organizations. Go to <http://www.acs.org/acshighlights> to download the complete PDF.

|   |  |   |
|---|--|---|
| 5,603   | 109  | 3.5 billion   |
| <u>ACS membership</u> in 1911.  | Number of employers recruiting applicants.   | Average potential worldwide audience per month for those news items.  |
| 164,000 +   | 1,264  | 1.7 million +   |
| ACS membership as of Dec. 31, 2011.   | Job opportunities available.   | Downloads of <u>ACS podcasts</u> in 2011.   |
| <b>2011</b>   | <b>184</b>   | <b>412</b>  |
| Declared the International Year of Chemistry. It was a worldwide celebration of the achievements of chemistry and its contributions to the well-being of humankind. | Total number of <u>ACS Petroleum Research Fund</u> grants awarded in 2011.               | Number of economically disadvantaged high school students who participated in <u>Project SEED</u> in 2011.  |
| <b>24,000 +</b>   | <b>\$18 million +</b>  | <b>16</b>   |
| Combined attendance at 2011 ACS <u>National Meetings</u> in Anaheim and Denver.   | Funding allocated for those grants.  | Years since ACS inaugurated <u>the ACS Scholars</u> program.  |
| <b>16,000 +</b>   | <b>26</b>  | <b>2,500 +</b>  |
| Number of papers submitted for those ACS National Meetings.   | Number of ACS PRF grantees who have received the Nobel Prize.                            | Number of students from underrepresented backgrounds who have participated in ACS Scholars in that time.  |
| <b>929</b>  | <b>1</b>   | <b>1,140</b>  |
| <u>Presentations posted online</u> after 2011 ACS National Meetings.  | Number of 2011 Nobel Laureates in Chemistry – Dan Shechtman.                             | ACS Scholars who have earned at least a bachelor's degree in a chemical science.  |
| <b>23,897+</b>  | <b>7,276</b>   | <b>104</b>  |
| Unique visitors who viewed those presentations online.  | Number of <u>ACS Chemistry Ambassadors</u> by year-end.                                  | Number of ACS Scholars who have earned Ph.Ds.   |
| <b>213</b>  | <b>100</b>   | <b>220,000</b>  |
| Number of scientists inducted into the 2011 class of ACS Fellows during the Denver National Meeting.  | Percentage of ACS peer-reviewed journals that received <u>news coverage</u> in 2011.     | Members of the <u>ACS Network</u> , the premier online forum for chemists and other scientists to communicate and build professional connections. |
| <b>2,703</b>  | <b>1,000 +</b>   | <b>14,123</b>   |
| Job seekers who participated in ACS <u>Career Fairs</u> at national meetings and in the ACS Virtual Career Fair online.   | Estimated number of print, electronic and social media news items issued by ACS in 2011. | ACS members who are in the <u>Act4Chemistry</u> network.  |



# Annual Report 2011

## 2011 HIGHLIGHTS

**1,191**

Messages sent by ACS members to Congress and other public policymakers in support of science issues through the Legislative Action Network.

**816**

Number of people who enrolled in [ACS Leadership Development](#) courses in 2011.

**65 million**

Chemical substances in the [CAS](#) REGISTRY<sup>SM</sup> at the end of 2011.

**63 million**

Sequences in the CAS REGISTRY<sup>SM</sup> at the end of 2011.

**38 million**

CAS' collection of searchable single and multi-step reactions from 1840 to the present.

**1.3 million**

Indexed records added to Cplus<sup>SM</sup> in 2011.

**71**

Countries where [SciFinder](#)<sup>®</sup> is used.

**36,000 +**

Number of peer-reviewed articles published in ACS Journals in 2011.

**More than 78 million**

Journal articles downloaded by researchers from the ACS Web Editions Platform in 2011.

**14**

Number of subject categories in which ACS Journals rank #1 in total citations and/or ISI Impact Factor<sup>TM</sup> as reported in the 2010 Journal Citation Reports<sup>TM</sup> from Thomson Reuters.

**458**

ACS-chartered [high school chemistry clubs](#) in 2011.

**40**

Percentage increase in the number of ACS-chartered chemistry clubs from 2010 to 2011.

**4**

Medals won – two gold, two silver – by the American team at the 43rd [International Chemistry Olympiad](#) (IChO) in Ankara, Turkey, in July 2011. It was the best performance by an American team since 2001.

**1,043**

The number of schools converting to SciFinder<sup>®</sup> Academic Unlimited Access, providing students and faculty from all departments at these institutions with access to SciFinder<sup>®</sup> and the CAS database.

**61,000**

Registrants who participated in [ACS Webinars](#) in 2011.

**100**

Number of ACS Local Section Government Affairs Committees.

**11**

Science & the Congress briefings conducted on Capitol Hill and elsewhere to educate lawmakers and their staff about science issues.

**1,000**

The number of participants at Science & the Congress briefings, including 400 U.S. House and Senate staff members.

**15,044**

Bachelor's degrees earned by students in ACS-approved chemistry programs in 2009-10, an all-time high.

**2,453**

Doctorates earned by students in ACS-approved chemistry programs during that same time span.

**10**

International Historic Chemical Landmarks in seven countries: Canada, France, Germany, Hungary, India, Mexico, and the United Kingdom.

**25**

States with National Historic Chemical Landmarks.

**2011**

The year when the most recent [National Historic Chemical Landmark](#) was designated – Varian A-60 NMR spectrometer, along with magnetic resonance imaging (MRI).

Annual Report 2011

# BOARD OF DIRECTORS & OFFICERS 2011

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Madeleine Jacobs  
Flint H. Lewis  
Kent J. Voorhees  
Neil D. Jespersen



Nancy B. Jackson

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Dennis Chamot  
Valerie J. Kuck  
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Bassam Z. Shakhashiri

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