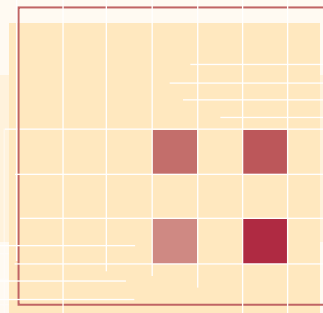




the society for solid-state
and electrochemical science
and technology

annual report 2008



Fostering the Advancement of Science

We are pleased to report that 2008 was a year of growth and achievement for ECS. Despite some world economic challenges and declining market conditions, we continued a trend of excellent performance with respect to technical meetings, publications, and science education. Ultimately, our strong technical programs supported our mission in 2008, and enabled ECS to foster the advancement of solid-state and electrochemical science.

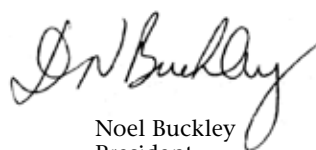
The Society's notable achievements are summarized in the following pages. These achievements are mission-focused activities that are funded by our operational and fund-raising activities. Financial performance continues to be a strength of ECS and we finished 2008 with total revenues of \$6 million, and surplus of \$542,323. However, broad stock market declines caused an unrealized loss of \$1.4 million in the ECS endowment and custodial funds. We attribute the Society's overall solid financial situation to progress in the meetings and publications programs, excellent management and cost containment, and relevancy of the scientific areas that we engage.

All scientific and engineering societies have room for improvement, and ECS is no exception. Going forward, ECS volunteer leaders and staff will be challenged to increase communications in our community, improve cross-discipline innovation, and elevate the speed and efficiency

of content delivery. And we must continue to attract and retain student and early-career scientists and engineers.

ECS holds deeply rooted values as a professional, world-class technical organization, and promotes a culture based on knowledge exchange and longtime relationships among members. The sharing of information and ideas is the lifeblood of this great organization. ECS continues to grow in stature, achievement, and breadth of influence. There is strong momentum, even in these challenging times, and we will build on that momentum in 2009 and beyond.

Thank you for your dedicated efforts, confidence, and continued support, and for making 2008 another successful year at ECS.



Noel Buckley
President



Roque Calvo
Executive Director

annual report

■ Publications ■

As one way of measuring the success of our journals, ECS charts one long-standing metric and an exciting new one. The Institute for Scientific Information's (ISI) Science Citation



Index calculates the impact factor of a journal based on a three-year period. It can be viewed as an approximation of the average number of

citations in a year, given to those papers in a journal that were published during the two preceding years. The impact factor for the *Journal of The Electrochemical Society* (JES) was 2.437 for 2008 and the figure for *Electrochemical and Solid-State Letters* (ESL) was 2.001, placing them in the top ten and top eleven, respectively, for journals in electrochemistry.

A more interesting metric, which is becoming an increasingly important standard, is the Eigenfactor™ (www.eigenfactor.org). The *Journal of The Electrochemical Society* (JES) is number one in electrochemistry journals

in this ranking. The Eigenfactor was developed borrowing methods from network theory, and it ranks the influence of journals much as Google's "PageRank" algorithm ranks the influence of Web pages. In many research areas, articles are not frequently cited until several years after publication; so with the Eigenfactor, a journal is considered influential if its articles are heavily cited within five years of publication by other influential journals. We will



continue to follow these metrics, but more important to us is the quality and breadth of coverage in the field.

Electrochemistry has been an active discipline lately, especially in energy science and technology, and the reputation of our journals has been broadening. As a result, JES had a record number of submissions in 2008 (1,550) and ESL had 711. Both journals showed major improvement in their lag times. The lag time for JES dropped significantly in 2008, from 5.8 months in 2007 to 4.2 months in 2008. The ESL lag time also dropped significantly, from 16.2 weeks in 2007 to 12.9 weeks in 2008. The drops in lag time reflect an assiduous effort on the part of the editors and staff to reduce



the time handling manuscripts and proofs, all while maintaining the high standards of peer review. For the two journals, in just ten years, the average number of published manuscripts increased by 129% and the average lag time decreased by 37.5%.

It is interesting to note, that among the eleven top-ranked electrochemistry journals, ECS is the only society publisher, all the rest are commercial publishers. Staying at

the top is no small feat considering the depth of resources in the commercial world, even in these trying economic times. Some commercial publishers in our scientific field have placed a lower value on editorial excellence, opting to invest in shortening lag times, inflating citations, and creating unbreakable subscription bundles; for the purpose of improving profit margins. The end result is a proliferation of high cost and low quality technical publications that impedes the advancement of our science. ECS will continue to maintain high editorial standards, to best foster the science.

The legacy digitization project continued in 2008, with the last of the content published under the title the *Journal of The Electrochemical Society*. Digitization began on the content published under the title *Transactions of The Electrochemical Society*; the years 1940-1948 will be added to the ECS Digital Library in 2009.

ecs transactions

ECS Transactions (ECST) grew with the addition of content from not only the ECS biannual meetings, but also several co-sponsored meetings. In 2008, a total of 83 issues of ECST, from eight different meetings, were published. Of those, 17 were published as hard-cover editions. Outside meetings and conferences continue to seek responsible, cost-effective publishers, and ECST has become home to many conferences, including the 23rd Meeting of the Mexican Electrochemical Society, the 23rd Symposium on Microelectronics Technology and Devices, and the 2007 Fuel Cell Seminar and Exposition, among others.

Interface showcased much of the hot technologies: electrochemical capacitors; corrosion within the human body; autonomous micro-power sources; and the science and technology of sustainable energy generation and conversion strategies for solar, electrochemical, and thermoelectric systems.

ECS was pleased to introduce the redesign of the ECS Bookstore. For the first time ever, ECS publications dating back to 1967 have been organized into an easy-to-search database. Users can now locate materials by title, editor, event, category, ISBN, product code, or keyword. Icons are displayed beside each title to indicate the available format(s) such as hardcover, PDF, and CD-ROM. Clicking on the main link for a title will display additional information such as the description, pages, year published, and the list prices for all available formats; and links are provided to any further information such as alternate formats, individual papers, and/or a Table of Contents.

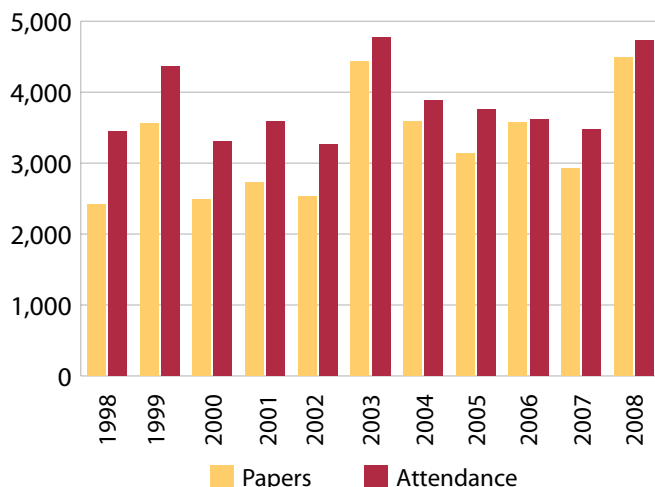
To address the need to more widely disseminate the Digital Library content, and to help support its development, the Society hired, for the first time, a global sales manager. We also introduced a tiered pricing structure, which enabled more institutions to afford access to the ECS Digital Library.



■ Community Site ■

We are continuing to invest in the ways to promote and satisfy the mission of ECS. We have a major initiative in progress that will provide an exciting new tool for our professional community and advance the science even more. This new community website will be the starting point for you to find the content that you need and to see what others deem important. It will be a place for you to connect with your scientific peers. And there will be some familiar social networking applications along with some unique collaboration tools. Stay tuned as this project unfolds in 2009!

Meetings



ECS has been an international organization since its inception in 1902; but with the increased ability to communicate and transmit the science globally, interest in holding ECS meetings in more countries has only increased. Since 1997, we have held meetings in Europe, with the next one is scheduled for Vienna, Austria, in October 2009. Cancun, Mexico was the site of a meeting held in the fall of 2006, with the co-sponsorship of the Sociedad Mexicana de Electroquímica. Planning is underway for a future joint meeting with the Sociedad Iberoamericana de Electroquímica in Latin America.

ECS and The Electrochemical Society of Japan (ECSJ) recently held the fifth iteration of what is now called PRiME (Pacific Rim Meeting on Electrochemistry and Solid-State Science). The meeting is held in Hawaii, to enable the participation not only of ECSJ members, but those of the Japan Society of Applied Physics (JSAP), the Korean Electrochemical Society (KECS), the Electrochemistry Division of the Royal Australian Chemical Institute (RACI), and the Chinese Electrochemical Society (CSE). Meetings serve the core objectives of ECS—education and dissemination of scientific information—and in this regard, PRiME 2008 was extraordinarily successful. With approximately 3,400 participants and 3,236 papers on 53 separate topics, it was the largest meeting in the history of our Society. It was, in fact, the largest meeting ever held in our discipline.

The size and quality of PRiME 2008 was a result of a long and very successful collaboration between ECS and ECSJ, with the technical co-sponsorship of JSAP, KECS, RACI, and CSE. Perhaps a more important result was the goodwill generated among international organizations, the new channels of communication opened, and the exchange of ideas among scientists from different countries. Collaboration and the exchange of ideas has always been a hallmark of progress in science. International collaboration between scientists and scientific organizations benefits humanity not only by its contribution to scientific progress but also by its unifying effect between people and by the example that it sets for collaboration in other spheres. The great success of PRiME 2008 is another reminder of what can be achieved through such cooperation.

(continued on page 62)

213th ECS Meeting

PHOENIX, AZ

MAY 18-22, 2008



THE ECS LECTURE—**Sumio Iijima** (third from left) delivered the lecture at the Plenary Session of the 213th ECS Meeting in Phoenix, Arizona. Prof. Iijima also was presented with the first Richard E. Smalley Award of the Fullerenes, Nanotubes, and Carbon Nanostructures Division from its current Chair, **Francis D'Souza** (far left). On hand to congratulate Prof. Iijima were ECS President **Barry MacDougall** (second from left) and ECS Executive Director **Roque Calvo** (far right).



VITTORIO DE NORA AWARD—The award, given for contributions to the field of electrochemical engineering and technology, is one of the Society's highest honors. The 2008 award was presented to **John Newman** (left) by ECS President **Barry MacDougall**.



HENRY B. LINFORD AWARD FOR DISTINGUISHED TEACHING—**Eliezer Gileadi** (left) received the 2008 award from ECS President **Barry MacDougall**. The Linford Award is given for excellence in teaching in subject areas of interest to the Society.

annual report

PRiMETM
PACIFIC RIM MEETING
ON ELECTROCHEMICAL
AND SOLID-STATE SCIENCE

2008

HONOLULU, HI * OCTOBER 12-17, 2008



PRiME 2008—The fifth joint international meeting officially opened on Monday, October 13 with the Plenary Session. Preparing for the opening greetings were (left to right): ECS Senior Vice-President **Paul Natishan**, ECS President **Noel Buckley**, ECSJ President **Makoto Yoda**, and ECS Executive Director **Roque Calvo**.



NEW DEVELOPMENTS IN ELECTROCHEMICAL NANOTECHNOLOGY—**Tetsuya Osaka** presented the plenary lecture on this fascinating topic to the opening session of PRiME 2008.



2008 CLASS OF ECS FELLOWS—ECS President **Noel Buckley** (front row, center) posed with the newest ECS Fellows. In the front row, from left to right, are: **Gery Stafford**, (President Buckley), and **Thomas Thundat**. In the back row, from left to right, are: **Joseph Stetter**, **John Stickney**, **Patrik Schmuki**, and **Curtis F. Holmes**. Missing from the photo are ECS Fellows **Doron Aurbach**, **Albert J. Fry**, **Fernando Garzon**, **Yury Gogotsi**, and **Prashant V. Kamat**.



ECS EDWARD GOODRICH ACHESON AWARD—**Robert P. Frankenthal**, the award recipient, was unable to come to the PRiME to receive the Medal, so the Medal came to him at a special luncheon a month later. Dr. Frankenthal is shown here (at right) receiving the award from ECS Vice-President **Paul Natishan**.



ECS CHARLES W. TOBIAS YOUNG INVESTIGATOR AWARD—The award recognizes outstanding scientific and/or engineering work in fundamental or applied electrochemistry or solid-state science and technology by a young scientist or engineer. **Yang Shao-Horn** (left) received the 2008 award from ECS President **Noel Buckley**.



Arriving in style at the **PPiME 2008 luau** were ECSJ President-elect **Kenichiro Ota** (back) and ECS President **Noel Buckley** (front).



The **PPiME 2008 LUAAU** was a feast for the senses with Hawaiian music and a dazzling display of traditional dances. It also included some good-natured audience participation.

annual report

(continued from page 59)

■ Technical Divisions ■

The ECS Fullerenes, Nanotubes, and Carbon Nanostructures (FNCN) Division established a second award in 2008, the SES Research Young Investigator Award. This award, to be presented for the first time in 2009, was created to encourage promising researchers to remain active in the fields of fullerenes, nanotubes, and carbon nanostructures. SES Research was founded in the early years of fullerene research, in 1991, by two University of Houston graduates,



IE&EE OUTREACH PROGRAM—The Industrial Electrochemistry & Electrochemical Engineering Division successfully completed its fourth volunteer Outreach Program during the ECS Phoenix meeting. The event took place at the Bioscience High School (BHS), just a few blocks from the meeting venue.

In the top photo, standing from left to right, are: **Renu Singh** (BHS teacher), **Monica Reyes** (BHS student), **Katherine Cordova** (BHS student), **Po-pé Enrique** (BHS teacher), **Deedee Falls** (BHS Principal), and **Ashley Martin** (BHS student). Seated from left to right are: BHS students **Jose Espericueta**, **Bria Knox**, **Raymond Galvan**, and **Victoria Nichols**. Missing from the photo is student Sarah Ramirez.

In the bottom photo, seated from left to right, are: **Gerri Botte** (Ohio University), **Bryan Boggs** (Ohio University), **Deedee Falls** (BHS Principal), and **Renu Singh** (BHS teacher). Standing, from left to right, are: **Ramasamy Palaniappan** (Ohio University), **Vijay Sethuraman** (Lawrence Berkeley National Laboratory), **Dennie Mah** (IE&EE Chair), **Po-pé Enrique** (BHS teacher), and **Vijay Boovaragavan** (Tennessee Tech University).



THOMAS CALLINAN AWARD—The Dielectric Science and Technology (DS&T) Division presented the 2008 award to **Paul Kohl** (right), pictured here with the incoming Chair of the DS&T Division **Durga Misra**, during the Division's Luncheon & Business Meeting during the ECS meeting in Phoenix.

Christopher Burres and Robert Wong, with the simple idea of supplying fullerenes to the world. Armed with the knowledge of making fullerenes, and the understanding that fullerenes will one day have an impact on the daily life of everyone, SES Research opens its doors to the worldwide fullerene research community.

Francis D'Souza, chair of the FNCN Division, said, "Establishing the second award to recognize outstanding persons in their early career is an important step to encourage the next generation of scientists to be active in the area of fullerenes, nanotubes, and carbon nanostructures, and involve them more in ECS sponsored activities. Both the Smalley Research and the SES Research Young Investigator Awards are expected to increase the visibility of the FNCN Division within and outside ECS."

■ Membership ■

Until 2008, ECS had been governed by two documents, the Constitution and the Bylaws, and the two documents in many instances overlapped one another. One fundamental document, rather than two, is the norm in many organizations, and it was suggested by legal counsel that ECS should consider merging the Constitution and the Bylaws into a single document. The Executive Committee of the Board of Directors saw the benefits in having a modern document and initiated the process to create a single document, the "New" Bylaws.

The process started in October 2007, with a petition by ten members. The petition was approved by the Board in October 2007. At the May 20, 2008 Annual Business Meeting in Phoenix, ECS members voted to approve the proposal. Following the meeting, all members had the opportunity to vote online for the final approval. The members voted to eliminate the Constitution and the new document, the "New" Bylaws currently governs ECS.

The "New" Bylaws were prepared by careful combination of the Constitution and existing Bylaws, in such a way that nothing was omitted, but nothing was duplicated. To allow the voters to focus on the merging process, rather than having them consider the desirability of specific material changes, any changes other than the merge were kept to the minimum. During 2009, other changes will be introduced, to make the Bylaws more in keeping with best practices, and members will again be able to vote online.



Vittorio de Nora
1912-2008

More changes for the membership occurred in 2008, with a new membership benefits package introduced in September. Members were given flexible online access to the entire ECS Digital Library (DL), including access to the archived content of JES and ESL, and, for the first time, to *ECS Transactions*. The new package provided members with 100 full-text downloads from the DL per year. To assist with the management of their downloads, members were provided with an Article Pack Account Management Center. As in years past, members were also able to purchase paper copies of the journals, at a significant reduction off the "list" price.

The year was not without its sad news as ECS noted the passing of one of its most prominent and well-known members, Vittorio de Nora. He started as a brilliant academic, but became an astute business man who led the globalization of the electrochemical chlor-alkali industry in the era following World War II, developing, promoting, and selling the de Nora cell technology world wide.

Vittorio de Nora left a pioneering legacy in the field of industrial electrochemistry, along with his older brother Oronzio de Nora. He was the first scientist to recognize the value of Henry Beer's non-carbon anode material and to complete its development so that it could be used industrially. The result was the de Nora coated titanium dimensionally stable anode (DSA[®]) used in the chlor-alkali industry. This led not only to the elimination of the polluting mercury cell technology, but also to the improvement of the environment by eliminating the greenhouse gas emissions from the carbon anodes that the DSA replaced.

(continued on page 65)

membership statistics

(as of October 1, 2008)

Table I. ECS Membership by Class

Category	2003	2004	2005	2006	2007	2008	2008/2006 %Change
Active	5411	5405	5126	5061	4974	5082	2.1
Member Reps	63	66	61	73	89	116	23.3
Life	52	46	46	46	45	46	2.2
Emeritus	246	215	230	229	234	248	5.6
Honorary	29	27	25	24	26	25	-4.0
Total Active Members	6598	6582	6542	6447	6309	6462	2.4
Total Students	1212	1278	1242	1304	1510	1940	22.26
Total Individual Members	7810	7860	7784	7751	7819	8402	6.9

Table II. ECS Membership by Division*

Division	2003	2004	2005	2006	2007	2008	2008/2006 %Change
Battery	2500	2625	2549	2511	1378	1450	5.0
Corrosion	1682	1716	1656	1584	531	521	-1.9
Dielectric Science & Technology	1399	1425	1339	1278	377	375	-0.5
Electrodeposition	1802	1888	1782	1727	509	509	0.0
Electronics & Photonics	2154	2152	1999	1812	815	759	-7.4
Energy Technology	2155	2377	2427	2434	929	1060	12.4
Fullerenes, Nanotubes and Carbon Nanostructures	503	706	687	713	194	205	5.4
High Temperature Materials	1061	1113	1096	991	205	196	-4.6
Industrial Electrochemistry & Electrochemical Engr	1365	1454	1393	1343	277	297	6.7
Luminescence & Display Materials	777	841	793	701	110	120	8.3
Organic & Biological Electrochemistry	1112	1243	1122	1026	188	215	12.6
Physical & Analytical Electrochemistry	2500	2614	2554	2426	643	664	3.2
Sensor	1253	1419	1382	1271	242	247	2.0

*The 2008 Division statistics represent only the primary interest of members. Prior to 2007, the numbers represent primary and secondary interests of members.

ECS Student Chapters

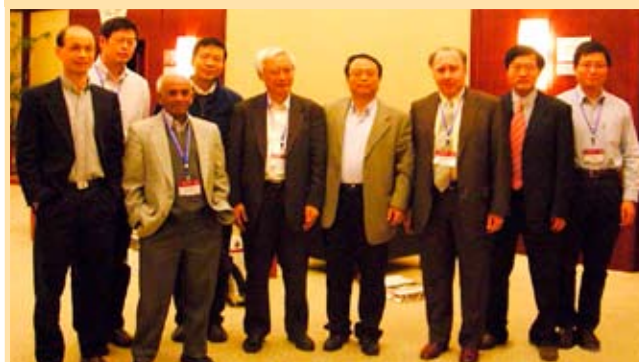
- **Atlanta Student Chapter at Georgia Tech**, founded 2008, Peter J. Hesketh, Faculty Advisor, peter.hesketh@me.gatech.edu
- **Auburn University Student Chapter**, founded 2007, Jeffrey Fergus, Faculty Advisor, jwfergus@eng.auburn.edu
- **Technical University Brno Student Chapter**, founded 2006, Jiri Vondrak, Faculty Advisor, vondrakj@iic.cas.cz
- **University of California - Berkeley Student Chapter**, founded 2006, John Newman, Faculty Advisor, newman@newman.cchem.berkeley.edu
- **University of Central Florida Student Chapter**, founded 2000, Kalpathy Sundaram, Faculty Advisor, sundaram@mail.ucf.edu
- **Central Illinois Student Chapter**, founded 2008, Andrzej Wiekowski, Faculty Advisor, andrzej@scs.uiuc.edu
- **University of Cincinnati Student Chapter**, founded 2007, Marc Cahay, Faculty Advisor, marc.cahay@uc.edu
- **ECS Cleveland Section and Ernest B. Yeager Center for Electrochemical Sciences Joint Student Chapter**, founded 2005, Dan Scherson, Faculty Advisor, dxs16@po.cwru.edu
- **University of Florida Student Chapter**, founded 2005, Eric Wachsman, Faculty Advisor, ewach@mse.ufl.edu
- **Grand Valley State University Student Chapter**, founded 2008, Cory M. DiCarlo, Faculty Advisor, dicarloc@gvsu.edu
- **Kerala, India Student Chapter at CUSAT**, founded 2008, M. K. Jayaraj, Faculty Advisor, mkj@cusat.ac.in
- **Lahore, Pakistan Student Chapter**, founded 2008, Inam Ul Haque, Faculty Advisor, inamul.haque@gmail.com
- **New York Capital Region Student Chapter**, founded 2006, Dan Lewis, Faculty Advisor, lewisd2@rpi.edu
- **The Ohio State University Student Chapter**, founded 2006, Gerald Frankel, Faculty Advisor, frankel.10@osu.edu
- **University of Rome "Tor Vergata" Student Chapter**, founded 2006, Enrico Traversa, Faculty Advisor, traversa@uniroma2.it
- **University of Texas at Austin Student Chapter**, founded 2006, Ram Manthiram, Faculty Advisor, rmanth@mail.utexas.edu
- **University of Virginia Student Chapter**, founded 2006, Rob Kelly, Faculty Advisor, rgk6y@virginia.edu



UNIVERSITY OF ROME "TOR VERGATA" STUDENT CHAPTER—From left to right: **Andrea Orsini**, President of the Chapter; **Zakarya Ahmed**, Secretary of the Chapter; Lecturers **Ana Tavares** and **John Kilner**; and **Enrico Traversa**, Faculty Advisor of the Student Chapter.



ECS STUDENT CHAPTER AT THE UNIVERSITY OF FLORIDA—Since its inception in 2005, the Chapter (a/k/a ECS@UF) has made an impact in the advancement of the theory and practice of electrochemistry at the University of Florida and in the surrounding community. Chapter members **Eric Armstrong** and **Cynthia Kan** demonstrate applications of electrochemistry to high school students visiting the university, using a miniature proton exchange membrane fuel cell car and a power house incorporating renewable power generation.



CHINA SECTION—The ECS-ISTC Executive and Advisory Committee members at a Section meeting. Pictured from left to right are: **Q. Lin** (IBM), **D. Huang** (Praxair), **G. Mathad** (S/C Tech Consulting), **H. Wu** (SMIC), **H. Iwai** (Tokyo Institute of Technology), **M. Yang** (IC Spectrum), **C. Claeys** (IMEC), **W. Schiau** (IC Spectrum), and **Q. Qu** (ASML).

(continued from page 63)

Vittorio joined ECS in 1938 while a postgraduate at Lehigh and continued as a member until his death. He had the distinction of being the Society member with the second-longest membership record, a fact of which he was quite proud. Vittorio de Nora was elected an Honorary Member of ECS in 1982 and became a Fellow of the Society in 1992, in recognition of his contributions to science and electrochemical engineering. He was further honored by ECS in 2006, when he was awarded the Edward Goodrich Acheson Award.

■ Sections & Student Chapters ■

The ECS Student Chapters provide students an opportunity to gain a more comprehensive understanding and knowledge of electrochemical and solid-state sciences, to have a venue for meeting fellow students, and to receive recognition for their organized scholarly activities.

The student chapters expanded their international presence in 2008 bringing our total number of chapters to 18 and still growing. Five new chapters were established: Atlanta Student Chapter at Georgia Tech; Central Illinois Student Chapter; Grand Valley State University Student Chapter; Kerala, India Student Chapter; and Lahore, Pakistan Student Chapter.



AUBURN UNIVERSITY STUDENT CHAPTER—During the school's first ECS Student Chapter meeting, **David Stanbury** (left) and **Jeff Fergus** (right), faculty members at Auburn University, review a poster on SOFC.

The Auburn University ECS Student Chapter held its first meeting on January 18, 2008. The 35 attendees included students, faculty, and other researchers from Auburn University and Columbus State University. Eight faculty members from chemistry and engineering (materials, chemical, and mechanical) gave brief overviews on their electrochemistry related research and educational interests. Following the oral presentations, additional details on the electrochemical research activities were presented in a poster session at which participants had the opportunity to discuss their research and become acquainted.

The electrochemical research activities at Auburn University are spread throughout the campus. While some of those with electrochemical interests have been working together for years, others had not even met, so the primary objective of this first meeting was to begin to develop a

community among these researchers at Auburn University, as well as those in nearby institutions, such as Columbus State University. The meeting accomplished this objective and will lead to fruitful interactions among participants and interesting future programs.

■ Outreach ■

As a nonprofit organization, ECS cannot and does not lobby, but does take seriously its responsibility to be good stewards of the science by educating those who can make a difference to our scientists and engineers. As part of this outreach effort, ECS maintains a membership in the Federation of Materials Societies (FMS). FMS is an umbrella society that unites professional societies, universities, and National Research Council organizations involved in materials science, engineering, and technology.



CONGRESSIONAL VISITS DAYS—From left to right are: **Chris Pollock**, American Welding Society; **Ernest Levert**, Federation of Materials Societies; **Steve Robinson**, Legislative Assistant; and **Petr Vanýsek**, ECS Secretary (2004-2008), during a visit in the Congressional office of then-Senator Barack Obama.

Each year FMS organizes visits with members of the U.S. Congress in Washington, DC. These visits, known as Congressional Visits Days (CVDs), are an important way for the public to participate in the policymaking of the U.S. government. Senators and Members of Congress listen to their constituents, who can arrange visits to the offices on Capitol Hill. "Materials Science, Engineering, and Manufacturing: Vital to a Secure and Prosperous Nation in the 21st Century." was the message brought this year by the FMS ambassadors.

Petr Vanýsek, who recently completed a four year term as Secretary of ECS, was a part of the CVDs in 2008. In reporting on the visit, he had this to say, "The ECS membership outside the U.S. surpassed 50% this year and it stands reason to consider if participation in the CVDs is relevant to all members. One item that came up was the U.S. visa policy for visiting scientists and students. In April, Microsoft Chair Bill Gates gave testimony to Congress about the economic dangers of restricting visits of foreign scientists. But even the domestic policies of one nation influence the welfare of the whole world, which is why I believe participation at CVD benefits all members, regardless of their home country. It is without doubt that due to the nature of our work and perhaps even due to our personal disposition we researchers are little inclined to communicate with politicians. But it needs to be done."

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annual report

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HOT DOGS, BASEBALLS ... AND ELECTROCHEMISTRY?—ECS combined all three during its first Student Mixer at the spring 2008 meeting in Phoenix.



ECS held a unique networking opportunity during its first Student Mixer at the spring 2008 meeting in Phoenix. Over 90 students (from as far away as Germany, Sweden, Japan, and Korea), corporate sponsors, active members, and ECS staff came together at Chase Field in Phoenix to watch Randy Johnson on his march to 300 career wins and to discuss electrochemistry and solid-state sciences over a catered lunch. The event was so successful, that another was held at the PRiME 2008 meeting in Hawaii in October, and more are planned for the future.

■ Fund-raising ■

Over the years, ECS has been fortunate to have the dedicated, careful, and intelligent leadership that has kept the Society technically important, and financially sound. The cost of doing business has changed dramatically since our inception in 1902, and in the last ten years, the Society has added fund-raising to its toolbox as a way to foster the science. We created the new position of Development Director in 2001, and since that time we have established a Case for Support, embarked on a major Centennial Campaign, witnessed generous member support from annual donations to a major gift annuity, and have increased the sponsorship of symposia and meetings by major corporations the world over.

Why do we raise this money? We raise it to support students—five Summer Fellowships, a major fellowship for early career scientists and engineers, and numerous student poster awards and awarded memberships. We raise it to enable participation—thousands of dollars in travel grants and in waived page charges yearly. We raise it to disseminate the technical information—to digitize major blocks of content still cited and still valued, to subsidize access to the Digital Library for members and small libraries, and to maintain it all on a state-of-the-art platform in perpetuity. And we raise it to permanently fund our awards program—over 50 of them that recognize and honor the highest achievements in our science and technology and enable our scientists and engineers to continue their important work.

All that we do—from our meetings to our publications, from our membership services to cultivating our corporate participation, from our education activities to our fund-raising efforts—we do it to meet our mission, throughout

every aspect of our programs and governance. We are committed to fostering the advancement of the theory and practice of electrochemical and solid-state science and technology.



ECS LEADERSHIP CIRCLE AWARDS—The awards are presented for loyal support of ECS as demonstrated through the Corporate Membership Program.

At the ECS meeting in Phoenix, a number of companies were recognized. **Kevin Colbow** (top photo, at right) of **Ballard Power Systems** received a Gold Level award for the company's 25 years of corporate membership from ECS President **Barry MacDougall**.

Jeff Jones (middle photo, at left) of **Agilent Technologies** received a Bronze Level award the company's five years of corporate membership from ECS President **Barry MacDougall**. Two other Leadership Circle winners were unable to attend: **ECO Energy Conversions** at the Gold Level, for 25 years; and **Varta Automotive Battery**, also at the Gold Level, for 25 years.

At the PRiME 2008 meeting in Hawaii, **John Newman** (bottom photo, at right) received a Bronze Level Leadership Circle Award from ECS President **Noel Buckley**, on behalf of Lawrence Berkeley National Laboratory, an ECS Corporate Member for 5 years.

board of directors

(as of October 2008)

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Dirk Guldi, University of Erlangen-Nurnberg

Uwe Happek, University of Georgia

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Rangachary Mukundan, Los Alamos National Laboratory

Patrik Schmuki, University of Erlangen

Venkat Srinivasan, Lawrence Berkeley National Laboratory

Gery Stafford, NIST

Isao Taniguchi, Kumamoto University

John Weidner, University of South Carolina

Eric Wuchina, Naval Surface Warfare Center

Karim Zaghib, Hydro-Québec

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(as of December 31, 2008)

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(as of June 15, 2009)

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annual report

ECS donors

The following individuals and organizations have helped support ECS's many activities. We thank them for their generous support of the Society.

Endowed Funds

We are grateful to the following donor for its generous support of our Education Endowment. This endowment helps to insure the continuation of bold advances in electrochemical and solid-state science and technology.

Fondazione Oronzio de Nora Casella

Businesses, Corporations, and Organizations

We are grateful to the following businesses, organizations, and corporations for their generous support of \$5,000 and above in support of our mission.

IBM
Applied Materials
NXP Semiconductors
Air Liquide
ASM International
Digi-Key Corporation
EMD Chemicals
Gelest, Inc.
GS Yuasa Corporation
Hokuto Denko, Corp.
Lawrence Livermore National Laboratory
Nippon Chemical Industrial Co., Ltd.
SUSS MicroTec

Government

We are grateful to the following government institutions for their generous support of \$5,000 and above in support of our mission.

Air Force Office of Scientific Research
Army Research Office

Individuals

We are grateful to the following individuals for their generous gifts of \$1,000 and above in support of our mission.

James C. Acheson
James. A. Amick
Chuck Derouin
Larry Faulkner
Fumio Hine
John S. Newman
Katalin Voros
Da Yu Wang

The Legacy Society

The Legacy Society honors benefactors who have provided for the Society in a variety of ways—through their wills, a charitable trust, a life-income arrangement, a life insurance policy, or a retirement plan.

Robert P. Frankenthal
Carl Hering
Mary M. Loonam

corporate partners

- 3M Company
 Acta S.p.A.
 Advance Research Chemicals, Inc.
 Agilent Laboratories
 Air Liquide
 Air Products
 AIXTRON
 ALS Co., Ltd
 AMEC
 AMETEK Scientific Instruments
 AnnealSys
 Applied Materials
 Applied Microengineering LTD
 Arbin Instruments
 Asahi Glass Research Center
 Asahi Kasei Chemicals Corporation
 ASM International
 Atotech USA, Inc.
 Autolab Instruments
 Aviza Technologies
 BAE Systems Battery Technology Center
 Ballard Power Systems
 BASF Fuel Cell, Inc.
 Bio-Logic USA / Bio-Logic SAS
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 Bondtech Co., Ltd.
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 C. Uyemura & Co., Ltd. Central Research Lab
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 Canon ANELVA Corporation
 CC Technologies, A DNV Company
 Central Electrochemical Research Institute
 Centrotherm Thermal Solutions GmbH & Co. KG
 Chemetall GmbH
 Coolohm, Inc.
 CSIRO Minerals
 DAISO, Co., Ltd.
 Degussa Evonik GmbH
 Denso Corporation
 Digi-Key Corporation
 Dow Chemical Co.
 Duracell
 E.I. Du Pont de Nemours & Co., Inc.
 EaglePicher Technologies LLC
 EICHEM Centre of Competence in Applied Electrochemistry
 ECN — Energy Research Centre of the Netherlands
 ECO Energy Conversion
 ElectroChem, Inc.
 Electrosynthesis Co., Inc.
 EMD Chemicals, Inc.
 ENEOS CELLTECH Co., Ltd.
 ENER1/ENERFUEL, Inc.
 Energizer
 Entrepix, Inc.
 EV Group
 Faraday Technology, Inc.
 Fil-Tech Inc.
 FMC Corporation, Peroxygens Division
 Ford Motor Co.
 Fortu Research GmbH
 Frontier Semiconductor
 FSI International
 fuelcellmaterials.com, a Division of NexTech Materials, Ltd.
 Fujii Electric Advanced Technology Co., Ltd.
 Gamry Instruments
 Gelest, Inc.
 General Electric Co., Global Research
 General Motors Research Laboratories
 Giner, Inc.
 Greatbatch, Inc.
 GS Yuasa Corporation
 HD Microsystems
 High Powered Lithium
 Hohsen Corporation
 Hokuto Denko, Corp.
 Honda Research Institute USA, Inc.
 Hosokawa Micron Powder Systems
 Hydro-Québec
 IBM Corporation
 Industrie De Nora
 INFICON
 International Lead Zinc Research Organization
 IVIUM Technologies
 John Wiley & Sons, Inc.
 Johnson Matthey Technology Centre
 Journal of Materials Chemistry
 Jusung Engineering Co., Ltd.
 Kansai Electric Power Co., Inc.
 Kemira Oyj, Kemira Pulp & Paper
 LAM Research
 Lawrence Berkeley National Lab
 Lawrence Livermore National Lab
 Leclanche S.A.
 Levitronix LLC
 Los Alamos National Laboratory
 MACCOR, Inc.
 Marubeni Information Systems Co., Ltd.
 Materials Today
 Mattson Technology, Inc.
 Max-Planck-Institut f. Festkörperforschung
 Medtronic, Inc. Energy and Component Center
 Metrohm
 Mitsubishi Chemical Corporation
 Mitsubishi Heavy Industries, Ltd.
 N. E. Chemcat Corporation
 Nacional de Grafite, LTDA
 National Research Institute for Electrical Engineering
 Net Flow Research, LLC
 Next Energy — EWE-Forschungszentrum für Energie-Technologie
 NexTech Materials, Ltd.
 Nippon Chemical Industrial Co., Ltd.
 Nissan Motor Co., Ltd.
 NXP Semiconductors
 Occidental Chemical Corp.
 Okuno Chemical Industries Co., Ltd
 Olin ChlorAlkali Products Division
 OM Group, Inc.
 OMRON Corporation, Advanced Device Laboratory
 Osram Sylvania, Inc. Chemical & Metallurgical Division
 Oxford Instruments Plasma Technology
 Panasonic Corp.
 PEC North America
 Permascand AB
 Permelec Electrode, Ltd.
 Pine Research Instrumentation
 Power Products Inc.
 PPG Industries, Inc., Chemicals Group
 Technical Center
 Praxair, Inc.
 Pred Materials International
 QUALCOMM Incorporated
 Quallion, LLC
 Radiometer Analytical, A Hach Company Brand
 Rayovac
 Robert Bosch GmbH
 Rohm & Haas Electronic Materials CMP Technologies
 SAFC Hitech
 Saft Batteries, Specialty Battery Group
 Samsung SDI
 Sandia National Laboratories
 SANYO Electric Co., Ltd.
 Scribner Associates, Inc.
 Semitool, Inc.
 SES Research
 SEZ Group
 Sigma-Aldrich
 Siltronic AG
 SOITEC
 SOPRA Inc.
 Springer
 SRI International
 SUSS MicroTec
 Tanaka Kikinzoku Kogyo KK
 TDK Corporation, Device Development Center
 Technic, Inc.
 Teledyne Energy Systems, Inc.
 TIMCAL Graphite and Carbon Ltd.
 Tokuyama Corporation
 Tokyo Ohka Kogyo Co., Ltd.
 Toshiba Fuel Cell Power Systems Corporation
 Toyota Central Research & Development Labs, Inc.
 Toyota Motor Engineering & Manufacturing, North America Inc.
 Tsukuba Materials Information Laboratory, Ltd. (TMIL)
 Umicore AG & Co. KG
 USHIO Inc
 UTC Fuel Cells
 Valence Technology
 Varta Automotive GmbH Advanced Battery Division
 Veeco Instruments
 Vegrandis, LLC
 Voltaix, LLC
 W. L. Gore & Associates, Inc.
 Wasatch Molecular
 Webcom Communications
 Williamson Intellectual Property Law, LLC
 Yamatake Corporation
 Yeager Center for Electrochemical Sciences at CWRU
 Zhangjiagang Guotai Harong New Chemical
 ZSW Center for Solar Energy & Hydrogen Research

Leadership Circle Awards

Diamond Level

Dow Chemical Co., Central Research (1941), 68 years
Olin Chlor Alkali Products Division (1941), 68 years
Occidental Chemical Corp. (1943), 66 years
Atotech USA, Inc. (1945), 64 years
Energizer (1945), 64 years
General Electric Co., Corporate Research & Development (1952), 57 years
General Motors Research Laboratories (1952), 57 years
Rayovac (1953), 56 years
Duracell (1957), 52 years
IBM Corporation (1957), 52 years

Gold Level

Toshiba Corp., Research & Development Center (1974), 35 years
Siltronic AG (1974), 35 years
Osram Sylvania, Inc., Chemical & Metallurgical Division (1975), 34 years
Sandia National Laboratories (1976), 33 years
International Lead Zinc Research Organization, Inc. (1979), 30 years
Medtronic, Inc., Energy and Component Center (1980), 29 years
Toyota Central Research and Development Labs, Inc. (1980), 29 years
Yuasa Corp (1980), 29 years
Princeton Applied Research/Solartron Analytical (1981), 28 years
Saft Batteries (1982), 27 years
CSIRO Minerals (1983), 26 years
Industrie de Nora (1983), 26 years
Ballard Power Systems, Inc. (1984), 25 years
ECO Energy Conversion (1984), 25 years
Varta Automotive GmbH, Advanced Battery Division (1984), 25 years
Greatbatch, Inc. (1985), 24 years
Leclanche S.A. (1985), 24 years
Max-Planck-Institut für Festkörperforschung (1985), 24 years

Silver Level

Eltech Systems Corp (1983), 26 years
Tronox LLC (1985), 24 years
Giner, Inc. (1986), 23 years
TIMCAL Graphite and Carbon Ltd. (1987), 22 years
Japan Storage Battery Co., Ltd. (1988), 21 years
3M Company (1989), 20 years
E. I. Du Pont de Nemours & Co., Inc., HD Microsystems (1989), 20 years
Solartron Instruments (1990), 19 years
Central Electrochemical Research Institute (1993), 16 years
TDK Corp., R&D Center (1993), 16 years
Valence Technology (1993), 16 years
DAISO, Co., Ltd. (1994), 15 years
Panasonic Corp. (1994), 15 years
C. Uyemura & Co., Ltd., Central Research Lab (1996), 13 years
Electrosynthesis Co., Inc. (1996), 13 years
FMC Corporation, Active Oxidants Division (1996), 13 years
Nacional de Grafite, LTDA (1996), 13 years
Permelec Electrode, Ltd. (1996), 13 years
PPG Industries, Inc., Chemicals Group Technical Center (1996), 13 years
Scribner Associates, Inc. (1996), 13 years
Technic Inc. (1996), 13 years
Advance Research Chemicals, Inc. (1998), 11 years
Yeager Center for Electrochemical Sciences at CWRU (1998), 11 years
Teledyne Energy Systems, Inc. (1999), 10 years
Quallion, LLC (2000), 9 years
UTC Fuel Cells (2000), 9 years

Bronze Level

Hach Company, Radiometer Analytical Division (1998), 11 years
De Nora Technologie Elettrochimiche S.r.L. (1999), 10 years
BAE Systems Battery Technology Center (2001), 8 years
Brodard of Nevada (2001), 8 years
GAIA-Akkumulatorenwerke GmbH (2001), 8 years
OM Group, Inc. (2001), 8 years
Permascand AB (2003), 6 years
Agilent Laboratories (2004), 5 years
Evonik Degussa GmbH (2004), 5 years
Samsung SDI (2004), 5 years
ZSW Center for Solar Energy & Hydrogen Research (2004), 5 years
PEC North America (2004), 5 years

financial summary

Consolidation Statement of Financial Positions (For the year ended December 31, 2008)

Assets	
Cash and cash equivalents	\$ 310,301
Accounts receivable, net	291,190
Prepaid expenses, deposits, and other assets	211,834
Investments in marketable securities	5,505,567
Investments in real estate:	
Land	1,591,874
Buildings, less accumulated depreciation of \$228,027	2,601,025
Total assets	\$10,511,791

Liabilities and Net Assets	
<i>Liabilities</i>	
Accounts payable and accrued expenses	\$ 464,667
Deferred revenue	647,759
Security deposits	27,156
Deferred Compensation	13,111
	1,152,693
<i>Net assets</i>	
Unrestricted	8,483,852
Temporarily restricted	338,536
Permanently restricted	536,710
Total net assets	9,359,098
Total liabilities and net assets	\$10,511,791

Consolidated Statement of Changes in Net Assets (For the year ended December 31, 2008)

Revenues	
Publications	\$ 2,369,758
Membership	777,712
Society meetings and activities	1,761,936
Interest and dividend income	663,383
Contributions and grants	39,485
Rental Income	385,944
Other revenues	30,097
	\$ 6,028,315

Expenses	
<i>Program services</i>	
Publications	\$ 2,138,293
Membership	179,235
Society meetings and activities	1,550,184
Awards, fellowships, and grants	176,929
	\$ 4,044,641
<i>Supporting services</i>	
General and administrative	1,038,756
Fundraising	26,080
Rental operations	376,515
	\$ 1,441,351
Increase in net assets from operations	\$ 542,323
Net change in fair value of investments	(1,983,420)
Change in net assets	(1,441,097)
Net assets, beginning of year	10,800,195
Net assets, end of year	\$ 9,359,098

These financial statements are a condensed version of the audited statements of ECS for the year ending December 31, 2008. ECS will be pleased to provide complete copies along with all footnotes and the unqualified report of our auditors upon request.

annual report

notes to financial statements

1—Summary of Significant Accounting Policies

The consolidated financial statements include the accounts of The Electrochemical Society, Inc. and its Divisions, Groups and Sections, and the LLC. All intercompany balances and transactions have been eliminated in consolidation.

The consolidated financial statements are prepared on the accrual basis of accounting and have been prepared to focus on The Electrochemical Society, Inc. and Subsidiary (the Society) as a whole, and to present balances and transactions according to the existence or absence of donor-imposed restrictions. Accordingly, net assets and changes therein are classified as follows: Unrestricted Net Assets – net assets not subject to donor-imposed stipulations; Temporarily Restricted Net Assets – net assets subject to donor-imposed stipulations that will be met by actions of the Society and/or by the passage of time; Permanently Restricted Net Assets – net assets subject to donor-imposed stipulations that they be maintained permanently by the Society. Generally, the donors permit the Society to use all or part of the income earned on related investment for various Society awards.

2—Reclassifications

Certain amounts in the December 31, 2007 financial statements have been reclassified to conform the December 31, 2008 classifications. These reclassifications had no effect on the net assets of the Society. However, in view of the reclassifications, the 2007 financial information is not comparable. Therefore, there is not a presentation of the December 31, 2007 financial information.

3—Income Tax Status and Income Taxes

ECS and its Divisions, Groups, and Sections qualify as a tax-exempt organization described under Section 501(c)(3) of the Internal Revenue Code and all of its income, except income generated through the advertising included in its publications, is exempt from Federal income taxes.

As a single-member limited liability company, LLC is treated as a “disregarded entity” for income tax purposes and, as such, its financial activity is reported in conjunction with the Federal income tax filing of ECS. The Society in accordance with Financial Accounting Standards Board (FASB) Financial Staff Position FIN 48-3, had deferred the application of FIN 48, “Accounting for Uncertainty in Income Taxes” until its first fiscal year beginning after December 15, 2008. The Society’s accounting policy is to evaluate uncertain tax positions in accordance with FASB No. 5 “Accounting for Contingencies.”

4—Investments

Investments in equities and fixed income instruments are reported at fair market value, and investment in real estate are reported at cost. Investment income and realized and unrealized net gains and losses on investments of permanently restricted net assets are reported as follows: as increases or decreases in temporarily restricted net assets if the terms of the gift impose restrictions on the use of the income and/or net gains; as increases or decreases in unrestricted net assets in all other cases. Cost, market value and unrealized appreciation (depreciation) at December 31, 2008 are summarized as follows:

	Cost	Market Value	Unrealized Appreciation (Depreciation)
Money market funds	\$ 463,304	\$ 463,304	\$ --
Mutual funds	3,196,324	2,538,676	(657,648)
Certificate of deposit	1,491,054	1,495,979	4,925
Corporate and U.S. bonds	971,012	1,007,608	36,596
Real Estate	3,460,269	3,460,269	--
Total	\$9,581,963	\$8,965,836	\$(616,127)

5—Endowment Funds

The Society’s endowment funds consist of several funds established to fund awards, as well as an educational endowment fund, publications endowment fund and an ECS endowment fund. The endowment funds include both donor-restricted funds and funds designated by the Board of Trustees to function as endowments. As required by GAAP, net assets associated with endowment funds are classified based on the existence or absence of donor-imposed restrictions.

The Society’s policy requires preservation of the fair value of the original gift as of the gift date of the donor-restricted endowment funds absent explicit donor stipulations to the contrary. As a result, the Society classifies as permanently restricted net assets the original value of gifts donated to the permanent endowment and the original value subsequent gifts to the permanent endowment. The remaining portion of the donor-restricted endowment fund that is not classified in permanently restricted net assets is classified as temporarily restricted net assets until those amounts are appropriated for expenditure by the Society.

6—ECS Holding LLC

ECS Holdings LLC was chartered in 1998 to manage the real estate assets of the Society. Current real estate holdings include five buildings at Howe Commons in Pennington, NJ, valued at a cost of \$4,420,926. The Society occupies one of the buildings and the other four are classified as an investment. ECS Holdings LLC leases office space in these four buildings to various tenants under operating leases arrangements expiring through 2019. Rental income under the aforementioned leases totaled \$385,944 (net of Society’s rentals of \$74,526) for the year ended December 31, 2008.

7—Independent Accounting Firm

The Society engaged the services of the independent accounting firm, WithumSmith+Brown, PC (WS+B), to conduct the 2008 annual audit. In the opinion of WS+B the Society’s financial statements present fairly, in all material respects, the financial position of The Electrochemical Society and subsidiaries as of December 31, 2008 and the changes in their net assets and their cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

8—Report of the ECS Audit Subcommittee

The ECS Audit Subcommittee provides oversight of The Electrochemical Society’s financial reporting process on behalf of the Board of Directors. Management (ECS Staff Directors and Officers) is responsible for the financial statements and the financial reporting process, including the system of internal control. In fulfilling its oversight responsibilities, the Subcommittee discussed the financial statements in the annual report with management, including a discussion of quality, not just the acceptability, of the accounting principles; the reasonableness of significant judgments; and the clarity of disclosures in the financial statements.

The members of the Financial Policy Advisory Audit Subcommittee in 2008 were Ralph White (Chair), Peter Fedkiw, Robin Susko, and Petr Vanýsek.

The ECS Audit Subcommittee with the exception of Peter Fedkiw (not present) discussed with the independent auditors the overall scope and plans for their respective audits. The Subcommittee meets with the independent auditors with and without management present, to discuss the results of their examinations, their evaluations of the Society’s internal control, compliance with laws and regulations, and the overall quality of the Society’s financial reporting.

Based on the discussions referenced above, the ECS Audit Subcommittee has recommended for acceptance to the Board of Directors the audited financial statements for the year ended December 31, 2008. The Subcommittee has also recommended the retention of WithumSmith+Brown, PC as the Society’s independent auditors for the year ending December 31, 2009.

ECS honor roll

Past Presidents of the Society

J. W. Richards.....	1902-1904	R. L. Baldwin.....	1938-1939	N. B. Hannay.....	1973-1974
H. S. Carhart.....	1904-1905	H. J. Creighton.....	1939-1940	D. A. Vermilyea.....	1974-1975
W. D. Bancroft.....	1905-1906	F. C. Mathers.....	1940-1941	T. R. Beck.....	1975-1976
C. Hering.....	1906-1907	R. R. Ridgway.....	1941-1942	M. J. Pryor.....	1976-1977
C. F. Burgess.....	1907-1908	E. M. Baker.....	1942-1943	D. N. Bennion.....	1977-1978
E. G. Acheson.....	1908-1909	R. M. Burns.....	1943-1944	D. R. Turner.....	1978-1979
L. H. Baekeland.....	1909-1910	S. D. Kirkpatrick.....	1944-1945	J. B. Berkowitz.....	1979-1980
W. H. Walker.....	1910-1911	W. R. Veazey.....	1945-1946	E. M. Pell.....	1980-1981
W. R. Whitney.....	1911-1912	W. C. Moore.....	1946-1947	R. J. Brodd.....	1981-1982
W. L. Miller.....	1912-1913	G. W. Heise.....	1947-1948	F. J. Strieter.....	1982-1983
E. F. Roeber.....	1913-1914	J. A. Lee.....	1948-1949	J. B. Wagner, Jr.....	1983-1984
F. A. Lidbury.....	1914-1915	A. L. Ferguson.....	1949-1950	P. C. Milner.....	1984-1985
L. Addicks.....	1915-1916	C. L. Faust.....	1950-1951	R. C. Alkire.....	1985-1986
F. A. J. FitzGerald.....	1916-1917	R. M. Hunter.....	1951-1952	R. E. Enstrom.....	1986-1987
C. G. Fink.....	1917-1918	J. C. Warner.....	1952-1953	F. G. Will.....	1987-1988
F. J. Tone.....	1918-1919	R. J. McKay.....	1953-1954	B. E. Deal.....	1988-1989
W. D. Bancroft.....	1919-1920	M. J. Udy.....	1954-1955	E. J. Cairns.....	1989-1990
W. S. Landis.....	1920-1921	H. H. Uhlig.....	1955-1956	J. M. Woodall.....	1990-1991
A. Smith.....	1921-1922	H. Thurnauer.....	1956-1957	L. R. Faulkner.....	1991-1992
C. G. Schluederberg.....	1922-1923	N. Hackerman.....	1957-1958	W. L. Worrell.....	1992-1993
A. T. Hinckley.....	1923-1924	S. Swann.....	1958-1959	R. P. Frankenthal.....	1993-1994
H. C. Parmelee.....	1924-1925	W. C. Gardiner.....	1959-1960	J. A. Amick.....	1994-1995
F. M. Becket.....	1925-1926	R. A. Schaefer.....	1960-1961	K. R. Bullock.....	1995-1996
W. Blum.....	1926-1927	H. B. Linford.....	1961-1962	D. W. Hess.....	1996-1997
S. C. Lind.....	1927-1928	F. L. LaQue.....	1962-1963	B. Miller.....	1997-1998
P. J. Kruesi.....	1928-1929	W. J. Hamer.....	1963-1964	G. M. Blom.....	1998-1999
F. C. Frary.....	1929-1930	L. I. Gilbertson.....	1964-1965	D. E. Hall.....	1999-2000
L. Kahlenberg.....	1930-1931	E. B. Yeager.....	1965-1966	C. M. Osburn.....	2000-2001
B. Stoughton.....	1931-1932	H. J. Read.....	1966-1967	J. Talbot.....	2001-2002
R. A. Witherspoon.....	1932-1933	H. C. Gatos.....	1967-1968	K. Spear.....	2002-2003
J. Johnston.....	1933-1934	I. E. Campbell.....	1968-1969	B. Scrosati.....	2003-2004
H. S. Lukens.....	1934-1935	N. C. Cahoon.....	1969-1970	R. Susko.....	2004-2005
J. H. Critchett.....	1935-1936	C. W. Tobias.....	1970-1971	W. Smyrl.....	2005-2006
D. A. MacInnes.....	1936-1937	C. V. King.....	1971-1972	Mark Allendorf.....	2006-2007
W. G. Harvey.....	1937-1938	T. D. McKinley.....	1972-1973	Barry MacDougall.....	2007-2008

Past Secretaries of the Society

C. Hering.....	1902	R. M. Burns.....	1947-1949	F. A. Trumbore.....	1980-1984
C. J. Reed.....	1902-1904	H. B. Linford.....	1949-1959	J. A. Amick.....	1984-1988
S. S. Sadtler.....	1904-1907	I. E. Campbell.....	1959-1965	E. W. Brooman.....	1988-1992
J. W. Richards.....	1907-1921	R. F. Bechtold.....	1965-1968	J. McBreen.....	1992-1996
C. G. Fink.....	1921-1947	D. R. Turner.....	1968-1974	R. Susko.....	1996-2000
		P. C. Milner.....	1974-1980	P. Natishan.....	2000-2004

Past Treasurers of the Society

P. G. Salom.....	1902-1920	L. I. Gilbertson.....	1955-1961	R. P. Frankenthal.....	1986-1990
F. A. Lidbury.....	1920-1924	E. G. Enck.....	1961-1964	R. E. White.....	1990-1994
A. Smith.....	1924-1931	R. H. Schaefer.....	1964-1967	W. M. Bullis.....	1994-1997
R. M. Burns.....	1931-1943	R. H. Cherry.....	1967-1973	Y. H. Wong.....	1997-1998
W. W. Winship.....	1943-1949	F. J. Strieter.....	1973-1976	W. D. Brown.....	1998-2002
E. G. Widell.....	1949-1955	J. L. Griffin.....	1976-1982	P. Fedkiw.....	2002-2006
		J. Kruger.....	1982-1986		

annual report



Edward Goodrich Acheson Award

E. G. Acheson.....	1929
E. F. Northrup.....	1931
C. G. Fink.....	1933
F. J. Tone.....	1935
F. M. Becket.....	1937
F. C. Frary.....	1939
C. F. Burgess.....	1942
W. Blum.....	1944
H. J. Creighton.....	1946
D. A. MacInnes.....	1948
G. W. Vinal.....	1950
J. W. Marden.....	1952
G. W. Heise.....	1954
R. M. Burns.....	1956
W. J. Kroll.....	1958
H. B. Linford.....	1960
C. L. Faust.....	1962
E. A. Gulbransen.....	1964
W. C. Vosburgh.....	1966
F. L. LaQue.....	1968
S. Ruben.....	1970
C. W. Tobias.....	1972
C. V. King.....	1974
N. B. Hannay.....	1976
D. A. Vermilyea.....	1978
E. B. Yeager.....	1980
H. C. Gatos.....	1982
N. Hackerman.....	1984
E. M. Pell.....	1986
H. H. Uhlig.....	1988
T. R. Beck.....	1990
D. R. Turner.....	1992
J. B. Wagner, Jr.....	1994
R. C. Alkire.....	1996
J. M. Woodall.....	1998
L. R. Faulkner.....	2000
B. Deal.....	2002
W. L. Worrell.....	2004
V. de Nora.....	2006
Robert P. Frankenthal.....	2008



Olin Palladium Medal Award

(formerly the Palladium Medal Award, 1951-1977)

C. W. Wagner.....	1951
N. H. Furman.....	1953
U. R. Evans.....	1955
K. F. Bonhoeffer.....	1957
A. N. Frumkin.....	1959
H. H. Uhlig.....	1961
N. Hackerman.....	1965
P. Delahay.....	1967
T. P. Hoar.....	1969
L. Brewer.....	1971
V. G. Levich.....	1973
M. J. N. Pourbaix.....	1975
H. Gerischer.....	1977
R. Parsons.....	1979
I. M. Kolthoff.....	1981

M. Cohen.....	1983
M. Fleischmann.....	1985
A. J. Bard.....	1987
B. E. Conway.....	1989
J. Newman.....	1991
J.-M. Savéant.....	1993
J. Kruger.....	1995
R. W. Murray.....	1997
J. B. Goodenough.....	1999
N. Sato.....	2001
E. Gileadi.....	2003
R. Rapp.....	2005
Sergio Trasatti.....	2007



Gordon E. Moore Medal for Outstanding Achievement in Solid-State Science and Technology

(formerly the Solid State Science & Technology Award, 1973-2005)

W. G. Pfann.....	1973
H. C. Gatos.....	1975
R. N. Hall.....	1977
M. B. Panish.....	1979
G. L. Pearson.....	1981
N. Holonyak, Jr.....	1983
J. M. Woodall.....	1985
A. Y. Cho.....	1987
J. F. Gibbons.....	1989
J. D. Plummer.....	1991
B. E. Deal.....	1993
W. L. Worrell.....	1995
K. E. Spear.....	1997
I. Akasaki.....	1999
A. Reisman.....	2001
R. B. Fair.....	2003
D. Hess.....	2005
Tak H. Ning.....	2007



Vittorio de Nora Award in Electrochemical Engineering and Technology

(formerly the Electrochemical Science and Technology Award, 1974-1977)

A. Brenner.....	1974
R. B. MacMullin.....	1976
F. T. Bacon.....	1978
H. B. Beer.....	1980
J. C. Schumacher.....	1982
D. E. Danly.....	1984
K. Kordesch.....	1986
A. Heller.....	1988
C. W. Tobias.....	1990
E. B. Yeager.....	1992
L. T. Romankiw.....	1994
R. Baboian.....	1996
W. G. Grot.....	1998
D. R. Turner.....	2000

R. C. Alkire.....	2004
F. Mansfeld.....	2006
John S. Newman.....	2008



Carl Wagner Memorial Award

A. J. Bard.....	1981
G. C. Wood.....	1983
R. C. Alkire.....	1985
R. W. Murray.....	1987
W. L. Worrell.....	1989
D. D. Macdonald.....	1991
J. Jorné.....	1993
B. R. MacDougall.....	1995
M. J. Weaver.....	1997
C. R. Martin.....	1999
P. A. Kohl.....	2001
R. M. Crooks.....	2003
J. Hupp.....	2005
F. Mansfeld.....	2006
Philip N. Bartlett.....	2007



Henry B. Linford Award for Distinguished Teaching

C. W. Tobias.....	1982
B. E. Conway.....	1984
A. J. Bard.....	1986
L. Brewer.....	1988
J. Newman.....	1990
K. Nobe.....	1992
J. O'M. Bockris.....	1994
T. C. Franklin.....	1996
R. A. Rapp.....	1998
G. Stoner.....	2000
D. Peters.....	2002
R. M. Latanision.....	2004
D. Pletcher.....	2006
Eliezer Gileadi.....	2008

Charles W. Tobias Young Investor Award

Stuart B. Adler.....	2004
Hock Min Ng.....	2006
Yang Shao-Horn.....	2008

Honorary Members

Charles F. Chandler.....	1919
Edgar F. Smith.....	1919
Carl Hering.....	1922
Edward G. Acheson.....	1923
Wilder D. Bancroft.....	1925
Edward Weston.....	1926
Thomas A. Edison.....	1928
W. Lash Miller.....	1929
Edward Dean Adams.....	1930
Charles F. Burgess.....	1932
Frederick M. Becket.....	1934

(Honory Members continued)

L. H. Baekeland	1936
Robert A. Witherspoon	1940
Archer E. Wheeler	1941
W.R. Whitney	1944
Paul J. Kruesi	1944
Colin G. Fink	1946
Oliver W. Brown	1946
John W. Marden	1947
William Blum	1953
Robert M. Burns	1959
George W. Heise	1959
Frank C. Mathers	1959
Stanislaus Skowronski	1962
Oliver W. Storey	1962
A. Kenneth Graham	1963
Howard A. Acheson	1971
Charles L. Faust	1971
Cecil V. King	1973
Herbert H. Uhlig	1973
Norman Hackerman	1973
Henry B. Linford	1974
Sherlock Swann	1974
Ernest G. Enck	1975
W. C. Gardiner	1975
Ivor E. Campbell	1976
Ernest B. Yeager	1977
David A. Vermilyea	1977
Charles W. Tobias	1977
Harry C. Gatos	1978
Ralph M. Hunter	1979
Dennis R. Turner	1980
Henry F. Ivey	1980
Walter J. Hamer	1980
Michael J. Pryor	1981
Francis L. LaQue	1981
N. Bruce Hannay	1982
Theodore R. Beck	1982
Vittorio de Nora	1982
John L. Griffin	1983
Erik M. Pell	1983
Samuel Ruben	1983
Paul C. Milner	1986
Harold J. Read	1986
Forrest A. Trumbore	1986
Douglas N. Bennion	1987
Ralph J. Brodd	1987
Jerome Kruger	1987
Glenn W. Cullen	1990
James C. Acheson	1990
Richard C. Alkire	1991
Bertram Schwartz	1991
J. Bruce Wagner, Jr.	1991
V. H. Brannaky	1991
R. S. Karpiuk	1996
F. J. Strieter	1996
W. L. Worrell	1996
Barry Miller	1999
Jefferson Cole	2001
L. Faulkner	2003
R. Frankenthal	2003
L. Romankiw	2003
Gordon E. Moore	2007
John S. Newman	2007
Jerry M. Woodall	2007

Honorary Associate Members

Mrs. Colin G. Fink

Fellows of The Electrochemical Society

Allen J. Bard	1990
Robert B. Comizzoli	1990
Glenn W. Cullen	1990
Theodore I. Kamins	1990
Paul C. Milner	1990
Edward H. Nicollian	1990
Robert A. Osteryoung	1990
Arnold Reisman	1990
Lubomyr T. Romankiw	1990
Geraldine C. Schwartz	1990
Ben G. Streetman	1990
J. Bruce Wagner, Jr.	1990
Theodore R. Beck	1991
Elton J. Cairns	1991
Bruce E. Deal	1991
Werner Kern	1991
William A. Pliskin	1991
Charles W. Tobias	1991
Rolf Weil	1991
Richard C. Alkire	1992
Vittorio de Nora	1992
Jerome Kruger	1992
Barry Miller	1992
Dennis R. Turner	1992
Jerry M. Woodall	1992
Richard P. Buck	1993
Larry R. Faulkner	1993
Dennis W. Hess	1993
Vik J. Kapoor	1993
Rolf H. Muller	1993
Carlton M. Osburn	1993
Robert A. Rapp	1993
George L. Schnable	1993
Y. H. Wong	1993
Petr Zuman	1993
George K. Celler	1994
Sung-Nee George Chu	1994
John P. Dismukes	1994
Richard B. Fair	1994
Adam Heller	1994
Richard A. Oriani	1994
Boone B. Owens	1994
Wayne L. Worrell	1994
Fred Anson	1995
Laurence D. Burke	1995
Brian E. Conway	1995
Robert P. Frankenthal	1995
Karl M. Kadish	1995
Digby D. Macdonald	1995
Gleb Mamantov	1995
Florian Mansfeld	1995
Royce W. Murray	1995
John Newman	1995
Yutaka Okinaka	1995
Howard W. Pickering	1995
George Rozgonyi	1995
Mordechay Schlesinger	1995
Karl E. Spear	1995
John M. Blocher, Jr.	1996
Hans K. Böhm	1996
Der-Tau Chin	1996
Hugh Isaacs	1996
Wolfgang J. Lorenz	1996
S. J. Pearton	1996
Subhash C. Singhal	1996
Venkataraman Swaminathan	1996
James A. Amick	1997
Denis Noel Buckley	1997
Eliezer Gileadi	1997
Michel J. Froment	1997

Koji Hashimoto	1997
Chung-Chiun Liu	1997
Edward McCafferty	1997
Theodore D. Moustakas	1997
Shyam P. Muraka	1997
Stella W. Pang	1997
Joachim Walter Schultze	1997
James D. Sinclair	1997
Norman L. Weinberg	1997
Lawrence Young	1997
Huk Y. Cheh	1998
Donald E. Danly	1998
Dennis H. Evans	1998
Fumio Hine	1998
Dennis C. Johnson	1998
Zoltan Nagy	1998
Katsumi Niki	1998
Jun-ichi Nishizawa	1998
Fan Ren	1998
Antonio J. Ricco	1998
David A. Shores	1998
William H. Smyrl	1998
George Thompson	1998
Eric Brooman	1999
Stanley Bruckenstein	1999
Kathryn Bullock	1999
Shimshon Gottesfeld	1999
Yue Kuo	1999
Dieter Landolt	1999
Jerzy Ruzyllo	1999
Norio Sato	1999
Ralph White	1999
William Yen	1999
Cammy Abernathy	2000
Kuzhikalail M. Abraham	2000
John C. Angus	2000
W. Ronald Fawcett	2000
David S. Ginley	2000
Yasuhiko Ito	2000
Howard Huff	2000
Robert F. Savinell	2000
Roger Staehle	2000
Charles W. Struck	2000
Sergio Trasatti	2000
Dieter M. Kolb	2001
David J. Lockwood	2001
James McBreen	2001
Patrick J. Moran	2001
Shohei Nakahara	2001
William E. O'Grady	2001
Supramanian Srinivasan	2001
Mark Allendorf	2002
William Brown	2002
Cor Claeys	2002
Martin Kendig	2002
Kim Kinoshita	2002
Paul Kohl	2002
Zempachi Ogumi	2002
Tetsuya Osaka	2002
Krishnan Rajeshwar	2002
Israel Rubinstein	2002
Sigeru Torii	2002
Toshio Shibata	2002
Sorin Cristoloveanu	2002
David Duquette	2003
Peter Fedkiw	2003
Charles Hussey	2003
Richard McCreery	2003
Frank McLarnon	2003
Robin Susko	2003
Darrel Untereker	2003

(continued on next page)

annual report

(Fellows continued)

Osamu Yamamoto.....	2003
G. T. Burstein.....	2004
C. Clayton.....	2004
G. Davis.....	2004
M. J. Deen.....	2004
S. Fonash.....	2004
M. Meyyappan.....	2004
J. F. Rusling.....	2004
M. Seo.....	2004
M. Shur.....	2004
J. Simonet.....	2004
M. Stratmann.....	2004
J. Talbot.....	2004
M. S. Whittingham.....	2004
R. Adzic.....	2005
J. Davidson.....	2005
T. Hattori.....	2005
J. P. Leburton.....	2005
P. Marcus.....	2005
C. Martin.....	2005
P. Natishan.....	2005
D. Pletcher.....	2005
B. Scrosati.....	2005
J. Scully.....	2005
R. Singh.....	2005
H. H. Strehblow.....	2005
M. Williams.....	2005
A. Baca.....	2006
S. Bandyopadhyay.....	2006
T. Fahidy.....	2006
G. Frankel.....	2006
C. Jagadish.....	2006
N. Koshida.....	2006
J. Lessard.....	2006
H. Massoud.....	2006
H. Yokokawa.....	2006
B. MacDougall.....	2006
M. Orazem.....	2006
D. Misra.....	2006
A. Virkar.....	2006
A. Wieckowski.....	2006
Simon S. Ang.....	2007
Viola Birss.....	2007
Marc Cahay.....	2007
James M. Fenton.....	2007
Dennis G. Peters.....	2007
Daniel A. Scherson.....	2007
Eric D. Wachsman.....	2007
Doron Aurbach.....	2008
Albert J. Fry.....	2008
Fernando Garzon.....	2008
Yury Gogotsi.....	2008
Curtis F. Holmes.....	2008
Prashant V. Kamat.....	2008
Patrik Schmuki.....	2008
Gery R. Stafford.....	2008
Joseph R. Stetter.....	2008
John Stickney.....	2008
Thomas Thundat.....	2008

Edward G. Weston Summer Fellowship

(formerly the Edward G. Weston Fellowship, 1930-1945)

E. B. Sanigar.....	1930
K. Solliner.....	1931
M. E. Fogle.....	1932
R. D. Blue.....	1933
P. A. Jacquet.....	1934
M. A. Coler.....	1935
H. B. Linford.....	1936

G. L. Putnam.....	1937
V. de Nora.....	1938
W. P. Ruemmier.....	1940
R. E. Black.....	1941
W. E. Roake.....	1942
R. D. Misch.....	1947
M. T. Simnad.....	1948
R. L. Brubaker.....	1961
D. Yohe.....	1962
H. O. Daley, Jr.....	1963
M. D. Hawley.....	1964
T. G. McCord.....	1965
J. D. McLean.....	1966
K. B. Prater.....	1967
K. Doblhofer.....	1968
L. R. Faulkner.....	1969
W. J. Horkans.....	1970
W. J. Horkans.....	1971
W. J. Bover.....	1972
B. J. Alexander.....	1973
S. S. Fratoni, Jr.....	1974
M. Suchanski.....	1975
R. J. Nowak.....	1976
P. A. Kohl.....	1977
C. D. Jaeger.....	1978
L. Bottomley.....	1979
G. L. McIntire.....	1980
J. Pemberton.....	1981
M. E. Kordesch.....	1982
R. G. Tompson.....	1983
P. M. Kovach.....	1984
J. N. Harb.....	1985
S. E. Creager.....	1986
X. Zhang.....	1987
C. Amass.....	1988
R. J. Phillips.....	1989
J. E. Franke.....	1990
S. R. Snyder.....	1991
P. Pantano.....	1992
G. J. Edens.....	1993
B. Idriss.....	1994
D. Bizzotto.....	1995
L. A. Lyon.....	1996
C. Claypool.....	1997
B. Bath.....	1998
A. C. Templeton.....	1999
P. W. Wuelfing.....	2000
K. Balss.....	2001
T. Hu.....	2002
J. Mauzeroll.....	2003
J. Seegmiller.....	2004
E. Blair.....	2005
F. Laforge.....	2006
Alex G. Güell.....	2007
Matthew J. Banholzer.....	2008

Colin Garfield Fink Summer Fellowship

P. Brown.....	1962
W. G. Lemmermann.....	1963
W. G. Stevens.....	1964
J. P. Carney.....	1965
S. Piekarski.....	1966
B. S. Pons.....	1967
R. E. Bonewitz.....	1968
L. Papouchado.....	1969
R. G. Reed.....	1970
R. Fike.....	1971
D. L. McAllister.....	1972
R. R. Chance.....	1973
P. I. Lee.....	1974
J. B. Flanagan.....	1975

J. S. Hammond.....	1976
P. D. Tynia.....	1977
S. M. Wilhelm.....	1978
J. D. Porter.....	1979
R. S. Glass.....	1980
E. E. Bancroft.....	1981
T. D. Cabeika.....	1982
B. L. Wheeler.....	1983
E. T. T. Jones.....	1984
D. A. Van Galen.....	1985
J. S. Hanson.....	1986
P. Gao.....	1987
D. T. Schwartz.....	1988
A. E. Russell.....	1989
J. Xue.....	1990
C. K. Rhee.....	1991
M. J. Shane.....	1992
C. M. Pharr.....	1993
J. M. Lauerhaus.....	1994
S. M. Hendrickson.....	1995
J. C. Hutchinson.....	1996
P. V. A. Pamidi.....	1997
G. S. Hwang.....	1998
W. Baker.....	1999
A. Crown.....	2000
R. Maus.....	2001
S. Peper.....	2002
M. Alpuche-Aviles.....	2003
A. Mugweru.....	2004
G. Lica.....	2005
A. Martinson.....	2006
Prabeer Barpanda.....	2007
Sau Yen Chew.....	2008

Joseph W. Richards Summer Fellowship

V. E. Hauser, Jr.....	1960
M. J. Schaer.....	1961
R. E. Visco.....	1961
A. K. Postma.....	1962
C. C. Liu.....	1963
M. J. Vasile.....	1964
M. J. Vasile.....	1965
C. C. Liu.....	1966
B. N. Baron.....	1967
L. P. Zajicek, Jr.....	1968
K. R. Bullock.....	1969
S. H. Cadle.....	1970
J. W. Webb.....	1971
C. P. Keszthelyi.....	1972
M. Shabrang.....	1973
D. H. Karweik.....	1974
T. P. DeAngelis.....	1975
D. L. Feke.....	1976
H. Faulkner.....	1977
D. M. Novak.....	1978
B. R. Karas.....	1979
R. M. Cohen.....	1980
R. N. Dominey.....	1981
R. M. Ianniello.....	1982
D. F. Tessier.....	1983
N. T. Sleszynski.....	1984
C. M. Lieber.....	1985
J. L. Valdes.....	1986
R. Q. Bligh.....	1987
D. W. Conrad.....	1988
S. A. Schofield.....	1989
J. A. Roberts.....	1990
M. S. Freund.....	1991
L. Gao.....	1992
H. Gasteiger.....	1993

(Joseph W. Richards
Summer Fellowship continued)

J. Schoer.....	1994
S. Morin.....	1995
N. Madigan.....	1996
S. Petrovic.....	1997
J. J. Sumner.....	1998
A. Wijayawardhana.....	1999
B. Liu.....	2000
C. Noble.....	2001
C. B. France.....	2002
P. Ramadass.....	2003
J. Carroll.....	2004
K. Salaita.....	2005
J. Breger.....	2006
Sadagopan Krishnan.....	2007
Meng Jiang.....	2008

F. M. Becket Summer Fellowship

(formerly the F. M. Becket Memorial Award 1962-1999)

R. B. Johnson.....	1962
J. K. Johnstone.....	1964
K. Lehman.....	1966
H. K. Bowen.....	1967
T. E. Parker.....	1971
G. M. Crosbie.....	1973
N. A. Godshall.....	1975
J. D. Hodge.....	1977
W. Cheng.....	1979
P. Davies.....	1981
P. A. Barron.....	1983
G. J. Miller.....	1985
M. Rosenbluth.....	1987
J. D. Cotton.....	1989
J. Philliber.....	1991
P. Agarwal.....	1993
H. C. Slade.....	1995
K. S. Weil.....	1997
G. S. Hwang.....	1999
J. Parrish.....	2001
S. Wasileski.....	2002
E. Clark.....	2003
F. Deng.....	2004
S. Harrison.....	2005
Y. Yang.....	2006
Michael Orthner.....	2007
Marcos Jose Leitao Santos.....	2008

Herbert H. Uhlig Summer Fellowship

Natalia Shustova.....	2008
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Energy Research Summer Fellowship

(supported by the U.S. Department of Energy)

M. R. Deakin.....	1985
P. B. Johnson.....	1985
D. A. La Hurd.....	1985
S. E. Morris.....	1985
D. P. Wilkinson.....	1985
D. G. Frank.....	1986
K.-C. Ho.....	1986
R. G. Kelly.....	1986
I.-H. Yeo.....	1986
J. Kwak.....	1986
L. C. Dash.....	1987
S. A. Naftel.....	1987
T. R. Nolen.....	1987
D. Schwartz.....	1987
T. H. Wong.....	1987

S. D. Fritts.....	1988
D. A. Koos.....	1988
D. A. Hazlebeck.....	1988
M. O. Schloh.....	1988
S. S. Perine.....	1988
J. E. Baur.....	1989
C.-P. Chen.....	1989
D. W. Eng.....	1989
R. L. McCarley.....	1989
C. J. Murphy.....	1989
C. K. Nguyen.....	1990
I.-H. Oh.....	1990
T. G. Strein.....	1990
J. W. Weidner.....	1990
S. E. Gilbert.....	1990
C. S. Johnson.....	1991
H. Huang.....	1991
D. R. Lawson.....	1991
B. D. Pendley.....	1991
C. C. Streinz.....	1991
P. A. Connick.....	1992
A. C. Hillier.....	1992
D. L. Taylor.....	1992
K. K. Lian.....	1992
T. T. Nadasdi.....	1992
D. G. Jensen.....	1993
J. C. Bart.....	1993
G. Seshadri.....	1993
J. A. Poirier.....	1993
K. W. Vogt.....	1993
Z. Shi.....	1994
C.-C. Hsueh.....	1994
V. A. Adamian.....	1994
K. M. Maness.....	1994
K. M. Richard.....	1994
Y.-E. Sung.....	1995
J. C. Conboy.....	1995
L. A. Zook.....	1995
W. R. Everett.....	1995
H. Zhang.....	1995
S. Grachtchak.....	1996
J.-B. Green.....	1996
S. Motupally.....	1996
C. Nasr.....	1996
S. Nayak.....	1996
K. Hu.....	1997
M. E. Williams.....	1997
A. Zolfaghari.....	1997
C. R. Horne.....	1997
G. K. Jennings.....	1997
M. Zhao.....	1998
S. Sriramulu.....	1998
J. Ritchie.....	1998
M. A. Elhamid.....	1998
S. Zou.....	1998
K. Cooper.....	2000
K. Grant.....	2000
D. Hansen.....	2000
J. F. Hicks.....	2000
Z. Liu.....	2000

Oronzio de Nora Industrial Electrochemistry Fellowship

N. Mano.....	2004
N. Mano.....	2005
N. Mano.....	2006
Vijayasekaran Boovaragavan.....	2007
Vijayasekaran Boovaragavan.....	2008

Norman Hackerman Young Author Award

(formerly the Young Authors Prize, 1929-1988)

W. C. Gardiner.....	1929
D. K. Alpern.....	1930
F. L. Jones.....	1931
F. W. Godsey, Jr.....	1932
B. L. Bailey.....	1933
J. R. Heard, Jr.....	1934
U. B. Thomas, Jr.....	1935
W. A. Johnson.....	1936
R. S. Soanes.....	1937
N. B. Nichols.....	1938
G. A. Moore.....	1939
J. S. Mackay.....	1940
E. Adler.....	1941
S. Speil.....	1942
W. G. Berl.....	1943
J. P. Coyle.....	1944
A. E. Hardy.....	1945
N. A. Nielsen.....	1946
H. Leidheiser, Jr.....	1947
M. A. Streicher.....	1948
J. C. Griess, Jr.....	1949
G. W. Murphy.....	1950
J. T. Byrne.....	1951
W. E. Kuhn.....	1952
J. Halpern.....	1953
M. J. Pryor.....	1954
M. Stern.....	1955
R. S. Cooper.....	1956
P. Ruetschi.....	1957
M. Stern.....	1958
F. A. Posey.....	1959
A. C. Makrides.....	1960
J. D. Newson.....	1961
M. J. Dignam.....	1962
J. A. Cunningham.....	1963
R. E. Westerman.....	1964
R. E. Visco.....	1965
J. Newman.....	1966
H. W. Pickering.....	1967
G. G. Charette.....	1968
G. Dryhurst.....	1969
J. Newman.....	1969
W. R. Parrish.....	1969
A. J. Appleby.....	1970
D. C. Johnson.....	1970
D.-T. Chin.....	1971
M. S. Whittingham.....	1971
M. A. Hopper.....	1972
F. Kuhn-Kuhnenfeld.....	1972
M. J. Bowden.....	1973
L. Thompson.....	1973
D. Simonsson.....	1973
S. H. Cadle.....	1974
A. D. Dalvi.....	1974
L. R. Faulkner.....	1975
S. Solmi.....	1975
P. Negrini.....	1975
B. MacDougall.....	1976
S. K. Ubhayakar.....	1976
C. W. Manke.....	1977
W. J. Horkans.....	1977
A. G. Gonzalez.....	1978
C. H. Tsang.....	1978
D. A. Antoniadis.....	1978
D. Y. Wang.....	1979
C. W. Magee.....	1979
E. Takayama.....	1980

(continued on next page)

annual report

(Norman Hackerman Young Author Award
continued)

H. Reller.....	1980
W. J. P. Van Enckevort.....	1981
M. W. M. Graef.....	1981
C. Y. Chao.....	1981
L. F. Lin.....	1981
D. W. Sittari.....	1982
T. P. Chow.....	1982
P. G. Pickup.....	1983
K. F. Jensen.....	1983
D. B. Graves.....	1983
N. A. Godshall.....	1984
E. K. Broadbent.....	1984
J. C. Farmer.....	1985
G. S. Oehrlein.....	1985
J. Richer.....	1986
T. Tanaka.....	1986
C. P. Wilde.....	1987
P. N. Bartlett.....	1987
J. Maier.....	1987
J. A. Bardwell.....	1988
C.-J. Han.....	1988
A. E. Husser.....	1989
D. H. Craston.....	1989
J. M. Rosamilia.....	1989
J. H. Comfort.....	1989
M. W. Verbrugge.....	1990
C. J. Giunta.....	1990
T. J. Mountziaris.....	1991
J. V. Cole.....	1991
D. W. Suggs.....	1991
B. W. Gregory.....	1991
D. B. Bonham.....	1992
E. S. Aydil.....	1992
P. P. Apte.....	1993
A. West.....	1993
H. A. Gasteiger.....	1994
F. R. Myers.....	1994
R. Vidal.....	1995
G. D. Papasouliotis.....	1995
J. H. Nordlien.....	1996
J. Lee.....	1996
A. K. Padhi.....	1997
S. M. Han.....	1997
A. D. Robertson.....	1998
Y. Shao-Horn.....	1998
S. R. Kaluri.....	1998
A. Bautista.....	1999
P. A. O'Neil.....	1999
R. T. Leah.....	2000
J. W. Klaus.....	2000
J. F. Whitacre.....	2001
P. Feichtinger.....	2001
T. J. Pricer.....	2002
P. S. Lee.....	2002
K. Jambunathan.....	2003
S. Noda.....	2003
M. Miyamoto.....	2003
R. Akolkar.....	2004
Y.-K. Hong.....	2004
R. Akolkar.....	2005
Y. K. Hong.....	2005
M. Kunimatsu.....	2006
S. Borini.....	2006
Steffen Eccarius.....	2007
A. T. J. van Niftrik.....	2007
Kevin Ralston.....	2008
Eu Jin Tan.....	2008
Yudi Setiawan.....	2008

Turner Book Prize

S. Speil.....	1942
W. G. Berl.....	1943
J. P. Coyle.....	1944
J. T. Waber.....	1945
B. Cartwright.....	1946
A. E. Hardy.....	1947
M. A. Streicher.....	1948
R. E. Hoeckelman.....	1949
P. Delahay.....	1950
K. H. Stern.....	1951
C. C. Templeton.....	1951
P. T. Gilbert.....	1952
R. B. Holden.....	1953
D. A. Vermilyea.....	1954
J. G. Jewell.....	1955
J. H. Westbrook.....	1956
A. C. Makrides.....	1957
J. P. Pemsler.....	1958
R. G. Carlson.....	1959
R. E. Meyer.....	1960
P. C. Milner.....	1960
H. Freitag.....	1961
P. J. Boddy.....	1962
E. J. Cairns.....	1963
M. Weinstein.....	1963
R. W. Bartlett.....	1964
E. M. Hofer.....	1965
C. S. Tedmon, Jr.....	1966
F. P. Kober.....	1967
J. M. Hale.....	1968



Battery Division Student Research Award

J. R. Waggoner.....	1980
K. E. Yee.....	1980
W. A. van Schalkwijk.....	1981
C. Y. Mak.....	1986
T. I. Evans.....	1987
C. C. Streinz.....	1988
J. Weidner.....	1989
M. G. Lee.....	1990
E. J. Podlaha.....	1991
G. E. Gray.....	1992
D. Qu.....	1993
P. De Vidts.....	1994
S. Motupally.....	1995
J. Xu.....	1996
Y. Shao-Horn.....	1997
I. Courtney.....	1998
G.E. Rousse.....	1999
V. Srinivasan.....	2000
M. Zhao.....	2001
V. Subramaniam.....	2001
L. Fransson.....	2002
K.-W. Park.....	2003
A. Weber.....	2004
C. Delacourt.....	2005
K. Kang.....	2006
Feng Jiao.....	2007
Peter G. Bruce.....	2008

Battery Division Research Award

J. J. Lander.....	1958
D. M. Smyth.....	1959
T. P. Dirkse.....	1962
F. G. Will.....	1964

J. Burbank.....	1966
C. P. Wales.....	1966
D. Tuomi.....	1968
Y. Okinaka.....	1970
A. C. Simon.....	1972
S. M. Caulder.....	1972
J. McBreen.....	1974
T. Katan.....	1976
S. Szpak.....	1976
A. Heller.....	1978
K. R. Bullock.....	1980
R. A. Huggins.....	1982
D. Pavlov.....	1984
G. H. J. Broers.....	1985
J. L. Devitt.....	1986
D. H. McClelland.....	1986
J. P. Gabano.....	1987
M. Armand.....	1988
J. Jorne.....	1989
A. N. Dey.....	1990
R. E. White.....	1991
D. N. Bennion.....	1992
E. Peled.....	1993
K. M. Abraham.....	1995
J. Dahn.....	1996
B. Scrosati.....	1997
C. Delmas.....	1999
J. B. Bates.....	2000
S. Wittingham.....	2002
K. Kinoshita.....	2003
J. Newman.....	2004
G. Ceder.....	2004
M. Thackeray.....	2005
T. Ohzuku.....	2006
Clare P. Grey.....	2007

Battery Division Technology Award

Y. Nishi.....	1994
K. Ozawa.....	1994
E. S. Takeuchi.....	1995
S. Gilman.....	1996
J.-M. Tarascon.....	1997
G. E. Blomgren.....	1998
A. Yoshino.....	1999
H. Y. Cheh.....	2000
B. B. Owens.....	2001
D. Wilkinson.....	2002
M. Winter.....	2002
J. Yamaki.....	2003
M. Yoshio.....	2003
M. Ue.....	2004
D. Aurbach.....	2005
P. Novak.....	2005
K. Lee.....	2006
Michel Broussely.....	2007
Hiroshi Inoue.....	2008
Satoshi Mizutani.....	2008



Corrosion Division H. H. Uhlig Award

(formerly the Outstanding Achievement Award of the
Corrosion Division 1973-1983)

M. Cohen.....	1973
D. A. Vermilyea.....	1975
J. Kruger.....	1977
M. J. Pryor.....	1979
T. R. Beck.....	1981

(Corrosion Division H. H. Uhlig Award continued)

N. Sato	1983
P. Kofstad	1985
H. W. Pickering	1987
R. P. Frankenthal	1989
H. Leidheiser	1991
H. Isaacs	1993
W. H. Smyrl	1995
M. J. Graham	1997
K. Hashimoto	1999
D. Macdonald	2001
F. Mansfeld	2002
C. Leygraf	2003
R. Newman	2004
P. Marcus	2005
G. T. Burstein	2006
Edward McCafferty	2007
Martin Stratmann	2008

Corrosion Division Morris Cohen Graduate Student Award*(formerly the Corrosion Division Award for Summer Study 1986-1988)*

S. D. Scarberry	1986
C. C. Streinz	1987
R. Bianco	1988
M. A. Harper	1992
R. G. Buchheit	1993
J.-F. Yan	1994
B. V. Cockeram	1995
I. Odnevall	1996
D. G. Kolman	1997
C. S. Brossia	1998
M. Verhoff	1999
S. Yu	2000
S. F. Nitodas	2001
K. Cooper	2002
T. Ramgopal	2003
Q. Meng	2004
D. Chidambaram	2005
H. Tsuchiya	2006
Magnus Johnson	2007
Christopher D. Taylor	2008

**Dielectric Science and Technology Division Thomas D. Callinan Award**

J. A. Davies	1968
J. P. S. Pringle	1968
G. M. Sessler	1970
J. E. West	1970
C. A. Mead	1971
W. Kern	1972
J. R. Szedon	1973
C. M. Osburn	1975
T. W. Hickmott	1976
J. R. Ligenza	1977
R. Williams	1978
R. J. Kriegler	1979
B. E. Deal	1982
L. Young	1983
A. K. Sinha	1985
A. C. Adams	1986
S. P. Murarka	1987
R. B. Comizzoli	1988
E. A. Irene	1988

R. A. Levy	1989
M. H. Woods	1990
V. J. Kapoor	1991
S. I. Raider	1992
D. W. Hess	1993
Y.-H. Wong	1994
K. L. Mittal	1995
W. D. Brown	1996
J. P. Dismukes	1997
R. Singh	1998
A. Rohatgi	1999
K. Saraswat	2000
P. Ho	2001
J. Deen	2002
S. K. Banerjee	2003
A. G. Revesz	2003
S. Fonash	2004
Paul A. Kohl	2008

**Electrodeposition Division Research Award**

W. Weil	1980
Y. Okinaka	1981
E. B. Budevski	1982
R. C. Alkire	1983
L. T. Romankiw	1984
R. J. von Gutfeld	1984
J. W. Dini	1985
H. R. Johnson	1985
H. Leidheiser	1986
J. P. Hoare	1987
H. Y. Cheh	1988
D. S. Lashmore	1989
S. Nakahara	1990
T. C. Franklin	1991
R. E. White	1992
P. C. Andricacos	1993
M. J. Froment	1994
D. Landolt	1995
T. Osaka	1996
M. Schlesinger	1997
Madhav Datta	1998
R. Winand	1999
H. Honma	2000
D. Kolb	2002
J. Switzer	2003
J. Dukovic	2004
P. Bartlett	2005
T. P. Moffat	2006
Ibro Tabakovic	2007
Olaf Magnussen	2008

**Electronics and Photonics Division Award**

F. A. Trumbore	1970
F. C. Palilla	1971
M. B. Panish	1972
W. A. Pliskin	1973
B. E. Deal	1974
H. M. Manasevit	1975
M. G. Craford	1976
A. Y. Cho	1977
C. M. Wolfe	1978

E. Sirtl	1979
J. M. Woodall	1980
G. A. Rozgonyi	1981
G. W. Cullen	1982
D. W. Shaw	1983
A. Reisman	1984
S.-M. Hu	1985
E. H. Nicollian	1986
B. Schwartz	1987
K. E. Bean	1988
T. Kamins	1989
D. M. Brown	1990
C. M. Osburn	1991
G. S. Oehrlein	1992
B. S. Meyerson	1993
G. K. Celler	1994
L. C. Kimerling	1995
H. Huff	1996
A. F. Tasch	1997
U. M. Gösele	1999
S. N. G. Chu	2000
S. P. Murarka	2001
S. Cristoloveanu	2002
T. Ohmi	2003
C. Claeys	2004
S. Pearton	2005
H. Massoud	2006
Yue Kuo	2007
Fan Ren	2008

**Energy Technology Division Research Award**

M. W. Verbrugge	1994
S. Srinivasan	1996
H. R. Kunz	1998
A. W. Czanderna	1999
R. Selman	2001
I. Uchida	2001
A. Nozik	2003
K. Kinoshita	2004
K. Kanamura	2005
S. Licht	2006
Radoslav Adzic	2007
Yang Kook Sun	2007
Tom Fuller	2008

**Fullerenes, Nanotubes, and Carbon Nanostructures Award**

Sumio Iijima	2008
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**High Temperature Materials Division Outstanding Achievement Award**

J. B. Wagner, Jr.	1986
W. L. Worrell	1988
R. A. Rapp	1990

(continued on next page)

annual report 2008

(High Temperature Materials Division
Outstanding Achievement Award continued)

H. Schmalzried	1992
S. C. Singhal	1994
C. G. Vayenas	1996
C. Bernard	2001
H. Yokokawa	2002
K. Spear	2004
A. Virkar	2006
David J. Young	2008

High Temperature Materials Division J. B. Wagner, Jr. Young Investigator Award

S. Mohney	1999
S. M. Haile	2001
M. Swihart	2003
R. Mukundan	2005
Xiao-Dong Zhou	2007



Industrial Electrochemistry and Electrochemical Engineering Division New Electrochemical Technology (NET) Award

Asahi Glass Company	1999
DeNora Tecnologie	2005
E-Tek	2005
Bayer Material Science AG	2005
Ballard Power Systems	2007

Industrial Electrochemistry and Electrochemical Engineering Division H. H. Dow Memorial Student Achievement Award

R. Bakshi	1991
G. J. Yusem	1992
J. A. Poirier	1993
S. Siu	1994
M. Vreeke	1995
A. E. Thomas	1996
S. A. Leith	1997
P. Soo	1998
S. Sriramulu	1999
K. M. Jeerage	2000
A. L. Prieto	2001
W. He	2002
J. Zhang	2003
S. Basker	2004
V. Ramani	2005
N. Jalani	2006
Brenda L. Garcia-Diaz	2007
Sunil Roy	2008

Industrial Electrochemistry and Electrochemical Engineering Division Student Achievement Award

Y.-E. Sung	1995
J. K. N. Mbindyo	1996
C. A. Smith	1997
J. A. Drake	1998
R. Lowrey	1999
C. Arvin	2000
B. Djurfors	2001
V. Subramanian	2002
P. M. Gomadam	2003
I. AlNashef	2004
V. Sethuraman	2006
Minhua Shao	2007
Vinten Dewikar	2008



Luminescence and Display Materials Division Centennial Award

A. Meijerink	2004
A. Srivastava	2004
H. Guedel	2006



Organic and Biological Electrochemistry Division Manuel Baizer Memorial Award

T. Shono	1994
H. Lund	1996
H. Schäfer	1998
S. Torii	1998
J. Simonet	2000
J. Utley	2000
J. M. Savéant	2002
M. Tokuda	2004
D. Evans	2004
I. Nishiguchi	2006
Albert Fry	2008



Physical and Analytical Electrochemistry Division David C. Grahame Award

F. C. Anson	1983
J. Newman	1985
A. Heller	1987
M. J. Weaver	1989
B. Miller	1991
A. T. Hubbard	1993
R. M. Wightman	1995
D. M. Kolb	1997
P. N. Ross, Jr.	1999
D. A. Scherson	2001
A. Wieckowski	2003
H. White	2005
Joseph T. Hupp	2007

Physical and Analytical Electrochemistry Division Max Bredig Award in Molten Salt Chemistry

M. Blander	1987
G. P. Smith	1990
R. A. Osteryoung	1992
G. Mamantov	1994
N. Bjerrum	1996
H. A. Øye	1998
Y. Ito	1999
G. N. Papatheodorou	2002
M. Gaune-Escard	2004
J. Wilkes	2006
Bernard Gilbert	2008



Sensor Division Outstanding Achievement Award

J. Janata	1994
R. P. Buck	1996
I. Lundström	1998
A. J. Ricco	2000
M. Aizawa	2002
N. Yamazoe	2004
W. Heineman	2006
Chung-Chiun Liu	2008