



# *ECS Annual Report*

# 12004 Ac Society

# The Globalization of a Scientific Society

**A**lthough founded in the United States in 1902, The Electrochemical Society has had an international profile from its very beginning, with charter members from countries ranging from Australia to Mexico to Russia and points in between. Certainly the Society's scientific roots range far afield—to Italy (Volta), England (Faraday), and even to ancient Egypt.\* In the past 20 years, the Society has made conscious and concerted efforts to extend its publications, meetings, and other services to the broadest reaches of our planet. Today, ECS continues to take advantage of the exponential growth in communication technology. ECS is able to support journal editors, Society and Division leaders, authors, members, and meeting participants from every corner of the globe, in just about the same manner as those who are just a few miles from ECS's headquarters. "Moore's law" is a concept known around the world, and ECS is proud to count Gordon Moore as a member. ECS was proud to be a part of the process of awarding the Perkin Medal, presented to Moore in 2004. Many other activities and events in 2004 show how commonplace our own global identity has become.



**ECS member GORDON MOORE** (center) received the 2004 Perkin Medal from the Society of Chemical Industry (SCI) America Section in September 2004. The medalist is chosen by a Jury of Award composed of officers from SCI and five other societies, including ECS. Also attending the award dinner were ECS President (2004-2005) ROBIN SUSKO (left) and ECS Past-President (1992-1993) WAYNE WORRELL.

## **Content Anytime, Anywhere**

ECS successfully completed the implementation of its new online manuscript submission and peer review program (Peer X-Press or PXP). One of the most positive effects of using this Web-based software has been the Society's ability to attract and support editors all over the world. In 2004, the Society's Associate Editors were located in Austria, Canada, Ireland, Japan, the UK, as well as across the U.S. Authors and reviewers were also able to take advantage of this anytime, anywhere system.

The Society's rapid-publication, peer-reviewed journal—*Electrochemical and Solid-State Letters* (ESL)—which debuted in mid-1998, established its own Editorial Board in 2004. Dennis W. Hess, of the Georgia Institute of Technology (Georgia Tech) was named Editor. Paul A. Kohl, who had been serving as Editor for both journals, and who was responsible for the creation of ESL, continued on as Editor of the *Journal of The Electrochemical Society* (JES). The two journals held their first joint editorial board meeting in spring 2004.

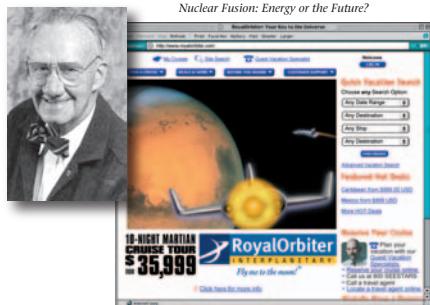
According to the 2003 ISI Science Citation Index impact factors (published in 2004), the ECS journals were again the top two in the field. *ESL* was number one, with an impact factor of 2.742 (up from 2.505), and the *Journal of The Electrochemical Society* (*JES*) had an impact factor of 2.361 (up from 2.330).

After several years of planning, ECS approved a charter for the new publication, *ECS Transactions* (ECST). *ECS Transactions* will be an online database publication for content presented at ECS meetings and ECS-sponsored meetings. The papers appearing in ECST will be reviewed to ensure that submissions meet generally-accepted scientific standards. The collections of these papers will serve as the proceedings of their respective symposia, and will be available for sale as such, as well as individually.

There are many electrochemical and solid-state applications that have become commonplace in many countries; but the pacemaker might well lead the list. *Interface* magazine was fortunate to hear from the inventor of the implantable pacemaker (and an ECS member)—Wilson Greatbatch—in a fascinating *Free Radicals* column entitled, “A Weekend Trip to Mars—Nuclear Fusion: Energy for the Future.”

A new title was added to the Society's list of sponsored monographs. This was the long-awaited third edition of *Electrochemical Systems* by John Newman and Karen Thomas-Alyea. The book sold over 900 copies in its first year. Dr. Newman is a former Associate Editor for JES.

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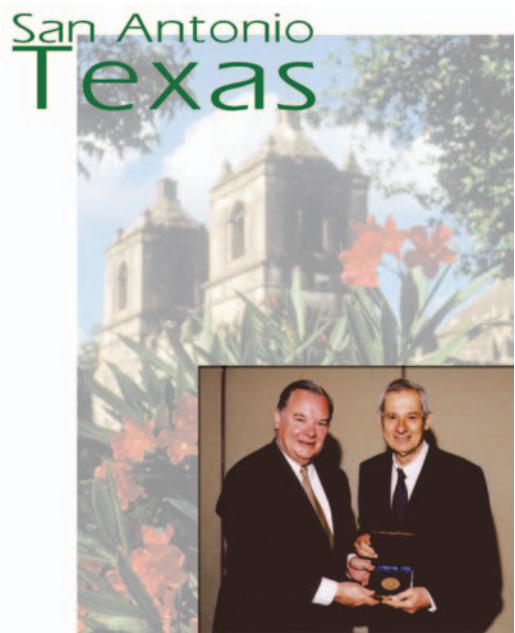


**WILSON GREATBATCH, ECS member and inventor of the implantable pacemaker.**

\* Relics found in the Middle East suggest that, thousands of years ago, voltaic cells were being used. Electroplating of some sort is known to have existed in those times as well.



A successful joint international meeting in Hawaii brought smiles to organizers and participants alike. Attendees were fortunate to hear a talk by MASUO AIZAWA (3rd from left) on the challenges of bionics. Prof. Aizawa is joined here by (from left to right): TADASHI WATANABE, ECSJ organizing committee chair; ROQUE CALVO, ECS Executive Director; (Aizawa); JUNICHI TANAHASHI, ECSJ President; and ROBIN SUSKO, 2004-2005 ECS President.



RICHARD ALKIRE (left) received the Society's 2004 Vittorio de Nora Award from ECS President (2003-2004) BRUNO SCROSATI at the Society's spring 2004 meeting. Prof. Scrosati was the first Society President from Europe.



## International, Inter-Society Cooperation

ECS joined with four other organizations from half-way around the world from us to produce the 2004 Joint International Meeting held in Honolulu, Hawaii in the fall. The 206<sup>th</sup> Meeting of The Electrochemical Society combined with the fall 2004 meeting of The Electrochemical Society of Japan. This meeting, the fourth in the series, was technically cosponsored by the Korean Electrochemical Society, the Japan Society of Applied Physics, and the Electrochemistry Division of the Royal Australian Chemical Institute. This major international conference included 46 topical symposia consisting of 2,643 technical presentations. Non-U.S. meeting attendees comprised 63% of the total attendance.

The Society's spring and fall 2004 meetings attracted an average of 49% non-U.S. attendance. The spring meeting, held in San Antonio, Texas, included 40 topical symposia consisting of 943 technical presentations and attracted 35% non-U.S. attendance. A new meeting abstract submission program made it easier for authors from all over to submit their abstracts to the ECS meetings.

Of the 14 Society co-sponsored meetings in 2004, nine took place outside of the United States. Shanghai, China was the setting for both the International Workshop on Junction Technology (IWJT 2004) and the International Semiconductor Conference (ISTC 2004). France was also a popular destination, hosting IPS-15 (Fifteenth International Conference on Photochemical Conversion and Storage of Solar Energy), in addition to EUROCORR 2004 (European Federation of Corrosion EFC). Other Society-sponsored meetings included: the Fourth Kurt Schwabe Corrosion Symposium; Mechanics of Corrosion and Protection in Espoo, Finland; SSPC-12 (Solid State Proton Conductors) in Uppsala, Sweden; Electrochem 2004 in Leicester, England; the International Conference on Electrode Processes in Szczyrk, Poland; and the Twelfth

The 12<sup>th</sup> International Meeting on Lithium Batteries, IMLB-12, was held June 27 to July 3, 2004 at the Nara Centennial Hall in Nara, Japan. The conference included an excursion to Horyuji Temple, the world's oldest wooden structure, located south of Nara.

International Meeting on Lithium Batteries (IMLB 12) held in Nara, Japan.

## Providing Services, Gaining Support

The ECS Centennial Campaign continued its push toward the \$1 million dollar mark. Over \$44,000 was raised in 2004, bringing the total amount, since the campaign began in 2002, to almost \$850,000.

The 2004 campaign was highlighted by a record number of donors. Donations to the campaign came from 180 individuals, and of this number, 65 were from outside of the United States. These benefactors helped support such important initiatives as the ECS Digital Library, the ECS Endowment, ECS Summer Fellowships, ECS Student Chapters, and a new Special Membership Fund.

Also in 2004, a special group of friends, family, and colleagues created a committee to begin raising money for the Herbert H. Uhlig Summer Fellowship. The committee, made up of Greta Uhlig, Aziz Asphahani, Ron Latanision, Florian Mansfeld, Winston Revie, and Roque Calvo, met frequently in 2004, and the campaign to raise \$100,000 to endow the new summer fellowship honoring Dr. Uhlig's memory will begin in mid-2005.

In addition, the ECS Corporate Member and Exhibit programs had a strong year. The ECS Corporate Member program reached a new financial peak with 68 total companies and a total income of over \$100,000. Of those Corporate Members, 25 of them, or 37% were from outside the United States. The ECS Technical Exhibit boasted 59 exhibitors in the last two meetings, and of this number, 19, or 32% were from outside the United States.

As the Society nears the final year of the five-year Centennial Campaign, we can expect to see many new and exciting initiatives.

## The Shrinking, Expanding Globe

In 2004, the latest iteration of the Society's Long-Range Planning Committee completed its work. The subcommittee on ECS Sections reported that one of the challenges for the Sections was that ECS was "dramatically international in scope. There are very few societies or associations based in the U.S. that have a larger population of international members as a percentage of their total membership base. ECS has 42% of its members residing outside the United States." As the Society has grown internationally, the Sections that have evolved successfully have incorporated larger geographic areas by becoming Sections that represent an entire coun-

# ECS Membership Statistics

(As of October 1, 2004)

try, or as in the case of Europe, an entire continent. The report went on to recommend that a new model be developed, one that would involve nine "Regions," which would be larger than the current geographic scope of the current Sections. Smaller geographical units might continue to run activities and meetings and would operate as "Sections" within the larger Regions. Clearly the Society's globalization efforts will continue to expand—enabling easy, yet meaningful access to meet the needs of its entire constituent base. ■

## Members Affiliated with ECS Sections

(Note: Not all ECS members affiliate with a Section)

Arizona .....	125
Brazilian.....	32
Canadian .....	241
Chicago.....	174
Cincinnati.....	57
Cleveland.....	135
Detroit.....	95
European.....	1,033
Georgia .....	198
Israel.....	35
Japan .....	774
Korean.....	197
Metropolitan New York.....	315
National Capital .....	212
New England .....	351
Pittsburgh.....	84
San Francisco.....	419
South Texas.....	198
Twin Cities.....	85

## ECS Membership by Class

Category	2000	2001	2002	2003	2004	2003/2004 %Change
Active	5523	5525	5297	5411	5405	-0.1
Member Reps	79	79	58	63	66	4.8
Life	57	57	51	52	46	-11.5
Emeritus	240	235	247	246	215	-12.6
Honorary	26	27	26	29	27	-6.9
Subtotal Active in Good Standing	5925	5923	5679	5801	5759	-0.7
Delinquent	710	851	961	797	823	3.3
Total Active on Record	6635	6774	6640	6598	6582	-0.2
Students	960	876	869	882	889	0.8
Delinquent	250	382	315	330	389	17.9
Total Students	1210	1258	1184	1212	1278	5.4
<b>Total Individual Members</b>	<b>7845</b>	<b>8032</b>	<b>7824</b>	<b>7810</b>	<b>7860</b>	<b>0.6</b>

## ECS Membership by Section

Section	2000	2001	2002	2003	2004	2003/2004 %Change
Arizona			106	122	125	2.5
Brazilian		47	45	34	32	-5.9
Canadian	250	220	213	223	241	8.1
Chicago	178	161	149	178	174	-2.2
Cincinnati	60	54	52	46	57	23.9
Cleveland	111	107	123	125	135	8.0
Detroit	92	106	94	90	95	5.6
European	1093	1025	1029	1178	1033	-12.3
Georgia	142	163	173	172	198	15.1
Israel	41	42	34	35	35	0.0
Japan	681	692	698	754	774	2.7
Korea	219	235	213	224	197	-12.1
Metropolitan New York	362	388	337	322	315	-2.2
Midland	21	21	21	17		
National Capital	230	253	238	217	212	-2.3
New England	346	344	347	353	351	-0.6
Pacific Northwest	115	117	115	125	121	-3.2
Philadelphia	143	136	138	119		
Pittsburgh	100	101	88	89	84	-5.6
San Francisco			404	379	419	10.6
San Francisco (EST)	157	164				
San Francisco (SS&T)	280	258				
South Texas	177	167	183	172	198	15.1
Southern Wisconsin	52	45				
Twin Cities	106	98	80	77	85	10.4
Non-Section	1929	1800	1668	1632	1767	8.3
<b>SUBTOTAL All classes (current)</b>	<b>6885</b>	<b>6744</b>	<b>6548</b>	<b>6683</b>	<b>6648</b>	<b>-0.5</b>
Delinquents (Active & Student)	960	1288	1276	1127	1212	7.5
<b>TOTAL</b>	<b>7845</b>	<b>8032</b>	<b>7824</b>	<b>7810</b>	<b>7860</b>	<b>0.6</b>

(The 2004 Annual Report continues on the following pages.)

# 2004 Board of Directors

**Robin Susko**, President, Board Chair, IBM Corp.

**William Smyrl**, Sr. Vice-President, University of Minnesota

**Mark Allendorf**, 2nd Vice-President, Sandia National Laboratories

**Barry MacDougall**, 3rd Vice-President, National Research Council – Canada

**Peter Fedkiw**, Treasurer, North Carolina State University

**Petr Vanysek**, Secretary, Northern Illinois University

**Roque Calvo**, Executive Director, The Electrochemical Society

**Viola Birss**, University of Calgary

**Christina Bock**, National Research Council – Canada

**D. Noel Buckley**, University of Limerick

**M. Jamal Deen**, McMaster University

**Francis D'Souza**, Wichita State University

**Gary Hunter**, Glenn Research Center

**Robert Kelly**, University of Virginia

**Robert McConnell**, National Renewable Energy Lab

**Elizabeth Opila**, NASA Glenn Research Center

**Dennis Peters**, Indiana University

**Gautam Pillay**, South Dakota School of Mines and Technology

**Daniel Scherson**, Case Western Reserve University

**Bruno Scrosati**, University of Rome "La Sapienza"

**Lauren Shea-Rohwer**, Sandia National Laboratories

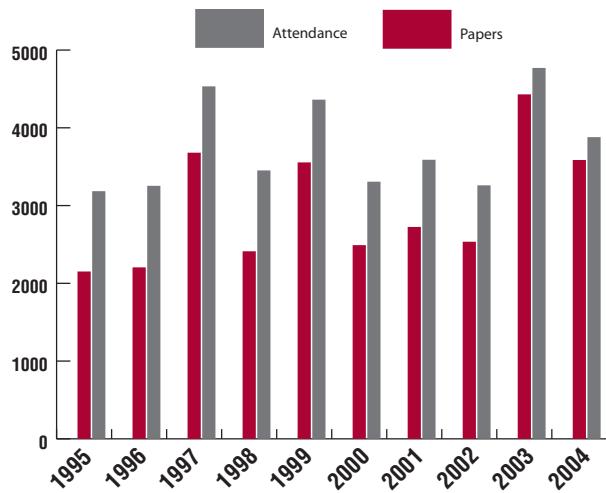
**David Shifler**, Naval Surface Warfare Center

**Karl Spear**, Penn State University

**John Stickney**, University of Georgia

## ECS Meetings

Paper submission and attendance.



# 2004 Headquarters Staff

(As of June 14, 2005)

**Roque J. Calvo**, Executive Director

**Mary E. Yess**, Deputy Executive Director

**Brian P. Bosak**, Director of Information Technology

**Karen Chmielewski**, Development Coordinator

**Anne Clementson**, Publications Assistant

**Paul Cooper**, Journals Systems Manager

**Ann F. Goedkoop**, Assistant Director of Publications

**Erin Goodwin**, Assistant Director of Meetings and Exhibits

**Andrea L Guenzel**, Journals Production Assistant

**Susan M. Liggett**, Senior Customer Service Representative

**Patricia T. Lorynski**, Administrative Assistant

**Terry McCloughan**, Books Program Coordinator

**Troy M. Miller**, Director of Development

**Elisha Nicholson**, Publications Production Coordinator

**Stephanie Plassa**, Director of Meetings and Exhibits

**Donna Provost**, Customer Service Representative

**Ellen M. Tiano**, Director of Membership

**Carolyn R. Wroblewski**, Director of Finance

**Valerie Yacko**, Administrative Assistant

## ECS Consolidated Balance Sheet

(Years Ended December 31, 2004 and 2003)

### Assets

	2004	2003
Cash	\$139,358	\$122,113
Accounts Receivable	163,816	141,541
Contributions Receivable	20,025	29,200
Inventories	29,727	59,912
Prepaid expenses, deposits, and other assets	112,673	115,670
Investments (note 2):		
Marketable Securities	8,311,472	8,067,348
Real Estate	1,812,920	1,437,733
Land	350,608	350,608
Buildings	226,663	233,329
<b>Total Assets</b>	<b>\$11,167,262</b>	<b>\$10,557,454</b>

### Liabilities and Net Assets

	2004	2003
<i>Liabilities:</i>		
Accounts Payable and accrued expenses	\$112,380	\$187,173
Deferred Revenue	1,077,207	51,295
Security Deposits	25,525	26,196
Deferred Compensation	40,804	48,206
<b>Total Liabilities</b>	<b>\$1,255,916</b>	<b>\$312,870</b>
<i>Net Assets:</i>		
Unrestricted		
General Operating	\$101,793	\$940,038
Investment in land and buildings	577,271	583,937
Custodial	7,796,972	7,296,237
Designated	480,584	470,712
Designated earnings	125,749	118,857
Sections	123,160	117,150
<b>Total Unrestricted</b>	<b>\$9,205,529</b>	<b>\$9,526,931</b>
Temporarily restricted	335,617	347,453
Permanently restricted	370,200	370,200
<b>Total Net Assets</b>	<b>\$9,911,346</b>	<b>\$10,244,584</b>
<b>Total Liabilities &amp; Net Assets</b>	<b>\$11,167,262</b>	<b>\$10,557,454</b>



## 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 its wholly owned subsidiaries, ECS Holdings LLC and ECS Fifty-Nine Holding LLC. All intercompany balances and transactions have been eliminated in consolidation.

These consolidated financial statements, which are presented on the accrual basis of accounting, have been prepared to focus on The Electrochemical Society, Inc. and subsidiaries (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 investments for various Society awards.

### 2—Investments

Investments are carried at fair value and are generally held until maturity. Investments in real estate are carried 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.

Investments, other than real estate, are stated at fair value, as determined by quoted market prices provided by investment managers, and consist of the following as of December 31, 2004:

Money market funds.....	\$576,889
Equity mutual funds .....	3,435,103
Short-term corporate fund.....	198,655
Certificates of deposit .....	2,564,924
Corporate and US bonds.....	1,505,479
Accrued Interest receivable .....	30,422
Real Estate (ECS Holdings LLC) .....	1,437,733
Real Estate (ECS Fifty-Nine Holding LLC) .....	375,187
<b>Total .....</b>	<b>10,124,392</b>

### 3—ECS Holdings LLC

ECS Holdings LLC leases office space to various tenants under operating lease arrangements expiring through 2019. (Rental income under aforementioned leases totaled \$397,860 for the year ended December 31, 2004.)

### 4—Independent Accounting Firm

The Society engaged the services of the independent accounting firm, Noble & Noble LLP, to conduct the 2004 annual audit. In the opinion of Noble & Noble LLP, the Society's financial statements present fairly, in all material respects, the financial position of The Electrochemical Society, Inc. and subsidiaries as of December 31, 2004, 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.

## Consolidated Statement of Activities

(Year Ended December 31, 2004)

<b>Revenues</b>	<b>2004</b>
Publications .....	\$1,970,786
Membership .....	665,192
Society meetings and activities .....	1,497,954
Interest and dividend income.....	221,754
Contributions and grants.....	127,562
Rental income.....	397,860
Other revenues .....	26,815
Net assets released from restrictions for awards .....	(9,175)
<b>Total Revenues .....</b>	<b>\$4,898,748</b>
<b>Expenses</b>	<b>2004</b>
<i>Program Services:</i>	
Publications .....	\$2,050,007
Membership .....	127,423
Society meetings and activities .....	966,968
Awards, fellowships, and grants.....	282,651
<b>Total Program Services .....</b>	<b>\$3,427,049</b>
<i>Supporting Services:</i>	
General and administrative.....	\$752,023
Rental Operations .....	314,871
<b>Total Supporting Services.....</b>	<b>\$1,066,894</b>
<b>Total Expenses .....</b>	<b>\$4,493,943</b>
Increase (decrease) in net assets from operations .....	404,805
<i>Nonoperating gain (loss):</i>	
Net change in fair value of investments .....	263,372
<b>Increase (decrease) in net assets .....</b>	<b>\$668,177</b>
<b>Net assets as of beginning of year .....</b>	<b>\$9,243,169</b>
<b>Net assets as of end of year.....</b>	<b>\$9,911,346</b>

# 2004 Corporate Partners

3M Company  
 Accent Optical Technologies  
 Ade Phase Shift  
 Advance Research Chemicals, Inc.  
 Agilent Laboratories  
 Alfa Aesar A Johnson Matthey Company  
 Arbin Instruments  
**Asylum Research**  
 Atotech USA, Inc.  
 BAE Systems Applied Technologies Inc.  
**Ballard Power Systems (Canada)**  
**BaSyTec**  
 Battery Design Company  
 BCS Fuel Cells, Inc.  
 Brinkmann Instruments, Inc  
 Broddarp of Nevada  
 C. Uyemura & Co., Ltd., Central Research Lab. (Japan)  
 Central Electrochemical Research Institute (India)  
**CITIC Guoan Mengguli Power Source Tech (China)**  
 Comsol, Inc  
 CSIRO Div. of Mineral Prod., Clayton, (Australia)  
 DAISO Co., Ltd. (Japan)  
 De Nra Technologie Elettrochimiche S.r.l. (Italy)  
**Degussa AG (Germany)**  
**Dionex Corporation**  
 Dow Chemical Co., Chlor-Alkali Assets Business  
 Duracell  
 E.I.DuPont de Nemours, HD Microsystems  
 ECO Energy Conversion

ElectroChem, Inc.  
**Electrolytics, Inc**  
 Electrosynthesis Company, Inc.  
 Elsevier  
 ELTECH Systems Corporation  
 Energizer, Battery Products Division  
**Entek Membranes**  
 ESA, Inc. (Cypress Systems)  
**eSpin**  
 E-Tek Division De Nora North America, Inc  
 Evans Analytical Group  
 FMC Corporation, Active Oxidants Division  
 FMC Lithium  
 Fuel Cell Technologies  
 GAIA - Akkumulatorenwerke GmbH (Germany)  
 Gamry Instruments  
 General Electric Co., Global Research  
 General Motors Research Laboratories  
 Giner, Inc., Newton, MA  
 Hach Company, Radiometer Analytical Division  
 Ibiden Co, Ltd. (Japan)  
 IBM Corporation  
**Integran Technologies**  
**Integrated Systems Engineering, Inc.**  
 International Lead Zinc Research Organization, Inc.  
 Kerr-McGee Chemical, LLC, Electrolytic Division  
 Kluwer Academic Publishers  
 KOSLOW Scientific Co.  
 Lacks Enterprises

Lawrence Berkeley National Lab  
 Leclanche, S.A. (Switzerland)  
 Maccor, Inc  
 Malt Group  
 Materials Today/Elsevier Ltd  
 Matsushita Battery Industrial Co., Ltd. (Japan)  
**Max-Planck-Institut fur Festkorperforschung (Germany)**  
 Maxtek, Inc  
 Medtronic, Inc. Energy and Component Center  
 Merck KGaA  
 Mine Safety Appliances Company  
**Molecular Imaging Corp.**  
 Nacional de Grafite, LTDA (Brazil)  
 Novocontrol America, Inc  
 NuVant Systems, Inc.  
 Occidental Chemical Corp.  
 Olin ChlorAlkali Products Division  
 OM Group, Inc.  
 OSRAM Sylvania, Inc., Chemical & Metallurgical  
**PEC North America**  
 Permascand AB (Sweden )  
 Permelec Electrode, Ltd., Kanagawa Pref., Japan  
 Porotech, Ltd  
 PPG Industries, Inc., Chemical Group Technical Center, Monroeville, PA  
 Princeton Applied Research, Oak Ridge, TN  
 Quallion, LLC  
 Rayovac Corporation  
 Saft Research & Development Center

**Samsung SDI Co., Ltd. (South Korea)**  
 Sandia National Labs  
 Scribner Associates, Inc.  
**Sidehill Copperworks**  
 Solartron Instruments  
 Springer  
 Stanford Research Systems  
**Tanaka Kikinzoku Group**  
 TDK Corporation, Research & Development Center (Japan)  
 Technic, Inc.  
 TIMCAL Graphite and Carbon Ltd. (Switzerland)  
 Toshiba Corp., Research & Development (Japan)  
 Toyota Central Research & Development Labs, Inc. (Japan)  
**Tvn Systems, Inc**  
**USC-Viterbi School of Engineering**  
 UTC Fuel Cells  
 Valence Technology  
 Varta Automotive GmbH - Advanced Battery Division (Germany)  
 Veeco Instruments  
 Vyteris Inc.  
 Wacker Siltronic AG (Germany)  
 Wilson Greatbatch, Ltd.  
 Yeager Center for Electrochemical Sciences at CWRU  
 Yuasa Corp. (Japan)  
**ZSW, Center for Solar Energy & Hydrogen Research (Germany)**

\*Companies listed in bold are new for 2004.

## Contributors to the ECS Centennial Campaign

The following individuals made generous gifts to the Centennial Campaign. We thank them for their support of the Society and the contribution to their field.

### Centennial Campaign Donors

\$5,000 Level  
*(Annual Gift of \$5,000 or More)*  
 Dr. Richard C. Alkire  
 Broddarp of Nevada, Inc.\*  
 Yukiko Dokiya & Family in memory of Masayuki Dokiya  
 Walter J. Hamer  
 Fumio Hine\*  
 Katalin Voros

### Centennial Club Members

*(Annual Gift of \$1,000 or More)*  
 The James C. Acheson Foundation\*  
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 Rolfe C. Anderson &  
 Sholeh Hessami-Anderson  
 William M. Ayers  
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 Theodore & Ruth Beck  
 BYD Company Limited  
 William D. Brown in memory of Mary Elizabeth Smith\*  
 Roque & Marianne Calvo\*  
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Corrosion Division of The Electrochemical Society  
 Hariklia (Lili) Deligianni\*  
 Dielectric Science & Technology Division of The Electrochemical Society  
 Electrodeposition Division of The Electrochemical Society  
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 Ronald E. Enstrom  
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J. W. Marden.....	1952

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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
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M. Fleischmann .....	1985
A. J. Bard .....	1987
B. E. Conway .....	1989
J. Newman .....	1991
J.-M. Savéant .....	1993
J. Kruger .....	1995
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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
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J. Jorné .....	1993
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G. Stoner .....	2000
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W. Ronald Fawcett .....	2000	Tetsuya Osaka.....	2002	M. Shur .....	2004
David S. Ginley .....	2000	Krishnan Rajeshwar .....	2002	J. Simonet .....	2004
Yasuhiko Ito .....	2000	Israel Rubinstein .....	2002	M. Stratmann .....	2004
Howard Huff .....	2000	Sigeru Torii .....	2002	J. Talbot .....	2004
Robert F. Savinell .....	2000	Toshio Shibata.....	2002	M. S. Whittingham .....	2004

## Edward G. Weston Fellowship

E. B. Sanigar .....	1930	M. A. Coler.....	1935	R. E. Black .....	1941
K. Solliner.....	1931	H. B. Linford .....	1936	W. E. Roake .....	1942
M. E. Fogle .....	1932	G. L. Putnam .....	1937	R. D. Misch .....	1947
R. D. Blue .....	1933	V. de Nora .....	1938	M. T. Simnad .....	1948
P. A. Jacquet .....	1934	W. P. Ruemmier .....	1940		

## Edward G. Weston Summer Fellowship

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

## Colin Garfield Fink Summer Fellowship

P. Brown .....	1962	P. D. Tyma .....	1977	M. J. Shane .....	1992
W. G. Lemmermann .....	1963	S. M. Wilhelm .....	1978	C. M. Pharr .....	1993
W. G. Stevens .....	1964	J. D. Porter .....	1979	J. M. Lauerhaus .....	1994
J. P. Carney .....	1965	R. S. Glass .....	1980	S. M. Hendrickson .....	1995
S. Piekarski .....	1966	E. E. Bancroft .....	1981	J. C. Hutchinson .....	1996
B. S. Pons .....	1967	T. D. Cabeika .....	1982	P. V. A. Pamidi .....	1997
R. E. Bonewitz .....	1968	B. L. Wheeler .....	1983	G. S. Hwang .....	1998
L. Papouchado .....	1969	E. T. T. Jones .....	1984	W. Baker .....	1999
R. G. Reed .....	1970	D. A. Van Galen .....	1985	A. Crown .....	2000
R. Fike .....	1971	J. S. Hanson .....	1986	R. Maus .....	2001
D. L. McAllister .....	1972	P. Gao .....	1987	S. Peper .....	2002
R. R. Chance .....	1973	D. T. Schwartz .....	1988	M. Alpuche-Aviles .....	2003
P. I. Lee .....	1974	A. E. Russell .....	1989	A. Mugweru .....	2004
J. B. Flanagan .....	1975	J. Xue .....	1990		
J. S. Hammond .....	1976	C. K. Rhee .....	1991		

## Joseph W. Richards Summer Fellowship

V. E. Hauser, Jr.	1960	T. P. DeAngelis	1975	M. S. Freund	1991
M. J. Schaer	1961	D. L. Feke	1976	L. Gao	1992
R. E. Visco	1961	H. Faulkner	1977	H. Gasteiger	1993
A. K. Postma	1962	D. M. Novak	1978	J. Schoer	1994
C. C. Liu	1963	B. R. Karas	1979	S. Morin	1995
M. J. Vasile	1964	R. M. Cohen	1980	N. Madigan	1996
M. J. Vasile	1965	R. N. Dominey	1981	S. Petrovic	1997
C. C. Liu	1966	R. M. Ianniello	1982	J. J. Sumner	1998
B. N. Baron	1967	D. F. Tessier	1983	A. Wijayawardhana	1999
L. P. Zajicek, Jr.	1968	N. T. Sleszynski	1984	B. Liu	2000
K. R. Bullock	1969	C. M. Lieber	1985	C. Noble	2001
S. H. Cadle	1970	J. L. Valdes	1986	C. B. France	2002
J. W. Webb	1971	R. Q. Bligh	1987	P. Ramadas	2003
C. P. Keszthelyi	1972	D. W. Conrad	1988	J. Carroll	2004
M. Shabrang	1973	S. A. Schofield	1989		
D. H. Karweik	1974	J. A. Roberts	1990		

## F. M. Becket Summer Fellowship

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

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

## Energy Research Summer Fellowship

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

M. R. Deakin	1985	C. K. Nguyen	1990	Y.-E. Sung	1995
P. B. Johnson	1985	I.-H. Oh	1990	J. C. Conboy	1995
D. A. La Hurd	1985	T. G. Strein	1990	L. A. Zook	1995
S. E. Morris	1985	J. W. Weidner	1990	W. R. Everett	1995
D. P. Wilkinson	1985	S. E. Gilbert	1990	H. Zhang	1995
D. G. Frank	1986	C. S. Johnson	1991	S. Grabtchak	1996
K.-C. Ho	1986	H. Huang	1991	J.-B. Green	1996
R. G. Kelly	1986	D. R. Lawson	1991	S. Motupally	1996
I.-H. Yeo	1986	B. D. Pendley	1991	C. Nasr	1996
J. Kwak	1986	C. C. Strein	1991	S. Nayak	1996
L. C. Dash	1987	P. A. Connick	1992	K. Hu	1997
S. A. Naftel	1987	A. C. Hillier	1992	M. E. Williams	1997
T. R. Nolen	1987	D. L. Taylor	1992	A. Zolfaghari	1997
D. Schwartz	1987	K. K. Lian	1992	C. R. Horne	1997
T. H. Wong	1987	T. T. Nadasdi	1992	G. K. Jennings	1997
S. D. Fritts	1988	D. G. Jensen	1993	M. Zhao	1998
D. A. Koos	1988	J. C. Bart	1993	S. Sriramulu	1998
D. A. Hazlebeck	1988	G. Seshadri	1993	J. Ritchie	1998
M. O. Schloh	1988	J. A. Poirier	1993	M. A. Elhamid	1998
S. S. Perine	1988	K. W. Vogt	1993	S. Zou	1998
J. E. Baur	1989	Z. Shi	1994	K. Cooper	2000
C.-P. Chen	1989	C.-C. Hsueh	1994	K. Grant	2000
D. W. Eng	1989	V. A. Adamian	1994	D. Hansen	2000
R. L. McCarley	1989	K. M. Maness	1994	J. F. Hicks	2000
C. J. Murphy	1989	K. M. Richard	1994	Z. Liu	2000

## Oronzio de Nora Industrial Electrochemistry Fellowship

N. Mano

..... 2004

## Norman Hackerman Young Author Award

(formerly the Young Authors Prize 1929-1988)

W. C. Gardiner .....	1929	W. R. Parrish.....	1969	P. N. Bartlett .....	1987
D. K. Alpern .....	1930	A. J. Appleby .....	1970	J. Maier .....	1987
F. L. Jones .....	1931	D. C. Johnson .....	1970	J. A. Bardwell .....	1988
F. W. Godsey, Jr. ....	1932	D.-T. Chin .....	1971	C.-J. Han .....	1988
B. L. Bailey .....	1933	M. S. Whittingham .....	1971	A. E. Husser .....	1989
J. R. Heard, Jr. ....	1934	M. A. Hopper .....	1972	D. H. Craston .....	1989
U. B. Thomas, Jr. ....	1935	F. Kuhn-Kuhnenfeld .....	1972	J. M. Rosamilia .....	1989
W. A. Johnson .....	1936	M. J. Bowden .....	1973	J. H. Comfort .....	1989
R. S. Soanes .....	1937	L. Thompson .....	1973	M. W. Verbrugge .....	1990
N. B. Nichols .....	1938	D. Simonsson .....	1973	C. J. Giunta .....	1990
G. A. Moore .....	1939	S. H. Cadle .....	1974	T. J. Mountziaris .....	1991
J. S. Mackay .....	1940	A. D. Dalvi .....	1974	J. V. Cole .....	1991
E. Adler .....	1941	L. R. Faulkner .....	1975	D. W. Suggs .....	1991
S. Speil .....	1942	S. Solmi .....	1975	B. W. Gregory .....	1991
W. G. Berl .....	1943	P. Negrini .....	1975	D. B. Bonham .....	1992
J. P. Coyle .....	1944	B. MacDougall .....	1976	E. S. Aydin .....	1992
A. E. Hardy .....	1945	S. K. Ubhayakar .....	1976	P. P. Apte .....	1993
N. A. Nielsen .....	1946	C. W. Manke .....	1977	A. West .....	1993
H. Leidheiser, Jr. ....	1947	W. J. Horkans .....	1977	H. A. Gasteiger .....	1994
M. A. Streicher .....	1948	A. G. Gonzalez .....	1978	F. R. Myers .....	1994
J. C. Griess, Jr. ....	1949	C. H. Tsang .....	1978	R. Vidal .....	1995
G. W. Murphy .....	1950	D. A. Antoniadis .....	1978	G. D. Papasouliotis .....	1995
J. T. Byrne .....	1951	D. Y. Wang .....	1979	J. H. Nordlien .....	1996
W. E. Kuhn .....	1952	C. W. Magee .....	1979	J. Lee .....	1996
J. Halpern .....	1953	E. Takayama .....	1980	A. K. Padhi .....	1997
M. J. Pryor .....	1954	H. Reller .....	1980	S. M. Han .....	1997
M. Stern .....	1955	W. J. P. Van Enckevort .....	1981	A. D. Robertson .....	1998
R. S. Cooper .....	1956	M. W. M. Graef .....	1981	Y. Shao-Horn .....	1998
P. Ruetschi .....	1957	C. Y. Chao .....	1981	S. R. Kaluri .....	1998
M. Stern .....	1958	L. F. Lin .....	1981	A. Bautista .....	1999
F. A. Posey .....	1959	D. W. Sittari .....	1982	P. A. O'Neil .....	1999
A. C. Makrides .....	1960	T. P. Chow .....	1982	R. T. Leah .....	2000
J. D. Newson .....	1961	P. G. Pickup .....	1983	J. W. Klaus .....	2000
M. J. Dignam .....	1962	K. F. Jensen .....	1983	J. F. Whitacre .....	2001
J. A. Cunningham .....	1963	D. B. Graves .....	1983	P. Feichtinger .....	2001
R. E. Westerman .....	1964	N. A. Godshall .....	1984	T. J. Pricer .....	2002
R. E. Visco .....	1965	E. K. Broadbent .....	1984	P. S. Lee .....	2002
J. Newman .....	1966	J. C. Farmer .....	1985	K. Jambunathan .....	2003
H. W. Pickering .....	1967	G. S. Oehrlein .....	1985	S. Noda .....	2003
G. G. Charette .....	1968	J. Richer .....	1986	M. Miyamoto .....	2003
G. Dryhurst .....	1969	T. Tanaka .....	1986	R. Akolkar .....	2004
J. Newman .....	1969	C. P. Wilde .....	1987	Y.-K. Hong .....	2004

## Turner Book Prize

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

## Battery Division Student Research Award

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

## Battery Division Research Award

J. J. Lander.....	1958	S. Szpak .....	1976	R. E. White .....	1991
D. M. Smyth.....	1959	A. Heller .....	1978	D. N. Bennion.....	1992
T. P. Dirkse.....	1962	K. R. Bullock.....	1980	E. Peled.....	1993
F. G. Will.....	1964	R. A. Huggins .....	1982	K. M. Abraham.....	1995
J. Burbank.....	1966	D. Pavlov .....	1984	J. Dahn .....	1996
C. P. Wales.....	1966	G. H. J. Broers .....	1985	B. Scrosati.....	1997
D. Tuomi .....	1968	J. L. Devitt .....	1986	C. Delmas.....	1999
Y. Okinaka .....	1970	D. H. McClelland .....	1986	J. B. Bates.....	2000
A. C. Simon .....	1972	J. P. Gabano .....	1987	S. Wittingham.....	2002
S. M. Caulder .....	1972	M. Armand .....	1988	K. Kinoshita .....	2003
J. McBreen .....	1974	J. Jorne .....	1989	J. Newman .....	2004
T. Katan .....	1976	A. N. Dey .....	1990	G. Ceder .....	2004

## Battery Division Technology Award

Y. Nishi.....	1994	G. E. Blomgren .....	1998	M. Winter .....	2002
K. Ozawa .....	1994	A. Yoshino .....	1999	J. Yamaki .....	2003
E. S. Takeuchi .....	1995	H. Y. Cheh .....	2000	M. Yoshio .....	2003
S. Gilman .....	1996	B. B. Owens .....	2001	M. Ue .....	2004
J.-M. Tarascon .....	1997	D. Wilkinson .....	2002		

## Corrosion Division H. H. Uhlig Award

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

M. Cohen .....	1973	P. Kofstad .....	1985	M. J. Graham .....	1997
D. A. Vermilyea .....	1975	H. W. Pickering .....	1987	K. Hashimoto .....	1999
J. Kruger .....	1977	R. P. Frankenthal .....	1989	F. Mansfeld .....	2002
M. J. Pryor .....	1979	H. Leidheiser .....	1991	C. Leygraf .....	2003
T. R. Beck .....	1981	H. Isaacs .....	1993	R. Newman .....	2004
N. Sato .....	1983	W. H. Smyrl .....	1995		

## Corrosion Division Morris Cohen Graduate Student Award

(formerly the Corrosion Division Award for Summer Study 1986-1988)

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

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

J. A. Davies .....	1968	B. E. Deal .....	1982	Y.-H. Wong .....	1994
J. P. S. Pringle .....	1968	L. Young .....	1983	K. L. Mittal .....	1995
G. M. Sessler .....	1970	A. K. Sinha .....	1985	W. D. Brown .....	1996
J. E. West .....	1970	A. C. Adams .....	1986	J. P. Dismukes .....	1997
C. A. Mead .....	1971	S. P. Murarka .....	1987	R. Singh .....	1998
W. Kern .....	1972	R. B. Comizzoli .....	1988	A. Rohatgi .....	1999
J. R. Szedon .....	1973	E. A. Irene .....	1988	K. Saraswat .....	2000
C. M. Osburn .....	1975	R. A. Levy .....	1989	P. Ho .....	2001
T. W. Hickmott .....	1976	M. H. Woods .....	1990	J. Deen .....	2002
J. R. Ligenza .....	1977	V. J. Kapoor .....	1991	S. K. Banerjee .....	2003
R. Williams .....	1978	S. I. Raider .....	1992	A. G. Revesz .....	2003
R. J. Kriegler .....	1979	D. W. Hess .....	1993	S. Fonash .....	2004

## Electrodeposition Division Research Award

W. Weil .....	1980	J. W. Dini .....	1985	S. Nakahara .....	1990
Y. Okinaka .....	1981	H. R. Johnson .....	1985	T. C. Franklin .....	1991
E. B. Budevski .....	1982	H. Leidheiser .....	1986	R. E. White .....	1992
R. C. Alkire .....	1983	J. P. Hoare .....	1987	P. C. Andricacos .....	1993
L. T. Romankiw .....	1984	H. Y. Cheh .....	1988	M. J. Froment .....	1994
R. J. von Gutfeld .....	1984	D. S. Lashmore .....	1989		

(continued on next page)

## **Electrodeposition Division Research Award (*continued*)**

D. Landolt .....	1995	Madhav Datta .....	1998	D. Kolb .....	2002
T. Osaka .....	1996	R. Winand .....	1999	J. Switzer .....	2003
M. Schlesinger .....	1997	H. Honma .....	2000	J. Dukovic .....	2004

## **Electronics Division Award**

F. A. Trumbore .....	1970	G. W. Cullen .....	1982	G. K. Celler .....	1994
F. C. Palilla .....	1971	D. W. Shaw .....	1983	L. C. Kimerling .....	1995
M. B. Panish .....	1972	A. Reisman .....	1984	H. Huff .....	1996
W. A. Pliskin .....	1973	S-M. Hu .....	1985	A. F. Tasch .....	1997
B. E. Deal .....	1974	E. H. Nicollian .....	1986	U. M. Gösele .....	1999
H. M. Manasevit .....	1975	B. Schwartz .....	1987	S. N. G. Chu .....	2000
M. G. Crawford .....	1976	K. E. Bean .....	1988	S. P. Murarka .....	2001
A. Y. Cho .....	1977	T. Kamins .....	1989	S. Cristoloveanu .....	2002
C. M. Wolfe .....	1978	D. M. Brown .....	1990	T. Ohmi .....	2003
E. Sirtl .....	1979	C. M. Osburn .....	1991	C. Claeys .....	2004
J. M. Woodall .....	1980	G. S. Oehrlein .....	1992		
G. A. Rozgonyi .....	1981	B. S. Meyerson .....	1993		

## **Energy Technology Division Research Award**

M. W. Verbrugge .....	1994	A. W. Czanderna .....	1999	A. Nozik .....	2003
S. Srinivasan .....	1996	R. Selman .....	2001	K. Kinoshita .....	2004
H. R. Kunz .....	1998	I. Uchida .....	2001		

## **High Temperature Materials Division Outstanding Achievement Award**

J. B. Wagner, Jr. ....	1986	H. Schmalzried .....	1992	C. Bernard .....	2001
W. L. Worrell .....	1988	S. C. Singhal .....	1994	H. Yokokawa .....	2002
R. A. Rapp .....	1990	C. G. Vayenas .....	1996	K. Spear .....	2004

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

S. Mohney .....	1999	S. M. Haile .....	2001	M. Swihart .....	2003
-----------------	------	-------------------	------	------------------	------

## **Industrial Electrolysis and Electrochemical Engineering Division H. H. Dow Memorial Student Achievement Award**

R. Bakshi .....	1991	A. E. Thomas .....	1996	A. L. Prieto .....	2001
G. J. Yusem .....	1992	S. A. Leith .....	1997	W. He .....	2002
J. A. Poirier .....	1993	P. Soo .....	1998	J. Zhang .....	2003
S. Siu .....	1994	S. Sriramulu .....	1999	S. Basker .....	2004
M. Vreeke .....	1995	K. M. Jeerage .....	2000		

## **Industrial Electrolysis and Electrochemical Engineering Division Student Achievement Award**

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

## **Luminescence and Display Materials Division Centennial Award**

A. Meijerink .....	2004
A. Srivastava .....	2004

## Organic and Biological Electrochemistry Division Manuel Baizer Memorial Award

T. Shono .....	1994	S. Torii .....	1998	J. M. Savéant .....	2002
H. Lund .....	1996	J. Simonet.....	2000	M. Tokuda .....	2004
H. Schäfer.....	1998	J. Utley .....	2000	D. Evans .....	2004

## Physical Electrochemistry Division David C. Grahame Award

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

## Physical Electrochemistry Division Max Bredig Award in Molten Salt Chemistry

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

## Sensor Division Outstanding Achievement Award

J. Janata .....	1994	I. Lundström .....	1998	M. Aizawa.....	2002
R. P. Buck.....	1996	A. J. Ricco .....	2000	N. Yamazoe .....	2004

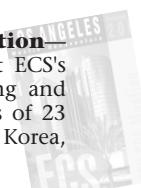
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• **Discounts on Meetings and Publications**—Keep aware of pertinent scientific and technological advances through a variety of ECS publications, including proceedings volumes, meeting abstracts, and monograph volumes.

• **Honors and Awards Program**—Recognize the accomplishments of your peers through the Honors and Awards Program, which includes over two dozen Society, Division, Group, and Section awards and the distinguished ECS Fellow designation.

• **Career Center**—Includes an online database for posting resumes as well as a job bank for prospective employers to post job openings. There's a discussion forum and many services for student members.