J. Michael Brown, chair of the earth and space sciences department at the University of Washington, received the Louis Néel Medal. He was cited for his "distinguished work in devising sophisticated experiments to infer the physical properties of iron and deep Earth materials and for his outstanding contributions to mineral physics of the Earth's core."

The Hans Oeschger Medal went to **Philip D. Jones** for his "outstanding contribution and tireless effort in reconstructing the climate of the last 250 years at global and regional scales." He is the director of external affairs at the University of East Anglia's climatic research unit in Norwich, UK.

The EGS presented its Plinius Medal to **Emmanouil N. Anagnostou,** assistant professor with the University of Connecticut's department of civil and environmental engineering. He was honored for his "outstanding achievements in combining meteorology and hydrology to improve our knowledge and understanding of natural hazards."

This year's Lewis Fry Richardson medalist was **Friedrich H. Busse,** professor of theoretical physics at the University of Bayreuth in Germany. He was acknowledged for his "imaginative contributions to the understanding of nonlinear thermal convection and his models for the geodynamo."

William K. Hartmann and **Gerhard Neukum** jointly received the Runcorn–Florensky Medal for their "outstanding contributions to the determination of the age of planetary surfaces from the frequency distribution of impact craters." Hartmann is a senior scientist at the Planetary Science Institute in Tucson, Arizona. Neukum is a professor of planetary science at the Free University of Berlin and the director of the DLR Institute of Space Sensor Technology and Planetary Exploration in Berlin.

Franco Siccardi, professor of civil engineering at the University of Genoa in Italy, received the Sergey Soloviev Medal. He was cited for his "distinguished and pioneering work in the understanding, prediction, and mitigation of natural hazards, and his efforts to promote their interdisciplinary approach."

The EGS handed out its Young Scientists' Publication Award to **Emma J. Bunce** for her paper with Stan Cowley entitled "Divergence of the Equatorial Current in the Dawn Sector of Jupiter's Magnetosphere: Analysis of Pioneer and Voyager Magnetic Field Data," which appeared in *Planetary and Space Science* in 2001. Bunce is a planetary science research associate in the radio and space plasma physics group at the University of Leicester, UK.

TMS Presents Its Awards for 2002

During its annual meeting in Seattle, Washington, this past February, the Minerals, Metals, and Materials Society presented this year's awards.

John M. Poate, vice president and chief technology officer of Axcelis Technologies in Beverly, Massachusetts, received the John Bardeen Award. He was cited for "the development of ion beam techniques for the analysis and modification of new surface properties of several classes of electronic materials."

The Bruce Chalmers Award went to **Michel Rappaz**, professor at the Ecole Polytechnique Fédérale de Lausanne in Switzerland. Rappaz was recognized for his "outstanding contribution to the numerical modeling of microstructures coupled with macroscopic models of heat and mass transport in modern solidification processing."

Frans Spaepen, Gordon McKay Professor of Applied Physics at Harvard University, received the Institute of Metals Lecture & Robert Franklin Mehl Award. The award recognizes an "outstanding scientific leader who is selected to present a lecture at the annual meeting." His talk was entitled "The Structure of Liquids and Solid–Liquid Interfaces."

The recipients of the Champion H. Mathewson Award were **Man H. Yoo** and **C. L. Fu** for their paper entitled "Physical Constants, Deformation Twinning, and Microcracking in Titanium Aluminides" in *Metallurgical and Materials Transactions*. The award is given to "the author(s) of a paper considered the most notable contribution to metallurgical science." Both are research staff members at Oak Ridge National Laboratory.

NAS Elects New Members

At the 139th annual meeting of the National Academy of Sciences in April, 72 new members were elected, bringing the total number of active members to 1907. Also elected were 15 foreign associates from 12 countries; the election raised the number of foreign associates to 330. Among the newly elected members are

Boris L. Altshuler, professor of physics at Princeton University and physics research fellow at the NEC Research Institute in Princeton, New Jersey

Barry C. Barish, Ronald and Maxine Linde Professor of Physics and director of the Laser Interferometer Gravitational Wave Observatory (LIGO) at Caltech

Jacqueline K. Barton, Arthur and Marian Hanisch Memorial Professor of Chemistry at Caltech

Adriaan Bax, biophysical nuclear magnetic resonance spectroscopy section chief at the National Institutes of Health in Bethesda, Maryland

Carlos Bustamante, Howard Hughes Investigator, professor of molecular and cell biology, and professor of physics at the University of California, Berkeley

John E. Carlstrom, Subramanyan Chandrasekhar Distinguished Service Professor in the astronomy and astrophysics department and in the physics department at the University of Chicago

George H. Denton, Libra Professor of Geological Sciences and member of the Institute for Quaternary and Climate Studies at the University of Maine in Orono

Jennifer A. Doudna, Howard Hughes Investigator and Henry Ford II Professor of Molecular Biophysics and Biochemistry at Yale University

John P. Grotzinger, Shrock Professor of Earth Sciences and director of the Earth Resources Laboratory at MIT

Willy Haeberli, R. G. Herb Distinguished Professor of Physics and Harry Steenbock Professor of Physical Sciences at the University of Wisconsin–Madison

Charles B. Harris, professor of chemistry at the University of California, Berkeley

H. Jeff Kimble, William L. Valentine Professor and professor of physics at Caltech

Eric I. Knudsen, chair of the neurobiology department and Edward C. and Amy H. Sewall Professor in the medical school at Stanford University

Michael Levitt, chair of the structural biology department at Stanford University

Tom C. Lubensky, Mary Amanda Wood Professor of Physics and chair of the physics and astronomy department at the University of Pennsylvania

Alan G. MacDiarmid, Blanchard Professor of Chemistry at the University of Pennsylvania

Geoffrey W. Marcy, professor in the astronomy department and director of the Center for Integrative Planetary Science at the University of California, Berkeley

Rowena G. Matthews, G. Robert Greenberg Distinguished University Professor at the University of Michigan

David W. McLaughlin, director of the Courant Institute of Mathematical Sciences, professor of mathematics and neural science, and provost at New York University

James C. McWilliams, Louis B. Slichter Professor of Earth Sciences at UCLA

Saul Perlmutter, senior scientist in the physics division at Lawrence Berkeley National Laboratory

Veerabhadran Ramanathan, Victor C. Alderson Professor of Applied Ocean Sciences and professor of atmospheric and climate sciences at the Scripps Institution of Oceanography at the University of California, San Diego

Mark A. Ratner, Charles E. and Emma H. Morrison Professor of Chemistry at Northwestern University

Stephen H. Schneider, professor in the biological sciences department and the Institute for International Studies at Stanford University

Gerald Schubert, chair of UCLA's Earth and space sciences department

Peter W. Shor, member and fellow at AT&T Labs–Research in Florham Park, New Jersey

Yum–Tong Siu, William Elwood Byerly Professor of Mathematics at Harvard University

Scott D. Tremaine, chair of Princeton University's astrophysical sciences department

Sheldon Weinbaum, CUNY Distinguished Professor of Mechanical and Biomedical Engineering at the City College of the City University of New York.

The newly elected foreign members include

Francisco de la Cruz, scientist at the Bariloche Atomic Center in San Carlos de Bariloche, Río Negro, Argentina

Gerhard Ertl, director of the Fritz Haber Institute of the Max Planck Society in Berlin, Germany

Brian Hoskins, professor of meteorology and Royal Society Research Professor at Reading University in the UK

Wolfgang Ketterle, John D. MacArthur Professor of Physics at MIT

David Ruelle, Honorary Professor of Mathematical Physics at the Institut des Hautes Etudes Scientifiques in Bures-sur-Yvette, France.

In Brief

Leon Radziemski joined the Research Corp in Tucson, Arizona, last May as its new program officer. Among his duties, he will be the liaison between the American Physical Society and the company, which funds two APS awards and also funds physics faculty research. Radziemski previously served for 12 years as dean of the College of Sciences at Washington State University.

After 29 years as editor of *Astrophysical Journal Letters*, **Alexander Dalgarno,** Phillips Professor of Astronomy at Harvard University and senior scientist at the Smithsonian Astrophysical Observatory in Cambridge, Massachusetts, is retiring from the position. He will be succeeded by **Christopher Sneden,** the Rex G. Baker Jr Centennial Research Professor in Astronomy at the University of Texas at Austin. The transition will take place this fall.

Walter L. Brown, who spent more than 50 years with Bell Laboratories, Lucent Technologies, and its recent spinoff, Agere Systems, retired from Agere. On 1 June, he joined Lehigh University's material science and engineering faculty as an adjunct professor. He had been the associate director of materials research at Agere.

The National Academy of Engineering presented its Charles Stark Draper Prize in February to **Robert Langer,** Kenneth J. Germeshausen Professor of Chemical and Biomedical Engineering at MIT. The academy acknowledged Langer as "a pioneer in applying engineering principles to medical problems. . . . His creative engineering of polymer plastics is now allowing delivery of medicine in unique ways to difficult locations in the body." The prize came with a purse of $500 000.

In March, the UK's Institute of Physics announced the appointment of **Julia King** as its next chief executive. Currently the director of marine engineering and technology at Rolls-Royce in Derby, King will succeed **Alun Jones** in September.

Bruce Berne, Higgins Professor of Chemistry at Columbia University, received the 2002 Joel Henry Hildebrand Award in the Theoretical and Experimental Chemistry of Liquids in April at the annual meeting of the American Chemical Society. He was acknowledged for his "pioneering contributions to the theory of dynamic processes in liquids, processes such as chemical reaction, vibrational relaxation, and quantum solvation; and for the first molecular dynamics simulation of a molecular fluid." The award consisted of $5000 and a certificate.

At the 7th International Conference on the Structure of Surfaces, to be held this month in Newcastle, Australia, the Surface Structure Prize will be presented jointly to **Donald W. Jepsen, Franco Jona,** and **P. M. Marcus** for their "pioneering contributions to the development of quantitative low-energy electron diffraction (LEED) for the determination of the atomic structure of crystal surfaces." Marcus is an emeritus staff member at IBM's T. J. Watson Research Center in Yorktown Heights, New York. Jona is a leading professor in the materials science and engineering department at SUNY Stony Brook. Jepsen is retired from his position as a research staff member at the T. J. Watson Research Center.

Franco Porcelli, professor of plasma physics at the Politecnico di Torino in Italy, became the editor of *Physics Letters A* in January, succeeding **Miklos Porkolab**.

In February, in a ceremony at the Royal Society of Medicine in London, the Rank Prize Funds awarded several Rank Prizes for Opto-electronics. **Brian Garside** (Opto-Electronics Inc), **Kenneth O. Hill** (Zenastra Photonics Inc), **Gerald Meltz** (OFT Associates), and **William W. Morey** (Sabeus Photonics Inc) jointly received a prize for "the invention and development of fiber Bragg gratings." The four winners shared the cash prize of £40 000 (about $58 000). A prize for "the invention and application of optical coherence tomography" went to **James G. Fujimoto** (MIT), **Carmen A. Puliafito** (Bascom Palmer Eye Institute, University of Miami School of Medicine), and **Eric A. Swanson** (LightLab Imaging and also Sycamore Networks Inc). Fujimoto received £20 000 (about $29 000), and Puliafito and Swanson each received £10 000 (close to $14 500). A prize went to **Robert D. Burnham** of Estes Park, Colorado, **Kenichi Iga** (Japan Society for the Promotion of Science), and **Donald R. Scifres** (JDS Uniphase Corp) for "the invention of vertical-cavity surface-emitting lasers." The