

History of Science at the University of Maryland, College Park

Percy Alec Deift, a professor of mathematics at New York University's Courant Institute

G. Barney Ellison, a professor of chemistry and biochemistry at the University of Colorado at Boulder

Nader Engheta, a professor of electrical engineering at the University of Pennsylvania

Robb W. Glenny, an associate professor of medicine and of physiology and biophysics at the University of Washington

Tin-Lun Ho, a professor of physics at Ohio State University

Terence T.-L. Hwa, an associate professor of physics at the University of California, San Diego

David Jablonski, a professor of geophysical sciences at the University of Chicago

James M. Lattimer, a professor of physics and astronomy at the State University of New York at Stony Brook

Yanguang (Charles) Li, an assistant professor of mathematics at the University of Missouri—Columbia

Peter I. Mészáros, a professor of astronomy and astrophysics at Pennsylvania State University

William Royall Newman, a professor of history and philosophy of science at Indiana University

David J. Pine, a professor of chemical engineering and of materials at the University of California, Santa Barbara

Michael Riordan, assistant to the director of the Stanford Linear Accelerator Center and an adjunct professor of physics at the University of California, Santa Cruz

Roberto H. Schonmann, a professor of mathematics at UCLA

Duncan G. Steel, a professor of electrical engineering and computer science and of physics at the University of Michigan

Bruce Winstein, the Samuel K. Allison Distinguished Service Professor of Physics at the University of Chicago

Xin Zhou, an associate professor of mathematics at Duke University

The 1999 Latin American and Caribbean fellows engaged in physics-related work are

Roberto Escudero, a professor of physics at the National Autonomous University of Mexico (in Mexico City)

Pablo A. Ferrari, a professor of mathematics at the University of São Paulo (in Brazil)

Leopoldo Infante, an associate professor of astrophysics at the Catholic University of Chile (in Santiago)

Henrique E. Toma, a professor of chemistry at the University of São Paulo (in Brazil)

Sloan Foundation Honors Young Scientists

The Alfred P. Sloan Foundation has awarded 100 two-year grants of \$35 000 each to young faculty members. The recipients were chosen, according to the foundation, "on the basis of their exceptional promise to contribute to the advancement of knowledge." The 38 new fellows who are engaged in physics-related research are

Anton Andreev, an assistant professor of physics at the University of Colorado at Boulder

Paul S. Aspinwall, an assistant professor of physics at Duke University

Scott M. Auerbach, an assistant professor of chemistry at the University of Massachusetts Amherst

Mark M. Banaszak Holl, an assistant professor of chemistry at the University of Michigan

William Nielsen Brandt, an assistant professor of astronomy at Pennsylvania State University

Claudio Chamon, an assistant professor of physics at Boston University

Paul A. Crowell, an assistant professor of physics at the University of Minnesota

Hong Ding, an assistant professor of physics at Boston College

Douglas L. Gin, an assistant professor of chemistry at the University of California, Berkeley

Alain Goriely, an assistant professor of mathematics at the University of Arizona

Martin Greven, an assistant professor of applied physics at Stanford University

Amihay Hanany, an assistant professor of physics at MIT

Ulrich Heintz, an assistant professor of physics at Boston University

William L. Holzapfel, an assistant professor of physics at the University of California, Berkeley

James E. Hutchison, an assistant professor of chemistry at the University of Oregon

David M. Jonas, an assistant professor of chemistry at the University of Colorado at Boulder

Randall D. Kamien, an assistant professor of physics at the University of Pennsylvania

Yong Baek Kim, an assistant professor of physics at Pennsylvania State University

Chung-Pei Ma, an assistant professor of physics at the University of Pennsylvania

Hideo Mabuchi, an assistant professor of physics at Caltech

Naomi C. R. Makins, an assistant professor of physics at the University of Illinois at Urbana-Champaign

Todd J. Martínez, an assistant professor of chemistry at the University of Illinois at Urbana-Champaign

Igor Mezic, an assistant professor of mechanical and environmental engineering at the University of California, Santa Barbara

Kathryn Ann Moler, an assistant professor of applied physics at Stanford University

Karl Todd Mueller, an assistant professor of chemistry at Pennsylvania State University

Julio F. Navarro, an assistant professor of astronomy at the University of Victoria (in British Columbia, Canada)

Mary C. Pugh, an assistant professor of mathematics at the University of Pennsylvania

Jie Qing, an assistant professor of mathematics at the University of California, Santa Cruz

Daniel Raftery, an assistant professor of chemistry at Purdue University

Philip J. Reid, an assistant professor of chemistry at the University of Washington

David Saltzberg, an assistant professor of physics at UCLA

Dimitar D. Sasselov, an assistant professor of astronomy at Harvard University

Charles A. Schmuttenmaer, an assistant professor of chemistry at Yale University

Benjamin J. Schwartz, an assistant professor of chemistry at UCLA

Eva Silverstein, an assistant professor of physics at the Stanford Linear Accelerator Center

Bruce Tidor, an associate professor of chemistry at MIT

Michelle D. Wang, an assistant professor of physics at Cornell University

Kun Yang, an assistant professor of physics at Florida State University

IN BRIEF

Richard N. Zare has been named the 1999 recipient of the Welch Award in Chemistry for his lifetime achievements in physical and analytical chemistry. Zare is the Marguerite Blake Wilbur Professor of Natural Science at Stanford University.

At its annual meeting in October, the National Academy of Engineering will present its 1999 Arthur M. Bueche Award to **H. Guyford Stever**, former president of Carnegie Mellon University and former head of the National Science Foundation. Stever is being recognized for, in the academy's words, "his lifetime contributions and exceptional service to engineering and research."

Several new faculty members have joined the Pennsylvania State Uni-

versity physics department over the past year. Last fall, **Jainendra Jain**, formerly at the State University of New York at Stony Brook, became the first holder of the Erwin Mueller Chair in Physics at Penn State. **Lee Samuel Finn** also moved to Penn State last fall from Northwestern University. **Peter Eklund** of the University of Kentucky will follow next month.

The American Society for Mass Spectrometry has presented its 1999 Award for a Distinguished Contribution in Mass Spectroscopy to **Melvin B. Comisarow**, a professor of chemistry at the University of British Columbia, and **Alan G. Marshall** a professor of chemistry at Florida State University. They were honored for the invention and development of Fourier transform ion cyclotron resonance mass spectrometry. The society also presented its 1999 Biemann Medal to **Matthias Mann** for "his ingenious applications of mass spectrometry to protein chemistry and molecular biology." Mann is a professor of molecular biology at the University of Southern Denmark. The awards were

presented at the 47th ASMS Conference in June in Dallas, Texas.

Fred Stein has been selected to be the new director of education and outreach programs at the American Physical Society. He is currently the director of the Center for Science, Mathematics, and Technology Education and a professor of chemistry at Colorado State University. He replaces **Ramon Lopez**, who has accepted the position of Cook Professor and chair of the physics department at the University of Texas at El Paso.

In June, **Keith Thomassen** retired as head of the magnetic fusion energy program at Lawrence Livermore National Laboratory. He retained his professorship in the nuclear engineering department at the University of California, Berkeley.

Bob M. Duff has been named the Executive director of the Southwest Research Institute's instrumentation and space research division. He was previously director of the institute's electronics and applied physics department.

the project, I really did not understand the scale of what was being done. But he had decided that I would be the one who would watch over the instrumentation that was needed for him and his superb corps of chemists.

The chemists' job was to design a separation process for plutonium, an element that had hitherto been produced in such small quantities that no one had ever seen it. Furthermore, its separation was made even more difficult because the element was accompanied by frightening amounts of radioactivity when it was produced from the highly irradiated uranium in the huge neutron reactors at Hanford, Washington.

Of course, the separation project under Glenn was very successful, and I found out later that his knack of picking people to do particular jobs was really quite effective. In the rare cases when it did not work out, he would hire someone else and put him to work right alongside the errant worker.

Glenn was a very intense person who always kept his eye on the ball and seemed to have the knack of doing the right thing at the right time. He believed that one should not waste any time in making measurements any better than needed to accomplish a particular scientific objective. Occasionally, he was accused of skimming the peaks of research and never working in the valleys, but that was unfair because he was concerned with reconnoitering the vast new research areas that had been opened up by the advent of nuclear energy, knowing that the thorough investigations would come later when the training of PhD students resumed after the war.

Glenn always worked very hard because he felt that he had so much to do. He seemed to have a vision that demanded all of his capabilities (and those of his associates, too!). During the war, most of the scientists worked about 60 hours a week, and the necessary meetings were always held at night. To relieve stress, Glenn developed the habit of playing golf at the nearby Jackson Park Golf Course. Although his tortured swing was something to behold, somehow he managed to get on the green in three strokes on the average, and often beat his opponents (I was often among them) with his short game.

Glenn's first love was the expansion of the periodic table, and, as soon as he felt that the process of chemically separating plutonium was under control, he decided that the next step was to look for new elements beyond plutonium. He had two options. One was to use the newly built neutron reactors ("piles" they were called in those days)

OBITUARIES

Glenn Theodore Seaborg

Glenn Theodore Seaborg, discoverer of ten transuranic elements, winner of the 1951 Nobel Prize in Chemistry, and chairman (1961–71) of the Atomic Energy Commission, died on 25 February at his home in Lafayette, California, while recovering from a stroke he had suffered six months earlier.

Born on 19 April 1912 in Ishpeming, Michigan, Glenn earned an AB in chemistry from the University of California's Los Angeles campus in 1934 and a PhD in chemistry from its Berkeley campus in 1937. Gilbert Lewis supervised Glenn's thesis work, which was on the interaction of fast neutrons with lead. After completing his PhD, Glenn worked in Berkeley's chemistry department—as Lewis's personal assistant, as an instructor (1939–42), and then as an assistant professor (1941–42).

In 1940, Edwin McMillan and Peter Abelson synthesized element 93 (neptunium) at Berkeley for the first time. Because neptunium, with a halflife of two days, was found to emit beta particles, its decay product was presumed to be element 94. In December of that same year, Glenn and his Berkeley team successfully isolated the unstable neptunium and separated and identified its decay product as element 94.



GLENN THEODORE SEABORG

Continuing the nomenclature of its two predecessors in the periodic table, the new element was named plutonium.

In 1942, the US having entered World War II, Glenn took a leave of absence from Berkeley to join the Manhattan Project at the University of Chicago's Metallurgical Laboratory. It was in the summer of that year that I joined Glenn's group as its 12th member. I viewed my job as temporary—one that would disappear as soon as World War II was over. I must confess that, though Glenn took great pains to explain to me the science that was driving