

Mathematics People

2001–2002 AMS Centennial Fellowships Awarded

The AMS has awarded four Centennial Fellowships for 2001–2002. The recipients are IVAN DIMITROV, RAVI VAKIL, JIAHONG WU, and MEIJUN ZHU. The amount of the fellowship is \$40,000, with an additional expense allowance of \$1,600.

Ivan Dimitrov

Ivan Dimitrov received his Ph.D. in 1998 from the University of California, Riverside, under the supervision of Ivan Penkov. Since then Dimitrov has been a Hedrick Assistant Professor at the University of California, Los Angeles. He also visited the Max-Planck-Institut für Mathematik in Bonn (summer 1999). During the 2001–02 academic year he will spend a semester at Yale University and a semester at the Mathematical Sciences Research Institute in Berkeley.



Ivan Dimitrov

Dimitrov's research area is representation theory of Lie algebras and Lie superalgebras. Among the problems he has worked on are the algebraic and geometric aspects of representations of direct limit Lie algebras and classification of weight representations of Lie superalgebras. His current research projects are centered on various extensions of the theory of Harish-Chandra modules to complex Lie algebras and real Lie superalgebras.

He plans to use part of the Centennial Fellowship to visit Yale University.

Ravi Vakil

Ravi Vakil received his Ph.D. in 1997 from Harvard University under the direction of Joe Harris. Vakil was an instructor at Princeton University (1997–98) and is currently a C.L.E. Moore Instructor at the Massachusetts Institute of Technology (1998–2001).



Ravi Vakil

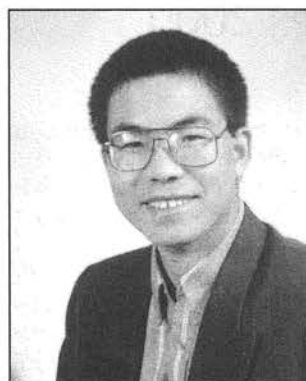
Vakil's research is in the field of algebraic geometry. His main work to date has been on the geometry of algebraic curves and maps of algebraic curves, as well as the intersection theory of moduli spaces, especially of curves and stable maps. His current interests involve the interactions of algebraic geometry with nearby fields, including enumerative geometry, mathematical physics, number theory, and combinatorics.

He plans to use the Centennial Fellowship to visit the Mathematical Sciences Research Institute in Berkeley as well as Stanford University, where he will take up an assistant professorship.

Jiahong Wu

Jiahong Wu received his Ph.D. in 1996 from the University of Chicago under the supervision of Peter Constantin.

After a year at the Institute for Advanced Study, he spent three years at the University of Texas at Austin as an instructor. In the fall of 2000 he moved to Oklahoma State University, where he is currently an assistant professor.



Jiahong Wu

Wu's research has been in nonlinear partial differential equations, especially those arising in the study of fluid mechanics. His work includes the study of zero-dissipation limits for various equations arising in the description of physical systems and analytical results related to magneto-hydrodynamic turbulence (e.g., turbulence in the outer layers of the sun). His recent work is on the global existence of smooth solutions for the

2D quasi-geostrophic equation, an evolution equation that describes the large-scale motion of the atmosphere and ocean in certain regimes, the zero viscosity limit of the classical Navier-Stokes equations in bounded domains, and several initial-boundary-value problems for model equations in nonlinear, dispersive media.

He plans to use the Centennial Fellowship for visits to the University of Chicago and the University of Texas at Austin.

Meijun Zhu

Meijun Zhu received his Ph.D. from Rutgers University in 1996 under the direction of Yan Yan Li. Zhu was a postdoctoral fellow at the University of British Columbia and at the Pacific Institute for the Mathematical Sciences (1996–98), and a postdoctoral fellow at McMaster University (1998–99). Since 1999 he has been an assistant professor at the University of Oklahoma.



Meijun Zhu

Zhu's research area is partial differential equations. He has worked mainly on nonlinear elliptic equations involving critical Sobolev exponents, curvature equations, and geometric inequalities. Recently he has been work-

ing on sharp Sobolev inequalities and various isoperimetric inequalities on Riemannian manifolds. He plans to use the Centennial Fellowship to visit Princeton University.

Please note: Information about the competition for the 2002–2003 AMS Centennial Fellowships will be published in the "Mathematics Opportunities" section of an upcoming issue of the *Notices*.

—Allyn Jackson

Kuranishi Receives 2000 Bergman Prize

MASATAKE KURANISHI has been awarded the Stefan Bergman Prize for 2000. The prize, established in 1988, recognizes mathematical accomplishments in the areas of research in which Stefan Bergman worked. The amount of the 2000 Bergman Prize is \$26,000.

The previous Bergman Prize winners are: David W. Catlin (1989), Steven R. Bell and Ewa Ligocka (1991), Charles Fefferman (1992), Yum Tong Siu (1993), Jon Erik Fornæss (1994), Harold P. Boas and Emil J. Straube (1995), David E. Barrett and Michael Christ (1997), and John P. D'Angelo (1999). On the selection committee for the 2000 prize were Frederick Gehring, J. J. Kohn (chair), and Yum Tong Siu.

What follows is the citation prepared by the committee, a brief biographical sketch, and some background about the Bergman prize.



Masatake Kuranishi

Citation

The Bergman Prize was awarded to Professor Masatake Kuranishi of Columbia University for his numerous fundamental contributions to the theory of complex manifolds and Cauchy-Riemann structures.

Of his voluminous work we highlight two results: one from complex manifold theory on locally complete deformation of compact complex manifolds, and one

from Cauchy-Riemann structures on the local embedding problem.

His result on locally complete deformation of compact complex manifolds is one of the pivotal results in the long history of the study of deformation of complex structures.

Deformation theory has its origin in the work of Riemann, which, for a compact Riemann surface of genus at least two, determined the number of complex deformation parameters to be three times its genus minus three.

In the late 1950s Kodaira and Spencer pioneered the study of the local moduli of compact complex manifolds by the methods of elliptic systems of partial differential equations. The problem was to prove the existence of a locally complete deformation of any compact complex manifold. A locally complete deformation means a local holomorphic deformation such that any other local holomorphic deformation can be obtained as a pullback of it. Kodaira, Spencer, and Nirenberg proved its existence under the additional assumption of the vanishing of the second cohomology group of the tangent bundle. In such a case the local moduli space is regular.

In 1962 Kuranishi constructed a locally complete holomorphic deformation of any compact complex manifold. His local moduli space is in general a complex-analytic set that may have singularities. His deformation is also locally complete at points of the parameter space sufficiently near the reference point. Kuranishi's work is of great fundamental importance in the theory of holomorphic deformation. His work, building upon that of Kodaira-Spencer, ushered in the development of local deformation theory in the following two decades in which the work of a long list of mathematicians, Douady, Grauert, Palamodov, Forster, Knorr, Tyurina, Bingener, and many others, completed the theory of semi-universal deformation of analytic objects. A semi-universal deformation allows nilpotent elements in the structure sheaf of the local moduli space and requires that the tangent space of the moduli space at the reference point agrees with the space of first-order infinitesimal deformations, which in the case of a compact complex manifold is the first cohomology group of the tangent bundle.

Kuranishi's result on the local embedding problem of Cauchy-Riemann structures concerns the realization of

abstract real submanifolds endowed with some partial complex structures called Cauchy-Riemann structures.

For a local smooth real submanifold in complex Euclidean space, the tangent space inherits the complex structure of the ambient space, and a subspace of it is a complex vector space. When the dimension of the maximum complex vector subspace of the tangent space is constant, the local smooth real submanifold is a Cauchy-Riemann manifold (or CR manifold). The restrictions to it of local holomorphic functions on the ambient space are the CR functions. When the local smooth real submanifold is a real hypersurface, it is said to be strongly pseudoconvex at a point if after a local biholomorphic coordinate change it becomes strictly convex. Strong pseudoconvexity is equivalent to the complex Hessian of its defining function being positive or negative definite when restricted to the maximum complex vector space of its tangent space. This notion of strong pseudoconvexity is also defined for the higher codimension case, using the positivity of the so-called Levi form, which is the generalization of the complex Hessian of the defining function of the hypersurface case.

The Cauchy-Riemann equations, which define CR functions on a CR manifold, form a very important class of partial differential equations. A CR structure can be defined on an abstract smooth real manifold by conditions concerning a subbundle of its tangent bundle having a complex structure. More precisely, a CR manifold is a real manifold whose complexified tangent bundle contains an integrable subbundle whose intersection with its complex conjugate bundle is the zero section. A fundamental question is: Under what conditions can an abstract CR manifold be locally embedded in a complex Euclidean space? Or, equivalently, are there enough local CR functions on it to make such an embedding possible?

Hans Lewy in 1957 constructed the first example of a smooth linear partial differential equation without nonconstant solution, which geometrically can be interpreted as the nonexistence of nonconstant CR functions in some CR manifold.

Kuranishi, in his trailblazing series of three papers in 1982, proved the local embedding theorem for abstract CR manifolds of real dimension at least nine under the assumption of strong pseudoconvexity. For the case of real dimension three there are counterexamples, for example, Nirenberg's strongly pseudoconvex CR threefold without nonconstant CR functions. After Kuranishi's work the case of real dimension seven was verified in the work of Akahori, Catlin, Webster, and others. The case of real dimension five, which is conjectured to be true, is still an open problem.

Kuranishi's work on the local embedding of CR manifolds is a formidable tour de force. He starts out by choosing a suitable smooth non-CR embedding and employs an ingenious approximation scheme to modify the embedding in an infinite sequence of steps in which he skillfully controls the estimates of the CR Neumann operator by Moser's method.

In his recent work, Kuranishi develops a new approach to describing CR structures by frame bundles and Cartan

connections to put in better perspective the local embedding problem and the techniques of its solution.

The impact of Kuranishi's work on complex manifolds and Cauchy-Riemann structures has been deep and far-reaching.

Biography

Masatake Kuranishi was born on July 19, 1924, in Tokyo. He received his Ph.D. in 1952 from Nagoya University, where he became a lecturer (1951–52), associate professor (1952–58), and professor (1958–61). Between 1956 and 1961 he also held visiting positions at the University of Chicago, the Massachusetts Institute of Technology, and Princeton University. In the summer of 1961 he assumed his present position as professor of mathematics at Columbia University. He was a fellow of the Guggenheim Foundation in 1975.

About the Prize

The Bergman Prize honors the memory of Stefan Bergman, best known for his research in several complex variables as well as the Bergman projection and the Bergman kernel function, which bear his name. A native of Poland, he taught at Stanford University for many years and died in 1977 at the age of 82. He was an AMS member for thirty-five years. When his wife died, the terms of her will stipulated that funds should go toward a special prize in her husband's honor.

The AMS was asked by Wells Fargo Bank of California, the managers of the Bergman Trust, to assemble a committee to select recipients of the prize. In addition, the Society assisted Wells Fargo in interpreting the terms of the will to assure sufficient breadth in the mathematical areas in which the prize may be given. Awards are made every year, in the case of a single recipient, or every other year, in the case of two joint recipients, who share the prize funds over two consecutive years. The Bergman Prize is given in the following areas: (1) the theory of the kernel function and its applications in real and complex analysis and (2) function-theoretic methods in the theory of partial differential equations of elliptic type with attention to Bergman's operator method.

—Allyn Jackson

Yao Receives Turing Award

The Association for Computing Machinery (ACM) has given its Turing Award for 2001 to ANDREW YAO of Princeton University. He received the award in recognition of his fundamental contributions to the theory of computation, including the complexity-based theory of pseudorandom number generation, cryptography, and communication complexity.

The award, named for Alan Turing, includes a \$25,000 prize and is given for technical contributions "of lasting and major technical importance to the computer field."

—From an ACM announcement

Arnol'd Receives 2001 Heineman Prize

VLADIMIR I. ARNOL'D of the Steklov Institute of Mathematics, Russia, has been awarded the 2001 Dannie Heineman Prize for Mathematical Physics for his contributions to the understanding of dynamics and of singularities of maps, with profound consequences for mechanics, astrophysics, statistical mechanics, hydrodynamics, and optics. The prize carries a cash award of \$7,500 and is presented in recognition of outstanding publications in the field of mathematical physics.

The Heineman Prize was established in 1959 by the Heineman Foundation for Research, Educational, Charitable, and Scientific Purposes, Inc., and is administered jointly by the American Physical Society (APS) and the American Institute of Physics (AIP). The prize is presented annually.

—From an APS announcement

Dongarra Elected to NAE

The National Academy of Engineering (NAE) has announced the election of seventy-four members and eight foreign associates. One mathematical scientist was elected, JACK J. DONGARRA of the University of Tennessee, Knoxville. Dongarra was elected for his contributions to numerical software, parallel and distributed computation, and problem-solving environments.

—From an NAE announcement

Kenyon Receives Rollo Davidson Prize

The trustees of the Rollo Davidson Trust have awarded the Rollo Davidson Prize for 2001 to RICHARD KENYON of the Université de Paris-Sud. Kenyon received the prize in recognition of his achievements in the study of discrete lattice systems, for his proof of the scaling limit and conformal invariance of domino tilings and the uniform spanning tree in two dimensions.

The prize was established to commemorate the life and work of Rollo Davidson and is awarded to young scientists of outstanding promise and achievements for work in probability, statistics, and related areas.

—From a Rollo Davidson Trust announcement

Golubitsky and Stewart Receive Sunyer i Balaguer Prize

The Institut d'Estudis Catalans has awarded the 2001 Ferran Sunyer i Balaguer Prize jointly to MARTIN GOLUBITSKY of the University of Houston and IAN STEWART of the University of

Warwick, England, for their monograph *The Symmetry Perspective: From Equilibrium to Chaos in Phase Space and Physical Space*. The prize consists of 10,000 euros (about US\$9,000). According to the terms of the prize, the monograph will be published in the Birkhäuser series Progress in Mathematics.

The Ferran Sunyer i Balaguer Prize is awarded each year for a mathematical monograph of an expository nature presenting the latest developments in an active area of mathematics research in which the author has made important contributions.

—From an Institut d'Estudis Catalans announcement

2001 Sloan Fellows Announced

The Alfred P. Sloan Foundation has announced the names of 104 outstanding young scientists and economists who have been selected to receive Sloan Research Fellowships. Grants of \$40,000 for a two-year period are administered by each fellow's institution. Once chosen, fellows are free to pursue whatever lines of inquiry most interest them, and they are permitted to employ fellowship funds in a wide variety of ways to further their research aims.

More than four hundred nominations for the 2001 awards were reviewed by a committee of distinguished scientists. The mathematicians on the committee were: George C. Papanicolaou, Stanford University; Peter Sarnak, Princeton University; and Ronald J. Stern, University of California, Irvine.

The 2001 Sloan Fellows in mathematics are: YURI BEREST, Cornell University; HUBERT L. BRAY, Massachusetts Institute of Technology; JARED C. BRONSKI, University of Illinois at Urbana-Champaign; DAVID CAI, University of North Carolina; EMMANUEL J. CANDES, California Institute of Technology; BRIAN CONRAD, University of Michigan; ANDREA GOLDSMITH, Stanford University; DMITRY JAKOBSON, McGill University; ALEXANDER KISILEV, University of Chicago; DMITRY KLEINBOCK, Brandeis University; ALLEN KNUTSON, University of California, Berkeley; AI-KO LIU, University of California, Berkeley; NADER MASMOUDI, New York University; ALEXANDER POLISHCHUK, Boston University; WILHELM SCHLAG, Princeton University; DIMITRI SHLYAKHTENKO, University of California, Los Angeles; CHRISTOPHER M. SKINNER, University of Michigan; KONSTANTINA TRIVISA, University of Maryland; CATHERINE HUAFEI YAN, Texas A&M University; and JIU-KANG YU, University of Maryland.

—Alfred P. Sloan Foundation announcement

NSF Graduate Research Fellowships Announced

The National Science Foundation (NSF) has awarded its Graduate Research Fellowships for fiscal year 2001. This program supports students pursuing doctoral study in all areas of science and engineering and provides a stipend

of \$18,000 per year for three years of full-time graduate study. Listed below are the names of the awardees in the mathematical sciences for 2001, followed by their undergraduate institutions (in parentheses) and the institutions at which they plan to pursue graduate work.

SAMI H. ASSAF (University of Notre Dame), University of California, Berkeley; ANDREA K. BARREIRO (Rensselaer Polytechnic Institute), New York University; MACIEJ F. BONI (Princeton University), Cornell University; JY-YING J. CHEN (Stanford University), Harvard University; MICHAEL J. COLSHER (Duke University), New York University; EDGARDO S. CUREG (University of the Philippines), University of South Florida; MICHELLE C. DUNN (Harvard University), Carnegie Mellon University; NICHOLAS K. ERIKSSON (Massachusetts Institute of Technology), University of California, Berkeley; JOHANNA N. Y. FRANKLIN (Carnegie Mellon University), University of California, Berkeley; MATTHEW T. GEALY (University of Chicago), Massachusetts Institute of Technology; PHILIP T. GRESSMAN (Washington University), Massachusetts Institute of Technology; JAIME J. HALETKY (Rensselaer Polytechnic Institute), University of California, Berkeley; DION K. HARMON (Cornell University), Massachusetts Institute of Technology; RICHARD C. HAYNES (Williams College), Harvard University; CHRISTOPHER J. HILLAR (Yale University), University of California, Berkeley; JAMES KELLEY (Pennsylvania State University), University of California, Berkeley; PETER S. KIM (Massachusetts Institute of Technology), University of Chicago; SARAH C. KOCH (Rensselaer Polytechnic Institute), Brown University; FUMEI LAM (University of California, Berkeley), Massachusetts Institute of Technology; JOHANN K. LEIDA (University of St. Thomas, MN), Massachusetts Institute of Technology; CARL A. MILLER (Duke University), Harvard University; MANISH M. PATNAIK (Massachusetts Institute of Technology), University of Chicago; SAMUEL D. PAYNE (Princeton University), University of California, Berkeley; ALEXANDER PEKKER (Stanford University), Harvard University; MICHAEL M. SCHEIN (California Institute of Technology), Princeton University; SUZANNE S. SINDI (California State University, Fullerton), Cornell University; SETH M. SULLIVANT (University of California, Berkeley), Massachusetts Institute of Technology; JOAQUIN T. THOMAS (Yale University), University of Cambridge, England; JUSTIN L. TUMLINSON (Northern Arizona University), Massachusetts Institute of Technology; BART VAN STEIRTEGHEM (Free University of Brussels), Columbia University; and XIAOHUI WANG (Nanjing University, China), University of North Carolina, Chapel Hill.

Editor's note: The institutions of graduate study listed here are from the students' original applications. In some cases students will have switched institutions by the time the fellowship tenure begins.

—From an NSF announcement

Guggenheim Fellowships Awarded

The John Simon Guggenheim Memorial Foundation has announced the names of 183 artists, scholars, and scien-

tists who were selected as Guggenheim Fellows from more than 2,700 applicants in the 2001 competition. The awards totaled \$6,588,000. Guggenheim Fellows are appointed on the basis of distinguished achievement in the past and exceptional promise for future accomplishment.

Following are the names of the awardees who work in the mathematical sciences, together with their affiliations and areas of research interest. MICHAEL C. FERRIS, University of Wisconsin, Madison: Optimization for medical applications; ARTHUR J. KRENER, University of California, Davis: Normal forms and bifurcations of control systems; FREYDOON SHAHIDI, Purdue University: New instances of functoriality; KAREN K. UHLENBECK, University of Texas, Austin: A geometric approach to soliton and wave equations; GUNTHER UHLMANN, University of Washington: Inverse boundary problems; RUTH J. WILLIAMS, University of California, San Diego: Mathematical theory for stochastic networks.

—From a Guggenheim Foundation news release

Fulbright Awards Announced

The J. William Fulbright Foundation and the United States Information Agency have announced the names of the recipients of the Fulbright Foreign Scholarships for 2000–2001. Following are the U.S. scholars in the mathematical sciences who have been awarded Fulbright scholarships to lecture or conduct research, together with their home institutions and the geographical areas in which they plan to use the awards.

DER-CHEN E. CHANG, Georgetown University: Taiwan; UDAYAN B. DARJI, University of Louisville: Hungary; SABER N. ELAYDI, Trinity University, Texas: West Bank; THOMAS E. GILSDORF, University of North Dakota: Mexico; ANDRZEJ S. GUTK, Tennessee Technological University: Cameroon; DAVID W. HENDERSON, Cornell University: Latvia; CONSTANTINE K. KLIORYS, Gannon University: Lithuania; WELDON A. LODWICK, University of Colorado, Denver: Portugal; JAMES H. MATIS, Texas A&M University, College Station: India.

—From a Fulbright Foundation announcement

2001 Intel Science Talent Search Winners Announced

Two students working in mathematics have been awarded an Intel Science Talent Search scholarship for 2001. GABRIEL D. CARROLL, eighteen years old and a student at Oakland Technical High School in Oakland, California, was awarded third place and a \$50,000 scholarship for his project "Homology of Narrow Partially Ordered Sets (Posets)", in which he studied partial orders by investigating the shape of a related geometric space. Carroll is first in his class and is president of the school's math club. He has won numerous mathematics awards, including a gold medal in 1998 and a silver medal in 1999 at the International Mathematical Olympiad.

Fourth place honors, plus a \$25,000 scholarship, went to 17-year-old ALAN MARK DUNN of Potomac, Maryland, a student at Montgomery Blair High School, for his computer science project "Optimization of Advanced Encryption Standard Candidate Algorithms for the Macintosh G4". Dunn used two different strategies to optimize five algorithms. Each strategy was successful to some degree, increasing the speed of most algorithms by 200% to 400%. Dunn is a coauthor of a paper for the 15th European Meeting on Cybernetics and Systems Research.

The Intel Science Talent Search is the oldest and most respected high school science scholarship competition in the United States. Five previous winners have gone on to receive Nobel Prizes. The total value of the Intel awards is \$1.25 million. The forty finalists received awards ranging from \$5,000 to \$100,000.

—From an Intel Corporation announcement

Deaths

THOMAS ALBERT BEITER, of Mansfield, OH, died on February 8, 2001. Born on January 21, 1947, he was a member of the Society for 8 years.

PHILIPPE M. A. BENILAN, of the Université de Franche-Comte, died on February 17, 2001. Born on October 6, 1940, he was a member of the Society for 11 years.

WINIFRED K. BURROUGHS, of West Grove, PA, died on March 9, 2001. Born on November 15, 1919, she was a member of the Society for 54 years.

LEONARD CARLITZ, of Palo Alto, CA, died on September 17, 1999. Born in December 1907, he was a member of the Society for 72 years.

BEN FITZPATRICK JR., of Waverly, AL, died on November 11, 2000. Born on September 28, 1932, he was a member of the Society for 44 years.

C. R. KOSSACK, of North Haven, CT, died on March 22, 2001. Born on May 16, 1906, he was a member of the Society for 53 years.

WENDELL D. LINDSTROM, professor emeritus, Kenyon College, OH, died on December 8, 1999. Born on February 7, 1927, he was a member of the Society for 46 years.

WILBUR T. MCKINNEY, of San Diego, CA, died on February 7, 2001. Born on August 25, 1910, he was a member of the Society for 43 years.

CRISPIN ST. J. A. NASH-WILLIAMS, emeritus professor, University of Reading, England, died on January 20, 2001. Born on December 19, 1932, he was a member of the Society for 30 years.

ROBERT A. RANKIN, professor emeritus, University of Glasgow, died on January 27, 2001. Born on October 27, 1915, he was a member of the Society for 54 years.

DAVID ROSENBLATT, of Washington, DC, died on March 10, 2001. Born on September 7, 1919, he was a member of the Society for 44 years.

AHMAD HANI SHAMSUDDIN, of American University of Beirut, Lebanon, died on April 5, 2001. Born on December 28, 1951, he was a member of the Society for 8 years.

ROBERT SIMON, vice president, Leasing Tech. International, Darien, CT, died on February 11, 2001. Born on December 25, 1919, he was a member of the Society for 49 years.

JAMES R. SMITH, of Appalachian State University, Boone, NC, died on December 16, 2000. Born on June 6, 1942, he was a member of the Society for 31 years.

VICTOR R. STAKNIS, retired, Northeastern University, died on January 18, 2001. Born on June 14, 1920, he was a member of the Society for 48 years.

INDULIS STRAZDINS, of Riga Technical University, Latvia, died on April 3, 2001. Born on March 31, 1934, he was a member of the Society for 24 years.

ERNST-JOCHEN THIELE, professor emeritus, Technische Universität Berlin, died on February 22, 2001. Born on September 9, 1928, he was a member of the Society for 39 years.

CLIFFORD A. TRUESDELL III, professor emeritus, Johns Hopkins University, died on January 14, 2000. Born on February 18, 1919, he was a member of the Society for 22 years.

ARTHUR G. WALKER, of West Sussex, England, died on March 31, 2001. Born on July 17, 1909, he was a member of the Society for 54 years.

CHARLES H. WHEELER, of Richmond, VA, died on September 16, 2000. Born on October 30, 1904, he was a member of the Society for 68 years.

HELMUT W. WIELANDT, professor emeritus, Universität Tübingen, died on February 14, 2001. Born on December 19, 1910, he was a member of the Society for 40 years.

J. W. ZIMMER, of Severna Park, MD, died in August 2000. Born on September 18, 1909, he was a member of the Society for 61 years.