

we hear that

National Academy of Sciences presents annual awards

The National Academy of Sciences presented eleven awards at its annual meeting in April. Among the winners working in physics-related fields are Conyers Herring, William C. Kelly, W. W. Morgan, Robert N. Clayton and Walter Sullivan.

Conyers Herring, a solid-state theorist, received the James Murray Luck Award and a \$5000 honorarium for "a career of service to the scientific community and particularly its review literature." Since 1937, when Princeton University granted him a doctoral degree, Herring has held positions with MIT, Princeton, the University of Missouri, the Division of War Research at Columbia University (during the Second World War) and the University of Texas. From 1946 to 1976 Herring was a member of the technical staff of Bell Laboratories. He joined the Stanford University faculty as a professor of applied physics in 1976.

The NAS Staff Award for Distinguished Service and \$2000 was given to William C. Kelly for his "outstanding professional contributions" to the National Research Council. Kelly has held a number of posts with the NRC; currently, he is executive director of the NRC Commission on Human Resources. A physicist by training (PhD, University of Pittsburgh, 1951), he served on the Pittsburgh faculty for fifteen years. In the following years—from 1958 to 1965—Kelly was the director of the department of education and manpower at the American Institute of Physics. He came to the NRC in 1965.

W. W. Morgan won the Henry Draper Medal in recognition of "his pioneering researches in spectral classification, leading to a new standard of accuracy in our knowledge of the distances of the stars and the structure of our galaxy." A \$1000 honorarium accompanies the medal. Morgan, emeritus professor of astronomy at the University of Chicago, earned his PhD from that institution in 1931. He has been associated with Yerkes Observatory since 1926. The Astronomical Society of the Pacific honored Morgan with its Bruce Gold Medal in 1958.

The NAS awarded the George P. Merrill Award and \$1000 to Robert N. Clayton, chairman of the department of geophysical science, University of Chicago. It cited "his pioneering measurements of isotopic heterogeneities in extraterrestrial materials." Clayton received a doctoral degree from Caltech in 1955. He served on the Caltech and Pennsylvania State University faculties before he came to Chicago in 1958. Clayton won the NASA Exceptional Scientific Achievement Medal in 1977.

The New York Times science editor, Walter Sullivan, was honored with the Public Welfare Medal for "his clarity of expression and extensive knowledge which have enabled millions of readers to understand the means and ends of scientific research." Sullivan has worked for the *Times* since 1940. He won the AIP-US-Steel Foundation Award for Science Writing in Physics and Astronomy in 1969.

Other NAS award winners were Gil-

bert F. White, director of the Institute of Behavioral Science, University of Colorado, Boulder (Award for Environmental Quality); Phillip A. Sharp, professor at the Center for Cancer Research and the department of biology, MIT (US-Steel Foundation Award in Molecular Biology); Julius Adler, Edwin Bret Hart Professor in the departments of biochemistry and genetics, University of Wisconsin, Madison (Waksman Award in Microbiology); Frank H. Westheimer, Morris Loeb Chair of Chemistry, Harvard University (Award in Chemical Sciences); George F. Carrier, T. Jefferson Coolidge Professor of Applied Mathematics, Harvard University (NAS Award in Applied Mathematics and Numerical Analysis), and James S. McDonnell, chairman of McDonnell Douglas Corp, St. Louis, Missouri (NAS Award in Aeronautical Engineering).

ASP to honor five astronomers

In July, the Astronomical Society of the Pacific will honor five men for their contributions to the field of astronomy. The Society has selected George Herbig of Lick Observatory to be the 1980 Catherine Wolfe Bruce Medalist and Walter Sullivan of *The New York Times* to win this year's Dorothea Klumpke-Roberts Award. In addition, James Liebert of the University of Arizona and Luis Rodriguez of the Mexican Institute of Astronomy will share the R. J. Trumpler Award and

CLAYTON



SULLIVAN



KELLY



MORGAN



HERRING



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the ASP Amateur Achievement Award will go to Frank Bateson of New Zealand. The award ceremonies will take place in Tucson at the Society's annual scientific meeting.

George Herbig, professor of astronomy at the University of California, Santa Cruz, won the 82nd edition of the Bruce Medal in recognition of his work on T-Tauri stars (stars formed a relatively short time ago, less than about 4×10^8 years) and on the nebulous "knots" found in star-forming regions now called Herbig-Haro objects (after their co-discoverers). Herbig earned his PhD from the University of California, Berkeley, in 1948; he has been associated with Lick Observatory since 1944. The American Astronomical Society awarded Herbig its 1955 Warner Prize.

The Klumpke-Roberts Award will be given to Walter Sullivan, science editor for *The New York Times*. The award is presented each year for outstanding contributions to public understanding and appreciation of astronomy. Sullivan is author of two books on astronomy, *We Are Not Alone* and *Black Holes*. He was recently honored by the National Academy of Science (see preceding story).

The Trumpler Prize is awarded to recognize outstanding doctoral theses in astronomy. For the first time in the history of the prize, two astronomers have been selected in the same year: James Liebert, for his dissertation on white dwarfs and Luis Rodriguez for his study of the nature of various gas complexes found at the center of our Galaxy.

Frank Bateson, a retired New Zealand accountant and company manager, was recognized for his activities over a long career in amateur astronomy. In 1927 he founded the Variable Star Section of the Royal Astronomical Society of New Zealand and he has since made over 100 000 observations of variable stars.

Six physicists among IEEE award winners

Physicists William Shockley, Robert Adler, Simon Ramo, Aldert van der Ziel, William M. Webster and Raymond W. Sears were among those honored by the Institute of Electrical and Electronics Engineers at a conference held in Boston last May.

The 1980 IEEE Medal of Honor was awarded to William Shockley for his invention, with John Bardeen and Walter H. Brattain, of the transistor. In 1956 the trio shared the Nobel Prize for this work. Shockley holds an appointment as emeritus professor of electrical

engineering at Stanford University.

Robert Adler, director of research at Extel Corp, Northbrook, Illinois, won the Edison Medal "for many inventions in the fields of electronic beam tubes and ultrasonic devices, and for leadership in innovative research and development."

Vice-chairman of the board at TRW, Inc, Simon Ramo was given the Founder's Medal in recognition of his leadership in the application of systems engineering to electronics.

Aldert van der Ziel was presented the Education Medal "for leadership in engineering education and for contributions to noise theory in electronic devices." Van der Ziel is a professor of electrical engineering at the University of Minnesota, Minneapolis.

William M. Webster was cited for his "sustained leadership in the management of research and development" in winning the Frederick Philips Award. He is vice president of RCA Laboratories.

Raymond W. Sears, retired member of Bell Laboratories, won the Haraden Pratt Award for his long-term service to the IEEE.

Two United Technologies Research Center scientists have received awards from the Institute of Electrical and Electronics Engineers. **Anthony J. DeMaria**, head of the Center's electromagnetics and physics laboratories, was presented the 1980 Morris N. Liebmman Award and **Elias Snitzer**, head of

the applied physics laboratory, was given the 1979 Quantum Electronics Award.

William David Wright, formerly professor of physics at Imperial College of Science and Technology, London, now retired, has won the Inter-Society Color Council's Macbeth Award.

Rafael Tsu has become a senior scientist at Energy Conversion Devices, Inc. Before his move Tsu worked at the IBM Watson Research Center.

Uday K. Sengupta has joined Tachisto Inc as senior research and development scientist. He was previously with the Honeywell Inc Electro-Optics Center.

Simon D. White, formerly of the Institute of Astronomy, Cambridge University, has been appointed a senior fellow at the University of California, Berkeley Space Sciences Laboratory.

James Hillier, retired executive vice president and chief scientist of RCA, and **Major Edwin Armstrong** (deceased) have been elected to the National Inventors Hall of Fame. Hillier is credited with the invention of the electron microscope; Armstrong with the superheterodyne radio receiver.

The Institute for Physical Science and Technology of the University of Maryland has named **Robert W. Zwanzig** Distinguished Professor of Science and Technology.

obituaries

Vladimir Čermák

Vladimir Čermák, senior scientist of the J. Heyrovský Institute of Physical Chemistry and Electrochemistry, Czechoslovak Academy of Sciences, Prague, died on 4 January 1980.

Čermák was born in České Budějovice, Czechoslovakia in 1920 and received his early schooling in Prague. World War II delayed his university studies; during those years he was employed in the chemical industry. In 1945 he entered the School of Natural Sciences, Charles University, in Prague. He studied under Miroslav Brdička and Jaroslav Heyrovský and received his degree in 1949 for work in polarography. Čermák then helped found the Laboratory of Physical Chemistry, Czechoslovak Academy of Sciences. The laboratory later developed into the institute to which he was to be attached for all of his life. At the new laboratory his interests shifted



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