PHYSICS TODAY articles on the discovery of radioactivity (February 1996, page 21) and Marie Curie (July 2003, page 37), as a public service. He promoted international educational and scholarly exchanges and lectured in many countries on the history of science and nuclear policy; when visiting Nepal, he loved to trek in the Himalayas. He exercised his social conscience by joining protests against the Vietnam War, by opposing what he regarded as dangerously aggressive US nuclear weapons policy (and UC management of the weapons laboratories), and by serving as president of the Santa Barbara chapter of the American Civil Liberties Union.

Larry Badash distinguished himself as a leader in the history of physical sciences. His books, papers, and teaching consistently joined two cultures by exploring the intricacies of physics while also explaining the immense impact of science on society.

Zuoyue Wang
California State Polytechnic University Pomona
Peter Neushul
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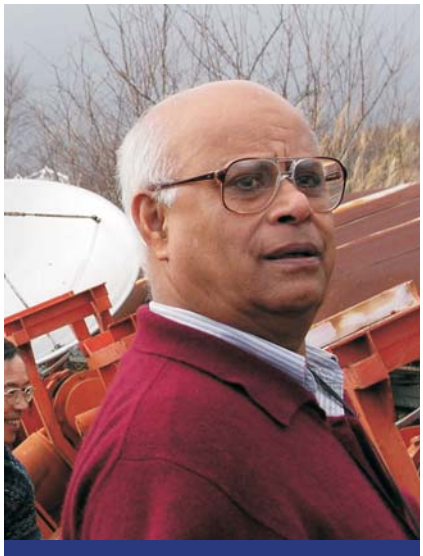
Mukul Ranjan Kundu

Renowned solar physicist and radio astronomer Mukul Ranjan Kundu died on 17 June 2010 near College Park, Maryland, from complications after an automobile accident that occurred when he was returning home from work. A recipient of the American Astronomical Society's 2007 George Ellery Hale Prize, Mukul spent his entire career studying the radiophysics of the Sun. His work significantly advanced the understanding of the interactions between accelerated electrons and the magnetized solar corona and of the myriad nonthermal radio phenomena that resulted.

K. SHIBASAKI



Mukul Ranjan Kundu

Mukul was born 10 February 1930 in Calcutta, India. After completing his college studies in physics and radiophysics at the University of Calcutta, he went on to earn his DSc degree in radio astronomy from the University of Paris in 1957. His early work involved the study of the terrestrial ionosphere and how it is influenced by the Sun. He was also involved in the development of radio interferometry when he was in Paris. After a brief stay at the National Physical Laboratory in New Delhi, India, Mukul went to the US in 1962, first as an associate research physicist at the University of Michigan and then as an associate professor at Cornell University. In 1965 he returned to India to work for three years at the Tata Institute of Fundamental Research. Then he went back to the US to be a professor at the University of Maryland, College Park, where he worked until the last day of his life.

The radio interferometric work he began during his graduate days became his prime interest in studying solar phenomena at various wavelengths, from millimeters to meters. His 1971 discovery with Timothy McCullough that the Sun's north pole was brighter than the surrounding quiet Sun has had a lasting impact on our understanding of the connection between the solar wind and the Sun's surface features. That phenomenon was later found to be associated with coronal holes in the Sun's polar regions and at low latitudes. The enhanced radio emission indicates that the chromosphere under coronal holes has different physical conditions compared with the quiet chromosphere.

At the other extreme of radio wavelengths, the early argument by Mukul and Robert Stone that the nonthermal electrons responsible for the complex type III solar radio bursts observed at kilometric wavelengths are from the flare site rather than due to shock acceleration has proved to be of enduring usefulness. Mukul did extensive work on solar radio phenomena using interferometric arrays such as the Clark Lake Multifrequency Radioheliograph, the Nancay Radioheliograph, the Nobeyama Radioheliograph, the Westerbork Synthesis Radio Telescope, the Very Large Array, and the Berkeley Illinois Maryland Association array.

Most of the more than 400 research publications Mukul authored or coauthored were about the Sun, but a significant number discussed other areas of astrophysics: radio galaxies, supernova remnants, nebulae, flare stars, and T Tauri stars. He published his influential textbook, *Solar Radio Astronomy* (Wiley), in 1965. He also edited four other books covering solar physics, solar radio physics, solar terrestrial physics, and astrophysics.

Mukul was a member of the editorial board of the journal *Solar Physics* for more than 40 years—from 1967 until his death. For nearly two decades, he helped immensely with the success of the research associate programs of the National Research Council. He also served as a member of NSF's Advisory Panel for Atmospheric Sciences from 1983 to 1986. He trained numerous students and young scientists from the US and abroad.

A great fan of food and wine, Mukul was a regular visitor to the Washington, DC, waterfront to get fresh fish. A jovial person, he enjoyed the company of his colleagues and will always be remembered for his healthy laugh, which identified him in any group conversation or at any dinner table.

Nat Gopalswamy
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