



C. L. Hemenway  
(1920 - 1982)

On November 18, 1982, Curtis Hemenway unexpectedly passed away.

He went to school at Rutgers University, where he received his MS and Ph.D. in physics.

From 1949-56 he was at Union College at Schenectady, N.Y. as Assistant Professor and Associate Professor.

In 1956 he was asked to take over the Dudley Observatory, Albany, N.Y., which, at that time, was located in its old castle-like building at Albany, N.Y. There he was the director until 1979.

From 1964-1979 he was also Professor of Astronomy and Space Science at the State University of New York, Albany (SUNYA) and from 1964-71 he served as the Chairman of the Department of Astronomy and Space Science at SUNYA.

His scientific peak activities were in the 60ties and 70ties. He pioneered a variety of new techniques for collecting extraterrestrial dust particles. The revolutionary nature of these experiments and Hemenway's encouragement of outsiders to participate in these experiments catalyzed a rapid growth of the cosmic dust research: Already in 1959 he flew the famous Venus Flytrap rocket experiment to collect particles in the atmosphere. He developed balloon borne collectors, including a superpressured balloon, which travelled around the globe. The first satellite-borne collectors for the Gemini program were also performed by Hemenway. In 1973 he was Principal Investigator of several dust collections on Skylab. Already at that time one could see space debris, but nobody was aware of this fact at that time.

Hemenway's scientific results were partly unexpected and partly controversial. Only since we have the sound basis of the lunar sample results, we can estimate the reality in a better way. He has already collected fluffy particles, but at that time it was not known that these fluffy particles were the ones we were looking for.

He was a member of the IAU, active in Commission 22. His activities within COSPAR were excellent. In 1968 he founded the Cosmic Dust Panel IIC and was its first chairman until 1973. Owing to his activities, the small but strong dust community has vigorously succeeded during that time.

Hemenway's final years were tragic. The department of Astronomy and Space Science at SUNYA was dissolved and the activities at the Dudley Observatory were not funded any longer. This terminated his activities. Disappointed, but still defending his scientific convictions, he went back to the state where he had, originally, come from: to Maine. There he lived in his summer house near the ocean. Since he was a sailor, he was always proud of his sail boat named "star dust".

His last visit with the international dust community was when he came to Ottawa/Canada in May 1982 to the COSPAR-meeting.

H. Fechtig



G.M. NIKOLSKY (1929-1982)

Professor Guennady M. Nikolsky, who passed away in his 54th year was a prominent russian astrophysicist, member of the IAU. His sudden disappearance occuring at the summit of his creative life is a great loss for the astronomical community. G.M. Nikolsky, was born in Rostov at Don River on Sept. 28, 1929. He obtained a degree in astrophysics from the Astronomical Department of Kiev State University in 1953, where he took up his first job as a scientific assistant to Professor S.K. Vsekhsvyatsky. In 1956-58 he joined the Astrophysical Institute at Alma-Ata where he studied the zodiacal light, planets, and the airglow. Since 1958 up to his last day he worked at IZMIRAN, near Moscow, where he created the Laboratory of Solar Activity which became famous to all experts in Solar Physics. G.M. Nikolsky was a brilliant experimentator and observer. He designed the world largest coronagraph, of the Lyot type, with a 535mm objective diameter and a new type of magnetograph. Prof. Nikolsky was generally recognized as an authority in solar total eclipse observations. His contribution in promoting space research have been remarkable. He had been the P.I. of the Artificial Solar Eclipse Experiment realized at the joint Soviet-American mission Apollo-Soyuz in 1975. In 1982, with the Soviet-French crew aboard Salyut-7, Prof. Nikolsky had been on the Soviet part of the PCN experiment. Unique color photographs of the zodiacal light and the ionospheric glow were obtained then. Lately, G.M. Nikolsky had developed ideas on new and original experiments and studies which he had no time to fulfill.

Gennady Nikolsky was a brilliant and open person. He had many friends, not only in his homeland but also among solar astrophysicists abroad although he had never the opportunity to leave his country. The untimely death of Prof. G.M. Nikolsky is an unmeasurable loss for his disciples, friends, colleagues, to all those who had the privilege to share his friendship.

S. Koutchmy



D. W. SCHUERMAN (1943 - 1982)

Dr. Donald W. Schuerman was just 38 when an automobile accident prematurely ended his promising career as an astrophysicist. He was a member of the IAU, COSPAR, and the American and Royal Astronomical Societies, and he had already made major contributions to the subjects of this IAU Colloquium in his relatively short seven years in this field. Dr. Schuerman was born in Cincinnati, Ohio on July 13, 1943. He obtained his advanced degree in physics and astronomy from the University of Rochester in 1968, after which he was manager of the NASA/Johnson Space Center UV rocket program. In 1972 he joined Dudley Observatory in Albany, New York where he worked on a Skylab coronagraph designed to measure atmospheric aerosols and contaminant particulates around the spacecraft. This experiment introduced him to some of the many problems involving light scattered by small particles. In 1975 he joined the Space Astronomy Laboratory at which he worked in Albany and, later, in Gainesville, Florida until his death in 1982. While there he worked on theoretical topics and on space (Skylab, Pioneer 10/11, ISPM, Space Shuttle, ESA/Giotto mission to Halley) and laboratory experiments. Included among his activities:

- light scattering by irregularly shaped particles (he directed the program in microwave analog measurements of small particles);
- studies of spacecraft induced atmospheres (particulates associated with manned spacecraft - Skylab, Space Shuttle);
- he defined and developed the science concept for the ISPM zodiacal light/background starlight experiment and for the optical probe experiment (HOPE) which will be used for measurements of Comet Halley from the ESA/Giotto probe;
- he derived the general inversion of the zodiacal light brightness integral and used it with Pioneer 10/11 data to provide the first direct information on the properties and distribution of zodiacal dust beyond 1 AU;
- with Dr. Frank Giovane he developed the data reduction methodology

used to derive an all-sky map of background starlight as seen from beyond the asteroid belt;

- he predicted that large scale interplanetary dust arcs may be associated with each planet, those of Jupiter and Saturn being the most predominant.

In his last years he became increasingly convinced that optics, dynamics, and (IR) emission must continue to "come together" if we are to fully understand the interplanetary dust complex. His convictions are strongly confirmed by the recent zodiacal emission results from IRAS.

Although Dr. Schuerman was a brilliant and quick theoretician, he also understood and worked comfortably with instrumentation. He was also expert at metal and woodworking. Muzzle-loading guns and the associated woodsmanship was a major hobby for him as it is for his father and for his son. Don Schuerman went all out in his science, in his love of family and friends, and in his love of life itself. His scientific work ethic, contagious smile, everready wit, and zest for life will remain forever with his family, colleagues, and friends.

J. L. Weinberg