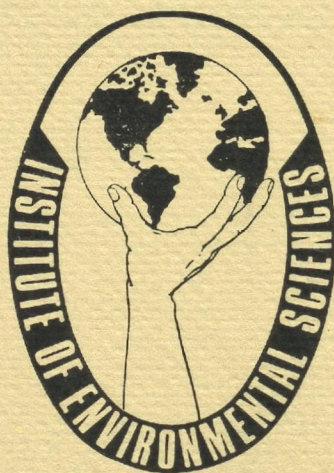


INSTITUTE OF
ENVIRONMENTAL SCIENCES

Space Environment Award



Dr. Matthew P. Thekaekara

1971

Space Environment Award

By action of the Executive Committee in January 1971, the Awards Committee was authorized to offer the Space Environment Award to the best paper or to a distinguished member whose work in the field of Space Environment was considered outstanding.

CITATION TO

Dr. Matthew P. Thekaekara

For his work in Solar Physics, particularly for his efforts in obtaining revised engineering standard values of solar spectral and total irradiance.

Dr. Matthew P. Thekaekara
Goddard Space Flight Center

Dr. Matthew P. Thekaekara spends his workdays as a government scientist. His evenings and weekends are devoted to the parish affairs of the Ascension Church in Halethorpe, a suburb of Baltimore, Maryland.

He is a practicing Roman Catholic priest who regularly conducts Mass as well as one of Goddard's top physicists. In December of 1970, he received the GSFC Exceptional Performance Award for his "outstanding performance in leading and coordinating the solar research that obtained revised engineering standard values of solar spectral and total irradiance". These new values for the "solar constant" have a wide range of applications in physics, astronomy, and engineering.

Dr. Thekaekara's work in solar physics began in 1962 while he was Associate Professor of Physics at Georgetown University. At that time he took part in a Summer Workshop in Solar Simulation here at Goddard. In 1964 he joined the Center staff full-time in order to continue this project. Then, in 1967, he was principal investigator for the NASA 711 Galileo experiment conducted aboard a Convair 990 aircraft flying at altitudes of 38,000 feet. Data taken during this series of flights show a solar constant value closer to 1.940 calories per square centimeter per minute than the earlier value of 2.00 calories per square centimeter per minute, indicating that the sun's energy may be slightly less than originally thought.

Dr. Thekaekara was born in Changanacherry, India, and received his B.S. degree in physics from Madras University in 1939 and a L.Ph. degree in philosophy from the Gregorian University in 1941. In 1956, he received his PhD from Johns Hopkins University in Baltimore.

A prolific author, he has published over fifty technical articles, several philosophical and religious papers, and even a volume of poetry.

IES NEWS

THREE RECEIVE VIGNESS AWARD

Drs. Robert M. Mains, Charles T. Molloy, and Charles T. Morrow were recipients of the Vigness Award presented at the Institute of Environmental Sciences' annual banquet April 28, 1971 in Los Angeles.

The Vigness Award formerly had been given for the best paper on shock published in the previous year; however, by action of the Executive Committee in January 1971, the Awards Committee was authorized to offer the honor to those distinguished men whose services in the field of mechanics was considered outstanding.

Dr. Mains is currently a professor of Civil and Environmental Engineering at Washington University, St. Louis; his experience includes working at the Hopkins Applied Physics Lab, professor at Cornell Univ., Knolls Atomic Physics Lab and the General Electric Co. Dr. Molloy joined T.R.W. Systems and was responsible for the Titan Missile sound and vibration program after several years at Bell Telephone Co., the Vitro Corp. and the Lockheed Corp.; he also was an Adjunct Professor at Polytechnic Institute of Brooklyn and at the University of Southern California. Dr. Morrow, a Staff Scientist with L.T.V. Advanced Technology Center, Inc., Dallas, previously worked at the Harvard Underwater Sound Laboratory, the Harvard Electro-Acoustic Laboratory, the Sperry Gyroscope Co., the Hughes Aircraft Co., the Ramo-Woolridge Corp. and the Aerospace Corp.; Dr. Morrow is the author of numerous papers as well as a published book "Shock and Vibration."

The citation to the three reads: "For their continued leadership and contributions to environmental sciences in the field of vibration, shock and acoustics. For their efforts in the dissemination of En-

vironmental Science, and for their superior authorship and teaching."

THEKAEKARA HONORED IN LOS ANGELES

Dr. Matthew P. Thekaekara, NASA/Goddard, was presented the Space Environment Award by Edward Kirchman, Chairman of the IES Awards Committee, at the annual IES banquet in Los Angeles on April 28.

The award is offered to the best paper or to a distinguished member whose work in the field of Space Environment is considered outstanding. The citation to Dr. Thekaekara reads: "For his work in Solar Physics, particularly for his efforts in obtaining revised engineering standard values of solar spectral and total irradiance."

Dr. Thekaekara's work in solar physics began in 1962 while he was Associate Professor of Physics at Georgetown University. At that time he took part in a summer workshop in Solar Radiation at Goddard and in 1964 he joined the Goddard staff full-time. In 1967 he was principal investigator for the NASA 711 Galileo experiment conducted aboard a Convair 990 aircraft flying at altitudes of 38,000 feet; data taken during these flights indicated a solar constant value closer to 1.940 calories per square centimeter per minute than the earlier value of 2.00 calories per square centimeter per minute, indicating that the sun's energy may be slightly less than originally thought. In December 1970 he received the GSFC Exceptional Performance Award for his "outstanding performance in leading and coordinating the solar research that obtained revised engineering standard values of solar spectral and total irradiance."

Born in India, Dr. Thekaekara received his B.S. degree in physics from Madras University and an L.Ph. degree in philosophy from

the Gregorian University as well as a PhD from Johns Hopkins University. A prolific author, he has published over 50 technical articles, several philosophical and religious papers, and even a volume of poetry.

NUCLEAR RADIATION COMMITTEE ELECTS ELDER CHAIRMAN

Glenn E. Elder, White Sands Missile Range, was unanimously elected chairman of the IES Nuclear Radiation Committee by the membership of the committee on a recent ballot. The other committee officers include *Albert R. Ludwig*, Bendix Corporation (Mishawaka Div.), Vice-Chairman; *Joseph P. Allgeier*, Secretary; *Howard K. Goldmacher*, Standards Chairman; *Stephen J. Babjak*, General Electric Co., Standards Vice-Chairman; and *Sam J. Basham, Jr.*, Battelle Memorial Institute, Membership Chairman. Mr. Elder receives the leadership of the committee from Mr. Basham, who has served as committee chairman for the past three years; Mr. Basham's dedication in the past is greatly appreciated.

The Nuclear Radiation Committee "is concerned with the nuclear radiation environment as it pertains to laboratory test techniques, the simulation of these environments and correlation of damage data. This includes a definition of the environment for test and analysis purposes and the measurement of the environment, test specimen response, etc. Some effort is also devoted to environmental factors associated with equipment hardening." Recently the committee developed a session for the Annual Meeting in Los Angeles which helped them disseminate information to the membership and currently they are developing irradiation test standards.