Dr. Ravindra (Ravi) B. Lal

Dr. Ravindra Behari Lal, a University Eminent Scholar and Professor of Physics at Alabama A&M University, was born in Agra, India, the city of the famous TAJ MAHAL.

Dr. Lal joined Alabama A&M University in 1975 as an Associate Professor of Physics and was promoted to Professor in 1978. He obtained his M.S. and Ph.D. degrees in Solid State Physics from Agra University in 1958 and 1963 respectively. He did his postdoctoral work at NASA/Marshall Space Flight Center as a postdoctoral associate of National Academy of the Sciences/National Research Council. At NASA/MSFC he did pioneer work on the effects of radiation on thermal control coatings used for Apollo and other spacecrafts. On a special recommendation by NASA/MSFC director Dr. Werner Von Braun, his term as a postdoctoral associate was extended to a third year.

After leaving NASA he joined the India Institute of Technology (IIT) in Delhi, India as an Assistant Professor in Physics. At IIT Delhi he worked on the growth of zinc oxide crystals and also on a project funded by the NBS, Washington, DC.

He returned to the United States in 1970 and worked at the University of Alabama in Huntsville and the Paine College in Augusta, GA before coming to Alabama A&M University in 1975.

While at AAMU he was chosen by NASA in 1978 as a principal investigator for a Space Shuttle experiment on the maiden flight of the Spacelab-3 mission in 1985. The crystal growth experiment for growing triglycine sulfate (TGS) crystals for room temperature infrared detectors was successfully flown. This work gave recognition to AAMU in the field of microgravity research. The success of the first experiment in 1985 gave Dr. Lal an opportunity to fly another experiment in 1992 on the first International Microgravity Laboratory (IML-1) to grow crystals of TGS using the Fluids Experiment System (FES). He states that working as a PI on the two space shuttle missions, Spacelab-3 and the first International Microgravity Laboratory was one of my most exciting times of his career.

The Alabama House of Representatives recognized him on April 25, 1985 for his achievements on NASA's Spacelab-3 experiment. In 1986, James C. Fletcher, NASA's Administrator, presented him with NASA's Public Service Achievement Award for Spacelab-3 Payload Principal Investigator's Team.

Dr. Lal was also the principal investigator for a project from NASA's Commercialization of Space program for 7 years. The NASA Center of Commercialization of Crystal Growth at Clarkson University in Potsdam, NY funded this project with support from many industrial companies, including Boeing, Rockwell International, MetroLaser, and EDO/Barnes Engineering.

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Dr. Lal was a major contributor in the establishment of the M.S. and Ph.D. programs in Optics/Lasers and Materials Science at AAMU. He played a significant role in the winning proposal from the National Science Foundation Center on Nonlinear Optics and Materials and served as one of the PI's for this $1 million/year center.

During his tenure at AAMU Dr. Lal has obtained over $6 million in research funding. Presently, he is a principal investigator for grants from DOE, DOD, SMDC, and NSF.

He has served as conference chairs for many SPIE (International Society for Optical Engineering) conferences. Presently he is serving as a co-chair of the SPIE Presidential Advisory Committee on India.

In addition to teaching at the Indian Institute of Technology (IIT) in New Delhi, he has supervised many M.S. and Ph.D. students at AAMU. He is a Fellow of the SPIE, member of thr American Association of Crystal Growth, American Physical Society, and Sigma XI. He was awarded the NASA New Technology Award in 1981 and 1983. He has given invited talks in Russia, Austria, India, Japan, including the Gordon Conferences. He has published over 100 research papers in national and international journals.

He is presently serving for one year as a NASA's Administrator's Fellow in the Exploration Science and Technology Division of NASA/Marshall Space Flight Center.

He has served as the Public Relations Officer of the Huntsville India Association and is presently the secretary of the Board of Trustees of the Hindu Cultural Center of North Alabama (HCCNA).

He is married to Usha Lal.