



Dr Ajay Kumar Saxena,

Former dean, Faculty of Sciences, Indian Institute of Astrophysics (IIA), Bengaluru, India.

Ajay Kumar Saxena has been working in the field of Photonics Instrumentation and Optical Technology for the past 30 years. He obtained his Ph.D. degree in Physics from the University of Lucknow in 1977 and even before this, had started his tenure at IIA with the founding director of IIA at that time: Prof Vainu Bappu.

During his long research career spanning decades both in India and abroad, has been involved in optical technology development and Instrumentation programmes including design, fabrication and testing of optics used in Astronomical observations and related applications. He developed a new polarization interferometer technique using a simple device (Babinet Compensator) for the precise quantitative evaluation of optical surfaces and wavefront sensing in situation like active and adaptive optics systems. He set up Vacuum coating facilities at Indian Institute of Astrophysics. Setting up of 0.3M, 1.5M and 2.8M Vacuum coating plants and subsequent aluminizing of large mirrors up to 2.34M and various other types of optical coatings have been milestones in his research career. He played a major role in designing and monitoring the manufacture of the 2M vacuum coating plant for high altitude observatory at the Indian Astronomical Observatory (IAO), located in Hanle near Leh in Ladakh.

He has developed the technology for the fabrication of passive radiant cooler sun shield panels of highly specularly reflective surfaces for VHRR in INSAT Series of satellite. It is an import substitute resulting in large savings in foreign exchange. Successful performance of VHRR in INSAT 2A, 2B, 3A and METSAT speaks of the quality and performance of the radiant cooler. He also was engaged in the development of sunshield panels for INSAT – 3D imager and sounder coolers. He has successfully performed experiments on studies of solar Corona during four solar eclipses - two in India and two abroad (Venezuela and Iran).

He has been conferred the 1994 Republic Day Award of the National Research Development Corporation for the innovative invention work related to the passive radiant cooler used in

VHRR of INSAT II series of satellites of ISRO. He has also served as a visiting Prof at University of British Columbia, Vancouver, Canada. He has several publications both national and international and has also several students who completed PhD under his supervision.



In the last several years, Prof Saxena has setup an NGO named Gyan Vigyan educational and social welfare foundation for the promotion of science and social welfare. He also has a school that conducts Science Activity and Research School (SARS) as part of this foundation, named Akash Gyan Vigyan Kendra. This school was a unique feature of the foundation and several students have been benefited from these activities. He has designed curriculum for several academic institutions promoting science.

He has generously donated to SJC an 12 inch telescope that he built over the years. Here at SJC, he is a technical consultant with regard to the installation and operation of the 12 inch as well as the 8 inch telescopes. He will also continue with advising us regarding research and instrumentation and technology development programs.

SJC remains grateful to him. We hope that his presence and guidance will enthuse our students to take up science as a career.