

Professor Parameswaran Hariharan

The degree of Doctor of Science (honoris causa) was conferred upon Professor Parameswaran Hariharan in 2001.

Citation

Chancellor, I have the honour to present Professor Parameswaran Hariharan for the conferring of the degree of Doctor of Science (honoris causa).

Professor Hariharan was born in India. After completing his Masters degree in Physics, he worked in the 1950s at the National Physical Laboratory, New Delhi and at the National Research Council, Ottawa. In 1958, he received his PhD from the University of Kerala for his work on photographic resolving power. He subsequently became Director of the laboratories at Hindustan Photo Films in Ootacamund and Senior Professor at the Indian Institute of Science in Bangalore. Professor Hariharan joined the Division of Applied Physics of CSIRO in Sydney in 1973 and retired as a Chief Research Scientist in 1991. He has continued his research as an Honorary Research Fellow at CSIRO and, fortunately for this institution, as an Honorary Visiting Professor at the University of Sydney where he has made significant contributions to the fields of optical technology, quantum optics, a study of the geometric phase and the development of achromatic phase-shifters using ferroelectric liquid crystals.

Professor Hariharan has achieved international recognition as a leading figure in interferometry and holography and has made outstanding original scientific contributions to several other areas of optics and photographic science. His many firsts include the demonstration of the gain in contrast and resolution by double-passing a Fabry-Perot interferometer, work which led to the multiple-pass Fabry-Perot interferometer, now widely used in Brillouin spectroscopy. More recently Professor Hariharan has made significant contributions to the study of quantum effects in optical interference.

He has published more than 200 papers in international journals as well as four major reviews and several book chapters. He is the author of three books and the Editor of two volumes in the Milestone Series published by the Society of Photooptical and Instrumental Engineers (SPIE).

Professor Hariharan has made significant contributions to optics at an international level. He has been President of the Optical Society of India and the Australian Optical Society. He served on the Board of the International Commission for Optics for nine years. He was the Founder President of the Australian Chapter of SPIE and a Director of SPIE and has been active in a number of roles in the Society. He is a Fellow of numerous other Professional bodies and he has been honoured by awards and medals both here and in Europe and the United States of America.

Chancellor, I have great pleasure in presenting Professor Parameswaran Hariharan for admission to the degree of Doctor of Science (honoris causa) and I invite you to confer the degree upon him.