Address of the President (Dr C. Jordan) on the Presentation of the Gold Medal to Sir John Houghton on Friday 1995 October 13

Sir John Houghton is awarded the Gold Medal of the Royal Astronomical Society for his distinguished and inspiring work in Atmospheric Physics.

John Houghton originally specialized in the study of atmospheric radiation, particularly in the infrared part of the spectrum. Following his education at Oxford he worked for 3 years at the RAE, Farnborough, making spectroscopic observations from aircraft, before returning to the University in 1957. After 5 years as a Lecturer he took over from his former supervisor, Alan Brewer, as Reader and Head of the Department of Atmospheric Physics. There, he was brilliantly ahead of his time in appreciating the role that Earth satellites were to play in the study of the atmosphere, especially the stratosphere, and hence in studies of the climate. He rapidly built up a strong team to design and build space instruments. These used novel techniques, largely of his devising, which pioneered the now established methods for atmospheric temperature sounding and remote composition measurements. Four instruments were flown on the NIMBUS 4 to NIMBUS 7 satellites between 1970 and 1978. While carrying out this massive programme of research and developing the Department’s size and international reputation, as well as his own (he received a personal Chair in 1974), Houghton still found time to entrance several generations of students with his enthusiasm and knowledge. His books, Infrared Physics (1966), Physics of Atmospheres (1977 and 1986) and Remote Sounding of Atmospheres (1984), are still in general use in the field and widely respected.

Another thrust of John Houghton’s career has been his drive to see the UK play a leading role in the world’s space programme. In pursuit of this he left Oxford in the early 1980s to take on the Directorship of the SERC’s Appleton Laboratory, and to see it through its successful merger to form the RAL. He was highly influential in the process which led to the formation of the BNOSC in the same period, and has for many years been Chairman of its Earth Observations Programme Board.

After moving to the Meteorological Office in 1983, Houghton’s long-standing interest in the global climate led him to commit his formidable talent and energy to the problem of forecasting change on much longer time scales than had previously been the forecaster’s metier. He was first Chief Executive of the Meteorological Office, a position created when the Meteorological Office became a Government Agency in 1989, and therefore also the last of a series of distinguished Directors-General extending back into the middle of the last century. Under his leadership, the Meteorological Office not only maintained and improved its position as the paramount meteorological service in the world, it also built on its reputation as a world-class atmospheric research centre. For example, the establishment and nurturing of the Hadley Centre for Climate Research and Prediction at
Bracknell, relied very much on his ideas, energy and inspiration. He chaired the Intergovernmental Panel on Climate Change, whose report is easily the most influential publication in what has become perhaps the most discussed scientific problem of the decade, and he is the principal proponent for the Global Climate Observing Satellite system of climate-monitoring satellites.

Since his retirement, amongst other activities, he has chaired the Royal Commission on the Environment, whose report has again stimulated much discussion.

Few people could accomplish in two careers as much as Sir John has in one. Happily, for everyone that knows him, his career is far from over. Sir John Houghton has deservedly received many honours; today we honour him ourselves.

Sir John, it gives me great pleasure to present you with the Gold Medal of the Royal Astronomical Society.