

GOLDEN JUBILEE OF THE INDIAN INSTITUTE OF SCIENCE, BANGALORE

THE Golden Jubilee of the Indian Institute of Science, marking its 50 years of progress (1909-59), was celebrated with *eclat* during a week from the 2nd to the 8th February 1959. It was inaugurated by Dr. Rajendra Prasad, President of India, on the 2nd, before a gathering of over 6,000 people. The celebration coincided with the visit to India of His Royal Highness the Duke of Edinburgh and his participation in the inaugural function added importance to it. Among those who took part in the celebrations were His Highness Sri Jayachamaraja Wadiyar, Governor of Mysore, Dr. S. Radhakrishnan, Vice-President of India, Prime Minister Pandit Jawaharlal Nehru and Prof. Humayun Kabir, Union Minister for Scientific Research and Cultural Affairs. A large number of distinguished scientists from abroad, who brought messages of greetings from the scientific organizations of their countries to the Institute on this occasion, attended the celebrations.

President Rajendra Prasad in inaugurating the celebration paid a glowing tribute to the late Mr. J. N. Tata who more than sixty years ago foresaw the requirements of an industrialized India and with forethought, wisdom and patriotism founded this Institute. Speaking about the impact of science on material progress Dr. Rajendra Prasad referred to the dilemma of science and said that science cannot be called a blessing without recognising its social obligations and moral principles, and he stressed on the urgent need of tempering scientific progress with spiritual or moral values.

As Visitor of the Institute, the President announced his approval of the conferment of Honorary Fellowships of the Institute on Prime Minister Nehru, Dr. C. V. Raman and Dr. M. Visvesvaraya.

The Duke of Edinburgh in his speech referred to the crisis which science has produced and said that "we can solve it by our own choice, or, if we don't, it will certainly be solved for us by war or by famine". Speaking on the role of centres of learning, the Duke said, "It seems to me it is the clear duty of all Institutes of higher learning to do what they can to help the world make the right choice".

Earlier, Mr. J. R. D. Tata, President of the Court of the Institute, who presided over the inaugural function, in his welcome speech, recounted the progress of the Institute since its inception and stressed the need for the Institute to identify itself with the task of national reconstruction.

Dr. S. Bhagavantam, Director of the Institute, while proposing a vote of thanks, referred to

the needs of science and technology in India today and made a strong plea for the establishment "in a big way" of an Instrument-making centre in the country.

Prof. Humayun Kabir opened the Golden Jubilee Exhibition, at 4 p.m., on the 2nd February. His Highness the Governor of Mysore opened the New Wind Tunnel of the Aeronautics Department of the Institute on the 3rd February.

Dr. S. Radhakrishnan, Vice-President of India, in his address on the 3rd evening, speaking about Science and Religion, said "Science would help humanity to overcome superstition and ignorance, while religion would help them to overcome selfishness, jealousy and greed. If these two worked hand in hand, the world would have an integrated human being—a being who belonged to the future and not to the present".

Prime Minister Nehru, who addressed a meeting on the 4th February, referred to the problem of conveying scientific knowledge to the people, and to the problem of the language of science which will "not only enable the country to keep pace with the scientific progress abroad but also will help people to develop a scientific way of thinking". He dwelt on the need for a common scientific terminology and said that efforts should be made for evolving a terminology which should be common to all the Indian languages and added that international scientific terms should also be adopted for usage, otherwise it would be impossible for the country to advance in the field of science and technology.

In an evening public lecture on the 4th February, Dr. H. J. Bhabha, Director, Tata Institute of Fundamental Research, spoke on "the Economics and Development Programme of Nuclear Energy for Power Production in our National Plan". In a public lecture, on the 5th evening Dr. K. S. Krishnan, Director of the National Physical Laboratory, spoke on "The Progress of Physics at the Turn of the Century".

There were also a number of scientific and technical lectures arranged in different Departments during the week in which the foreign scientists present addressed scientific gatherings. These included Prof. G. Rienacker (W. Germany), Mr. P. Danel (Holland), Prof. A. Tiselius, N.L. (Sweden), Mr. J. H. Pitchford (England), Dr. A. E. Douglas (Canada), Dr. K. F. Meyer (U.S.A.), Prof. F. Hawking (England), Prof. Hans Friedrich-Freksa (Germany), Dr. Neil Hutcheon (Canada), Prof. L. Janossey (Hungary), Dr. W. T. J. Morgan (England) and Mr. Paul O'Langguth (Bombay).

The Exhibitions arranged by the various Departments of the Institute proved to be of great interest and educative value and daily attracted large crowds of visitors. Originally scheduled to close on the 8th February, they had to be extended for three more days to meet the public demand.

The Golden Jubilee Celebrations have left a deep impression on all those who attended them

and Dr. S. Bhagavantam, Director of the Institute, his staff and students deserve the warmest congratulations for the unqualified success of the celebrations. We have no doubt that with such happy auguries ushering in the new era of the second fifty years, we can confidently look forward to a period of rapid development in the activities of the Institute.

THE INDIAN SCIENCE CONGRESS

THE 46th Annual Session of the Indian Science Congress was held in Delhi from 21st to 28th January 1959 under the auspices of the University of Delhi. The Session was inaugurated by Prime Minister Nehru and was presided over by Dr. A. Lakshmanaswami Mudaliar, Vice-Chancellor of the Madras University. About 3,000 delegates from all over the country and 85 from abroad attended the Session.

His Royal Highness the Duke of Edinburgh who led the British team of delegates to the Congress conveyed greetings and good wishes from the Queen and from the British Association for the Advancement of Science.

In his Inaugural Address the Prime Minister said that "broadly speaking science had driven out many of the Gods before whom people bowed and itself assumed a Godlike pose..... Like two-headed Janus it shows the face of the Creator and the face of the Destroyer". He further remarked that "Science has to look at the heart and mind of man and integrate this knowledge with the other advances it is making".

Dr. Lakshmanaswami Mudaliar in his Presidential Address spoke on the beneficial role

played by modern science in promoting human welfare and, what is more, in preventing human ills, and dwelt in detail about the progress of medicine within the last fifty years and how medical science has been influenced and guided by the great discoveries in physical, biological and technological sciences.

About 1,500 papers contributed to the Session were taken up for presentation in the thirteen sectional meetings each presided over by the Sectional President.

Besides reading of papers there were symposia and public lectures. There were two Exhibitions: The Scientific and Technical Instruments Exhibition and the Exhibition of Scientific Literature in the fourteen Indian Languages. The latter was opened by Mr. C. D. Deshmukh, Chairman of the University Grants Commission. The bulk of the literature represented popular science, school-books and children's literature.

The 47th Session of the Congress will be held in Bombay in January 1960. Prof. P. Parija, Vice-Chancellor of the Utkal University, has taken over as General President for 1959-60.

IRELAND'S TRIBUTE TO HAMILTON, THE DISCOVERER OF QUATERNIONS

A PLAQUE commemorating the discovery of Quaternions by Sir William Rowan Hamilton, the great Irish mathematician, was unveiled at Rowan Hamilton Bridge, formerly Broome Bridge, Cabra, on the 13th November 1958 by the Taoiseach, Mr. de Valera. The story goes that on the 16th October 1843, when Hamilton was walking along the tow path of the Broome Bridge, there suddenly occurred to him the solution of a problem which had been occupying his mind for a considerable time. With a pen-knife he worked out the solution on one of the stones of the bridge. That marked the birth of the quaternions. Paying a tribute to the memory of a great scientist and a great Irishman, Mr. de Valera said, "On many occasions, since I first heard this story well over 50 years ago, I came to this bridge as to a holy place. I have searched stone after stone in the hope

of finding some trace of that famous inscription. Time had done its work but they were gathered there now to see that that inscription would be perpetuated and that those who passed there would remember that they were passing by a spot that was famous in the history of science".

There could be no question of the profound importance of what Hamilton had discovered on that day in October 1843. It was nothing less than a new era of mathematical thought, without which the theoretical development of modern physics would have been well-nigh impossible. As Schrödinger had said "Hardly a day passes, hardly an hour passes, that somebody somewhere on this globe does not pronounce the name of Hamilton, or reads it or writes it or prints it".