The many products where we can use LCD devices are petrol bunk, multimeters, medical instruments, thermometers, electronic balances, process instruments, etc. They can also be used in typewriters, pay phone communication equipment, cellular phones, paging, handheld programming terminals etc.

India cannot afford to lag behind in this quest for higher technology. It will be noticed that high-tech products are helpful in bringing the benefit to a large country like India, where many live below the poverty line. For example, the extension of the TV network and the emergence of satellite communication has brought the benefit of entertainment and information to people in the remote parts of this country, which would not have been possible by traditional technology. India is a major developing country and, thanks to the technological expertise India is capable of, we should not lose or lag behind in high-tech areas. In this context the Department of Electronics (DOE), therefore, had defined its role clearly as the following:

(a) To bring the benefit of electronics to every walk of life in India, and
(b) To make the Indian electronics industry into a global player.

Today's function with the launching of the Centre for Liquid Crystal Research, which is going to be an autonomous society under the DOE is one more example of the initiatives being taken by the DOE to build on the technical competence we have in this country. Ultimately, we need leaders among our scientists to build organizations. In Dr Chandrasekhar we have a leader who is an eminent expert and internationally reputed scientist on liquid crystals, fellow of the Royal Society and recipient of the Royal Society medal. In advancing areas of science, one strategy we must follow is to build organizations around the leadership and technical expertise of people like Dr Chandrasekhar. 'Yada yada acharati sresthahat tat tat deve etharlojanah sayatpramanam kunute lokore tato anuvartate' says the Gita. It is the leaders who set role model for others to follow.

The intellectual engine behind the Centre for Liquid Crystal Research is of course Dr Chandrasekhar. But as Kennedy said: 'Success has many fathers, failure is an orphan'. This Centre would not have been possible but for the cooperation among the Planning Commission, Bharat Electronics, the Department of Electronics, Department of Science and Technology, the State Government of Karnataka. The Government of Karnataka has always taken a positive and active interest in the development of Electronics and Bangalore has emerged as the silicon plateau of India. In the setting up of the Centre for Liquid Crystal Research, today, we are witnessing one more addition to the string of excellent institutions in this city.

I particularly thank the Hon'ble Vice President of India, who in spite of his busy schedule, has spared his valuable time to come and be with us and inaugurate this Centre. We are also grateful to the presence of His Excellency the Governor and the Hon'ble Chief Minister of Karnataka.

While the Centre for Liquid Crystal Research will focus on research, emphasis will be laid also on coming up with products that can be marketed. This will mean that a close association with the industry is necessary. I would therefore welcome initiatives from the industry to be closely linked with this institution, both in implementation of the projects and also, if possible, in funding. It is ultimately with the combined support and active interests of all concerned that we can make progress.

I wish the Centre for Liquid Crystal Research all success.

N. Vittal, Department of Electronics, New Delhi.

Dedication of the Jawaharlal Nehru Centre for Advanced Scientific Research*

As the Jawaharlal Nehru Centre for Advanced Scientific Research is among the visible monuments erected to commemorate the 100th birth anniversary of Pandit Nehru, let me recall a passage from one of the most profound documents viz. the Scientific Policy Resolution (SPR), which Mr Nehru as the Prime Minister of India piloted through the Parliament in 1958. Several passages of SPR are quoted quite frequently, but I shall read one that appeals to me the most.

'It is an inherent obligation of a great country like India, with its traditions of scholarship and original thinking, and its great cultural heritage, to participate fully in the march of science which is probably mankind's greatest enterprise today.'

With a visionary policy of this nature, Indian science took rapid strides during the years since independence. In the present-day scenario, globalization and international competitiveness are the keywords. Let us take this opportunity to remind ourselves that if there is one field in which international quality and competitiveness are a natural part of our strength, it is the field of basic sciences. Even today, if a young person decides to embark upon a research career in science and enters the portals of a leading institution, one aspiration that he entertains is to come up with a publication that can appear in a peer-reviewed, internationally reputed journal. This is ingrained in the culture of the scientific milieu and the bright, young researcher knows to choose a frame of reference, the best in his field, against which he has to perform to make a mark.

It has been one of India's good fortunes that there have always been a few research leaders in our country who have assiduously built such strong scientific traditions and motivated all those who came into their fold to produce competitive

*Speech delivered by P. Rama Rao at the JNCSAR, Bangalore on 4 March 1995
research. Currently, undisputedly, a foremost research leader and an institution builder is Prof. C. N. R. Rao. Passion for science is part of his being and he has been a relentless, tireless crusader for the well-being of Indian science.

With him spearheading the onerous task of building this modern edifice of science, not so much in brick and mortar, but in concept and carving out 'cornerstones', the architecture of JN Centre has built into it an aura of excellence. This is manifest in the fact—and I trust that I am speaking for all of the Honorary Faculty—that those who were invited to be associated with Prof. C. N. R.'s endeavours in an honorary capacity regarded the opportunity as a recognition of their own standing in their respective disciplines. It is thus that, even while the plans for physical construction got underway, JN Centre moved ahead rapidly with its academic programmes with the help of about 50 honorary faculty members, honorary professors and honorary senior fellows.

Discussion meetings, summer research fellowship programme, visiting fellowship activity, research support to young Ph.Ds and initiatives in international cooperation have all taken shape well in advance. The selected research fields of attention, about which I hope Prof. C. N. R. will have more to say, are all in the emerging regime in a wide range of disciplines spanning biodiversity, chemistry and physics of materials, fluid dynamics and complex systems.

Returning to the subject of scientific policy that I had referred to, let me read three of the aims among those listed in SPR:

(i) To ensure an adequate supply, within the country, of research scientists of the highest quality and to recognize their work as an important component of the strength of the nation.
(ii) To ensure that the creative talent of men and women is encouraged and finds full scope in scientific activity.
(iii) To encourage individual initiative for the acquisition and dissemination of knowledge, and for the discovery of new knowledge, in an atmosphere of academic freedom.

In the objectives of JN Centre and the paths that are in the process of being paved for the growth of the Centre's several programmes, one is able to see a remarkable resonance with the aims of the scientific policy that Nehru had articulated. Let me then say that there is every expectation that the Centre will meet the challenge of being worthy of the great name that it bears.

Our respected Vice President has done us all a great honour in being with us this morning and his gracious presence, as well as that of Mrs. Narayanan, on this special occasion shall remain a perennial source of strength. Our respectful gratitude to them, and my sincere thanks to Prof. C. N. R. Rao for giving me this opportunity.