

and their simplicity render the results obtained by light-scattering both accurate and easy of interpretation. One can get a variety of information from studies of the Raman effect in single crystals under different experimental conditions. The lecturer showed how the recent directional studies on calcite and sodium nitrate enabled one to draw important conclusions regarding the dynamics of their lattices.

DR. C. S. PICHAMUTHU detailed the mineralogical aspect of various properties of crystalline rocks. He referred briefly to the use of the more common optical instruments such as the polarisation microscope and the Federow stage to determine the optical constants of minerals. The optical anomalies such as the occasional biaxiality and anomalous interference colours shown by hexagonal crystals like quartz and garnet have puzzled the mineralogists till now. In the case of lavas and spherulites which are formed in a fine state of crystallisation, the mineralogist has recourse only to X-ray studies to find out their structure. In the case of ore minerals, studies are made by reflected light and by etching methods because of the opacity of the crystals. However, the study of the distribution of components in the ore samples is rather difficult. The lecturer then dealt in detail

with the formation and characteristics such as the orientation effects in stress minerals.

PROF. SIR C. V. RAMAN gave suggestions regarding the methods to be adopted in resolving some of the optical anomalies observed in minerals and stressed the possible influence of irregularities and crystal imperfections such as the mosaic structure on the optical behaviour of crystals particularly in light scattering.

MR. T. M. K. NEDUNGADI drew attention to the usefulness of the study of light scattering in crystals in the explanation of their various physical properties. He showed how his studies of the Raman spectrum of quartz at high temperatures have given an insight into the probable mechanism of the  $\alpha/\beta$  transformation in quartz.

Some interesting new results obtained from studies on the luminescence, light-scattering and light absorption in diamonds were presented by MR. P. G. N. NAYAR. Diamonds in general have a number of fluorescent bands. But among the different crystals there is wide variation in their intensities. Certain correlations between the frequency differences of the luminescent bands and infra-red and ultra-violet absorption were pointed out and discussed.

T. M. K. NEDUNGADI.

## A NATIONAL RESEARCH COUNCIL FOR INDIA

IN the December Number of *Current Science*, in an Editorial we pleaded strongly for the immediate inauguration of a National Research Council, on lines similar, in essentials, to the Department of Scientific and Industrial Research in Great Britain, for organising industrial research in this country. It is gratifying to learn that this suggestion has received strong support from the scientists of this country who had assembled at Madras under the auspices of the Indian Science Congress. At a meeting held on the 5th of January, under the Presidentship of Sir T. Vijayaraghavacharya, various speakers, including Profs. J. N. Ray, S. P. Agharkar and J. N. Mukherjee, spoke on the role of science in national planning and drew attention to the existence of lacunae in our scientific organisation. The inauguration of a

National Research Council at this stage of scientific development in India, was considered essential for an ordered utilisation of the industrial resources of the country. In bringing the proceedings to a close, Sir T. Vijayaraghavacharya mentioned that as long ago as 1931, he had suggested the formation of a national council of research for organising not only agricultural but also industrial research. He felt that the formation of such a body was long overdue.

A Committee consisting of Sir T. Vijayaraghavacharya (*President*), Prof. Birbal Sahni, Dr. J. C. Ghosh, Lt.-Col. R. N. Chopra, Prof. M. N. Saha and Prof. P. Parija (*Secretary*), was appointed to prepare a memorandum relating to the establishment of a National Research Council for India for being submitted to the Government of India.