

tion and rests instead on a solid basis of observation and inference.

The optical behaviour of a mixed crystal is, of course, not comparable in all respects with that of a mixture of liquids. Nevertheless, it is useful to indicate the resemblances between the optical phenomena under consideration and the diffusion of light in binary and ternary liquid mixtures. The blue schiller exhibited by the finest moonstones may, indeed, be not inaptly compared in its origin and in its spectral character with the blue opalescence which develops in a binary liquid mixture, e.g., of methanol with carbon disulphide, as its critical solution temperature is approached. The schiller is essentially a diffusion of light within the feldspar. It results from the segregation of the albite from the orthoclase in the form of tiny crystallites which so dispose themselves that the crystalline order and symmetry of the parent mass is left unimpaired. The blue colour exhibited by many specimens of labradorite may similarly be compared with the blue opalescence which develops when water is added to methanol containing benzene in solution, and the benzene tends to separate out in consequence. The diffusion of light in the labradorite which manifests as its iridescence is due to tiny crystallites of orthoclase which have segregated from the albite-anorthite mixture and set themselves in an appropriate orientation within the crystal lattice.

The interested reader will naturally refer to the original papers for further information regarding the topics dealt with above in their barest outlines. They contain a description and discussion of many facts of interest discovered in the course of the studies and which considerations of space preclude even being mentioned here. The illustrations accompanying the present article are taken from the paper on labradorite and represent four of the numerous specimens studied. As the reproductions are not in colour, they are not very effective as pictures of the beautiful phenomena actually observed. But they demonstrate a most important feature of the optical behaviour of labradorite, namely that it shows its characteristic iridescence in two different settings of the crystal with reference to the direction of the incident light. These settings (A and C in each figure) lie one on either side of the setting (B in each figure) at which the aventurinism due to the macroscopic inclusions is most prominently displayed. The parts of the labradorite which exhibit the iridescence in the two settings are different, being respectively the alternate layers of multiple twinning in the mineral. The distribution of these layers as well as the nature of the twinning is very different in the four specimens. This becomes evident in the iridescence displayed by them.

C. V. RAMAN

SYMPOSIUM ON THE HISTORY OF SCIENCE IN S. ASIA

THE Council of the National Institute of Sciences of India, in collaboration with the UNESCO South Asia Science Co-operation Office, propose to hold this year in Delhi a Symposium on "The History of Science in South Asia". The dates provisionally fixed are 5th, 6th and 7th November, 1950.

The Symposium, which will cover the period up to the end of the 18th century, will deal with—

1. (a) Chronology of the achievements;
(b) Defining the periods of achievements;
2. Life stories of the pioneers;
3. Contacts with outside on countries' own

initiative or by the adventurous trips of foreigners;

4. General history of those periods with stress on social conditions;
5. Impact of the discoveries of the scientists on military strategy of the kings and on the general living conditions like town planning, public health, agriculture, transport, industries.

The papers contributed will give either a general integrated picture of scientific development in related branches of science, or a treatment of the progress through the different periods of history of one particular branch of science. They will also bring out the impact of science on society in various periods of history.