

the two curves in naphthalene being a special feature due to the identity of the two angles.

Figs. 3 and 7 illustrate the dispersion of conical refraction as observed with a naphthalene crystal in two different ways. In the former, a straight slit illuminated by the total light of a mercury lamp is employed as the source, and the crystal itself forms the spectral images of the source as already

explained. In Fig. 7, on the other hand, a fine pin-hole is employed as the source (as in Fig. 4 but with a thicker plate) and is viewed in exact focus. Four distinct circles are then seen corresponding to the four brightest rays of the mercury lamp.

The photographs illustrating this article were obtained for me by Mr. V. S. Rajagopalan.

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## THE NEW CHARTER OF SCIENTIFIC FELLOWSHIP

### DECLARATION OF SCIENTIFIC PRINCIPLES

A CONFERENCE on Science and World Order was organised by the British Association for the Advancement of Science, during September 1941. The Conference was held at the Royal Institution and its deliberations covered the relations of science to government, human needs, world planning, technological advances, post-war relief and world mind. At the end of the conference, Sir Richard Gregory, Bart, F.R.S., President of the Association, presented the Charter of Scientific Fellowship.

The text of the declaration of Scientific Principles is reproduced here.

1. Liberty to learn, opportunity to teach and power to understand are necessary for the extension of knowledge, and we, as men of science, maintain that they cannot be sacrificed without degradation to human life.

2. Communities depend for their existence, their survival and advancement, on knowledge, of themselves and of the properties of things in the world around them.

3. All nations and all classes of society

have contributed to the knowledge and utilization of natural resources, and to the understanding of the influence they exercise on human development.

4. The basic principles of science rely on independence combined with co-operation, and are influenced by the progressive needs of humanity.

5. Men of science are among the trustees of each generation's inheritance of natural knowledge. They are bound, therefore, to foster and increase that heritage by faithful guardianship and service to high ideals.

6. All groups of scientific workers are united in the fellowship of the Commonwealth of Science, which has the world for its province and the discovery of truth as its highest aim.

7. The pursuit of scientific inquiry demands complete intellectual freedom and unrestricted international exchange of knowledge; and it can only flourish through the unfettered development of civilized life.

—(Nature, 1941, 148, 393.)

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