

Conclusion

The Nuffield Advanced Physics course has been developed over the last four or five years. At the time of writing, the publications are still emerging from the press, and it is too soon to give any account of their reception. So the course is still in its infancy. Those of us who were associated with it, while hoping that the

infant is healthy, also hope that it will grow and develop. The last thing we wish to see is adoption of the course in a static and unchanging way, so that the course becomes a new orthodoxy, and a sad case of arrested development. Its future, however, is not now in our hands, but in those of teachers, whose creative efforts are needed to give it life.

Acknowledgments

Figure 1 is from Nuffield Advanced Physics, *Teachers' Handbook*, (Penguin Education, 1972) The publisher is Penguin Education and further information may be obtained from: Penguin Education, Harmondsworth, Middlesex, UK Figure 2 is from photography by M. Plomer.

HORIA HULUBEI

On 22 November 1972, there ended the meritorious activity, which had gained the recognition of the entire scientific world, of Horia Hulubei, the President of the Romanian National Committee of Physics, scientist of worldwide renown, who died, leaving deep regret not only with those who had the privilege of knowing him but also with the new generation of Romanian physicists.

As words can only dimly evoke a personality so outstanding as that of Horia Hulubei's, we shall confine ourselves to the facts.

Horia Hulubei was born on the 15 November 1897 in Iasi where he attended high school and university. In 1926, after taking his degree in physics and chemistry, he left for Paris to obtain his doctorate at the Sorbonne where he joined the group headed by the new Nobel prize winner, Jean Perrin, and where he remained, with brief interruptions, until 1938.

There, in the company of the great names of French physics: Jean Perrin, Marie Curie, Paul Langevin and Aimé Cotton, Hulubei's scientific personality took shape as he established himself as an original researcher. His works, regarded as classical, on Raman effect upon water, the Cauchois-Hulubei spectrometer which exceeded in sensitivity all existing X-ray spectrographic methods and which afforded

elaboration of the well-known tables of wavelengths, the recording of the multiple Compton effect as well as the X-lines of the elements 87 and 93, were only a few of his investigations.

He returned to Romania in 1938. Because of the Second World War which prevented him from continuing his laboratory research, he devoted himself to academic work. He held, at Bucharest University, the Chair of Physical Chemistry subsequently transformed into the Chair of Atomic Physics.

Soon his activity was considerably expanded. As Director of the first Institute for Physics and then of the Institute for Atomic Physics in Bucharest, as well as President of the Committee for Nuclear Energy, he made an invaluable contribution to the development of physics in Romania and to the formation of new generations of physicists. With his unerring competence, hard to overestimate, he co-ordinated the investigations of complex teams of researchers in new fields, such as high energy physics, reactor physics or nuclear reactions, and he militated, without respite, for the stimulation of wide collaboration between physicists to ensure a continuous flow of information and ideas.

He was elected member of the Academy of the Romanian Socialist



Republic, the French Academy of Sciences, the Academy of Science of Portugal, the Academy of Science of New York, and other scientific societies.

Full of vitality up to the last moments of his life, he took an active part in the World Peace Council, in the Conferences for Nuclear Energy (Geneva), in the scientific councils of the Joint Institute for Nuclear Research in Dubna, as well as in the activity of the International Agency for Atomic Energy, where he played a leading role as Governor, and Vice-President of the Governors' Council.

Paving the way to the development of the most advanced branches of physics, Horia Hulubei appears in perspective as the real founder of modern physics in Romania.

Submitted by the Romanian National Committee of Physics.

Nuclear Physics

26 June - 1 July 1972, Aix-en-Provence, France

The Nuclear Physics Division of EPS held its first large conference from 26 June - 1 July in the pleasant surroundings of Aix-en-Provence. The conference was mainly organized by the French Physical Society and was dedicated to the memory of Claude Bloch who died in December 1971 and who had a major influence on post-war French theoretical nuclear physics.

In order that the conference should cover a wide area of nuclear physics

while remaining a reasonable size, the programme was centred around three topics, emphasizing different but complementary aspects of the nucleus. The three topics were: I Fission, II Nuclear spectroscopy with heavy ions, III Nuclear physics above 100 MeV. There were main invited talks in each of these fields and the conference broke up into parallel sessions for shorter contributed papers in each field. In its format the confer-

ence was successful in bringing together what have tended to become somewhat separated areas of the subject.

Fission has in the past been a separate part of nuclear physics. The fission isomers and their explanation in terms of the double hump potential barrier have brought fission back into the main stream of nuclear physics particularly through the predictions of the double hump from the Strutinski synthesis of the microscopic shell model and the macroscopic liquid drop model. Claude Bloch at the time of his death was