



M. DIMOU / CN

Cours/Lecture Series

1994-1995 ACADEMIC TRAINING PROGRAMME

LECTURE SERIES

SPEAKER : Sergej KAPITZA / Academy of Sciences, Moscow, Russia
TITLE : History of XXth century physics
TIME : 6, 7, 8, 9 & 10 February from 11.00 to 12.00 hrs
PLACE : Auditorium

ABSTRACT

The meaning and message of the history of science will be discussed with relevance to XX century physics. This decisive period began in 1894-95 with the discoveries of the electron, X-rays and radioactivity, with the consequent development of relativity and quantum physics. Connections of the development of science and society in XX century with culture and the influence on industry will be examined. Finally, the corruption of physics by the military will be considered.

The influence of physics on chemistry and biology will be briefly treated and the impact of the approach and method of physics on modern thinking will be assessed.

It should be kept in mind that the history of science is not a way of getting a simplified or adulterated presentation of the subject, in this case of physics and so some understanding of general physics will be assumed. On the other hand, the broader generalisations of the history of ideas and events are to be illustrated (if not proven) by the facts (and myths) of science.

Finally, as an exercise in a study of science and society, history of physics may lead to a better understanding of the present predicament of humankind, that is certainly now facing a decisive period of its development. That is why the whole subject as a chapter of history may be of some immediate, if not practical interest today.