

# **SEVENTH SYMPOSIUM ON MICRODOSIMETRY**

**OXFORD, ENGLAND**

**EDITED BY J. BOOZ, H. G. EBERT**

Commission of the European Communities

Directorate-General for Research, Science and Education

Biology, Radiation Protection and Medical Research

and

**H. D. HARTFIEL**

National Radiological Protection Board

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**Edited by**  
**J. Booz, H. G. Ebert**  
**and H. D. Hartfiel**



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OPENING SESSION

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O P E N I N G   A D D R E S S

SIR FREDERIC DAINTON

National Radiological Protection Board, Harwell

1. This is a conference of scientists talking about science.

True, it is a tiny part of a small corner of science. The prefix micro before dosimetry has a double significance. But what you do is still science and perhaps you will allow me to open this conference with some general observations on science of a kind which will help you to see your work as part of a larger enterprise and encourage you to seek to perform a role other than that of the mere dedicated laboratory worker, a role which in this day and age is, I believe, equally important.

2. WHAT IS SCIENCE?

It would take a brisk walker several minutes to traverse the length of shelves of the British Library which carry learned tomes on the philosophy, history and sociology of science. But rather than refer to those volumes I would like to offer you the following definition of science, born out of my own experience. Science is the interlocking complex of tested facts about the external world which are joined together by speculative theories which aim to explain and encompass what is known so as to be able to make predictions about the unknown. Such theories cannot be verified as absolute truths and survive only until they are falsified by an "ugly" fact, which leads to their adaptation or