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**RADIATION CANCER ANALYSIS AND LOW DOSE RISK ESTIMATION:
NEW DEVELOPMENTS AND PERSPECTIVES -
CONFERENCE TO BE HELD FEB 2002**

**Final Technical Report
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The Conference

The 20th LH Gray Conference on Radiation Cancer Analysis and Low Dose Risk Estimation: New Developments and Perspectives, was organised by the National Institute for Public Health and the Environment (RIVM). The meeting took place in Ede, the Netherlands, 17-21 February 2002 and was sponsored by the European Commission¹, the U.S. Department of Energy², the LH Gray Memorial Trust (UK) and the Society for Radiological Protection (UK). The meeting aimed to provide a forum where radiation biologists, epidemiologists and radiation cancer modellers could meet, exchange results and views and consider the further development of their work. Sixty-two persons from 13 countries (AUS, BEL, CZE, FRA, GER, ITA, JAP, POL, RUS, SWE, NL, UK, USA) participated in the conference. The focus of the meeting was on the implications of radiation-induced cancer modelling for low-dose radiation risks. The meeting dealt with topics such as 'Basic Mechanisms and Bystander Effects'; 'Cancer Modelling'; 'Cancer Genetics', 'Radon Exposure and Lung Cancer Risk'; 'Cancer after Medical Exposure'; 'Cancer Risk Estimation'; 'Dose-Effect Relationships'; 'Application to Radiation Protection', and contained seven invited papers by keynote speakers and 31 original contributions.

In the organisation of the conference special attention was given to stimulating the discussion and to this end all the participants were given to opportunity to "vote", in total confidentiality, on a series of pertinent questions using an interactive polling machine. The polling machine was used in the first session and participants were asked to respond to a series of questions, phrased to invite a yes or no answer, on important issues in radiological protection. In the last session some of these questions were repeated or slightly modified to form the basis for debate. The questions and the responses can be reviewed at <http://www.rivm.nl/rca>, where also further details of the conference can be found.

The important and on-going discussion of low dose radiation risk, the issue of the linear, no-threshold (LNT) extrapolation and the anticipated new recommendations e.g. from BEIR and ICRP provided the back-drop for the conference. The organisers hope that the conference stimulated further co-operative research between radiation biologists, epidemiologists and cancer modellers which might lead to improved insights into the estimation of low dose radiation risks and that these insights might soon be considered for inclusion in radiation protection recommendations.

The Proceedings

All speakers at the conference were offered the possibility to contribute to the proceedings. The submitted manuscripts were subjected to the standard peer-review procedure of the Journal of Radiological Protection, which was organised by the Guest Editors (M.J.P. Brugmans, H.P. Leenhouts and K.H. Chadwick). Thirty-two manuscripts were accepted for publication and, preceded by a preface by the Guest Editors, published in the Proceedings as a special issue of the Journal of Radiological Protection (Volume 22, Number 3A, September 2002). All participants of the conference received a copy of the Proceedings.

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