Light, Lasers, and Synchrotron Radiation

A Health Risk Assessment

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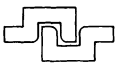

Series B: Physics

Light, Lasers, and Synchrotron Radiation

A Health Risk Assessment

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FOREWORD

This volume contains the formal record of the lectures presented at the 9th Course of the International School of Radiation Damage and Protection held at the "E.Majorana" International Centre for Scientific Culture in Erice (Italy) from May 9 to May 20, 1989.

This course was the last of a series of 4 courses, started in 1981, that were dedicated to the assessment of risk hazard from non-ionizing radiation. The proceedings of these courses were all published by Plenum Press with the following headings:

1) M.Grandolfo, S.M.Michaelson and A.Rindi, Eds.: "Biological Effects and Dosimetry of Nonionizing Radiation; Radiofrequency and Microwave Energy", Plenum Press, New York, NATO ASI Series A Life Sciences, Vol.49 (1983);
2) M.Grandolfo, S.M.Michaelson and A.Rindi, Eds.: "Biological Effects and Dosimetry of Static and ELF Electromagnetic Fields", Plenum Press, New York, E.Majorana International Science Series, Life Sciences, Vol.19 (1985);
3) M.H.Repacholi, M.Grandolfo and A.Rindi, Eds.: "Ultrasound; medical applications, biological effects and hazard potential", Plenum Press, New York (1987).

We hope that all these volumes together may represent a complete textbook and a reference for the students and scientists interested in the physics, biology, measurement and dosimetry, health effects and standard setting, in short, the risk assessment of that wide field of radiation presently classified as non-ionizing radiation.

We are indebted to the Associazione Italiana Protezione dalle Radiazioni (AIRP), The International Non Ionizing Radiation Committee of the International Radiation Protection Association (INIRC/IRPA), the Istituto Superiore di Sanita', the Italian Ministry of Scientific and Technological Research, the Sincrotrone Trieste, and the Sicilian Regional Government for sponsoring and supporting the Course.

We acknowledge with great appreciation the cooperation and skilled assistance of Mrs.Franca Grisanti and Mr.Giacomo Monteleone of the Physics Laboratory of the Italian National Institute of Health, Rome, Italy.

We take the opportunity to thank all the lecturers and students that, by participating to the courses from all around the world, made possible this endeavor.

M.Grandolfo
A.Rindi
D.H.Sliney

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