This volume of *Nukleonika* contains papers based on the presentations at the XIII Scientific Meeting of the Polish Radiation Research Society, which was held on September 13–16, 2004 in Lodz, Poland. The Meeting was organized by Lodz Department of the Society, under the patronage of Professor Jan Krysinski – Rector of the Technical University of Lodz. It gathered about 90 active participants who are involved in the research areas including radiation physics and chemistry, photochemistry, radiobiology, radiological protection, ionizing radiation in medicine and environment, and non-ionizing radiation effects on humans and biological systems.

The conference programme included seven invited lectures, 52 oral presentations and 39 poster presentations. Among the invited speakers there were three 2004 laureates of Maria Sklodowska-Curie Medal of the Polish Radiation Research Society: Professor Thomas Bally, University of Fribourg, Switzerland (*Electron-transfer induced tautomerizations: results from a successful Polish–Swiss collaboration*), Professor Klaus-Dieter Asmus, University of Notre Dame, USA (*Halogenated peroxyl and oxyl radicals. More than just simple one-electron oxidants*) and Professor Stanislaw Szmigielski, Military Institute of Hygiene and Epidemiology, Warsaw (*Bioeffects and health risks of long-term exposures to low-level radiofrequency and microwave fields*). The fourth medal in this edition was granted posthumously to Professor Jerzy Kalecinski, Polish Academy of Sciences, Wroclaw.

One of the conference sessions had a special character since it was dedicated to Professor Jerzy Kroh on the 80th anniversary of his birthday. Professor Kroh is a founder member and since 1989 a honorary member of the Polish Radiation Research Society; he has a great contribution to the development of radiation research in Poland, and his achievements are well recognized by international scientific community.

Abstracts of all papers presented at the Meeting were published in the proceedings distributed to all the participants and institutions interested in the subject. This special issue is a collection of peer-reviewed papers submitted by those presenters who decided to do it. Yet, it represents well the main conference topics: from the plenary lecture by Antonina Cebulska-Wasilewska and a few other contributions on radiobiology, through one paper on non-ionizing radiation effects, to several papers on various aspects of radiation chemistry and photochemistry. The conference proved that radiation research is still very active in Poland.

We would like to express our gratitude to a number of persons and organizations, as they strongly contributed to the success of this Meeting and the special issue of *Nukleonika*:

- The members of the scientific committee and chairpersons of the sessions for their general leadership
- The Ministry of Science and Information Society Technologies, Rector of the Technical University of Lodz – Professor Jan Krysinski, Rector of the University of Podlasie – Professor Antoni Jowko, Dean of Chemistry Department of the Technical University of Lodz – Professor Marian Zaborski, and the City of Lodz Office, for their financial support
- The members of the organizing committee for their dedicated work before and during the Meeting
- The referees who did a great job reading carefully the papers submitted for the publication, and the authors who corrected their manuscripts within the deadlines.

Also, we would like to express our thanks to all participants of the Meeting for their interesting presentations and fruitful discussions.

The next conference of the Polish Radiation Research Society is planned for the autumn 2006. We hope that our initiative of publishing the selected conference presentations will become a tradition.