Preface

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The 18th National Conference of the Italian Society for Radiation Research (SIRR) was held on September 10–13, 2018, at the Science Department of University “Roma Tre”, Rome, Italy.

The SIRR interdisciplinary scientific society, which includes physicists, biologists, chemists and physicians, organizes the National Conference every two years. This represents an opportunity for scientists of different disciplines to share and discuss recent data and findings on relevant physical and biological basic mechanisms of radiation action and their consequences for risk assessment and radiation therapy by promoting interdisciplinary interactions between advances in techniques and knowledge. Recent technical developments in radiation detection and novel irradiation techniques were also discussed and for the first time an entire session of the Conference was dedicated to non-ionizing radiation. The scientific sessions of the Conference program included invited keynote lectures and selected oral and poster presentations.

These proceedings contain 24 refereed papers from the contributions presented at the Conference and related submitted manuscripts.

The Conference was attended by 115 participants, including many young researchers, all actively contributing to the scientific sessions; their attendance was encouraged and supported with two scholarships and a very inexpensive fee.

During the general assembly of the SIRR, prizes were awarded to young researchers for the best oral and poster presentations. Furthermore, in the same meeting, the SIRR Council appointed three honorary members: Prof. Caterina Tanzarella, Prof. Mauro Belli and Prof. Giancarlo Gialanella for their scientific contribution in these 35 years of the Society.

Special thanks are due to the chairpersons for their kind and efficient handling of the Conference sessions, the speakers, the posters presenters and the authors of the papers for the quality of their work.
The editors acknowledge the efforts of the organizing committee members for the success of the Conference and special thanks are also due to Mrs. Cristina Compagno and all the staff of “M.T.B. Management of Tourism and Biodiversity”, Rome, Italy, for the relevant support and assistance in the organization and management of the different onsite tasks of the Conference and related social activities.

Group photo with all the participants of the XVIII SIRR Conference.

The SIRR Council members at the social dinner.