Preface

The 2017 International Conference on Applications of Nuclear Techniques (“Crete17”) was held from June 11–17, 2017 on the island of Crete, Greece. This was the 14th in a series of conferences where scientists from many countries come together to present and discuss new results of their work in a broad spectrum of applications of nuclear techniques. Topics are chosen by an advisory committee based on areas of most current interest to the worldwide nuclear applications community. The Crete17 topics included:

- Accelerators and neutron generators
- Detection of fissile material and contraband
- Nuclear safeguards, security and forensics
- Technology for treaty verification
- Nuclear detectors for basic scientific research
- Applied antineutrino physics
- Laboratory and industrial applications
- Novel detectors and materials
- Medical and biological applications
- Dosimetry and radiological detection

Crete17 featured 58 talks and 16 posters out of which 24 papers were submitted for publication. All topic areas were well represented by a number of stimulating presentations. As in recent conferences, a large percentage of these dealt with novel detectors for a wide range of disciplines. There was also a keen interest in the areas of contraband, explosives & WMD detection and nuclear safeguards, security & forensics. Among the notable highlights were six invited talks: two on antineutrino physics, two on radiation sources for nuclear security and nonproliferation, one on the groundbreaking work at the European Spallation Source, and one on radionuclide production for nuclear medicine.

The papers in this proceedings have been edited for conformance to IJMPCS standards and peer-reviewed. They are arranged alphabetically by topic and primary author. We thank the reviewers for carefully completing their assignments in a timely manner. We also thank the authors for responding quickly to our editing and to the reviewers’ suggested revisions to their papers.

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Finally, on behalf of the attendees and the advisory committee, we wish to thank everyone who worked hard both before and during the conference to make sure it ran smoothly. In particular, we would like to thank Nancy Reason and Paul Rose for their invaluable help during the conference. We express our appreciation to the committee for their help with the technical side of the conference. Finally, we would like recognize the leadership and staff of Aquila Rithymna Beach Resort, who worked hard to ensure that this conference would be a memorable and rewarding experience for all.

Anna Erickson, Adam Bernstein, and Marianne Hamm
Editors

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