Preface

The 64th DAE-BRNS National Symposium on Nuclear Physics is being organized by Bhabha Atomic Research Centre at Department of Physics, University of Lucknow, Lucknow, during Dec. 23-27, 2019. This annual symposium has been instrumental in supporting research in nuclear physics in our country by providing a scientific platform to the nuclear physics community to present their research work and to interact with the fellow researchers in this area. About 450 participants are expected to attend during this year’s symposium to deliberate on more than 470 contributory papers and 29 Thesis presentations. In addition, there are 26 invited talks by distinguished researchers. The contributed papers received are 472, out of which 132 in Nuclear Structure section, 124 in Nuclear Reaction section, 27 in Nuclear Astrophysics section, 37 in Hadron Physics section, 68 in Relativistic Nuclear Collisions and QGP section, 5 in Electroweak Interaction in Nuclei section, and 79 in Nuclear Instrumentation, Techniques and Application section. Students, who are our future torchbearer of science, form a phenomenal 65% of the registered participants. Women participation is about 34%, which shows an increasing enthusiasm of ladies in nuclear sciences. The diverse interests of the research pursued currently in nuclear physics are reflected in the sub-topics covered in the symposium. One can find large overlaps of interests in these topics with several other active fields of research: fundamental interactions and symmetries, many-body systems descriptions, and advanced nuclear and accelerator instrumentation systems, just to name a few. A Pre-symposium Orientation Program on Monte Carlo Techniques and Error Analysis for Nuclear Physics Research is also arranged on 22nd December, 2019. During the symposium, a dedicated brainstorming session on Future Facilities and Scope for Nuclear Physics Research in the Country is also planned on Monday, 23rd December 2019, which will be an open session to arrive at a consensus to provide further direction to the Nuclear Physics community in the country. There will be Indian Physics Association (IPA) sponsored, C. V. K. Baba award for the best thesis presentation in the symposium. There will also be awards for ten best poster presentations.

We are grateful to all the speakers and participants for the overwhelming response and participation in the symposium. We thank the Board of Research in Nuclear Sciences, Department of Atomic Energy, for funding the symposium generously. We would like to thank the members of National Advisory Committee and the Organizing Committee for their valuable suggestions and support in planning the symposium. We thank the Screening Committee members for scrutinizing the contributed papers for presentation in the symposium. We also thank the local organizers at Lucknow University, where the symposium is being held for the first time, for providing the necessary support and logistics. We record our gratitude to all our colleagues in helping us to make the necessary arrangements for conducting the symposium successfully.