

## *Foreword*

The 11th International Symposium on Non-Equilibrium Processes, Plasma, Combustion, and Atmospheric Phenomena was held in Sochi, Russia, from October 7 to 11, 2024. The biannual Symposium considered and discussed the progress in such interrelated research topics like elementary physical and chemical processes in flames, plasma, aerosols, clusters and nanostructures; shock and detonation waves and reacting flows in jet engines; as well as new technologies based on nonequilibrium physical and chemical phenomena. The book contains extended abstracts of scientific reports presented at the Symposium. All materials are carefully edited and logically grouped by subject in the form of six chapters: Kinetics; Plasma, Lasers, and Nanostructures; Ignition and Combustion; Shock Waves and Detonations; Engines; and Technologies. All materials are presented both in English and in Russian. For convenience, the book contains an author's index, information about the authors' affiliations and working addresses, as well as the participants' e-mail addresses, which, if necessary, will allow one to request additional information from the authors.

The preparation and holding of the Symposium and the publication of this book are the result of long and hard work of the Organizing Committee and the TORUS PRESS Publishers. We express our gratitude to all colleagues who participated in this work, in particular, Ms. Olga Rein and Ms. Olga Frolova. We express our deep sorrow at the untimely passing of Ms. Tatyana Mikhailova, a person who put a lot of effort and soul into organizing this and several previous Symposia. We thank the authors for their active participation in the Symposium and preparation of manuscripts. We hope this book will become a useful addition to the up-to-date scientific literature on nonequilibrium processes.

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