

Preface

Since 1998, the International Colloquium on Pulsed and Continuous Detonations (ICPCD) has successfully brought together scientists worldwide for exchanging their accomplishments and new approaches in better understanding of transient combustion processes in various media, combustion, and detonation physics and chemistry, as well as discussing the examples of applications in industry and aerospace/water propulsion. This biannual Colloquium is traditionally organized in Russia (Moscow or St. Petersburg) and is significant in that it is accompanied by the release of a book of illustrated compressed manuscripts or extended abstracts and a book of full selected papers. This booklet includes the extended abstracts of presentations delivered at the 12th ICPCD held in St. Petersburg on October 19–22, 2020. The material is divided in four Chapters: Chapter 1 — Fundamentals of gaseous deflagrations and detonations; Chapter 2 — Fundamentals of heterogeneous deflagrations and detonations; Chapter 3 — Pulsed and continuous detonations; and Chapter 4 — High explosives.

The contents of the extended abstracts included in the booklet have been outlined to enable easy selection of the subject of choice by the reader. A quick glance at the booklet contents indicates that there has been a considerable progress in the detonation research during last years.

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