PREFACE

The International Symposium on Combustion and Atmospheric Pollution held in St. Petersburg, Russia, July 8–11, 2003, provided a forum for international experts in combustion and atmospheric physics and chemistry to address the issues of combustion-generated pollutants and aerosols and their environmental effects. The topics discussed included fundamentals of combustion in propulsion devices, ground transportation engines, and stationary power plants with the emphasis on pollution formation chemistry and various forms of emission.

The Symposium was dedicated to the memory of N.N. Semenov — distinguished scientist, founder of the chain-branching reaction theory and the theory of combustion and explosion, and Nobel prizewinner. The Symposium received an impressive response from the scientific community with more than 200 participants from 20 nations.

This book contains 19 revised and edited papers selected from those presented at the Symposium. The book provides an overview of the state-of-the-art in the intrinsically interrelated disciplines: combustion science and technology and physical chemistry of atmospheric pollution. Extended references are given at the end of each paper. An author index is provided at the end of the book and the information about the contributors at the beginning of the book to enable the reader to contact the authors if further information is needed. The volume is prepared as a reference for practicing engineers, research scientists working in the field of combustion, propulsion, and atmospheric chemistry, as well as for experts in environmental protection and safety.

We acknowledge the sponsoring agency, U.S. Office of Naval Research^{*}, for the financial support for the publication of this volume. The valuable contribution by Ms. Olga Frolova and her team at TORUS PRESS in the preparation and publication of this manuscript is appreciated. We do hope this volume will be a useful addition to the literature on combustion and atmospheric pollution.

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Editors

^{*}The content of the information does not necessarily reflect the position or the policy of the United States Government and no official endorsement should be inferred.