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Coaxial Hole"""; "Premixed Flame in a Radiatively Active Porous Medium Under the External Radiant Heating"; "Major Factors Influencing Flame Spreading Over Solid Fuel Layer"; "Combustion Kinetic of a Homogeneous Double Base Propellant: Pseudo-Detailed and Global Mechanism"; "Radiative Heat Flux and Energy Balance at the Surface of a Small Scale Kerosene Pool Fire"; "Velocity and Temperature Measurements in a Bidimensional Pool Fire: Influence of a Vertical Wall Close to the Fire"; "Chapter IV. Combustion Diagnostics"; "Fluorescence Measurements in Laminar Nonpremixed Flames of CH₄/N₂"; "Speckle Tomography of Unsteady Gasdynamic Objects"; "Spectroscopic Measurements of Hydroxyl Radical in Axisymmetric Hydrogen-Air Diffusion Flames"; "Re-Evaluation of Laser Schlieren Data for Acetylene Pyrolysis"; "Author Index"

Sommario/riassunto

The four companion volumes on Dynamics of Deflagrations and Reactive Systems and Dynamics of Detonations and Explosions present 91 of the 149 papers given at the Twelfth International Colloquium on the Dynamics of Explosions and Reactive Systems (ICDERS) held at the University of Michigan in Ann Arbor during July 1989. Four volumes: Dynamics of Deflagrations and Reactive Systems: Flames (Volume 131) and Dynamics of Deflagrations and Reactive Systems: Heterogeneous Combustion (Volume 132) span a broad area, encompassing the processes of coupling the exothermic energy release with the fluid dynamics occurring in any combustion process. Dynamics of Detonations and Explosions: Detonations (Volume 133) and Dynamics of Detonations and Explosions: Explosion Phenomena (Volume 134) principally address the rate processes of energy deposition in a compressible medium and the concurrent nonsteady flow as it typically occurs in explosion phenomena. In this volume, Dynamics of Detonations and Explosions: Detonations, the papers have been arranged into chapters on gaseous detonations, detonation initiation and transmission, nonideal detonations and boundary effects, and multiphase detonations. Although the brevity of this preface does not permit the editors to do justice to all papers, we offer the following highlights of some of the especially noteworthy contributions.
