



## METADATA

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## Abstract

The book "Introduction to the Basic Principles of Combustion Theory and Technology" is addressed not only to students of the Energy Sector of the Department of Mechanical and Aeronautical Engineering of the Polytechnic School of the University of Patras, but also to anyone interested in learning about the basic processes of fluid mechanics, mass and heat transfer, chemical kinetics, thermodynamics, turbulence, and combustion. The usefulness of combustion science in solving technical problems covers a

wide range of applications, such as thermal and propulsive power generation, fire prevention, fire safety, toxic waste incineration, alternative fuels, and control of pollutant emissions. It is therefore clear that the proper design of a combustion system is one of the most critical parts of the overall design process for an energy system. Through continuous development and updating in line with technological advances, this textbook will also serve as a suitable reference for postgraduate studies.

