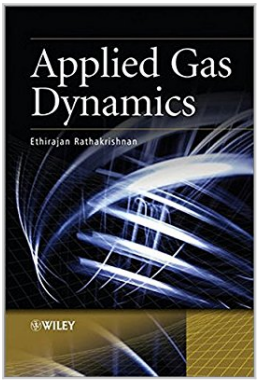

Applied Gas Dynamics

By Ethirajan Rathakrishnan

Applied Gas Dynamics By Ethirajan Rathakrishnan

In *Applied Gas Dynamics*, Professor Ethirajan Rathakrishnan introduces the high-tech science of gas dynamics, from a definition of the subject to the three essential processes of this science, namely, the isentropic process, shock and expansion process, and Fanno and Rayleigh flows. The material is presented in such a manner that beginners can follow the subject comfortably. Rathakrishnan also covers the theoretical and application aspects of high-speed flows in which enthalpy change becomes significant.

- Covers both theory and applications
- Explains involved aspects of flow processes in detail
- Provides a large number of worked through examples in all chapters
- Reinforces learning with concise summaries at the end of every chapter
- Contains a liberal number of exercise problems with answers
- Discusses ram jet and jet theory -- unique topics of use to all working in the field
- Classroom tested at introductory and advanced levels
- Solutions manual and lecture slides available for instructors

Applied Gas Dynamics is aimed at graduate students and advanced undergraduates in Aerospace Engineering and Mechanical Engineering who are taking courses such as Gas Dynamics, Compressible Flows, High-Speed Aerodynamics, Applied Gas Dynamics, Experimental Aerodynamics and High-Enthalpy Flows. Practicing engineers and researchers working with high speed flows will also find this book helpful.

Lecture materials for instructors available at http://www.wiley.com/go/gasdyn

Applied Gas Dynamics

By Ethirajan Rathakrishnan

Applied Gas Dynamics By Ethirajan Rathakrishnan

In *Applied Gas Dynamics*, Professor Ethirajan Rathakrishnan introduces the high-tech science of gas dynamics, from a definition of the subject to the three essential processes of this science, namely, the isentropic process, shock and expansion process, and Fanno and Rayleigh flows. The material is presented in such a manner that beginners can follow the subject comfortably. Rathakrishnan also covers the theoretical and application aspects of high-speed flows in which enthalpy change becomes significant.

- Covers both theory and applications
- Explains involved aspects of flow processes in detail
- Provides a large number of worked through examples in all chapters
- Reinforces learning with concise summaries at the end of every chapter
- Contains a liberal number of exercise problems with answers
- Discusses ram jet and jet theory -- unique topics of use to all working in the field
- Classroom tested at introductory and advanced levels
- Solutions manual and lecture slides available for instructors

Applied Gas Dynamics is aimed at graduate students and advanced undergraduates in Aerospace Engineering and Mechanical Engineering who are taking courses such as Gas Dynamics, Compressible Flows, High-Speed Aerodynamics, Applied Gas Dynamics, Experimental Aerodynamics and High-Enthalpy Flows. Practicing engineers and researchers working with high speed flows will also find this book helpful.

Lecture materials for instructors available at http://www.wiley.com/go/gasdyn

Applied Gas Dynamics By Ethirajan Rathakrishnan Bibliography

- Sales Rank: #2585779 in Books
- Published on: 2010-10-04
- Original language: English
- Number of items: 1
- Dimensions: 9.90" h x 1.55" w x 6.80" l, 2.74 pounds
- Binding: Hardcover
- 680 pages

Editorial Review

Review
"He begins this single-authored text with basic facts: definitions, supersonic flow, speed of flow, temperature rise, Mach angle, thermodynamics of fluid flow, and so on. Subsequent chapters address steady one-dimensional flow, normal shock waves, oblique shock and expansion waves, compressible flow equations, similarity rule, and two-dimensional compressible flows, among other topics, ending with chapters on ramjet, and jets. Each chapter concludes with a summary and exercise problems." (*SciTech Book News*, December 2010)

From the Back Cover
In *Applied Gas Dynamics*, Professor Ethirajan Rathakrishnan introduces the high-tech science of gas dynamics, from a definition of the subject to the three essential processes of this science, namely, the isentropic process, shock and expansion process, and Fanno and Rayleigh flows. The material is presented in such a manner that beginners can follow the subject comfortably. Rathakrishnan also covers the theoretical and application aspects of high-speed flows in which enthalpy change becomes significant.

- Covers both theory and applications
- Explains involved aspects of flow processes in detail
- Provides a large number of worked through examples in all chapters
- Reinforces learning with concise summaries at the end of every chapter
- Contains a liberal number of exercise problems with answers
- Discusses ram jet and jet theory -- unique topics of use to all working in the field
- Classroom tested at introductory and advanced levels
- Solutions manual and lecture slides available for instructors

Applied Gas Dynamics is aimed at graduate students and advanced undergraduates in Aerospace Engineering and Mechanical Engineering who are taking courses such as Gas Dynamics, Compressible Flows, High-Speed Aerodynamics, Applied Gas Dynamics, Experimental Aerodynamics and High-Enthalpy Flows. Practicing engineers and researchers working with high speed flows will also find this book helpful.

Lecture materials for instructors available at http://www.wiley.com/go/gasdyn

Users Review

From reader reviews:

Rita Hackett:

This Applied Gas Dynamics is great e-book for you because the content which can be full of information for you who also always deal with world and have to make decision every minute. This specific book reveal it facts accurately using great plan word or we can state no rambling sentences inside it. So if you are read the idea hurriedly you can have whole details in it. Doesn't mean it only will give you straight forward sentences but challenging core information with attractive delivering sentences. Having Applied Gas Dynamics in your hand like finding the world in your arm, info in it is not ridiculous one. We can say that no reserve that offer you world within ten or fifteen minute right but this book already do that. So , it is good reading book. Hey

Mr. and Mrs. busy do you still doubt in which?

Russell Wade:

You could spend your free time to see this book this guide. This Applied Gas Dynamics is simple to develop you can read it in the park your car, in the beach, train in addition to soon. If you did not have much space to bring the particular printed book, you can buy the actual e-book. It is make you easier to read it. You can save typically the book in your smart phone. Therefore there are a lot of benefits that you will get when you buy this book.

Catherine Stevenson:

Beside this particular Applied Gas Dynamics in your phone, it might give you a way to get nearer to the new knowledge or info. The information and the knowledge you can got here is fresh from the oven so don't end up being worry if you feel like an old people live in narrow town. It is good thing to have Applied Gas Dynamics because this book offers to you personally readable information. Do you oftentimes have book but you would not get what it's exactly about. Oh come on, that would not happen if you have this with your hand. The Enjoyable arrangement here cannot be questionable, like treasuring beautiful island. So do you still want to miss it? Find this book as well as read it from right now!

George Medrano:

A lot of publication has printed but it is unique. You can get it by online on social media. You can choose the best book for you, science, comedy, novel, or whatever by simply searching from it. It is named of book Applied Gas Dynamics. Contain your knowledge by it. Without leaving the printed book, it could possibly add your knowledge and make an individual happier to read. It is most important that, you must aware about e-book. It can bring you from one spot to other place.

Read Applied Gas Dynamics By Ethirajan Rathakrishnan for online ebook

Applied Gas Dynamics By Ethirajan Rathakrishnan Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Applied Gas Dynamics By Ethirajan Rathakrishnan books to read online.

Online Applied Gas Dynamics By Ethirajan Rathakrishnan ebook PDF download

Applied Gas Dynamics By Ethirajan Rathakrishnan Doc

Applied Gas Dynamics By Ethirajan Rathakrishnan Mobipocket

Applied Gas Dynamics By Ethirajan Rathakrishnan EPub