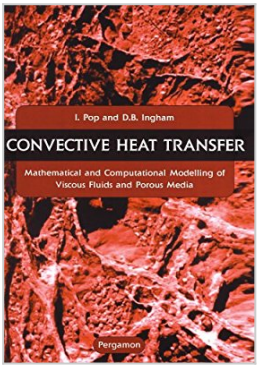

Convective Heat Transfer: Mathematical and Computational Modelling of Viscous Fluids and Porous Media

By I. Pop

Convective Heat Transfer: Mathematical and Computational Modelling of Viscous Fluids and Porous Media By I. Pop

Interest in studying the phenomena of convective heat and mass transfer between an ambient fluid and a body which is immersed in it stems both from fundamental considerations, such as the development of better insights into the nature of the underlying physical processes which take place, and from practical considerations, such as the fact that these idealised configurations serve as a launching pad formodelling the analogous transfer processes in more realistic physical systems. Such idealised geometries also provide a test ground for checking the validity of theoreticalanalyses. Consequently, an immense research effort has been expended in exploring and understanding the convective heat and mass transfer processes between a fluid and submerged objects of various shapes. Among several geometries which have received considerable attention are plates, circular and elliptical cylinders, and spheres, although much information is also available for some other bodies, such ascorrugated surfaces or bodies of relatively complicated shapes. The book is a unified progress report which captures the spirit of the work in progress in boundary-layer heat transfer research and also identifies potential difficulties and areas for further study. In addition, this work provides new material on convective heat and mass transfer, as well as a fresh look at basic methods in heat transfer. Extensive references are included in order to stimulate further studies of the problems considered. A state-of-the-art picture of boundary-layer heat transfer today is presented by listing and commenting also upon the most recent successful efforts and identifying the needs for further research.

Convective Heat Transfer: Mathematical and Computational Modelling of Viscous Fluids and Porous Media

By I. Pop

Convective Heat Transfer: Mathematical and Computational Modelling of Viscous Fluids and Porous Media By I. Pop

Interest in studying the phenomena of convective heat and mass transfer between an ambient fluid and a body which is immersed in it stems both from fundamental considerations, such as the development of better insights into the nature of the underlying physical processes which take place, and from practical considerations, such as the fact that these idealised configurations serve as a launching pad formodelling the analogous transfer processes in more realistic physical systems. Such idealised geometries also provide a test ground for checking the validity of theoreticalanalyses. Consequently, an immense research effort has been expended in exploring and understanding the convective heat and mass transfer processes between a fluid and submerged objects of various shapes. Among several geometries which have received considerable attention are plates, circular and elliptical cylinders, and spheres, although much information is also available for some other bodies, such ascorrugated surfaces or bodies of relatively complicated shapes. The book is a unified progress report which captures the spirit of the work in progress in boundary-layer heat transfer research and also identifies potential difficulties and areas for further study. In addition, this work provides new material on convective heat and mass transfer, as well as a fresh look at basic methods in heat transfer. Extensive references are included in order to stimulate further studies of the problems considered. A state-of-the-art picture of boundary-layer heat transfer today is presented by listing and commenting also upon the most recent successful efforts and identifying the needs for further research.

Convective Heat Transfer: Mathematical and Computational Modelling of Viscous Fluids and Porous Media By I. Pop Bibliography

- Published on: 2011-06-30
- Released on: 2001-02-01
- Original language: English
- Dimensions: 10.00" h x 1.53" w x 7.00" l,
- Binding: Paperback
- 676 pages

Editorial Review

About the Author
University of Cluj, Faculty of Mathematics, Romania

Department of Applied Mathematics, Ingham Centre for Computational Fluid Dynamics, University of Leeds, Leeds, UK

Users Review

From reader reviews:

Cary Burgess:

The book Convective Heat Transfer: Mathematical and Computational Modelling of Viscous Fluids and Porous Media give you a sense of feeling enjoy for your spare time. You may use to make your capable a lot more increase. Book can to become your best friend when you getting stress or having big problem together with your subject. If you can make reading through a book Convective Heat Transfer: Mathematical and Computational Modelling of Viscous Fluids and Porous Media to become your habit, you can get considerably more advantages, like add your capable, increase your knowledge about a number of or all subjects. You may know everything if you like open and read a publication Convective Heat Transfer: Mathematical and Computational Modelling of Viscous Fluids and Porous Media. Kinds of book are a lot of. It means that, science reserve or encyclopedia or other folks. So , how do you think about this book?

Ramona Johnson:

Do you among people who can't read gratifying if the sentence chained inside straightway, hold on guys this specific aren't like that. This Convective Heat Transfer: Mathematical and Computational Modelling of Viscous Fluids and Porous Media book is readable simply by you who hate the straight word style. You will find the info here are arrange for enjoyable reading through experience without leaving also decrease the knowledge that want to offer to you. The writer regarding Convective Heat Transfer: Mathematical and Computational Modelling of Viscous Fluids and Porous Media content conveys objective easily to understand by a lot of people. The printed and e-book are not different in the content but it just different as it. So , do you nonetheless thinking Convective Heat Transfer: Mathematical and Computational Modelling of Viscous Fluids and Porous Media is not loveable to be your top listing reading book?

Maribel Davenport:

Convective Heat Transfer: Mathematical and Computational Modelling of Viscous Fluids and Porous Media can be one of your beginner books that are good idea. We all recommend that straight away because this reserve has good vocabulary that could increase your knowledge in vocabulary, easy to understand, bit entertaining however delivering the information. The article writer giving his/her effort to put every word into enjoyment arrangement in writing Convective Heat Transfer: Mathematical and Computational

Modelling of Viscous Fluids and Porous Media nevertheless doesn't forget the main point, giving the reader the hottest and also based confirm resource facts that maybe you can be one of it. This great information could drawn you into fresh stage of crucial thinking.

William Devine:

You can get this Convective Heat Transfer: Mathematical and Computational Modelling of Viscous Fluids and Porous Media by check out the bookstore or Mall. Just simply viewing or reviewing it may to be your solve problem if you get difficulties for the knowledge. Kinds of this guide are various. Not only simply by written or printed but can you enjoy this book by means of e-book. In the modern era including now, you just looking because of your mobile phone and searching what their problem. Right now, choose your current ways to get more information about your book. It is most important to arrange yourself to make your knowledge are still revise. Let's try to choose proper ways for you.

Read Convective Heat Transfer: Mathematical and Computational Modelling of Viscous Fluids and Porous Media By I. Pop for online ebook

Convective Heat Transfer: Mathematical and Computational Modelling of Viscous Fluids and Porous Media By I. Pop 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 Convective Heat Transfer: Mathematical and Computational Modelling of Viscous Fluids and Porous Media By I. Pop books to read online.

Online Convective Heat Transfer: Mathematical and Computational Modelling of Viscous Fluids and Porous Media By I. Pop ebook PDF download

Convective Heat Transfer: Mathematical and Computational Modelling of Viscous Fluids and Porous Media By I. Pop Doc

Convective Heat Transfer: Mathematical and Computational Modelling of Viscous Fluids and Porous Media By I. Pop Mobipocket

Convective Heat Transfer: Mathematical and Computational Modelling of Viscous Fluids and Porous Media By I. Pop EPub