groups and the detection of the onset of cancer.

In general, Mamatha Rao’s work provides a broader conceptual framework highlighting the importance of microbes and non-flowering plants in biotechnology, which is an interesting subject in a way that manages to stimulate the readers’ interest. The textbook is easy to read and understandable. The information is also up to date and lucid. This book has led to a greater understanding of the key concepts of the topic and has thereby increased interest in the subject and their impact on human welfare.

The pictures and diagrams are excellent and provide wonderful insights towards the title of the book, although the sequence of arrangement of figures could have been better arranged serially. The author has kept in mind that careful and detailed explanations of topics, and comprehensive and recent information coverage are all important criteria of any good scientific text book.

At the end of the book, the glossary of medical terms is very useful to the reader and its utility for researchers and practitioners. The authors have provided references to establish authenticity of the statements made in the text for each aspect. The scientific names of organisms provided as an index in the end of the compilation text is relevant for the researchers to verify and utilize more information for the practical purposes.

The book is printed and bound well, contains very few typographical and spelling mistakes.

The book is a compiled source of information on microbes and non-flowering plants, and serves as an important reference book for graduate students, scientists and professionals interested in the subject.

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Stratosphere–troposphere interactions/exchange process is a subject which has gained immense importance in the field of atmospheric research in the last couple of decades. This stems from the increasing realization of the key role of stratosphere–troposphere exchange in affecting the climate. Dynamical, chemical and radiative coupling between the troposphere and stratosphere must be understood in evaluating the global change. Stratosphere is a region of high static stability, poor in water vapour and rich in ozone which are two important constituents of the greenhouse effect. In contrast, troposphere is a region of low static stability, rich in water vapour and relatively poor in ozone. Vertical transport of air and chemical species through the depth of the troposphere can occur on time-scales as short as a few hours, whereas it takes a year or more in the lower stratosphere for a similar altitude range. The tropopause marks the transition between troposphere and stratosphere. In the tropics it is generally well defined by a sharp minimum in the altitude profile of temperature whereas at higher latitudes the temperature minimum is not sharp and quite often a region of nearly constant temperature separates the troposphere and stratosphere. Even in tropics it is physically more meaningful to consider the region of transition between dominance of convective equilibrium and radiative equilibrium separating troposphere and stratosphere and this region is called the Tropical Troposphere Layer. This layer is the gateway for the entry of water vapour into the stratosphere from troposphere and for ozone transport.

While there are textbooks in atmospheric science dealing with atmospheric dynamics and chemistry, there are practically none specifically on stratosphere–troposphere interactions and the relevant physical processes. In view of its growing scientific importance, a textbook on this subject especially intended for undergraduate and graduate students and for those who want to pursue research in this area is a long felt need. The book under review eminently fulfills this need. Mohankumar himself made many important contributions to the area of solar influence on stratosphere and stratosphere–troposphere exchange processes and this is amply reflected in the presentation of the various topics relevant to stratosphere–troposphere interactions in this book. Radiative processes in the lower and middle atmosphere, dynamics of the troposphere and stratosphere, waves in the troposphere and stratosphere and chemical processes are dealt with in the book in minute detail. The subject of Antarctic ozone hole, which is of great scientific and also public interest, is presented in detail. The stratospheric influence on tropospheric weather and climate, a topic of current scientific interest is also dealt with.

In a book of this nature dealing with a subject of current scientific research, there are bound to be a few overlaps, repetitions and omissions (at least in the first edition!). Some of the topics described in a chapter are repeated again in a later chapter in a little more detail. For example, the basic topic of vertical structure of pressure and density (hydrostatic equation) described in the first chapter is described again in a later chapter (on dynamics) in some detail. This should have been dealt with in the first chapter itself along with the assumptions involved including the general and realistic case of non-isothermal atmosphere. Description of jet streams, quasi-biennial oscillation and semi-annual oscillation is in the first chapter. It would have been useful if these aspects were dealt with after the chapter on dynamics so that the physical mechanisms of these can be better understood.

The topic of atmospheric tides is very important and relevant but is not included in the chapter on dynamics. Convective-radiative equilibrium, thermal balance of
troposphere, convection itself, wave saturation and wave mean flow interaction are not presented in detail. This would have been of help in understanding the troposphere-stratosphere interactions. Topics like exosphere, ionosphere, plasmasphere and magnetosphere are briefly described in a cursory and imprecise manner.

Notwithstanding the shortcomings mentioned above which can be attended to in the next edition, overall the book is very well organized and written. Relevant references are given at the end of each chapter. Of added value and usefulness are questions and problems at the end of each chapter along with answers to some selected problems at the end of the book.

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MEETINGS/SYMPOSIA/SEMINARS

International Conference on Food Technology (INCOFTECH 2009)

Date: 28–30 August 2009
Place: Thanjavur, India

Objective include: To create awareness among the stake holders on appropriate and improved food processing and preservation technologies; To ascertain the technological gaps and challenges in food processing sector in India; To develop linkage between the stake holders in the food value chain such as farmers, processors, entrepreneurs, R&D institutes, Govt and Non-Govt agencies; To formulate strategies for vertical growth of food processing sector in India; To impart knowledge on HACCP, GMP and other food safety issues.

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Website: www.pprc.gov.in

Workshop on Fungal Taxonomy

Date: 14–21 September 2009
Place: Chennai

The workshop deals with morphological and molecular taxonomy of different groups of fungi.

The workshop is mainly intended to impart training to research scholars and young college teachers interested in mycology.

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