

BOOK REVIEWS

and case studies. Thinking, feeling and behaving are the psychological determinants of the quality of life that a person leads. The authors discuss how thinking and feeling influence behaviour, which has a bearing on health. They have evidence to suggest that excessive exercise can have negative health effects. The results of several comprehensive surveys indicate that moderate degree of physical activity has both physical and psychological benefits. The box columns in this part are sure to enable a quick grasp of the information presented and to kindle the interest of readers to go into the details.

Part 3 covers health promotion and disease prevention. The sequential form of presenting information is to be appreciated. With details on the place of study and demography, the authors have touched vividly on the principal areas of health experience and behaviour under food, alcohol and drinking, tobacco and smoking, and physical activity and exercise. They have also discussed prevention aspects under each chapter. In addition to the theories and models developed based on their study, they have mentioned other research work in the field. This speaks of the genuine interest of the authors in the development of health psychology.

The last part is the most useful one covering lay representations of illness and how they affect the personalities of people. The general tendency of most of the people is to go in for self-medication. The authors have used cognitive, phenomenological and narrative approaches to understand the lay representations of illness. This provides a comprehensive picture. The adherence and resistance to medicines by patients are explained in detail, thereby helping practitioners handle their apprehensions. There is a suggestion on patient empowerment through actively involving them, thereby making them feel more responsible for themselves. This part ends with the acceptance of chronic diseases and learning to live with them. The authors focus on some undesirable practices of health professionals in dealing with these patients. While in reality they are to be given more time, explaining coping mechanisms and developing confidence, most personnel spend less than a few minutes with terminally ill patients, leaving them with a lot of psychological fears and trauma. This chapter is sure to provoke

people to introspect. The information given is an eye-opener for medical professionals to understand the psyche of patients. The psychological techniques suggested would help counsellors and health professionals in enabling patients to understand the coping and managing mechanisms of pain and the stress caused because of chronic sickness. The required follow-up, with educational materials and regular telephonic contacts to improve compliance is aptly explained. The authors also mention the care that family members need to show the affected ones.

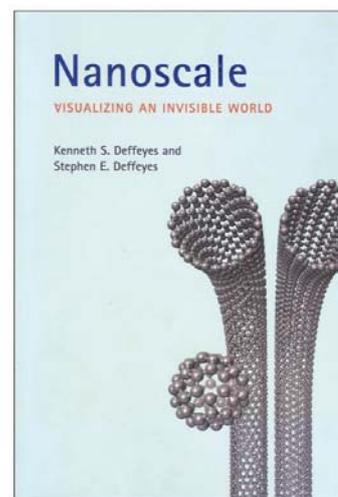
The aim of the book – in providing in-depth integration of qualitative, quantitative and action research approaches in dealing with better healthcare, keeping in mind that societal, political and economic changes are not keeping pace with industrial, scientific and medical achievements – is commendable. Each chapter speaks on the recourse to be taken keeping the societal, cultural and political imbalances in mind. The sequence of each chapter allows the reader to pick the area of personal interest and need. The recapitulation at the end of each chapter would be useful for students and academicians to review their understanding.

The authors focus on creating effective interventions for disease prevention and health promotion with special reference to sexual health, diet, smoking, alcohol, inactivity and stress. Each issue is addressed vividly with case studies, research references and empirical data followed by appropriate interventions. Keeping in tune with the idiom 'prevention is better than cure', the authors have adopted a preventive perspective with a focus on positive health enhancement through the use of multilevel strategies. Each chapter takes the reader through a journey of health issues, related experience and behaviour. All the major approaches to health psychology such as clinical, public health, community health and critical health have been vividly interspersed in the exclusive box spaces wherever the need to emphasize was felt.

I wish the authors good luck and many more research writing of this nature in future.

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Nanoscale: Visualizing an Invisible World. Kenneth S. Deffeyes and Stephen E. Deffeyes. The MIT Press, 55 Hayward Street, Cambridge, MA 02142, USA. 2009. ix + 133 pp. Price not mentioned.

In this book, a geology professor (Kenneth) and an illustrator (Stephen) have worked together to present the natural world at the nanoscale. It is dedicated to the memory of Linus Pauling (scientist) and Roger Hayward (architect and scientific illustrator). There are 50 chapters

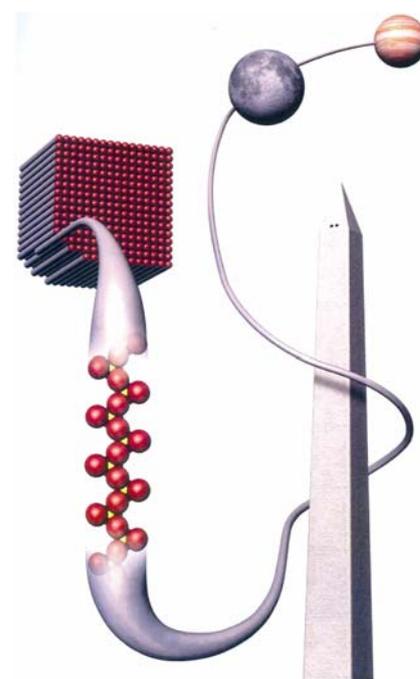


Figure 1. A 1 cm cube of pyroxene unrolled on a side into a single chain would reach from the White House to Jupiter – 10^9 km (p. 24; 25).

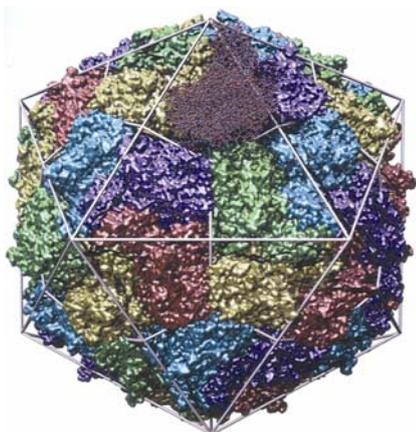


Figure 2. An illustration of the polio virus, an icosahedra virus. Different colours are used to differentiate individual capsid proteins on the surface; the genetic material is protected inside. The structure of one of the capsids is shown at the atomic level. The white lines have been used to emphasize symmetry (p. 56; 57).

dealing with topics such as air, hexagonal diamond, nanotubes and buckyballs, alpha helix and beta sheet, icosahedra virus, screw dislocation, perovskite morph, epitaxial growth and penrose tiling. In their own words, the authors have chosen each of these subjects 'because it illustrates how atomic structure creates a property such as hardness, color, or toxicity; because it has a great story; or sometimes simply because it is beautiful'.

The content is replete with clear illustrations (see Figures 1 and 2) and concise essays. The text conveys interesting information. For example, a different way of looking at atmospheric oxygen that was almost not present in the early atmosphere – '...A pollutant, a vile poison, a toxic byproduct of green-plant photosynthesis'; 'A dollars' worth of silver iodide, sprayed into moisture-laden air, can release more energy than a hydrogen bomb'; quasicrystal-coated pans used for cooking are stick-resistant at high tempe-

ratures and are scratchproof; the carbon nanotube with one set of carbon-carbon bonds in the hexagonal carbon lattice running around the tube conducts electricity better than copper, while the nanotube having lines oriented along the length of the tube can only be an electrical semiconductor (at best).

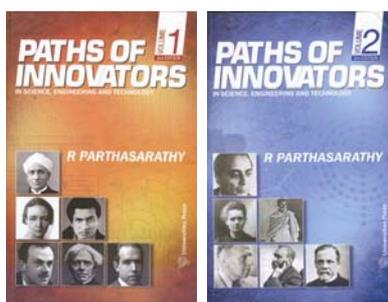
The essays deal with the subjects at the level of electrons, atoms, molecules, crystal structure, history, latest advances, patents and applications. Many of the illustrations were made from X-ray dif-

fraction data available on databases of atomic structures, the links to which are given at the end. The book would be suitable for students and readers who have a background in science, especially chemistry, and as a source of inspiration to others to find out more about these subjects.

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Paths of Innovators: In Science, Engineering and Technology (Volumes 1 and 2). R. Parthasarathy. Universities Press (India) Pvt Ltd, 3-6-747/1/A and 3-6-754/1, Himayatnagar, Hyderabad 500 029. 2012. xvi + 439 pp. and xx + 523 pp. respectively. Price not mentioned.

The books under review are revised editions (third) comprising short biographical sketches of legends in science, whose contributions have helped mankind rejoice a comfortable living. Both the volumes, compartmentalized into sections on engineering, mathematics, physics, chemistry and life sciences, are brief accounts on the lives, scientific achievements and hardships faced by the pioneers of science, both in India and across the globe. Though the contents of the books have remained more or less the same, they have a new look and format with 12 new essays. The earlier editions (2000 and 2003) were published by the East West Books (Madras) Pvt Ltd, Chennai.

Though the author has been successful in compiling lives of 282 scientists and their contributions in two volumes, he has missed out mentioning the seminal contribution made by G. N. Ramachandran to crystallography, for which Ramachandran was also bestowed with the Ewald Prize (1999). The text requires careful proofreading. For example, in vol. 1, p. 315, 'Wali' has been misspelt as 'Wahli'. Similarly, on p. 213, the name of the book, *Journey into Light* has been mentioned as *Journey unto Light*.

Overall the books are informative and useful for school children or anyone interested in biographies.

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Erratum

B. P. Radhakrishna (1918–2012)

R. Srinivasan [*Curr. Sci.*, 2012, **102**, 1062–1063]

In the second paragraph on page 1062, BPR's parents name is printed as Puttaiah and Subhadramma; it should read as *Puttaiah* and *Smt Venkamma*.

In the third column on page 1063, Millennium Award of the Geological Society of India (2000) should read as Millennium Award of the *Geochemical Society of India* (2000).