related aspects. These aspects of the IP policy balance the various FTAs in which Canada is a signatory. Such a presence in a developed (G-8) nation is an indicator of how political will and policy can ensure a balanced IP regime in a nation. Unfortunately, the developing countries push towards compulsory licensing and other public good supportive mechanisms are not encouraged. As the author suggests, a valuable export of Canada would be the expertise developed to design health and patent policy that incorporates the social values, economic priorities, industrial ambitions and unique legal environment.

Moving to Asian countries, this book has chapters on India, China, Thailand and Bangladesh. The chapter on India's approach deals with patent linkages, automatic licensing and open-source drug development activities that balance the non-IP-based market interventions practised. Contributing 20% of global generics and 8% of global pharma manufacturing, India's main concern is access to drugs that get limited due to the monopolistic tendency of IP. Recent case laws and modifications to the Indian Patent Act post TRIPS like Section 3(D), the abbreviated new drug application process and other government initiatives have been discussed. However, due to the lack of cases being finalized at the time of publishing this book, most of the case laws discussed are not complete.

The chapter on China presents the case of double-track system that was used for boosting Chinese pharmaceutical industry. The healthcare reforms of 2000 answered the growing social discontent with respect to medicine availability. Through its double-track system of providing an equivalent protection for patented drugs, China ensured a larger competition in the market. This ensures that the drugs are available through multiple manufacturers. With its drug price setting process, the demand was being met. However, the interesting facet of China's experience has been the marked high cost of medicines despite state control. This is attributed to the perception in hospitals and patients to buy high-cost medicines, restricted medical insurance, lack of doctors and services and absence of drug price control. China faces the typical agency problem wherein it has increased the number of agents (drug manufacturers) without a framework to manage the self-interests and needs of the principal – the user and the state. This is contrary to India's experience of having a generics market which ensured drugs becoming accessible, available and improvement in the innovation capabilities of its industry.

The case study of Thailand draws the readers' attention to the role of good manufacturing practices and IP regime to promote its pharmaceutical industry. Similar to African and other developing nations, obstacles of an IP regime which do not focus on access to medicines are stressed upon using Thailand's case. Thailand has not seen the increase in technology transfer or capabilities being strengthened post TRIPS implementation, nor has it seen increase in IP protection. Rather, it had to fight aggressively through parallel importation to reduce the drug prices.

Lastly, the book takes up the case of Bangladesh's pharmaceutical sector. By virtue of being present in the least developed countries list of the UN, Bangladesh faces tremendous challenge on three fronts, namely poverty alleviation, human resource capabilities and economic vulnerability. It faces systemic constraints in the health sector in the form of lack of scientific and research infrastructure, skilled people, industries and hospitals. While it followed India's approach towards drug control, Bangladesh did not continue with the necessary industrial support measures. This has resulted in the lack of active pharmaceutical ingredient production in Bangladesh. This leads to importation of the basic raw material for drug production and reduces the competitiveness of the country's pharmaceutical industry.

This book gives practical insights supported with empirical data on how various countries have approached the tricky aspect of balancing innovation, social and industrial perspectives, especially for public good. Detailed discussion on Canada's approach to IP and pharmaceutical industry alone makes this book important for policy makers to read and get insights and leverage the flexibilities available in the global political treaties.

However, notwithstanding the benefits, the book could have improved in certain areas. In its introductory chapter, the book discusses about creating a framework integrating the learning from various countries. However, the framework is hidden in the myriad data and empirical information that the book

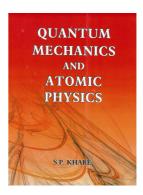
provides. There is no schematic way and hence it is laborious for policy makers to read through multiple chapters, before comprehending the components of the framework. Similarly, it was surprising to see that the editors did not have a concluding chapter that assimilated the key points from each country's experience towards developing a framework. The case of Columbia is one such example. This would have helped in creating the envisaged framework or minimally, created a checklist.

The book though having new data, is case-based, with no models proposed. Similarly, the India chapter does not discuss in detail the uniqueness of Section 3(d), a landmark approach not present in other countries, while focusing on pricing and market access regulations followed. The title of the book suggested a stronger, detailed analysis and learning from Section 3(d) related cases.

In conclusion, this book has provided a platform for health and patent policy experts and researchers to translate the framework and develop implementable models that incorporate the social values, economic priorities, industrial ambitions and unique legal environment faced in a developing country, especially for public goods.

KARUNA JAIN

National Institute of Industrial Engineering, Vihar Lake Road, Mumbai 400 087, India e-mail: nitie.director@gmail.com



**Quantum Mechanics and Atomic Physics.** S. P. Khare. Published by Rakesh Kumar Rastogi for Rastogi Publications, 'Gangotri', Shivaji Road, Meerut 250 002. 2014–15. xiv + 360 pp. Price: Rs 245.

The book under review should be useful for the target audience of university

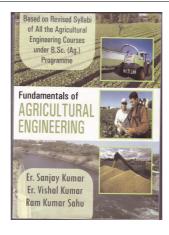
students. The contents have been chosen carefully to enable a good foundation for further studies in physics. The text is written in a coherent manner and the treatment of the topics chosen carries a flavour of the old style of teaching. The author introduction shows that he has a long academic experience, and this comes out in the book.

However, there are some issues to be addressed by the publisher or the author which would help in making the book a better resource.

- 1. The formatting and layout of the book should be improved to make it more appealing. In the present format it looks like a locally produced book, even though it has a rich content.
- 2. The author introduction is too detailed and should be cut down to one-third of its present size. In addition, it appears in two places once inside and once on the back cover one of them should be removed.
- 3. A photograph of Acharya Vinoba Bhave for the dedication is completely inappropriate in a science textbook. Physics is one of the most fundamental disciplines of human knowledge, and has nothing to do with the kind of spiritualism exemplified by Vinoba Bhave.
- 4. The preface is too long and elaborate, containing details of every chapter which is just a repetition of the table of contents. The preface should only mention facts like motivation for the book and acknowledgements. If any details of each chapter have to be included, they should be in the introduction to that chapter.
- 5. A better title for the book would be *Quantum Mechanics for Atomic Physics*, since the atomic physics part is only discussed in the last few chapters.

VASANT NATARAJAN

Department of Physics, Indian Institute of Science, Bangalore 560 012, India e-mail: vasant@physics.iisc.ernet.in



**Fundamentals of Agricultural Engineering.** Er. Sanjay Kumar, Er. Vishal Kumar and Ram Kumar Sahu. Kalyani Publishers, New Delhi. 2013. 567 pp. Price: Rs 350.00, ISBN: 978-93-272-2168-8

This book is a good compilation of topics written by experienced authors and in many ways meets the present need of undergraduate agricultural engineering students. The book consists of five parts. Part one covers farm power, including thermodynamics, IC engine, combustion and fuel system, ignition system, cooling system, lubrication system and governing system.

Part two comprises of farm machinery, including primary and secondary tillage equipment, sowing and planting equipment, weeding, interculturing and plant protection equipment, harvesting and threshing equipment, land development and horticultural equipment.

Part three deals with renewable energy, including energy resources, solar radiation, power cycle, solar collector, solar appliances, solar-photo voltaics, biomass, biomass gasification, briquetting of biomass, wind energy and liquid biofuel.

Part four covers food processing, including greenhouse technology, threshing, winnowing, decorticator/sheller, grain drying and storage structures, fruit and vegetable cleaning and grading, size reduction, evaporators and food safety standards.

Part five discusses soil and water conservation engineering, including surveying, levelling, irrigation, hydrology and soil and water conservation.

Overall, the book is a detailed and useful compilation of the basics in the field useful specifically for agricultural students.

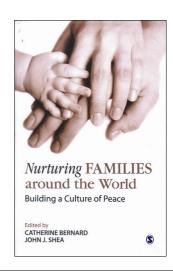
However, there are a few minor draw-backs. First, the book should have been arranged subject-wise, which would directly help the students. More figures and photographs are needed to explain a particular aspect practically. Need arises for more numerical and MCQ for individual parts, which will be useful for students taking competitive exams.

A second major concern is related to practical guidelines which will help the students to learn more about practical aspects: ICAR had laid emphasis on practical aspects like RAWE and experiential learning programmes in agricultural engineering.

In spite of these shortcomings, the book will be useful for B Sc (Agri) students. Figures and photographs are also nicely presented.

Rajvir Yadav

Department of Farm Engineering, College of Agriculture, Junagadh Agricultural University, Junagadh 362 015, India e-mail: ryadav61@gmail.com



Nurturing Families Around the World:
Building a Culture of Peace. Catherine
Bernard and John J. Shea (eds). SAGE
Publications India Pvt Ltd, B1/I-1
Mohan Cooperative Industrial Area,
Mathura Road, New Delhi 110 044.
2014. xxxiv + 121 pp. Price: Rs 550.

The cover of this book translates the message the book aims to share with its readers. It speaks about the need of having secure and stable relationships within the family. At the time when the world is