economic globalization and financial globalization. The Fordist phase started with the initiation of factory system by Henry Ford in 1914 as the 'assembly-line method, and the eight-hour five dollar a day wage for workers in the manufacture of motor cars'. Fordization led to corporatization of firms, divergence between ownership and control (management) of capital, emergence of financial markets in the form of money market and capital market, etc. Gradually all these led to the emergence of multinational corporations (MNCs).

The post-Fordist period is broadly the period after 1970. The concept of liberalism, role of the state and of the market, the nature of globalization, financialization of the economy and the decline of national sovereignty differentiated post-Fordism from Fordist capitalism. Post-Fordism in turn comprised economic globalization and financial globalization. Flexible production emerged, rampant small firms which were promoted by venture capital firms and MNCs supported further monopolization, services sector grew faster than that of gross domestic product (GDP), the growth of professionals as a proportion of labour-weakened labour unions, and state policy supported MNCs under economic globalization phase of the post-Fordist period.

The growth of economic globalization led to the emergence of financial globalization. This was characterized by financialization of services, and international trade consistently surpassed the growth rate of world economy. But the growth of international financial flows surpassed both international trade and world GDP growth rates. MNCs started focusing more on complex integration strategies covering both developed and developing countries to their advantage. But the crux of financial globalization is the de-linking of international financial flows from international commodity flows aided by free exchange rates. This encouraged hot money movements. This has made independent economic policies by governments difficult. Nations have become variables in the world market. International bodies such as the IMF, World Bank and WTO strive to bring about an ever-increasing integration of the world economic and financial systems. As a result, the capitalist development has been facilitating concentration of wealth in fewer and fewer hands, not confined to nations but to blocs across nations. The identification and analytical description of distinct phases in the growth of capitalism is the hallmark of Suresh's prudent analysis.

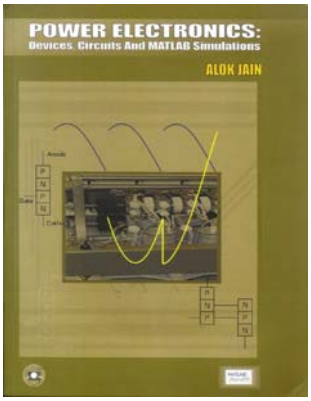
How each of these distinct phases of capitalism functioned has been dealt with in chapter 7. According to Suresh, capitalism is subjected to far greater changes in the course of its existence than pre-capitalist systems so much so that it has been sub-divided into sub-epochs, which are different in terms of size of the enterprise, form of business organization, work organization, nature of financial system, nature of globalization, and role of the government. But the question is why has the nature of capitalism changed from time to time? Suresh traces the source of problems of capitalism, which led to a consistent change in its form, to the commodification of economic life (in chapter 8). Commodity production under capitalism has its sole emphasis on exchange value, on the market as the governing principle of the economy. The problem most commonly associated with capitalism is that of business cycles, of recurring depression and crises in production and employment.

Another dimension of capitalism is what is known as internationalization – worldwide spread of capitalism. While identifying the phases of internationalization, Suresh focuses on its current phase, namely financial globalization (in chapter 9). This phase is characterized by, among others, international flows of finance capital in the form of capital as finance. It is globalization of finance in the form of 'hot money' flows. He contends that globalization of the world economy is synonymous with globalization of capitalism. However, he concludes that less developed countries have not been enveloped in the world's globalized economy and therefore globalization has hardly benefited them. The benefits of growth due to globalization have accrued more to the First World than to the Third World. In the final chapter, based on Marxist view, Suresh identifies imperialism as the highest stage of capitalism which would ultimately give way to socialism. Imperialism is capitalism in which dominance of monopolies and finance capital is established. In the process, the economic and hence political sovereignty of every nation has weakened, and Third World countries suffered more on this account.

Overall, Suresh's analysis of 'evolution of capitalism' raises pertinent issues for safeguarding the development interests of developing countries, particularly the vulnerable sections within. However, whether policy makers will be able to respond to this 'wake-up call' or will further strengthen 'global monopoly powers' is an altogether different issue. The book is well-structured, deeply analysed and discusses the implications of changing phase of capitalism comprehensively. The limitation, if at all, can be found in some of the repetitive statements relating to the features of different phases of capitalism, which to some extent was unavoidable. Finally, economics students will gain substantially by reading this book.

M. H. BALA SUBRAHMANYA

Department of Management Studies,
Indian Institute of Science,
Bangalore 560 012, India
e-mail: bala@mgmt.iisc.ernet.in



Power Electronics: Devices, Circuits and MATLAB Simulations. Alok Jain. Penram International Publishing (India) Pvt Ltd, B-20, Bussa Udyog Bhavan, T. J. Road, Sewree, Mumbai 400 015. 2010. xiv + 504 pp. Price: Rs 315.

This book on power electronics covers a wide spectrum of power electronic topics and primarily addresses the undergraduates and to some extent post-graduates of the electrical engineering group. The book aims to exhort with the aid of the popular proprietory MATLAB environment. It comes with a CD that includes MATLAB programmes for the students to use and learn.

The book is divided into ten chapters. It starts with a review of basic electrical principles in the first chapter. The second chapter focuses on the power semiconductor devices discussing the static and dynamic characteristics of the various devices that include the diode, transistor and thyristor families. The third chapter discusses some general methods and circuits for triggering and/or driving some popular power semiconductor devices. A major portion of this chapter is dedicated to trigger and gate control circuits of the thyristor family. However, a section discusses briefly the gate drive principles of the more popular MOSFETs and IGBTs. The fourth chapter explains the commutation methods for the thyristor family of devices. A section in this chapter also devotes to issues of protection of devices by discussing briefly the snubber circuits and gate protection circuits. The fifth chapter is on AC–DC converters giving an analytic treatment of uncontrolled rectifiers. The discussion is primarily on single phase and three phase diode rectifiers supplying to a resistive or resistive–inductive load. The sixth chapter focuses on the controlled rectifiers like the half wave controlled, full wave controlled and three phase controlled rectifiers. Dual converter and force commutated controlled rectifiers are also discussed. The seventh chapter is devoted to inverters or DC–AC converters. This chapter introduces the reader to the single phase and three phase topology. A brief discussion on the pulse width modulation concept for controlling the inverter output voltage is also included. Chapter eight discusses DC–DC converters. A section is devoted to classification of choppers. The last two sections are extension of the chopper concept to non-isolated and isolated switched mode DC–DC converters. Chapter nine is devoted to AC–AC converters with discussions on phase angle control and cycloconverters. Chapter ten is entirely devoted to power electronic applications. This chapter is a collection of circuits related to power electronic applications with brief descriptions for each application. At the end of every chapter except the first, the book provides few review problems to work out. The appendix contains some useful information like Fourier Series, Device temperature control and heat sinks, power semiconductor device specifications, safe operating area, circuit breakers and a brief note on device testing.

At the outset, the book appears comprehensive trying to address many power electronics topics. However, the discussions in the chapter treat the various topics primarily keeping the undergraduate students in mind. This is a good book for the undergraduate students. There are many positives in this book. It gives a treatment which emphasizes a practical viewpoint at the same time including sufficient analysis for the new student in this area to appreciate. There are many solved examples that provide a measure of confidence to the students in learning the subject. At the end of every chapter, the author has also provided quite a few review problems for the readers to exercise their thoughts. The book includes a good collection of interesting power electronic application towards the end (chapter 10), that will interest many readers. However, on the negative aspect, the book does not cover many topics to a great depth as required for the post-graduate students or a practising engineer. Chapter three is rather weak on drive circuits for BJT, MOSFETs and IGBTs which are the workhorses of the power electronic industry. There is overemphasis on the thyristor family as is evident from reading chapters 3 and 4. The chapter on diode rectifiers (chapter 5) does not address the capacitive load which is rather ubiquitious in most power electronic equipments. The topic on DC–AC converters (chapter 7) is also rather weak. The treatment of pulse width modulation is brief. Current topics such as space vectors and space vector PWM which are most popular in today's DC–AC converters should have been addressed. Not withstanding the negatives mentioned, the book has a lot of positives that the reader will be able to learn and imbibe. Overall, this book is well written. The book uses MATLAB as the platform for simulation throughout the book. However, it may be interesting to note that the reader may also use the programs given in the book (almost as is) with an open source platform called OCTAVE.

L. UMANAND

Centre for Electronics Design and Technology,
Indian Institute of Science,
Bangalore 560 012, India
e-mail: lums@cedt.iisc.ernet.in