**Statistics on Science and Technology in Europe: Data 1985–1999.** Office for the Official Publications of the European Communities, L-2985 Luxembourg. 2001. 174 pp. ISBN: 92-894-0176-1. Price: Euro 35.

In March 2000, at the Summit meet held at Lisbon, the European Council set itself the objective of making Europe the most competitive and dynamic knowledge-based economy, capable of sustainable economic growth with more and better jobs and greater social cohesion. Such systematic policy support needs both high-quality information on science and technology (S&T) and relevant analysis. That is precisely what this book under review provides.

This publication, produced by Eurostat, goes far beyond the usual statistics on R&D expenditure, R&D personnel, government R&D appropriations, and patents. For the first time, Eurostat has included data on innovation, employment in high technology sectors, and human resources in S&T. In addition, a separate chapter is devoted to future directions for the development of a new generation of S&T statistics.

All the information provided is based on data supplied by the Member States concerned, the Research Directorate General of the European Commission, the European Patent Office, and the OECD. In all, there are 45 tables, 79 figures and 5 maps. Wherever complete time series data are not provided (for want of space), one can find them in the CD-ROM version of this publication and in Eurostat's reference database, New Cronos.

The book is divided into three parts: research and development (4 chapters), knowledge growth and innovation (3 chapters), and looking to the future (chapter 8). Comparisons are made not only among the EU-15 countries, but also with Norway, Iceland, Japan and USA, and in some cases among regions of EU-15 countries.

In the past six or seven years, considerable advances have occurred in the science indicators movement. Both the European Communities and the OECD have contributed to these advances in no small measure. Till recently, the linear model of innovation [Research → Invention → Innovation → Diffusion] was thought adequate, but it is now realized that technology and innovation occur via much more complex processes. Technological innovation is no longer seen merely as an appendix to research; it is now seen as a complex interactive phenomenon that results from a mixture of knowledge and market requirements. It is therefore necessary for S&T indicators to reflect not only the economic but also the social impacts of S&T. This publication recognizes that S&T statistics should take these changed perceptions into account. It is time for going beyond the *Frascati Manual*, first produced in 1963, providing guidelines for collection of R&D statistics.

This book does not provide publication and citation indicators, nor does it cover international collaboration, perhaps because these are covered by the European Report on Science and Technology Indicators.

This reviewer is unable to appreciate why the European Communities and Eurostat are reluctant to use the ISO Standard two-letter abbreviation for countries, especially when they have used the two-letter country abbreviations when referring to the currencies of different countries.

On the whole, this is an admirable document, professionally compiled. Both the data and analysis are excellent. I recommend it to science policy analysts.

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**The Amber Forest: A Reconstruction of a Vanished World.** George Poinar Jr. and Roberta Poinar. Princeton University Press, 41, William Street, Princeton, New Jersey 08540, USA. 1999. 239 pp. Price: US$ 19.95/£13.95.

Scientific reconstruction of the past has helped human beings understand not only their origin and evolution, but also their position in the biological hierarchy. While a good deal of the prehistoric biodiversity on earth has vanished without trace, some of it has been preserved by a host of nature's 'curators', that after millions of years, humans have been able to reclaim and study them. Amber has proved to be one of nature's best curators and amber fossils have provided the best insights for reconstructing the prehistory of tropical forest ecosystems.

In *Jurassic Park*, amber fossils provided the key to bringing dinosaurs back to life. Scientists in the movie extracted dinosaur blood from mosquitoes preserved for millions of years in amber and used the blood's DNA to revive creatures that terrified audiences around the globe! In the book under review, George and Roberta Poinar use amber for a similar act of revival. They however, bring back an entire tropical forest ecosystem – one that prevailed on the Island of Hispaniola (Caribbean/ Dominican Republic) some 15 to 45 million years ago.

In the tropical forests of Central and South America and Africa live species of leguminous trees, popularly called 'algarrobo'. Algarrobo trees produce a resin from glands that occur in their petals, leaves, fruits, branches and trunks. Although the purpose of this resin is a subject of much speculation, once hardened, the droplets turn into amber, the much sought-after gem.

One species of algarrobo tree, viz. *Hymenea protera*, now extinct, dominated the canopy of the Caribbean forests 15–45 million years ago. This tree, thanks to its abundance and copious amount of amber that each tree produced, has singly trapped and preserved, in the most spectacular manner, a wealth of earth's prehistoric biodiversity. Including leaves and floral parts of its own kind, the algarrobo tree has preserved a few hundred species of organisms such as fungi, bryophytes, flowering plants, nematodes, mites, spiders, insects (predominantly ants), amphibians, reptiles, birds (feathers) and mammals (hair).

In its first chapter, the book vividly describes the process of formation of amber and how organisms get trapped in it, how amber gets fossilized and how it is obtained from mines. Organisms preserved in amber retain their original form and colour pattern, making identification to the level of genera possible. Further, it is apparent that the animals were entombed in the flowing resin