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0521587352 - Science, Technology and Society: An Introduction - Martin Bridgstock,  
David Burch, John Forge, John Laurent and Ian Lowe

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## SCIENCE, TECHNOLOGY AND SOCIETY

This book provides a comprehensive introduction to the human, social and economic aspects of science and technology. It examines a broad range of issues from a variety of perspectives, using examples and experiences from Australia and around the world. The authors present complex issues in an accessible and engaging form. Topics include the responsibilities of scientists, ethical dilemmas and controversies, the Industrial Revolution, economic issues, public policy, and science and technology in developing countries. The book ends with a thoughtful and provocative look towards the future. It includes extensive guides to further reading, as well as a useful section on information searching skills. This book will provoke, engage, inform and stimulate thoughtful discussion about culture, society and science. Broad and interdisciplinary, it will be of considerable value to both students and teachers.

Martin Bridgstock, David Burch, John Forge, John Laurent and Ian Lowe are all in the Faculty of Science and Technology at Griffith University, Queensland, where they have been teaching an introductory course in science, technology and society for upwards of fifteen years. All are highly respected in the field as researchers, teachers and writers, and between them they have published over a dozen books and 500 articles.

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# SCIENCE, TECHNOLOGY AND SOCIETY

An Introduction

MARTIN BRIDGSTOCK, DAVID BURCH,  
JOHN FORGE, JOHN LAURENT  
AND IAN LOWE



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DAVID BURCH is a political scientist and is currently senior lecturer and Director of the Science Policy Research Centre at Griffith University. He is the author of *Overseas Aid and the Transfer of Technology* (1987), an editor of *Globalization and Agri-Food Restructuring* (1996), and has published numerous articles on aid and on technology and rural social change in Australia and the Third World.

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## *Preface*

This book sprang from two different sources, both related to our positions as academics teaching Science, Technology and Society in the Faculty of Science and Technology at Griffith University. In the first instance, the imperatives of providing undergraduate students with a broad view of the relationships between the sciences, technology and the larger society seem to become more pressing as the years go by: industrial empires rise and fall, computerisation transforms the nature of work, and biology cuts ever closer to our concepts of who we are and why we are here. As a society, we have a fairly simple choice. We can ignore these changes and attempt to cope with them as they appear. Or we can seek to understand what is happening and to exert some measure of control. Our view is clear: we favour the latter option. The second reason for writing the book was the need to fill a gap in the market. Although many excellent books and papers exist for our area, we have not found a single work which covers the material we want students to understand, at the level which seems appropriate. So, after a good deal of thought, we decided to write our own.

At its most basic level, this book seeks to show undergraduate students (and first-year students in particular) what science, technology and society is all about. It presupposes no study in or knowledge of the area, and is pitched at a level which most students should find clear and comprehensible. However, the book also recognises that students often become interested in some aspect of Science, Technology and Society and wish to pursue studies at a more advanced level. To assist with this, there is an extensive further reading section at the end of each chapter and an appendix concerned with seeking further information on any topic. Because of these, we hope that the book will be of use to many people beyond the introductory level. Naturally, we have not covered

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everything. However, we have tried to indicate the neglected areas and where interested students may go for more information.

From the time we began writing to the time the book appeared, more than two years elapsed. Inevitably, in a project of this complexity, many misunderstandings and errors occurred. We are grateful to the staff of Cambridge University Press Australia – notably Philippa McGuinness and Jane Farago – for their helpful and constructive efficiency. Our thanks also go to Janet Mackenzie, the copy editor, who has played a major part in giving the book greater clarity and coherence. We would also like to express our thanks to the Royal Australian Chemical Institute for permission to reproduce their ethical code in Chapter 4, and the National Australian Bank *Quarterly Summary* for permission to reproduce two diagrams in Chapter 7.

MARTIN BRIDGSTOCK, DAVID BURCH, JOHN FORGE,  
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