Contents

How to use this book

Defining the problem 4

Types of source 6
Access to sources

A routine for finding and using information

Choosing sources of information and their guides 6

Guides to sources 9
Chart 1. Information sources and guides versus coverage 10
Chart 2. Routes from guides to sources of information 12
Chart 3. Information required versus sources and guides 13
i
People 14
Guides to people 15
Organizations 19
Commercial organizations 20
Guides to commercial organizations 20
Educational organizations 25
Guides to educational organizations 25
Official organizations 28
Guides to official organizations 29
Professional and research organizations 32
Guides to professional and research organizations 33
The literature 37
Structure of scientific and technical literature 38
Use of the literature (summary) 39
Guides to the literature 39
General guides 40
Subject guides 42
Abstracting and indexing journals 46
Guides to abstracting and indexing journals 54
Chart 4. Subject coverage of some better-known abstracting and indexing
journals 57

Bibliographies 56 General bibliographies Subject bibliographies Guides to bibliographies 60 Books 61 Guides to books 62 Conference proceedings 65 Guides to conference proceedings 66 Government publications 69 Guides to government publications Journal articles 74 Guides to journal articles 75 Newspapers and newspaper articles 76 Guides to newspapers and newspaper articles 76 Patents, trade marks, trade names and industrial designs 78 UK patent specifications Non-UK patents 82 Guides to patents (printed and online) 84 Chart 5. Searching for information in UK patents Why and how to apply for a UK patent 91 Chart 6. A simplified guide to the UK patenting process Trade marks and guides 93 Trade names and guides 93 Industrial designs and guides Periodicals 94 Guides to periodicals 97 Reference material 101 Data compilations 102 Dictionaries 106 Directories 109 Encyclopaedias 109 Handbooks 110 Mathematical tables 112 Thesauri 113 Guides to reference material 115 Reports 117 Guides to reports Reviews and review serials 125 Guides to reviews and review serials 126 Standards 127 Guides to standards Theses and dissertations 133 Guides to theses and dissertations 134 Trade literature 136 Guides to trade literature **Information services** 139 Computerized information services Online information services 140

Chart 7. Online information services in outline 141

Databases, databanks, files and their producers Choosing databases 148 Hosts, service suppliers, vendors and spinners 149 Choosing hosts 157 Chart 8. Popular large databases versus hosts for online searching 158 Setting up an online information service Why go online? 159 How to get online 160 Equipment 160 Software Telecommunications 163 Chart 9. Telecommunications links for online access 164 Agreements with hosts 166 A typical online session Sample searches Publicizing the service 171 Running the service 171 Advice, guidance and training 171 Checklist 172 The future 173 Information bureaux, brokers and other services Regional services, cooperatives and networks 181 Videotex services 182 Information transmission systems Guides to information services and suppliers 186 Chart 10. Subject specialities of selected online databases 192 Searching: the literature and computer databases General principles Choosing search terms 213 Manual versus computer searching 216 217 Literature searching The plan of action 217 Familiarization 218 Choosing which sections to search 219 Choosing search terms 219 Searching procedures 220 Recording what you do and what you find 223 Computer database searching The plan of action 227 Familiarization Choosing which fields to search 229 Choosing search terms 230 Searching procedures 231 Recording and preserving searches 242 Guides to searching 243 Interpretation of references 243 Obtaining literature in a usable form

Library systems and services 245

Using a library 246

Catalogues 247

Classification schemes 249

Chart 11. Synopses of library classification schemes covering the two main areas of interest to scientists and engineers 252

Library facilities and services 253

Inter-library loans 254

Microforms 255

Photocopying 255

Translations 257

Principal libraries in the UK 258

British Library Science Reference and Information Service (SRIS) 259 British Library Document Supply Centre (BLDSC) 259

Guides to libraries 260

Guides to the book trade 263

Organizing and presenting information 266

Objectives 266

Gathering and recording information 268

Evaluating references 269

Storing references 269

Reference extension 271

Evaluating documents 272

Storing documents 273

Communicating information 274

Report writing 274

Giving a lecture 280

Current awareness 284

Scanning current literature 284

Current-awareness publications 285

Invisible colleges 287

Conferences (symposia, seminars, meetings), exhibitions etc. 288

Guides to conferences, exhibitions, etc. 288

Services 290

Appendix: Helping the library user 291

Personal assistance 291

Library signposting 292

Library guides 293

Point-of-use guidance 294

Library talks and tours 295

Library courses and exercises 295

Audiovisual aids 298

Computer-assisted instruction 300

Further reading 300

Index 302