Applied electrostatic precipitation, K.R. Parker (Ed.), Blackie, London, 1997, ISBN 0 1514 02664 xvi + 521 pp., £125.00

Applied Electrostatic Precipitation is a book which presents just about everything there is to know about the technology of particle removal from moving gas streams. The attention to detail is impressive, with the text clearly combining quite complex mathematical treatments with the practical implications of real system behaviour. Contributions are included from authors who are internationally recognised as experts in their field, and the editor has successfully knitted together this vast source of information into one self-contained volume. The style of writing throughout makes for easy reading, and the generous use of illustrations and graphical data elevates the overall status of this book to an almost encyclopaedic source of information; both as an introduction to and for the more advanced appreciation of, the world of electrostatic particle precipitation. It is all here; beginning with a gentle introduction to the basic theory of ion production and logically following through with basic explanations of particle charging and particle deposition phenomena. On delving deeper into the text, the reader is guided through the more complex considerations of aerodynamic effects and the implications of particle size and shape. A very usetul section is devoted to the methods of upgrading existing precipitator efficiency, with an in-depth treatment of flue gas conditioning being an especially valuable contribution. Energization modes and computer modelling are also given comprehensive coverage, and the tour ends with sections on commissioning and future developments. Each chapter is supported by a comprehensive list of references, ranging from interesting and useful archive material right through to current relevant research publications from around the world.

This is essential reading both for the novice seeking a concise, easy to read introduction to the subject, and the specialist, who would equally find this book very informative as an up to date reference manual. It is loaded with information, is easy to read, and is a high quality presentation. The editor and the authors are to be congratulated. Ten out of ten!

John F. Hughes

Elements of Chemical Process Engineering, D.S.J. Jones, John Wiley and Sons Ltd, Chichester, 1996, 528 pages, numerous figures, £120.00, ISBN 0 471 96154 X

The book *Elements of Chemical Process Engineering* aims at the young process engineer starting his/her professional career after graduation, most likely the baccalaureate. To ease this start, the author summed up his own experience gained in four decades working in the process industry focusing on practical and quick methods. These methods relate to the calculation and design of common process units as, for instance, vessels, columns, pumps, compressors, heaters and so on. In addition, utility plants and off sites are dealt with, which very often are missing in related books. Costs and