

This article was downloaded by:

On: 25 January 2011

Access details: *Access Details: Free Access*

Publisher *Taylor & Francis*

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



Journal of Sulfur Chemistry

Publication details, including instructions for authors and subscription information:

<http://www.informaworld.com/smpp/title~content=t713926081>

A review of: "J. L. Hudson and G.T. Rochelle: Flue Gas Desulfurization, American Chemical Society, Washington, D.C., 1982, 432 p., \$41.95."

Roland Mayer^a

^a Technische Universität Dresden Sektion Chemie, Dresden, German Democratic Republic

To cite this Article Mayer, Roland(1983) 'A review of: "J. L. Hudson and G.T. Rochelle: Flue Gas Desulfurization, American Chemical Society, Washington, D.C., 1982, 432 p., \$41.95."', *Journal of Sulfur Chemistry*, 3: 4, 169 – 170

To link to this Article: DOI: 10.1080/01961778308082451

URL: <http://dx.doi.org/10.1080/01961778308082451>

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: <http://www.informaworld.com/terms-and-conditions-of-access.pdf>

This article may be used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

BOOK REVIEW

J. L. Hudson and G. T. Rochelle: *Flue Gas Desulfurization*, American Chemical Society, Washington, D.C., 1982, 432 p., \$41.95.

This book contains 18 papers presented at the “Symposium on Advances in Flue Gas Desulfurization” at the ACS National Meeting in Atlanta 1981. The removal of sulfur from coal prior to combustion is increasingly important, as in all countries emission standards for sulfur dioxide become more stringent. But up till now flue gas desulfurization seems to be the only commercially significant technology for abatement of sulfur dioxide from fossil fueled power plants. In spite of the effort to develop a suitable and practicable technology, all over the world flue gas desulfurization is still not a mature technology.

The 18 chapters in this volume present recent advances in the science and technology of flue gas desulfurization processes with emphasis on fundamental work in desulfurization.

1. **L. Brewer:** Thermodynamic Values for Desulfurization Processes, 39 pages, 116 references.
2. **B. R. Staples:** Reliable Data for Flue Gas Desulfurization Processes, 16 pages, 11 references.
3. **G. M. Rosenblatt:** Use of Pitzer's Equations to Estimate Strong-Electrolyte Activity Coefficients in Aqueous Flue Gas Desulfurization Processes, 18 pages, 24 references.
4. **Pui K. Chand and G. T. Rochelle:** Limestone Dissolution: Effects of pH, CO₂, and Buffers Modeled by Mass Transfer, 24 pages, 31 references.
5. **F. B. Meserole, L. Glover, and D. A. Stewart:** Studies of the Major Factors Affecting Magnesium Limestone Dissolution, 14 pages.
6. **B. Meyer, M. Rigdon, T. Burner, M. Ospina, K. Ward, and K. Koshlap:** Thermal Decomposition of Sulfite, Bisulfite, and Disulfite Solutions, 14 pages, 20 references.
7. **S. G. Chang, D. Littlejohn, and N. H. Lin:** Kinetics of Reactions in a Wet Flue Gas Simultaneous Desulfurization and Denitrification System, 26 pages, 35 references.
8. **T. G. Braga and E. Connick:** Kinetics of the Oxidation of Bisulfite Ion by Oxygen, 20 pages, 17 references.
9. **D. B. Nurmi, J. W. Overman, J. Erwin, and J. L. Hudson:** Sulfite Oxidation in Organic Acid Solutions, 18 pages, 12 references.
10. **J. Erwin, C. C. Wang, and J. L. Hudson:** A Model of Oxidation in Calcium Sulfite Slurries, 30 pages, 32 references.
11. **J. C. Terry, J. B. Jarvis, D. L. Utley, and E. E. Ellsworth:** Laboratory Investigation of Adipic Acid Degradation in Flue Gas Desulfurization Scrubbers, 22 pages, 5 references.
12. **G. T. Rochelle, T. Weems, J. Smith, and M. W. Hsiang:** Buffer Additives for Lime/Limestone Slurry Scrubbing, 24 pages, 39 references.
13. **Shih-Chung Wang and D. A. Burbank:** Adipic Acid-Enhanced Lime/Limestone Test

Results at the EPA Alkali Scrubbing Test Facility, 40 pages, 10 references.

14. **R. H. Borgwardt:** Energy Requirements for SO₂ Absorption in Limestone Scrubbers, 18 pages, 15 references.
15. **J. A. Valencia:** The Limestone Dual Alkali Process for Flue Gas Desulfurization, 24 pages, 3 references.
16. **J. T. Yeh, R. J. Demski, and J. I. Joubert:** Control of SO₂ Emissions by Dry Sorbent Injection, 20 pages, 14 references.
17. **B. W. Farnum, R. C. Timpe, and S. A. Farnum:** Characterization of Volatile Organic Components of Nahcolite and Troma, 12 pages, 15 references.
18. **T. A. Burnett and W. L. Wells:** Conceptual Design and Economics of an Improved Magnesium Oxide Flue Gas Desulfurization Process, 34 pages, 6 references.

In addition this excellent book contains a very useful index with more than 900 entries. The book is of value to all chemists and specialists who needs to keep up with the new development, literature, and current research in flue gas desulfurization processes.

Roland Mayer
Technische Universität Dresden
Sektion Chemie
DDR-8027 Dresden
German Democratic Republic