

physical chemistry of adsorption, and the lack of worked out examples and homework problems, I would not use it as a text at the graduate or undergraduate level. However, this book should be read by anyone faced with the problem of implementing an adsorption process to remove organic materials from wastewater.

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Proceedings of the Second International Conference on Foundations of Computer-Aided Process Design

Edited by Arthur W. Westerberg and Henry H. Chien, CACHE, Ann Arbor, 1984, 1042 pp., \$37.50.

This volume contains the proceedings of FOCAPD-83, the second in a series of international conferences on process design. Like the first such conference held three years earlier, this meeting was designed as a forum for academic and industrial experts with interests in both re-

search and applications. The intense week-long conference was organized into nine sessions, each containing one or two rather detailed, invited presentations followed by a lengthy and often lively discussion period. The proceedings contain all 22 papers presented at the conference, four additional discussion papers, and summaries of the discussion sessions.

In comparison with the first conference, which was review-oriented and emphasized numeric analysis, thermodynamics, process synthesis, and other somewhat theoretical aspects of design and simulation, the subject areas chosen for FOCAPD-83 were more applied. Topics covered included expert systems for design, computer-aided systems engineering, database technology applications, equation-oriented and simultaneous modular alternatives to sequential modular flowsheet simulation and optimization, operability, resiliency, and flexibility, and batch design and scheduling, as well as recent research on specific modeling techniques including collocation, differential homotopy-continuation, hybrid fixed-point algorithms, algorithm

synthesis, nonlinear algebraic solution techniques, two-phase reactor modeling, and the structure and efficient use of thermodynamic models within design calculations. The proceedings are organized into sessions exactly as the conference was, even including the spill-over eighth session at which additional papers had been presented from several topics covered in other sessions. For clarity in the proceedings, these papers might have been better grouped with the topics to which they were related.

Within the defined scope of FOCAPD-83, the detailed presentations from this highly successful conference will provide researchers, practitioners, and educators with a good assessment of the current state of the art in a number of important process design areas. These papers, broadened further by the discussion summaries, should give readers an understanding of the problems now being faced and solved, and an outlook of challenging directions for continued research.

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