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Diffusion and Convection in Porous Catalysts

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(AIChE Symposium Series Volume 84, No. 266)

This Symposium Series volume presents papers from the 1987 AIChE Annual Meeting in New York City, November 15-20. It contains a cross section of both theoretical and experimental papers from academia and industry aimed at a more encompassing understanding of intra-catalyst transport mechanisms.

CONTENTS

Experimental Measurements of Hydrogen and CO Surface Diffusion on Rhodium. A Frictional-Flow Model for *A Priori* Calculation of Adsorbed-Phase Transport on a Uniform Surface. Simulation of Reactant Diffusion on Two-Dimensional Surfaces. Surface Diffusion in Random Bed of Fibers. Correcting Porosimetry Data to Obtain the Actual Pore and Throat Size Distributions. Configurational Effects on Hindered Diffusion in Micropores. Hindered Transport in Disordered Porous Media with Connected Pores. The Determination of the Size and Conformation of Bitumen Fractions by Hydrodynamic Measurements. An Investigation of Asphaltene Diffusion in Model Porous Membranes. Measurement of Effective Diffusivities of Gases in Microporous Coal Chars by Nonisobaric Pulse Gas Chromatography. Interpretation of Data from a Pulse Reactor. Convection, Diffusion and Reaction in a Large-Pore Catalyst Particle. Effective Diffusivity Measurement Through an Adsorbing Porous Solid.

1988 96 pp. ISBN 0-8169-0458-8 LC88-34405
Pub S-266 AIChE Members \$20 Others \$35

AIChE Journal (ISSN 0001-1541) is published monthly by the American Institute of Chemical Engineers, 345 E. 47th St., New York, NY 10017. Manuscripts should be submitted to Editor Morton M. Denn, at the Dept. of Chemical Engineering, University of California, Berkeley, CA 94720, Phone (415) 643-6591. The statements and opinions in the *AIChE Journal* are those of the contributors, and AIChE assumes no responsibility for them. Annual subscription rates: \$295 for nonmembers, \$40 for members; outside U.S., add \$15 for postage. Single copies: \$30; outside U.S., add \$2 for postage. Second-class postage paid at New York, NY and additional mailing offices. Copyright 1988 by the American Institute of Chemical Engineers. Subscribers are requested to give prompt notification of any change of address. Postmaster: Send changes of address to *AIChE Journal*, 345 East 47th St., New York, NY 10017.

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