CONTENTS

Papers	Page
HIGH-ALTITUDE MULTIPLE-VEHICLE EMISSION TESTS by Adolph Zulian and Gilbert A. Bonforte	1
EVALUATION OF ACTIVATED SLUDGE THICKENING THEORIES by Richard I. Dick and Benjamin B. Ewing	9
THE EAST SPEAKS by Maurice K. Goddard	31
IS THERE AN EAST-WEST WATER CONFLICT by Floyd E. Dominy	41
THE EAST-WEST WATER CONTROVERSY: BOTH SIDES ARE PARTLY RIGHT by Ray K. Linsley	49
CATTLE WASTES—POLLUTION AND POTENTIAL TREATMENT by Raymond C. Loehr and Robert W. Agnew	55
PROGRESS IN CONTROL OF VEHICLE EMISSIONS by John H. Ludwig	73
A HEURISTIC AID FOR THE DESIGN OF SEWER NETWORKS by Jon C. Liebman	81
SIMULATION OF THE TRICKLING FILTER PROCESS by Walter J. Maier, Vaughn C. Behn, and Charles D. Gates (over)	91

This Journal is published bi-monthly by the American Society of Civil Engineers. Publications office is at 2500 South State Street, Ann Arbor, Michigan, 48104. Editorial and General Offices are at 345 East 47th Street, New York, N. Y. 10017. Subscription price is \$8.00 per year with discounts to members and libraries. Second-class postage paid at Ann Arbor, Michigan. EM, HY, SA, SM, ST.

DISCUSSION

Proc. Paper 5358

ESTUARINE DISTRIBUTION OF NONCONSERVATIVE SUBSTANCES, by Donald J. O'Connor (Feb., 1965. Prior Discussion: Oct., 1965).	
closure	115
PREDICTING TEMPERATURES IN RIVERS AND RESERVOIRS, by William H. Delay and John Seaders (Feb., 1966. Prior Discussion: Oct., Dec., 1966). closure	116
PRECIPITATION OF IRON IN AERATED GROUND WATER, by Mriganka M. Ghosh, John T. O'Connor, and R. S. Engelbrecht (Feb., 1966. Prior Discussion: Oct., Dec., 1966).	118
DICHROMATE VERSUS CERIC SULPHATE IN COD DETERMINA- TIONS ^a , by M. A. El-Dib and F. M. Ramadan (Apr., 1966. Prior Discussion: Dec., 1966). by Ajit K. Basu	120
OPTIMIZING SAMPLING INTERVALS IN TIDAL ESTUARIES,	
by Charles G. Gunnerson (Apr., 1966. Prior Discussion: Feb., 1967).	121
EXPERIMENTAL EVALUATION OF SAND FILTRATION THEORY ^a , by David M. Fox and John L. Cleasby (Oct., 1966. Prior Discussion: June, 1967). by Arun K. Deb	124
THE RUHR AND THE DELAWARE ^a , by Allen V. Kneese (Oct., 1966. Prior Discussion: Apr., 1967).	121
by Walter A. Lyon	126
ORTHOKINETIC FLOCCULATION IN WATER PURIFICATION ^a , by Howard S. Harris, Warren J. Kaufman, and Ray B. Krone	
(Dec., 1966). by Peter E. Hale	127 128
MATHEMATICAL MODEL FOR WATER POLLUTION CONTROL STUDIES ^a , by Alvin S. Goodman and William E. Dobbins (Dec., 1966. Prior Discussion: Apr., 1967).	
by David H. Marks, Erhard F. Joeres, and Jon C. Liebman by Irving Grossman, Michael A. Mastropietro, and Henry Rivet	131 135

 $^{^{\}rm a}$ Discussion period closed for this paper. Any other discussion received during this discussion period will be published in subsequent Journals.

	Page
IMPOUNDMENT DESTRATIFICATION BY MECHANICAL PUMPING ^a , by William H. Irwin, James M. Symons, and Gordon G. Robeck (Dec., 1966. Prior Discussion: Apr., 1967). by Heinz Bernhardt	136 139 141
TIME-SERIES ANALYSES OF WATER-QUALITY DATA ² , by Robert V. Thomann (Feb., 1967).	
by Rafael G. Quimpo	144

Ŧ

^a Discussion period closed for this paper. Any other discussion received during this discussion period will be published in subsequent Journals.