CONTENTS

PREFACE	vii	
Hydraulic Transport of Bulky Materials	1	Iraj Zandi
Think Two-phase	35	S. L. Soo
The Role of Lift in the Radial Migration of Particles in a Pipe Flow	39	M. T. Lawler and P. C. Lu
Particle and Fluid Velocities of Turbulent Flows of Suspensions of Neutrally Buoyant Particles	59	C. P. R. Roberts and J. F. Kennedy
Some Phase-separation Phenomena in Iso-density, Two-phase Flows	73	George Bugliarello and George Yanizeski
Transient Flow of Solid-Liquid Mixtures in Pipes	87	D. J. Wood and T. Y. Kao
Transport of Solids at Low Concentration in Horizontal Pipes	101	Moye Wicks
Heterogeneous Flow of Heterogeneous Solids	125	H. A. Babcock
Hydraulic Conveyance of Solids in Pipes	149	J. W. Hayden and T. E. Stelson
Pipeline Transportation of Coke in Petroleum Products	165	R. L. Every, R. C. Hughes, and L. W. Koch
On Two-phase Pressurized and Unpressurized Flow: Behaviour Near Deposition Points	175	K. C. Wilson and A. Brebner
The Use of Heavy Media in the Pipeline Transport of Particulate Solids	187	M. E. Charles and R. A. Charles
Hetero-Homogeneous Solids/Liquid Flow in the Turbulent Regime	199	E. J. Wasp, T. C. Aude, R. H. Seiter, and T. L. Thompson

1.00

v

CONTENTS		
Economic Transport of Digested Sludge Slurries	211	B. C. Raynes and H. F. Larson
Sanitary Sewage Transport Velocity	221	M. B. McPherson, L. S. Tucker, and M. F. Hobbs
Head Loss in Spiral Solid–Liquid Flow in Pipes	227	CL. Chiu and J. J. Seman
A Pneumo-slurry System of Collecting and Removing Solid Wastes	237	Iraj Zandi and John Hayden
Pre-crushing Solid Wastes for Pipeline Transportation	255	S. N. Craig
Types and Costs of Grinding Equipment for Solid Waste Water Carriage	261	Ralph Stone
The Effects of Solids on Centrifugal Pump Characteristics	271	W. A. Hunt and R. R. Faddick
New Solids Pumping Techniques and Analysis	279	D. M. Frazier
AUTHOR INDEX	293	
SUBJECT INDEX	297	