Journal of the Indian Institute of Science, Rangalore 560 012, India

[Section A : Engineering and Technology]

Volume 60

Number 1

January 1978

L

CONTENTS

ORIGINAL PAPERS

Chemical Reaction Engineering

MASS TRANSFER WITH SURFACE REACTION IN ARRAYS OF CYLINDERS AT LOW REYNOLDS AND HIGH PECLET NUMBERS : FLOW PERPENDICULAR TO THE AXIS OF THE CYLINDERS

Venneti M. H. Govindarao 1

Fluid Mechanics

SOME CHARACTERISTICS OF HYDRAULIC JUMPS

1

N. S. Lakshmana Rao and B. S. Thandaveswara 15

TURBULENT WALL JETS

V. Kuppu Rao and M. Inderj^{it} 35

Communication Engineering

SIMULATION OF CO-SINUSDIDALLY MODULATED DIELECTRIC MEDIUM BY

Page

ARTIFICIAL DIELECTRIC AT MICROWAVE FREQUENCIES

S. K. Chatterjee and T. S. Rukmini 47

Differential Equations

SPECIRUM OF A SCHRÖDINGER OPERATOR WITH A CLASS OF DAMPED OSCILLATING POTENTIALS

Annapurna Sarkar 65

Applied Elasticity

VIBRATIONS OF IRREGULAR-SHAPED ORTHOTROPIC PLATES RESTING ON ELASTIC FOUNDATION UNDER INPLANE FORCES

Paritosh Biswas 73

Applied Mathematics

NON-SYMMETRICAL BENDING OF CIRCULAR PLATES HAVING SMALL INITIAL CURVATURE UNDER THE COMBINED ACTION OF LATERAL LOADS AND FORCES IN THE MIDDLE PLANE OF THE PLATES Debabrata Sinha and Sukumar Basuli

87

79

BOOK REVIEW