

**Journal of the Indian Institute of Science
Bangalore 560 012, India**

Volume 76

September–October 1996

Number 5

Special Issue on Laser Research at IISc

Contents

Foreword	505
K. P. J. Reddy and N. M. Reddy	Gain measurements in a shock tube-driven gasdynamic laser 507
A. Selvarajan and R. Balasubramanian	Analysis and applications of beam propagation method and coupled-mode theory 517
Vivek Srinivas	Review of intrinsic and extrinsic optical properties of GaAs quantum wells 535
G. M. Hegde, R. Anandhi, G. Balakrishnan, N. Biswas and S. Umapathy	Structure and dynamics by resonance Raman spectroscopy 543
S. Uma and Puspendu K. Das	Photodissociation dynamics of alkyl iodides: $I^*(^2P_{1/2})$ production in the ultraviolet 555
P. Jayanth and C. K. Subramanian	Photorefractive effect in lithium niobate crystals 565
P. Jayanth, R. Krishna Mohan and C. K. Subramanian	Optical phase conjugate interferometry with a photorefractive crystal 571
B. Raghavendra Prasad and C. K. Subramanian	Molecular gases as Brillouin media for optical phase conjugation : An experimental investigation 577
B. Raghavendra Prasad and C. K. Subramanian	Optical phase conjugation by degenerate four-wave mixing in tetraphenylporphines 589
R. Krishna Mohan and C. K. Subramanian	Optical phase conjugation in azo-dye-doped polymer films using pulsed and CW lasers 603
V. Boopathi and R. M. Vasu	Spatial coherence enhancement through source masking: Spectral modifications introduced by the mask 615
R. Krishna Mohan, P. Jayanth and C. K. Subramanian	Holographic and phase conjugate interferometry with non-linear optical media 621
L. Kameswara Rao	A novel methodology for multistate optical storage 633
G. S. Bhat	Laser in the study of an ohmically heated jet 639
IISc Theses Abstracts	651
Book Reviews	693