

JOURNAL OF THE INDIAN INSTITUTE OF SCIENCE

Volume 66, January–December 1986

Title–Index

- Aeroacoustic analysis of the two-duct reverse-flow perforated elements
MUNJAL, M.L., NARAYANA RAO, K. AND SAHASRABUDHE, A.D. 639
- Biodegradation of dl-synephrine: A novel pathway in *Nocardia* sp. DM1
SATYANARAYANA GANAPATHI RAJU AND VAIDYANATHAN, C.S. 511
- A comparative study of the performance of tufftrided and sursulf-treated low carbon steel gears
KRISHNAMURTHY, S. AND RAMAMOohana RAO, A. 205
- Comparison of stability constants of lead (II)–Schiff base complexes – A polarographic study
SREENIVASULU, R., RAGHAVENDRA RAO, V.S. AND HUSSIAN REDDY, K. 95
- A comparison of three different techniques for optimal allocation of tolerances and clearances in four-bar function generators
MRUTHYUNJAYA, T.S., ANANTHARAMAN, S., UDAYA SURYAN, G.S. AND CHANDRASEKARAN, K. 191
- Design of statistical experiments to optimise the composition of clay-bonded moulding sand mixtures containing organic additives
GADAG, S.P., SUBBA RAO, K.S., MALUR N. SRINIVASAN AND SESHAN, S. 669
- Designing a serrated trough for an oscillating conveyor
KONNUR, V.S. AND PARAMESWARAN, M.A. 213
- Determination of microgram quantities of Co(II) by a polarographic catalytic method
RAMACHANDRA MURTHY, R. AND SURYANARAYANA RAO, V. 337
- Development of an air-gap urea-specific electrode
SHARMA, R.K. 609
- Diel periodicity of benthos in riffle regions of polluted Widawka river, Poland
MARIA GRZYBKOWSKA, DARIA PAKULSKA, HENRYK JAKUBOWSKI AND RAVICHANDRA REDDY, S. 465
- Distribution of *Polyarthra vulgaris* Carlin (Rotifera: Monogonota) in a warm monomictic lake of Kashmir, India
YOUSUF, A.R. AND QADRI, M.Y. 405
- Dynamic arrival routing — a generalized problem and an optimal routing algorithm
LAKSHMANAN, V.S. AND THATHACHAR, M.A.L. 655
- Evaluation of rosin as film coating material for enteric coating
PATHAK, Y.V. AND DORLE, A.K. 549

- Extraction-spectrophotometric determination of traces of mercury (II) with bromide and rhodamine 6G
MUDAKAVI, J.R. AND RAMASWAMY, Y.S. 155
- A general analysis of mass transfer accompanied by multiple equilibrium reactions
BHATTACHARYA, A. AND RAMACHANDRAN, P.A. 583
- Glycol dimercaptoacetate as a new masking agent: Determination of zinc in presence of cadmium
PUROHIT, D.N. 29
- Impact dampers
ADNAN M.J. AL-NAJAFI, VENKATARAMAN, A. AND NAMBU DIRIPAD, K.B.M. 253
- Influence of processing conditions on the properties of investment cast austenitic stainless steel
MARTIN JEBARAJ, P., MALUR N. SRINIVASAN AND SESHADRI, M.R. 385
- Interaction of cesium with Trombay basalt
KHAN, Z.A., SATYA BRAT AND GODSE, V.B. 595
- Interaction of metal ions with pyrimidines
MISHRA, S.K., MISHRA, A.P., MISHRA, V.K. AND YADAVA, K.L. 33
- IR study of ethyl lactate in 3μ region
PARIMALA SOMESWAR, G. AND SUBRAMANYAM, B. 21
- Level-fair derivations in context-free rewriting systems
PARITOSH PANDYA, RANGARAJAN, K. AND SUBRAMANIAN, K. G. 325
- Lipoproteins and lipoprotein lipase in health and disease
PURAN S. BORA, NALINI SRIVASTAVA BORA AND SRIVASTAVA, L.M. 373
- New characteristic polynomial — A reliable index to detect isomorphism between kinematic chains
DUBE, R.K. AND RAO, A.C. 227
- A note on the fecundity of *Amblypharyngodon mola* (Ham.)
RAVI SHANKAR PISKA AND SARALA WAGHRAY 85
- Note on pulsatile viscous flow in a tube of elliptical cross-section
RAMACHANDRA RAO, A. 543
- On chromatic aberration in the cornea
CHAUDHURI, A. AND LAKSHMINARAYANAN, V. 307
- On points of k th absolute continuity
DEB, T.K. AND DE SARKAR, S. 457
- On problems of augmentation of Lagrangians in penalty functions of nonlinear programming
SHIV PRASAD AND MUKHERJEE, R.N. 89
- On the spectral resolution of a differential operator-II
CHAKRAVARTY, N.K. AND SWAPNA ROY PALADHI 127
- Optimized driving mechanisms for oscillatory conveyors
JOSHI, S.K. AND LAKSHMINARAYANA, K. 235
- Planar slider-crank mechanisms adjustable for prescribed dead center positions
NAIK, D.P. AND AMARNATH, C. 247
- A rapid infrared method for measuring hydroxyl value in industrial fatty oils
ABOU EL NAGA, H.H. AND SALEM, A.E.M. 67

- Relative viscosities of metal formates in formic acid
SUBHA, M.C.S., CHOWDOJI RAO, K. AND BRAHMAJI RAO, S. 397
- Seasonal changes in carbohydrate content of three Kashmir lakes
VIR K. KOUL, ZUTSHI, D.P. AND DUBEY, K.P. 475
- Separation and limit classification of special fourth-order differential expression
JYOTI DAS AND JAYASRI SETH 547
- Singularities in a two-fluid medium separated by an inertial surface
KRISHNA KUNDU 521
- Some observations on stress freezing
REDDY, P.V. AND SRINIVASA MURTHY, N. 1
- Some styrene alkyl-methacrylate copolymers as viscosity index improvers
ABOU EL NAGA, H.H., ABD EL AZEIM, W.M., ZANIB FATHY AND SAAD H. IBRAHIM 163
- Spectrophotometric determination of molybdenum (VI) and vanadium (V) using resacetophenone isonicotinoyl hydrazone
MALLIKARJUNA RAO, K., SREENIVASULU REDDY, T. AND BRAHMAJI RAO, S. 39
- Spectrophotometric determination of the stability constants of 4-substituted thiosemicarbazides with Co^{2+} , Ni^{2+} and Cu^{2+} system
SAXENA, S.B. AND AGARWAL, Y.K. 13
- Synthesis, characterisation and structural determination of VO^{2+} , UO_2^{2+} , Cu(II) , Ni(II) , Co(II) , Zn(II) and Cd(II) chelates of *o*-(N-2-pyrrolidimino) ethane sulphonic acid
RANGA, S.P., DAGA, K., SANTWANA GAUR, SUNITA BIHANDARI AND MEHTA, R.K. 603
- Synthesis, characterization and analytical properties of indane-1,2,3-trione monosemicarbazone: Spectrophotometric determination of copper (II) and palladium (II)
GIRIDHARA REDDY, K., HUSSAIN REDDY, K. AND VENKATA REDDY, D. 317
- Thermophysical properties of alkylbenzenechloroethane systems - viscosity and surface tension
PRABHAKAR, J., ASHOK KUMAR, K., NARAYANA SWAMY, V., VENKATESWARA RAO, M. AND PRASAD, D.H.L. 449
- A tractable pair of the Cauchy singular integral equations
CHAKRABARTI, A. 331
- A translation plane of Order 25 with small translation complement
NARAYANA RAO, M.L., KUPPUSWAMY RAO, K. AND VINOD JOSHI 533
- Unsteady flow of dusty visco-elastic liquid between two oscillating plates
MANDAL, G.C., SRIKUMAR MUKHERJEE AND SWAPNA MUKHERJEE. 77

Author Index

- AGARWAL, Y.K.
See Saxena, S.B. and Agarwal, Y.K. 13
- AL-NAJAFI, A.M.J., VENKATARAMAN, A. AND NAMBU DIRIPAD, K.B.M.
Impact dampers 253
- AMARNATH, C.
See Naik, D.P. and Amarnath, C. 247
- ANANTHARAMAN, S.
See Mruthyunjaya, T.S., Anantharaman, S., Suryan, G.S.U. and Chandrasekaran, K. 191

- AZEIM, W.M.A.
See Naga, H.H.A.E., Azeim, W.M. A.E., Fathy, Z. and Ibrahim, S.H. 163
- BHANDARI, S.
See Ranga, S.P., Daga, K., Gaur, S., Bhandari, S. and Mehta, R.K. 603
- BHATTACHARYA, A. AND RAMACHANDRAN, P.A.
 A general analysis of mass transfer accompanied by multiple equilibrium reactions 583
- BORA, N.S.
See Bora, P.S., Bora, N.S. and Srivastava, L.M. 373
- BORA, P.S., BORA, N.S. AND SRIVASTAVA, L.M.
 Lipoproteins and lipoprotein lipase in health and disease 373
- BRAT, S.
See Khan, Z.A., Brat, S. and Godse, V.B. 595
- CHAKRABARTI, A.
 A tractable pair of the Cauchy singular integral equations 331
- CHAKRAVARTY, N.K. AND PALADHI, S.R.
 On the spectral resolution of a differential operator II 127
- CHANDRASEKARAN, K.
See Mruthyunjaya, T.S., Anantharaman, S., Suryan, G.S.U. and Chandrasekaran, K. 191
- CHAUDHURI, A. AND LAKSHMINARAYANAN, V.
 On chromatic aberration in the cornea 307
- DAGA, K.
See Ranga, S.P., Daga, K., Gaur, S., Bhandari, S. and Mehta, R.K. 603
- DAS, J. AND SETT, J.
 Separation and limit-classification of special fourth-order differential expression 547
- DEB, T.K. AND SARKAR, S.D.
 On points of k th absolute continuity 457
- DORLE, A.K.
See Pathak, Y.V. and Dorle, A.K. 549
- DUBE, R.K. AND RAO, A.C.
 New characteristic polynomial—A reliable index to detect isomorphism between kinematic chains 227
- DUBEY, K.P.
See Koul, V.K., Zutshi, D.P. and Dubey, K.P. 475
- FATHY, Z.
See Naga, H.H.A.E., Azeim, W.M. A.E., Fathy, Z. and Ibrahim, S.H. 163
- GADAG, S.P., RAO, K.S.S., SRINIVASAN, M.N. AND SESHAN, S.
 Design of statistical experiments to optimise the composition of clay-bonded moulding sand mixtures containing organic additives 669
- GAUR, S.
See Ranga, S.P., Daga, K., Gaur, S., Bhandari, S. and Mehta, R.K. 603
- GODSE, V.B.
See Khan, Z.A. Brat, S. and Godse, V.B. 595
- GRZYBKOWSKA, M., PAKULSKA, D., JAKUBOWSKI, H. AND REDDY, S.R.
 Diel periodicity of benthos in riffle regions of polluted Widawka river, Poland 465
- IBRAHIM, S.H.
See Naga, H.H.A.E., Azeim, W.M. A.E., Fathy, Z. and Ibrahim, S.H. 163

- JAKUBOWSKI, H.
See Grzybkowska, M., Pakulska, D.,
Jakubowski, H. and Reddy, S.R. 465
- JEBARAJ, P.M., SRINIVASAN, M.N. AND
SESHADRI, M.R.
Influence of processing conditions on the
properties of investment cast austenitic
stainless steel 385
- JOSHI, S.K. AND LAKSHMINARAYANA, K.
Optimized driving mechanisms for osci-
llatory conveyors 235
- JOSHI, V.
See Rao, M.L.N., Rao, K.K. and Joshi,
V. 533
- KHAN, Z.A., BRAT, S. AND GODSE, V.B.
Interaction of cesium with Trombay ba-
salt 595
- KONNUR, V.S. AND PARAMESWARAN,
M.A.
Designing a serrated trough for an osci-
llating conveyor 213
- KOUL, V.K., ZUTSHI, D.P. AND DUBEY,
K.P.
Seasonal changes in carbohydrate con-
tent of three Kashmir lakes 475
- KRISHNAMURTHY, S. AND RAO, A.R.
A comparative study of the performance
of tufft-ridged and sursulf-treated low
carbon steel gears 205
- KUMAR, K.A.
See Prabhakar, J., Kumar, K.A., Swamy,
V.N., Rao, M.V. and Prasad, D.H.L.
449
- KUNDU, K.
Singularities in a two-fluid medium sepa-
rated by an inertial surface 521
- LAKSHIMANAN, V.S. AND THATHACHAR,
M.A.L.
Dynamic arrival routing – a generalized
problem and an optimal routing algo-
rithm 655
- LAKSHMINARAYANA, K.
See Joshi, S.K. and Lakshminarayana, K.
235
- LAKSHMINARAYANAN, V.
See Chaudhuri, A. and Lakshminara-
yanan, V. 307
- MANDAL, G.C., MUKHERJEE, S. AND
MUKHERJEE, S.
Unsteady flow of dusty visco-elastic li-
quid between two oscillating plates 77
- MEHTA, R.K.
See Ranga, S.P., Daga, K., Gaur, S.,
Bhandari, S. and Mehta, R.K. 603
- MISHRA, A.P.
See Mishra, S.K., Mishra, A.P., Mishra,
V.K. and Yadava, K.L. 33
- MISHRA, S.K., MISHRA, A.P., MISHRA,
V.K. AND YADAVA, K.L.
Interaction of metal ions with pyrimi-
dines 33
- MISHRA, V.K.
See Mishra, S.K., Mishra, A.P., Mishra,
V.K. and Yadava, K.L. 33
- MRUTHYUNJAYA, T.S., ANANTHA-
RAMAN, S., SURYAN, G.S.U. AND
CHANDRASEKARAN, K.
A comparison of three different tech-
niques for optimal allocation of tole-
rances and clearances in four-bar func-
tion generators 191
- MUDAKAVI, J.R. AND RAMASWAMY, Y.S.
Extraction-spectrophotometric deter-
mination of traces of mercury (II) with
bromide and rhodamine 6G 155

- MUKHERJEE, R.N.
See Prasad, S. and Mukherjee, R.N. 89
- MUKHERJEE, S. (SRIKUMAR)
See Mandal, G.C., Mukherjee, S. and Mukherjee, S. 77
- MUKHERJEE, S. (SWAPNA)
See Mandal, G.C., Mukherjee, S. and Mukherjee, S. 77
- MUNJAL, M.L., RAO, K.N. AND SAHASRABUDHE, A.D.
Aeroacoustic analysis of the two-duct reverse-flow perforated elements 639
- MURTHY, N.S.
See Reddy, P.V. and Murthy, N.S. 1
- MURTHY, R.R. AND RAO, V.S.
Determination of microgram quantities of Co(II) by a polarographic catalytic method 337
- NAGA, H.H.A.E., AZEIM, W.M.A.E., FATHY, Z. AND IBRAHIM, S.H.
Some styrene alkyl-methacrylate copolymers as viscosity index improvers 163
- NAGA, H.H.A.E. AND SALEM, A.E.M.
A rapid infrared method for measuring hydroxyl value in industrial fatty oils 67
- NAIK, D.P. AND AMARNATHI, C.
Planar slider-crank mechanisms adjustable for prescribed dead center positions 247
- NAMBUDIRIPAD, K.B.M.
See Al-Najafi, A.M.J., Venkataraman, A. and Nambudiripad, K.B.M. 253
- PAKULSKA, D.
See Grzybowska, M., Pakulska, D., Jakubowski, H. and Reddy, S.R. 465
- PALADHI, S.R.
See Chakravarty, N.K. and Paladhi, S.R. 127
- PANDYA, P., RANGARAJAN, K. AND SUBRAMANIAN, K.G.
Level-fair derivations in context-free rewriting systems 325
- PARAMESWARAN, M.A.
See Konnur, V.S. and Parameswaran, M.A. 213
- PATHAK, Y.V. AND DORLE, A.K.
Evaluation of rosin as film coating material for enteric coating 549
- PISKA, R.S. AND WAGHRAY, S.
A note on the fecundity of *Amblypharyngodon mola* (Ham.) 85
- PRABHAKAR, J., KUMAR, K.A., SWAMY, V.N., RAO, M.V. AND PRASAD, D.H.L.
Thermophysical properties of alkylbenzenechloroethane systems—Viscosity and surface tension 449
- PRASAD, D.H.L.
See Prabhakar, J., Kumar, K.A., Swamy, V.N., Rao, M.V. and Prasad, D.H.L. 449
- PRASAD, S. AND MUKHERJEE, R.N.
On problems of augmentation of Lagrangians in penalty functions of nonlinear programming 89
- PUROHIT, D.N.
Glycol dimercaptoacetate as a new masking agent: Determination of zinc in presence of cadmium 29
- QADRI, M.Y.
See Yousuf, A.R. and Qadri, M.Y. 405
- RANGARAJAN, K.
See Pandya, P., Rangarajan, K. and Subramanian, K.G. 325
- RAJU, S.G. AND VAIDYANATHAN, C.S.
Biodegradation of dl-synephrine: A novel pathway in *Nocardia* sp. DM1 511

- RAMACHANDRAN, P.A.
See Bhattacharya, A. and Ramachandran, P.A. 583
- RAMASWAMY, Y.S.
See Mudakavi, J.R. and Ramaswamy, Y.S. 155
- RANGA, S.P., DAGA, K., GAUR, S., BHANDARI, S. AND MEHTA, R.K.
Synthesis, characterisation and structural determination of VO^{2+} , UO_2^{2+} , Cu(II), Ni(II), Co(II), Zn(II) and Cd(II) chelates of *o*-(N-2-pyrrolidimino) ethane sulphonic acid 603
- RAO, A.C.
See Dube, R.K. and Rao, A.C. 227
- RAO, A.R.
See Krishnamurthy, S. and Rao, A.R. 205
- RAO, A.R.
Note on pulsatile viscous flow in a tube of elliptical cross-section 543
- RAO, K.C.
See Subha, M.C.S., Rao, K.C. and Rao, S.B. 397
- RAO, K.K.
See Rao, M.L.N., Rao, K.K. and Joshi, V. 533
- RAO, K.M., REDDY, T.S. AND RAO, S.B.
Spectrophotometric determination of molybdenum(VI) and vanadium (V) using resacetophenone isonicotinoylhydrazone 39
- RAO, K.N.
See Munjal, M.L., Rao, K.N. and Sahasrabudhe, A.D. 639
- RAO, K.S.S.
See Gadag, S.P., Rao, K.S.S., Srinivasan, M.N. and Seshan, S. 669
- RAO, M.L.N., RAO, K.K. AND JOSHI, V.
A translation plane of Order 25 with small translation complement 533
- RAO, M.V.
See Prabhakar, J., Kumar, K.A., Swamy, V.N., Rao, M.V. and Prasad, D.H.L. 449
- RAO, S.B.
See Rao, K.M., Reddy, T.S. and Rao, S.B. 39
See Subha, M.C.S., Rao, K.C. and Rao, S.B. 397
- RAO, V.S.
See Murthy, R.R. and Rao, V.S. 337
- RAO, V.S.R.
See Sreenivasulu, R., Rao, V.S.R. and Reddy, K.H. 95
- REDDY, D.V.
See Reddy, K.G., Reddy, K.H. and Reddy, D.V. 317
- REDDY, K.G., REDDY, K.H. AND REDDY, D.V.
Synthesis, characterization and analytical properties of indane-1,2,3,-trione monosemicarbazone: Spectrophotometric determination of copper(II) and palladium(II) 317
- REDDY, K.H.
See Sreenivasulu, R., Rao, V.S.R. and Reddy, K.H. 95
See Reddy, K.G., Reddy, K.H. and Reddy, D.V. 317
- REDDY, P.V. AND MURTHY, N.S.
Some observations on stress freezing 1
- REDDY, S.R.
See Grzybkowska, M., Pakulska, D., Jakubowski, H. and Reddy, S.R. 465
- REDDY, T.S.
See Rao, K.M., Reddy, T.S. and Rao, S.B. 39

- SAHASRABUDHE, A.D.
See Munjal, M.L., Rao, K.N. and Sahasrabudhe, A.D. 639
- SALEM, A.E.M.
See Naga, H.H.A.E. and Salem, A.E.M. 67
- SARKAR, S.D.
See Deb, T.K. and Sarkar, S.D. 457
- SAXENA, S.B. AND AGARWAL, Y.K.
Spectrophotometric determination of the stability constants of 4-substituted thio-semicarbazides with Co^{2+} , Ni^{2+} and Cu^{2+} system 13
- SESHADRI, M.R.
See Jebaraj, P.M., Srinivasan, M.N. and Seshadri, M.R. 385
- SESHAN, S.
See Gadag, S.P., Rao, K.S.S., Srinivasan, M.N. and Seshan, S. 669
- SETT, J.
See Das, J. and Sett, J. 547
- SHARMA, R.K.
Development of an air-gap urea-specific electrode 609
- SOMESWAR, G.P. AND SUBRAMANYAM, B.
IR study of ethyl lactate in $3\ \mu$ region 21
- SREENIVASULU, R., RAO, V.S.R. AND REDDY, K.H.
Comparison of stability constants of lead (II)-Schiff base complexes—A polarographic study 95
- SRINIVASAN, M.N.
See Gadag, S.P., Rao, K.S.S., Srinivasan, M.N. and Seshan, S. 669
See Jebaraj, P.M., Srinivasan, M.N. and Seshadri, M.R. 385
- SRIVASTAVA, L.M.
See Bora, P.S., Bora, N.S. and Srivastava, L.M. 373
- SUBHA, M.C.S., RAO, K.C. AND RAO, S.B.
Relative viscosities of metal formates in formic acid 397
- SUBRAMANIAN, K.G.
See Pandya, P., Rangarajan, K. and Subramanian, K.G. 325
- SUBRAMANYAM, B.
See Someswar, G.P. and Subramanyam, B. 21
- SURYAN, G.S.U.
See Mruthyunjaya, T.S., Anantharaman, S., Suryan, G.S.U. and Chandrasekaran, K. 191
- SWAMY, V.N.
See Prabhakar, J., Kumar, K.A., Swamy, V.N., Rao, M.V. and Prasad, D.H.L. 449
- THATHACHAR, M.A.L.
See Lakshmanan, V.S. and Thathachar, M.A.L. 655
- VAIDYANATHAN, C.S.
See Raju, S.G. and Vaidyanathan, C.S. 511
- VENKATARAMAN, A.
See Al-Najafi, A.M.J., Venkataraman, A. and Nambudiripad, K.B.M. 253
- WAGHIRAY, S.
See Piska, R.S. and Waghay, S. 85
- YADAVA, K.L.
See Mishra, S.K., Mishra, A.P., Mishra, V.K. and Yadava, K.L. 33
- YOUSUF, A.R. AND QADRI, M.Y.
Distribution of *Polyarthra vulgaris* Carlin (Rotifera: Monogonota) in a warm monomictic lake of Kashmir, India 405
- ZUTSHI, D.P.
See Koul, V.K., Zutshi, D.P. and Dubey, K.P. 475

Key word Index

Absorption	583	Conveyance	213
Active clay	669	Copper (II)	317
Adjustability	247	Cornea	307
Adsorption	595	Correlation coefficient	85
Aeroacoustic analysis	639	Corrosion	385
Air-gap electrode	609	Cytosine	33
Alkylbenzenes	449	Damping	253
Austenite	385	Dead clay	669
Band assignments	21	Degradation	511
Barrier equation	331	Delta ferrite	385
Benthos	465	Design of experiments	385,669
Benzene	155,449	Desorption	583
Binary solvent mixtures	21	1,2-Dichloroethane	449
Bromide	155	Diel periodicity	465
Bulk density	669	2,5-Dihydroxyphenylacetic acid	511
Cadmium	29	Discrete dynamic programming (DDP)	191
Cadmium (II)	33	Dissociation constants	603
Carbohydrates	475	Distance matrices	227
Carleman equation	331	Distribution coefficients	595
Catalytic wave	337	Driving mechanisms	235
Cauchy-type kernel	331	Dusty gas	77
Characteristic polynomials	227	Dynamic routing policy	655
Chelate	13	Elastic element	77
Chemisorption	595	Enhancement factor	583
Chloroethanes	449	Enteric coating	549
Cholesterol	373	EOS and EOL systems	325
Chromatic aberration	307	Equilibrium reactions	583
<i>Citrus</i> plant	511	<i>o</i> -(N-2-pyrrolidimino) Ethane sulphonic acid chelates	603
Cobalt	337	Eutrophication	475
Cobalt (II)	33	Fairness	325
Coefficient of restitution	253	Fecundity	85
Complexometry	29	Film coating	549
Composition variables	669	Food competition	405
Computation time	191	Formation constants	21
Computer simulation	583	Formic acid	397
Constant	13		
Continuous dynamic programming (CDP)	191		

Fourth-order differential expression	547	Length/weight-fecundity relationships	85
AC_k functions	457	Line source	521
BV_k functions	457	Lipid	373
Gas treating	583	Lipoproteins	373
Gears	205	Liporotein lipase	373
Generalized Fourier integral	127	Lubricating oils	163
Generalized orthogonal relation	127	Majorizing a matrix	127
Generalized Parseval relation	127	Masking agent	29
Glycoldimercaptoacetate	29	Mathieu functions	543
Graphs	227	Maturity	85
Green compression strength	669	Mechanical properties	385
Hertzian theory	253	Mechanisms	247
Hydroxyl value	85	Mercury(II) determination	155
<i>p</i> -Hydroxyphenylacetic acid	511	Metal formates	397
Identical	227	Microamounts	39
Immobilisation	595	Minimization problem	89
Impact	253	Mixtures	449
Impact damper	253	Moisture	669
Indane-1,2,3-trione monosemicarbazone	317	Molybdenum(VI)	39
Industrial oils	67	Moulding sand	669
Inertial surface	521	Mufflers	639
Infrared absorbance	67	Multigrade motor oils	163
Instantaneous reversible reactions	583	MUVIN	253
Interaction	595	<i>Nocardia</i> sp.	511
Inverse operator	331	Noise control	639
Investment casting	385	Nomogram	669
Iodate	337	Nonlinear programming	89
Isomorphism	227	–OH content	67
Kashmir lakes	475	Optimal allocation	191
Kinematic chains	227	Optimisation	669
Kinematics	247	Orbit of ideal points	533
Kuvshiniski type visco-elastic liquid	77	Organic additives	669
Laminar flows	77	Oscillating conveyors	213
Laplace transform	77	Oscillatory conveyors	235
Lead(II)	95	Palladium(II)	317
		Paper electrophoresis	33
		Parametric programming (PP)	191
		Peak current	337

Penalty functions	89	Spectral resolution	127
Perennial behaviour	405	Spectrophotometry	39,317
Perforated elements	639	Stability	13
Photoelasticity	1	Stability constants	33,95,603
Phytotoxicity	511	Stainless steel	385
AC _k points	457	Strength of chelation	21
Polarography	95,337	Stress freezing	1
Polluted river	465	Stress wave	253
Potential	521	Structural error	191
Proton-acceptor solvents	21	St. Venant's theory	253
Pulsatile flow	543	Summable	127
Queueing network	655	Surface durability	205
Recursion	655	Surface tension	449
Refractive index	307	Synephrine	511
3 μ region	21	1,1,2,2-Tetrachloroethane	449
Regression analysis	669	Thermophysical properties	449
Relative stabilities of		Thiosemicarbazide	13
two types of chelation	21	Thymine	33
Relative viscosities	397	Time-harmonic wave source	521
Resacetophenone isonicotinoyl		Time ratio	247
hydrazone	39	Toluene	449
Resolution matrix	127	Torsional impact damper	253
Resonance	253	Transfer matrix method	639
Response variables	669	Translation plane	533
Rhodamine 6 G	155	Transmission criterion	247
(Approximate) <i>k</i> th Riemann		1,1,1-Trichloroethane	449
derivative	457	Tufftride and sursulf treatments	205
Rosin	549	Two-fluid medium	521
Rotifer ecology	405	Uptake	595
Routing algorithm	655	Uracil	33
Schiff bases	95	Urea estimation	609
Separation	547	Urease	609
Serrations	213	Vacuum melting and casting	385
Shatter index	669	Vanadium(V)	39
(K) Singular functions	457	Viscosity	449
Skin friction	77	Viscosity index improvers	163
Slider-crank	235,247	Warm monomictic lake	405
Solvent extraction	155	<i>p</i> -Xylene	449
Source strength	521	Zinc	29
Spectral representation theorem	127		

Theses Abstracts Title Index

- | | | | |
|--|-----|---|-----|
| Analytical study of some aspects of cross-talk in wavelength division multiplexing-based fiber-optic systems
NARASIMHA PRASAD, S. | 626 | Facile routes to substituted di-and trifor-
mylbenzenes (Part I). Synthesis of
pterodin-M and onitin (Part II)
RAJU, B. | 566 |
| Autonomous fault-tolerant spacecraft
attitude control system through recon-
figuration
MURUGESAN, S. | 616 | Feeding of permanent moulded spheroid-
al graphite iron castings
CHANDRASEKHARA RAO, M.S. | 414 |
| Characterisation of rinderpest virus and
mechanism of its persistence in vero
cells
KESARI, K.V. | 346 | Further crystallographic studies on
lysozyme
VEERAPANDIAN, B. | 174 |
| Chemistry of spironaphthalenones
MADHUSUDHAN REDDY, G. | 45 | Inter-organellar interaction: Regulation
of mitochondrial oxidative phosphory-
lation by chloroplasts
VIPIN KUMAR | 356 |
| Contributions to the chemistry of the
complex fluorides of phosphorus,
boron, silicon and titanium
SYED MOHAMED, K. | 102 | Intramolecular interactions in porphyrin
systems
BHASKAR MAIYA, G. | 485 |
| Design and development of a micro-
processor-based test bench for protec-
tive relays
JAYACHANDRA SHENOY, U. | 693 | Kinetics and mechanism of anodic oxida-
tion of chlorate ion to perchlorate ion
on lead dioxide electrode
MUNICHANDRAIAH, N. | 560 |
| Development of algorithms for optimum
allocation of reactive powder in trans-
mission and distribution systems
THUKARAM, D. | 272 | Multiprocessing architecture for parallel
hidden surface removal algorithm
DIPAK GHOSAL | 423 |
| Dielectric-coated corner reflector
NEMICHANDRAMMA | 286 | Nondeterminism and communication in
functional programming systems: A
study in formal program development
ASIS KUMAR GOSWAMI | 411 |
| Ecology of the Asian elephant (<i>Elephas
maximus</i>) and its interaction with man
in South India
SUKUMAR, R. | 107 | Nonstoichiometry of chemically prepared
lead zirconate titanate (PZT) solid
solution
BALACHANDRAN, R. | 43 |
| Electrochemical aspects of sulphide
mineral dissolution
YELLOJI RAO, M.K. | 426 | Novel methods of synthesis of complex
metal oxides (A contribution to pre-
parative solid state chemistry)
VIDYASAGAR, K. | 353 |
| Environmental aspects in mining and
processing of sulphide minerals
MANDRE, N.R. | 695 | | |

- Ontogeny of muscarinic cholinergic and dopaminergic receptors in human foetal brains
RAVI KUMAR, B.V. 172
- Pathways in aromatic oxidation mechanistic studies on the reactions of aromatic substrates with periodic acid
HOSUR, B.M. 491
- Performance of the eigenvector (EV) method in the presence of coloured noise
MADAKA SUBBARAYUDU 621
- Polymer and ion-exchange wave guides for integrated optics: Some studies
AVUDAINAYAGAM, K.V. 481
- Prediction of compressibility of natural soils
BINDUMADHAVA 280
- Role of ozone in sun-weather relationships
GIRIDHAR KRISHNA, M. 418
- Sensitivity-based evolution design and evaluation of filter structures
RAJGOPAL, K. 276
- Some studies on reinforced concrete beam-column joints
KUMAR, A. 430
- Strategies of synthesis based on methoxycyclohexadienes: Synthesis of some polyketides
MANI, N.S. 268
- Structural, kinetic and mechanistic aspects of the carboxylic ionophore-mediated transmembrane cation transport
SHASTRI, B.P. 105
- The structural state of plagioclases and petrogenesis of anorthosites, Hole-narasipur belt, Karnataka Craton, South India
GANANATH, S.N. 493
- Structure and properties of lead oxyhalide glasses
GOVINDA RAO, B. 555
- Studies in opium alkaloids: (i) Synthetic utility of amine quaternization (ii) Microbial transformations of morphine
SAMUEL T. MANOHARAN 99
- Studies on compacted graphite cast irons
SRI RAMACHANDRA MURTHY, V. 421
- Studies on cracking of reinforced concrete and ferrocement flexural members and fracture behaviour of ferrocement
GANESAN, N. 681
- Studies on peptides of conformational and biological interest: Chemotactic peptide analogs, acyclic cystine peptides and fragments of bacteriorhodopsin and emerimicin
ANTONY RAJ, P. 342
- Studies on the crystal growth and dielectric properties of alkali metal perchlorates
SHRIPATHI, T. 266
- Studies on the properties of synthetic moulding sands through the application of statistical design of experiments
GADAG, S.P. 687
- Studies on the realization of varistors with positive voltage coefficient of resistance based on composites
LALKISHORE, K. 613
- Studies on silica and zircon sands bonded with silicate-ester systems
CHANDRAPPA, K.G. 679
- Studies on sound transmission in shallow sea
KARTHIKEYAN, C. 623
- A study of DNA methylation in the mealybug, *Planococcus lilacinus*
MURALIDHARAN, K. 48

- A study of residual strength of polypropylene film in short-term surface discharge ageing under sub-atmospheric conditions
INAMDAR, H.P. 110
- Synthesis and conformational analysis of cyclic cystine peptides
RAGHUVANSH KISHORE 563
- Synthesis, thermal rearrangement and silylation reactions of (alkoxy)-(aryloxy) cyclotriphosphazenes
KARTHIKEYAN, S. 171
- Systems of learning automata: Estimator algorithms and applications
SASTRY, P.S. 50
- Synthetic studies in terpenoids
MURALI, D. 348
- Thermostability studies on some components of the protein synthesizing machinery of a thermophilic fungus *Humicola lanuginosa*
ANIL KUMAR JOSHI 339
- Transformation of progesterone by fungal systems: Studies on the 11 α -hydroxylase system from *Aspergillus ochraceus*
JAYANTI SRIVATSAN 558
- Triacylglycerol synthesis in developing seeds of groundnut (*Arachis hypogaea*)
SUKUMAR, V. 567
- Understanding of electrical trees in PMMA with partial discharge and thermally stimulated discharges
PRATHAP, B. 176
- Vibrational spectroscopic and dielectric studies of some ferroic crystals
RAGHUNATHA CHARY, B. 263
- X-ray studies on the structure and interactions of analgetic fenamates
DHANARAJ, V. 488

Theses Abstracts Author Index

- AVUDAINAYAGAM, K.V.
Polymer and ion-exchange wave guides for integrated optics: Some studies 481
- BALACHANDRAN, R.
Nonstoichiometry of chemically prepared lead zirconate titanate (PZT) solid solution 43
- BINDUMADHAVA
Prediction of compressibility of natural soils 280
- CHANDRAPPA, K.G.
Studies on silica and zircon sands bonded with silicate-ester systems 679
- Chary, B.R.
Vibrational spectroscopic and dielectric studies of some ferroic crystals 263
- DHANARAJ, V.
X-ray studies on the structure and interactions of analgetic fenamates 488
- GADAG, S.P.
Studies on the properties of synthetic moulding sands through the application of statistical design of experiments 687

- GANANATH, S.N.
The structural state of plagioclases and petrogenesis of anorthosites, Hole-narasipur belt, Karnataka Craton, South India 493
- GANESAN, N.
Studies on cracking of reinforced concrete and ferrocement flexural members and fracture behaviour of ferrocement 681
- GHOSAL, D.
Multiprocessing architecture for parallel hidden surface removal algorithm 423
- GOSWAMI, A.K.
Nondeterminism and communication in functional programming systems: A study in formal program development 411
- HOSUR, B.M.
Pathways in aromatic oxidation mechanistic studies on the reactions of aromatic substrates with periodic acid 491
- INAMDAR, H.P.
A study of residual strength of polypropylene film in short-term surface discharge ageing under sub-atmospheric conditions 110
- JOSHI, A.K.
Thermostability studies on some components of the protein synthesizing machinery of a thermophilic fungus *Humicola lanuginosa* 339
- KARTHIKEYAN, C.
Studies on sound transmission in shallow sea 623
- KARTHIKEYAN, S.
Synthesis, thermal rearrangement and silylation reactions of (alkoxy)-(aryloxy) cyclotriphosphazenes 171
- KESARI, K.V.
Characterisation of rinderpest virus and mechanism of its persistence in vero cells 346
- KISHORE, R.
Synthesis and conformational analysis of cyclic cystine peptides 563
- KRISHNA, M.G.
Role of ozone in sun-weather relationships 418
- KUMAR, A.
Some studies on reinforced concrete beam-column joints 430
- KUMAR, B.V.R.
Ontogeny of muscarinic cholinergic and dopaminergic receptors in human foetal brains 172
- KUMAR, V.
Inter-organellar interaction: Regulation of mitochondrial oxidative phosphorylation by chloroplasts 356
- LALKISHORE, K.
Studies on the realization of varistors with positive voltage coefficient of resistance based on composites 613
- MAIYA, G.B.
Intramolecular interactions in porphyrin systems 485
- MANDRE, N.R.
Environmental aspects in mining and processing of sulphide minerals 695
- MANI, N.S.
Strategies of synthesis based on methoxycyclohexadienes: Synthesis of some polyketides 268
- MANOHARAN, S.T.
Studies in opium alkaloids: (i) Synthetic utility of amine quaternization (ii) Microbial transformations of morphine 99

- MOHAMED, K.S.
Contributions to the chemistry of the complex fluorides of phosphorus, boron, silicon and titanium 102
- MUNICHANDRAIAH, N.
Kinetics and mechanism of anodic oxidation of chlorate ion to perchlorate ion on lead dioxide electrode 560
- MURALI, D.
Synthetic studies in terpenoids 348
- MURALIDHARAN, K.
A study of DNA methylation in the mealybug, *Planococcus lilacinus* 48
- MURTHY, V.S.R.
Studies on compacted graphite cast irons 421
- MURUGESAN, S.
Autonomous fault-tolerant spacecraft attitude control system through reconfiguration 616
- NEMICHANDRAMMA
Dielectric-coated corner reflector 286
- PRASAD, S.N.
Analytical study of some aspects of crosstalk in wavelength division multiplexing-based fiber-optic systems 626
- PRATHAP, B.
Understanding of electrical trees in PMMA with partial discharge and thermally stimulated discharges 176
- RAJ, P.A.
Studies on peptides of conformational and biological interest: Chemotactic peptide analogs, acyclic cystine peptides and fragments of bacteriorhodopsin and emerimicin 342
- RAO, B.G.
Structure and properties of lead oxyhalide glasses 555
- RAO, M.K.Y.
Electrochemical aspects of sulphide mineral dissolution 426
- RAO, M.S.C.
Feeding of permanent moulded spheroidal graphite iron castings 414
- RAJGOPAL, K.
Sensitivity-based evolution design and evaluation of filter structures 276
- RAJU, B.
Facile routes to substituted di- and triformylbenzenes (Part I). Synthesis of pterodin-M and onitin (Part II) 566
- REDDY, G.M.
Chemistry of spironaphthalenones 45
- SASTRY, P.S.
Systems of learning automata: Estimator algorithms and applications 50
- SHASTRI, B.P.
Structural, kinetic and mechanistic aspects of the carboxylic ionophore-mediated transmembrane cation transport 105
- SHENOY, U.J.
Design and development of a microprocessor-based test bench for protective relays 693
- SHIRIPATHI, T.
Studies on the crystal growth and dielectric properties of alkali metal perchlorates 266
- SRIVATSAN, J.
Transformation of progesterone by fungal systems: Studies on the 11 α -hydroxylase system from *Aspergillus ochraceus* 558
- SUBBARAYUDU, M.
Performance of the eigenvector (EV) method in the presence of coloured noise 621

- SUKUMAR, R.
Ecology of the Asian elephant (*Elephas maximus*) and its interaction with man in South India 107
- SUKUMAR, V.
Triacylglycerol synthesis in developing seeds of groundnut (*Arachis hypogaea*) 567
- THUKARAM, D.
Development of algorithms for optimum allocation of reactive powder in transmission and distribution systems 272
- VEERAPANDIAN, B.
Further crystallographic studies on lysozyme 174
- VIDYASAGAR, K.
Novel methods of synthesis of complex metal oxides (A contribution to preparative solid state chemistry) 353

Book Review Index

- Ada—A life and a legacy by Dorothy Stein, reviewed by Priti Shankar 437
- The ancient tradition of geometric problems by Wilbur Richard Knorr, reviewed by B.S. Panduranga Rao 629
- Anniversary volume on approximation theory and functional analysis edited by P.L. Butzer, R.L. Stens and B.Sz.-Nagy, reviewed by D.V. Pai 300
- The art of Prolog: Advanced programming techniques by Leon Sterling and Ehud Shapiro, reviewed by Y.N. Srikanth 706
- Artificial intelligence: The very idea by John Haugeland, reviewed by M. Narasimha Murthy 438
- The Cambridge encyclopaedia of life sciences edited by Adrian Friday and David S. Ingram, reviewed by B.R. Seshachar 442
- The Cambridge guide to the material world by Rodney Cotterill, reviewed by S. Ramaseshan 497
- The case for Mars edited by Penelope J. Boston, reviewed by K. Kasturirangan 367
- Chemical and metallurgical thermodynamics, volumes I and II by M.L. Kapoor, reviewed by K.P. Abraham 66
- Circuit theory by T.S.K.V. Iyer, reviewed by M.R. Chidambara 503
- Complex analysis in one variable by Raghavan Narasimhan, reviewed by Adimurthi and P.N. Srikanth 186
- Computer environments for children by Cynthia Solomon, reviewed by N.V. Joshi 634
- Computer management and planning by Utpal K. Banerjee, reviewed by R. Krishnamurthy 116
- Concise science dictionary, reviewed by S.S. 55
- The connection machine by W. Daniel Hillis, reviewed by T. Viswanathan 499
- Control system synthesis: A factorization approach by M. Vidyasagar, reviewed by M.A.L. Thathachar 120
- The correspondence of Charles Darwin edited by F. Burkhardt and S. Smith, reviewed by T. Ramakrishnan 439

- Critical phenomena edited by V. Ceausescu, G. Costache and V. Georgescu, reviewed by E.S.R. Gopal 185
- Darwin's metaphor: Nature's place in Victorian culture by Robert M. Young, reviewed by B.R. Seshachar 709
- Dilation theory, Toeplitz operators and related topics, edited by C. Apostol, C.M. Pearcy, B.Sz.-Nagy, and D. Voiculescu, reviewed by Arun D. Joshi 293
- Distributed computing systems edited by Y. Paker and J.P. Verjus, reviewed by V. Rajaraman 305
- Eigenvalue distributions of compact operators by H. Konig, reviewed by Arun D. Joshi 577
- Electric machines by I.J. Nagrath and D.P. Kothari, reviewed by D.P. Sengupta 65
- Elements of logic and foundations of mathematics in problems by Wiktor Marek and Janusz Onyszkiewicz, reviewed by R. Vittal Rao 298
- Elliptic functions and rings of integers by Ph. Cassou-Nogue's and M.J. Taylor, reviewed by K. Ramachandra 702
- Ergodic theory and semisimple groups by R.J. Zimmer, reviewed by S.G. Dani 58
- Ergodic theory of random transformations by Yuri Kifer, reviewed by S.G. Dani 580
- The evolution of programs by Nachum Dershowitz, reviewed by Y.N. Srikant 303
- First step towards space edited by Frederick C. Durant III and George S. James, reviewed by R. Narasimha 495
- Foundations of electronics by D. Chattopadhyay, P.C. Rakshit, B. Saha and N.N. Purkait, reviewed by S.V. Bhat 121
- The foundations of program verification by Jacques Locckx and Jurt Sieber, reviewed by Priti Shankar 187
- From folk psychology to cognitive science – The case against belief by Stephen P. Stich, reviewed by P.C. Bansal 714
- From spacelab to space station edited by H. Stoewer and Peter M. Bainum, reviewed by S.K. Shrivastava 189,446
- Fundamentals of mathematics (Vols. I–III) edited by H. Behnke, F. Bachmann, K. Fladt and W. Suss, reviewed by S. Raghavan and S.S. Rangachari 361
- Fundamentals of optical fibre communications edited by Michael K. Barneski, reviewed by S.V. Pappu 304
- Genetic variation and its maintenance edited by D.F. Roberts and G.F. De Stefano, reviewed by V. Arunachalam 708
- Geometric theory of foliations by Cesar Camacho and Alcides Lins Neto (Translated by Sue Goodman), reviewed by T.R. Ramadas 64
- George Polya, Collected papers, Vol. III edited by J. Hersch and G.C. Rota, reviewed by B. Ramachandran 301
- Getting sued and other tales of the engineering life by Richard L. Meehan, reviewed by S. S. 113
- Guidance and control 1985 edited by R.D. Culp, E.J. Bauman and C.A. Cullian, reviewed by P.R. Mahapatra 444

- Handbook of mechanical design by G.M. Maitra and L.V. Prasad, reviewed by M.R. Raghavan 502
- Higher mathematics from an elementary point of view by H. Rademacher, edited by D. Goldfeld, reviewed by S. Raghavan 56
- History of rockets and astronautics Vol.7, parts I and II edited by R. Cargill Hall, reviewed by R. Narasimha 701
- IBM's early computers by Charles J. Bashe, Lyle R. Johnson, John H. Palmer and Emerson W. Pugh, reviewed by V. Rajaraman 436
- Inner exile by Elisabeth Heisenberg, reviewed by K.P. Sinha 302
- An introduction to science studies: The philosophical and social aspects of science and technology by John Ziman, reviewed by B.S. Ramakrishna 365
- Laboratory techniques in electroanalytical chemistry edited by P.T. Kissinger and W.R. Heineman, reviewed by V. Krishnan 506
- The language lottery: Toward a biology of grammars by David Lightfoot, reviewed by Thomas Chacko 509
- Manifolds of nonpositive curvature by W. Ballmann, M. Gromov and V. Schroeder, reviewed by Gopal Prasad 443
- Mathematical people: Profiles and interviews edited by D.J. Albers and G.L. Alexanderson, reviewed by Vivek S. Borkar 117
- Matrices and indefinite scalar products by I. Gohberg, P. Lancaster and L. Rodman; edited by I. Gohberg, reviewed by R. Vittal Rao 299
- Matrices in control theory by S. Barnett, reviewed by M.A.L. Thathachar 364
- Maxwell on molecules and gases by Elizabeth Garber, Stephen G. Brush and C.W.F. Everitt, reviewed by N. Kumar 631
- Microprocessors—with applications in process control by S.J. Ahson, reviewed by B.S. Sonde 122
- Multivariate approximation theory III edited by Walter Schempp and Karl Zeller, reviewed by M. Vanninathan 62
- Observation, experiment, and hypothesis in modern physical science edited by Peter Achin-Stein and Owen Hannaway, reviewed by L.K. Pandit 183
- Organizing for science: The making of an industrial research laboratory by Shiv Visvanathan, reviewed by R.S. Krishnan 114
- Permanent presence – Making it work edited by I. Bekey, reviewed by S.R. Jain 123
- Perspectives in mathematics—Anniversary of Oberwolfach, 1984 edited by W. Jager, J. Moser and R. Remmert, reviewed by Madhusudan Atre and S. Krishan 61
- Physical meteorology by Henry G. Houghton, reviewed by J. Srinivasan 501
- Physics handbook by C. Nordling and J. Osterman, reviewed by E.S.R. Gopal 119
- The physics of welding edited by J.F. Lancaster, reviewed by S. Seshan 366
- Plant genetic engineering edited by John H. Dodds, reviewed by J.D. Padayatty 706

- Polymer science by V.R. Gowariker, N.V. Viswanathan and Jayadeva Sreedhar, reviewed by Manas Chanda 632
- Proceedings of an international symposium on engineering sciences and mechanics, reviewed by B. Dattaguru 123
- Proceedings of the 31st International Technical Communication Conference, reviewed by Esther Ramani 55
- Progress in drug research edited by Ernst Jucker, reviewed by R. Nayak 711
- Pulse transformers: Design and fabrication by M.A. Nadkarni and S.R. Bhat, reviewed by S. Nagabhusana 188
- Quantum theory of finite systems by Jean-Paul Blaizot and Georges Ripka, reviewed by N. Kumar 630
- Reshaping life by G.J.V. Nossal, reviewed by J.D. Padayatty 440
- Science and technology in Indian culture - A historical perspective edited by A. Rahman, reviewed by P.C. Bansal 181
- Science, computers and people by Stanislaw Ulam, reviewed by S.K. Ranganathan 713
- Scientific and technical information sources by Ching-Chih Chen, reviewed by T.K.S. Iyengar and G.S.R. Rao 717
- Seminar on stochastic process, 1984 edited by E. Cinlar, K.L. Chung and R.K. Gettoor, reviewed by S. Ramasubramanian 704
- Space: A developing role for Europe edited by L.J. Carter and Peter M. Bainum, reviewed by K. Kasturirangan 370
- Space exploitation and utilization edited by Gayle L. May *et al.*, reviewed by S.K. Shrivastava 576
- Space safety and rescue - 1984-85 edited by Gloria W. Health, reviewed by K. Kasturirangan 573
- Space station beyond IOC edited by M. Jack Friedenthal, reviewed by S.R. Jain 575
- Spectral theory of linear operators and related topics edited by H. Helson, B.Sz.-Nagy, F.H. Vasilescu and D. Voiculescu, reviewed by Arun D. Joshi 295
- Structural stability of columns and plates by N.G.R. Iyengar, reviewed by K. Vijayakumar 633
- Technology's storytellers: Reweaving the human fabric by John M. Staudenmaier, S.J., reviewed by S.S. 435
- The theory of Jacobi forms by Marlin Eichler and Don Zagier, reviewed by Gopal Prasad 118
- Tools for teaching (UMAP Modules 1977-79), reviewed by R. Natarajan 190
- Welding of tubular structures, reviewed by S. Seshan, 366
- X-ray microanalysis in biology edited by M.A. Hayat, reviewed by Malur N. Srinivasan 504