

Table 1

Information about published pages in journals (January to December 2001)

	Vol. No.	No. of issues	No. of Papers	Total No. of pages 2001	**
1. Proc. (Chem. Sci.)	113	6	61	702	(↑60)
2. Proc. (Math. Sci.)	111	4	33	514	(↑42)
3. Proc. (Earth Planet. Sci.)	110	4	37	464	(↓88)
4. Sadhana	26	6	37	618	(↓22)
5. Pramana	56,57	12	284	2020	(↑156)
6. Bull. Mater. Sci.	24	6	107	690	(↑132)
7. J. Astrophys. Astron.	22	4	20	350	(↓126)
8. J. Biosci.	26	5	72	698	(↑282)
9. J. Genetics	80	3	22	168	(↑28)
10. Resonance	6	12	147	1224	(↓68)
11. Current Science	80,81	24	724	3272 *	(↓186)
			1544	10720	(↑210)

* including briefer items such as news, correspondence ** As compared to last year's figures

Table 2

Information on papers submitted for publication (January to December 2001)

	Accepted	Rejected	Pending	Total	**
1. Proc. (Chem. Sci.)	56	51	7	114	(↑17)
2. Proc. (Math. Sci.)	17	89	8	114	(↑2)
3. Proc. (Earth Planet. Sci.)	19	5	27	51	(↓37)
4. Sadhana	41	18	11	70	(↑19)
5. Pramana	78	49	47	174	(↓55)
6. Bull. Mater. Sci.	108	32	35	175	(↑49)
7. J. Astrophys. Astron.	6	13	4	23	(↓63)
8. J. Biosci.	87	75	6	168	(↑42)
9. J. Genetics	19	8	2	29	(↑2)
10. Resonance	46	65	50	161	(↑19)
11. Current Science	558	664	136	1358 *	(↓18)
Total	1038	1064	331	2433	(↓23)

* including briefer items such as news, correspondence ** As compared to last year's figures

Table 3

Circulation details of journals (January to December 2001)

	Subscription		Complimentary		Fellows & Associates	Total	
	India	Foreign	India	Foreign			
1. Proc. (Chem. Sci.)	570	60	77	90	177	974	(↑39)
2. Proc. (Math. Sci.)	558	89	81	91	124	943	(↑56)
3. Proc. (Earth Planet. Sci.)	465	66	86	91	93	801	(↑24)
4. Sadhana	529	24	85	20	144	802	(↑34)
5. Pramana	785	56	89	49	245	1224	(↑51)
6. Bull. Mater. Sci.	2033 ^a	37	105	17	133	2325	(↑98)
7. J. Astrophys. Astron.	460	141	77	25	98	801	(↑4)
8. J. Biosci.	929	53	105	80	260	1427	(↑49)
9. J. Genetics	619	114	123	10	166	1032	(↑48)
10. Resonance	3648 ^b	47	231	7	-	3933	(↓37)
11. Current Science	4203 ^c	100	160	57	76	4596	(↑164)

a. includes about 1470 MRSI members in India and abroad b. includes about 2000 personal subscribers

c. includes about 2150 personal subscribers

Annexure 1

NEW FELLOWS — 2001

(effective 1 January 2002)



1. K.A. Balasubramanian
(b. 6-4-1945)
Christian Medical College and
Hospital, Vellore
Sp: oxidative stress, gastrointestinal
mucosa, and pathophysiology



2. Sunanda Banerjee
(b. 20-7-1952)
Tata Institute of Fundamental
Research, Mumbai
Sp: experimental high energy
physics



3. S.V. Dhurandhar
(b. 29-11-1951)
Inter-University Centre for
Astronomy and Astrophysics, Pune
Sp: gravitational waves, general
relativity, and theoretical
astrophysics



4. N.R. Jagannathan
(b. 23-6-1954)
All India Institute of Medical
Sciences, New Delhi
Sp: biomedical NMR, MR imaging
and In-vivo MR spectroscopy in
living systems, and structure &
conformation of biomolecules



5. K.S. Krishna
(b. 15-10-1958)
National Institute of Oceanography,
Goa
Sp: structure and tectonics of
continental margins of India,
lithosphere deformation, of central
Indian Ocean, and structure &
evolution of volcanic ridges of Indian
Ocean.



6. K.C. Kumara Swamy
(b. 1-1-1957)
University of Hyderabad, Hyderabad
Sp: chemistry of the main group
elements, and organophosphorus
chemistry



7. Satyajit Mayor
(b. 26-1-1963)
National Centre for Biological
Sciences (TIFR), Bangalore
Sp: cell biology, biophysics, and
chemistry.



8. S.V.S. Murty
(b. 10-10-1952)
Physical Research Laboratory,
Ahmedabad
Sp: early solar system and pre-solar
processes, cosmochemistry of
nitrogen & noble gases, and mass
spectrometry.



9. T.G.K. Murty
(b. 11-2-1944)
Dept. of Space, Bangalore
Sp: optical engineering, thin film
technology, and electro-optical
instrumentation.



10. S. Ramakrishnan
(b. 22-12-1956)
Tata Institute of Fundamental
Research, Mumbai
Sp: low temperature physics.



11. S. Ramasubramanian
(b. 3-3-1952)
Indian Statistical Institute, Bangalore
Sp: probability theory and stochastic
processes: diffusions and stochastic
calculus.

**12. K. Sankara Rao**

(b. 15-12-1939)

Indian Institute of Science,
Bangalore*Sp:* developmental biology of plants,
and plant biotechnology.**13. Murali Sastry**

(b. 10-6-1959)

National Chemical Laboratory, Pune

Sp: surface physics, hybrid
materials, and nanomaterials.**14. Anurag Sharma**

(b. 7-5-1955)

Indian Institute of Technology, New
Delhi*Sp:* fibre and integrated optics,
gradient-index optics, and applied
optics.**15. Namita Surolia**

(b. 2-4-1953)

Jawaharlal Nehru Centre for
Advanced Scientific Research,
Bangalore*Sp:* molecular parasitology,
biochemistry, and molecular biology.**16. Y.D. Vankar**

(b. 5-12-1950)

Indian Institute of Technology,
Kanpur*Sp:* synthetic organic chemistry,
carbohydrate chemistry, and
asymmetric synthesis.**17. Umesh Varshney**

(b. 26-10-1957)

Indian Institute of Science,
Bangalore*Sp:* molecular biology, protein
biosynthesis, and DNA repair.**18. K. Veluthambi**

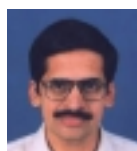
(b. 7-3-1953)

Madurai Kamaraj University,
Madurai*Sp:* plant biotechnology, plant
genetic engineering, and plant
molecular biology.**19. T.N. Venkataramana**

(b. 14-2-1958)

Tata Institute of Fundamental
Research, Mumbai*Sp:* rigidity and arithmeticity,
cohomology of arithmetic groups,
and Shimura varieties.**20. Saraswathi Vishveshwara**

(b. 30-4-1946)

Indian Institute of Science,
Bangalore*Sp:* quantum
chemistry, computational biology,
and biomolecular structure &
interaction.**21. Milind G. Watve**

(b. 12-12-1957)

M.E.S. Abasaheb Garware College,
Pune*Sp:* wildlife ecology & animal
cognition, evolutionary biology,
computational biology, and microbial
diversity**NEW HONORARY FELLOW****Ahmed H. Zewail**California Institute of Technology Pasadena,
California USA*Sp:* Developments of ultrafast lasers and
electrons for studies of dynamics with atomic-
scale resolution

Annexure 2

FELLOWS DECEASED



1. K.R. Anantharamaiah
(b. 2-9-1952, d. 29-10-2001)
Elected: 1994
Sp: radio astronomy, interstellar medium, and galaxies



2. V. Baliah
(b. 15-8-1917, d. 26-9-2000)
Elected: 1974
Sp: physical organic chemistry, organosulphur compounds, and heterocyclic compounds



3. M.L. Dhar
(b. 29-10-1914, d. 20-1-2002)
Elected: 1975
Sp: medicinal chemistry



4. Satish Dhawan
(b. 25-9-1920, d. 3-1-2002)
Elected: 1970
Sp: aerospace engineering, and fluid mechanics



5. T.R. Govindachari
(b. 30-7-1915, d. 28-12-2001)
Elected: 1951
Sp: chemistry of plant products, and organic synthesis



6. K. Krishna Murty
(b. 13-11-1926, d. 10-5-2001)
Elected: 1981
Sp: internal medicine, cardiology, and haematology



7. Anna Mani
(b. 23-8-1918, d. 16-8-2001)
Elected: 1960
Sp: atmospheric physics and instrumentation



8. T.R. Menon
(b. 17-4-1925, d. 29-5-2001)
Elected: 1963
Sp: fibre Science, textile physics, and textile testing



9. Divya Darshan Pant
(b. 18-10-1919, d. 9-5-2001)
Elected: 1968
Sp: plant morphology, palaeobotany, palynology, pollination ecology, cycads, and conifers



10. R.C. Paul
(b. 20-10-1919, d. 16-2-2002)
Elected: 1974
Sp: inorganic and physical chemistry



11. G.N. Ramachandran
(b. 8-10-1922, d. 7-4-2001)
Elected: 1950
Sp: crystallography, biophysics, biomolecular structure, theoretical physics, and mathematical logic



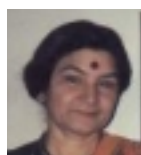
12. V. Ramalingaswami
(b. 8-8-1921, d. 28-5-2001)
Elected: 1974
Sp: nutritional disorders and liver diseases in the tropics, medical education, medical research administration, and health policy at national & international levels

**13. G.S. Ramaswamy***(b. 3-10-1923, d. 9-3-2002)*

Elected: 1974

Sp: structural engineering**17. T.S. Sadasivan***(b.22-5-1913, d. 18-8-2001)*

Elected: 1945

Sp: plant pathology**14. Darshan Ranganathan***(b. 4-6-1941, d. 4-6-2001)*

Elected: 1991

Sp: organic chemistry, bio-organic chemistry, and supramolecular chemistry**18. S.K. Sinha***(b.18-7-1934, d. 17-3-2002)*

Elected: 1983

Sp: agricultural sciences, and rural development**15. S. Rangaswami***(b.14-6-1912, d. 8-11-2000)*

Elected: 1943

Sp: organic chemistry, medicinal chemistry, and chemistry of natural products**19. M.A. Viswamitra***(b.14-11-1932, d. 10-4-2001)*

Elected: 1979

Sp: x-ray crystallography and molecular biophysics**16. P.S. Rao***(b.1-9-1914, d. 9-1-2002)*

Elected: 1943

Sp: organic chemistry and plan biochemistry**Robert Hanbury Brown***(b.31-8-1916, d. 16-1-2002)*

Elected: 1975

Sp: radio astronomy**HONORARY FELLOW DECEASED****Annexure 3****NEW ASSOCIATES — 2001****1. Abhishek Dhar***(b. 31-8-1970)*Raman Research Institute,
Bangalore*Sp:* nonequilibrium statistical physics**3. S.K. Satheesh***(b. 1-5-1970)*Indian Institute of Science,
Bangalore*Sp:* atmospheric aerosols, clouds, radiation, and climate**2. E.K. Narayanan***(b. 30-5-1973)*

Indian Statistical Institute, Bangalore

Sp: harmonic analysis**4. Vijay B. Shenoy***(b. 7-1-1971)*Indian Institute of Science,
Bangalore*Sp:* computational materials science, thin films, nanomechanics, and composite materials

Annexure 4

DISCUSSION MEETING

The architecture of materials

(2–5 December 2001, Orange County, Coorg)

List of participants

Topics discussed

Session 1 – Architecture of materials at the atomic level

- | | |
|------------------------------------|--|
| 1. S. Ranganathan, IISc, Bangalore | Variations on a structure: The body centered cubic lattice |
| 2. S. Lele, BHU, Varanasi | Thermodynamic modelling of materials using CVM |
| 3. U.D. Kulkarni, BARC, Mumbai | Atomic structure of short range ordered alloys |

Session 2 – Materials build-up from the liquid and vapour phases

- | | |
|--|--|
| 4. P. Ramachandra Rao, NML, Jamshedpur | Thermodynamics of solidification and melting |
| 5. A. Upadhyay, IIT, Kanpur | Role of microstructure in building dense parts |
| 6. V. Jayaram, IISc, Bangalore | How many types of amorphous arrangements exist at a given composition? |

Session 3 – Solid state transformations

- | | |
|--------------------------------------|--|
| 7. T.A. Abinandanan, IISc, Bangalore | Spinodal decomposition in fine grained materials |
|--------------------------------------|--|

Session 4 – Glasses and their crystallization

- | | |
|-------------------------------|--|
| 8. G.K. Dey, BARC, Mumbai | Ultrafine microstructures in Zr based glass forming alloys |
| 9. B.S. Murty, IIT, Kharagpur | Nanocrystallization of Zr and Mg based metallic glasses |

Session 5 – The defect structure of solids

- | | |
|---|---|
| 10. Samajdar, IIT, Mumbai
Indian Institute of Technology, Mumbai | Texture and microtexture – On the relative role and possible applications |
| 11. P. Veyssiere, CNRS-ONERA, France | Dislocation patterning and glide recovery in single slip |
| 12. V. Shenoy, IIT, Kanpur | Pattern formation in thin films |

Session 6 – Self assembly at the molecular level

- | | |
|--|---|
| 13. A. Nangia, University of Hyderabad,
Hyderabad | Self-assembly of nanostructures |
| 14. A. Sinha, NML, Jamshedpur | Biogenic synthesis of nano-particles through self assembly |
| 15. K.P.N. Murthy, IGCAR, Kalpakam | Interacting growth walks in the context of polymer and protein structures |

DISCUSSION MEETING

Selected topics in genetics and molecular biology

(5–9 December 2001, Orange County, Coorg)

LIST OF LECTURES

*List of Participants**Topics discussed*

- | | |
|--|--|
| 1. Hasan Korkaya, ICGB, New Delhi | Biochemical and functional characterization of Hepatitis E virus ORF3 protein |
| 2. Sandeep Krishna, IISc, Bangalore | Self organisation |
| 3. Benan Dincturk, Istanbul Technical University, Istanbul, Turkey | Archaeal glutamate synthase: gene organisation and evolutionary implications |
| 4. Shelley Bhattacharya, Visva Bharati, Santiniketan | Induction of proteins in animals by xenobiotic signals with an evolutionary approach |
| 5. Durgadas P Kasbekar, CCMB, Hyderabad | Genetic analysis of RIP Sterol reductase: genetic, molecular and cellular studies |
| 6. Surendra Ghaskadbi, Agharkar Research Institute, Pune | Insulin as a multifunctional protein: role of insulin signaling during morphogenesis |
| 7. S. Mahadevan, IISc, Bangalore | How cryptic are “cryptic” genes of bacteria? |
| 8. Hakan Bermek, Istanbul Technical University, Istanbul, Turkey | Lignin degradation and pulp bleaching by laccase, manganese peroxidase and xylanase |
| 9. Manjari Mazumder, NCBS, Bangalore | Protein motors |
| 10. Gopal Pande, CCMB, Hyderabad | Modulation of integrin signalling by membrane lipids |
| 11. Onder Peckan, Istanbul Technical University, Istanbul, Turkey | Formation, swelling and drying of Acrylamide (PAAm) gels |

Annexure 6

DISCUSSION MEETING

Genomics approach to biology

(24–27 February 2002, Orange County, Coorg)

List of participants

- | | |
|--|--|
| 1. Arun Kumar, IISc, Bangalore | 10. K. Muniyappa, IISc, Bangalore |
| 2. S. Dayananda, S.K. University, Anantapur | 11. V. Nagaraja, IISc, Bangalore |
| 3. P. Dwarakanath, Astra Zeneca India, Bangalore | 12. Parag Sadhale, IISc, Bangalore |
| 4. George Thomas, SPIC Science Foundation, Chennai | 13. H.A. Ranganath, University of Mysore, Mysore |
| 5. K.P. Gopinathan, IISc, Bangalore | 14. K. Sathyavelu Reddy, Sri Venkateswara University, Tirupati |
| 6. P. Gunasekaran, Madurai Kamaraj University, Madurai | 15. Shikha Laloraya, IISc, Bangalore |
| 7. P. Jayadeva Bhat, IIT, Mumbai | 16. N. Srinivasan, IISc, Bangalore |
| 8. S. Mahadevan, IISc, Bangalore | 17. Tapas K Kundu, JNCASR, Bangalore |
| 9. Maneesha S. Inamdar, JNCASR, Bangalore | 18. T.G. Umesh, Bangalore University P.G. Centre, Kolar |
| | 19. Utpal S Tatu, IISc, Bangalore |
| | 20. Umesh Varshney, IISc, Bangalore |

Annexure 7

TWELFTH MID-YEAR MEETING

(20 – 21 July 2001, Bangalore)

A. Special Lectures

1. R. Chidambaram, BARC, Mumbai
Scientific objectives of Pokhran II — Design and realization
2. P.N. Tandon, AIIMS, New Delhi
Neural basis of memory — New insights

B. Public Lecture

Vinod K. Gaur, IIA, Bangalore
Living with earthquakes

C. Lecture Presentations by Fellows/Associates

1. Vijayalakshmi Ravindranath, National Brain Research Centre, New Delhi
Towards understanding the pathogenesis of neurodegenerative disorders
2. Girish Sahni, Institute of Microbial Technology, Chandigarh
Challenges and surprises in the quest for designing an improved clot-buster drug
3. G. Marimuthu, Madurai Kamaraj University, Madurai
'Echo-locating' and 'listening' modes of capturing frogs by the Indian false vampire bat Megaderma lyra
4. Ram Sagar, UP State Observatory, Nainital
Star clusters
5. Nitin Nitsure, TIFR, Mumbai
Existence, truth, and proof: Modern foundations of mathematics
6. R. Nagarajan, TIFR, Mumbai
Quaternary borocarbide superconductors – The discovery and overview
7. Anil Kumar, NCL, Pune
Ionic solutions: From organic reactions to biomolecules
8. Vidita A. Vaidya, TIFR, Mumbai
Stress, depression and hippocampal damage
9. R. Ramesh, PRL, Ahmedabad
High resolution palaeomonsoon reconstruction from cave deposits
10. Bhaskar G. Maiya, University of Hyderabad, Hyderabad
Multichromophoric molecular assemblies based on porphyrin building blocks
11. S.V. Bhat, IISc, Bangalore
Resonating and non-resonating with electrons: Excitement unlimited
12. Ramesh Hariharan, IISc, Bangalore
Algorithms and computational complexity
13. Vijay V. Patel, CAIR, Bangalore
Challenges in control law design for modern manned aircraft

Annexure 8**SIXTY-SEVENTH ANNUAL MEETING, 2001**

(9–11 November 2001, Tirupati)

A. Presidential Address

1. K. Kasturirangan, Department of Space, Bangalore
Science and technology of imaging from space

B. (a) Symposium on Radar and Microwave Remote Sensing in Atmospheric Science

1. Kenji Nakamura, Nagoya University, Nagoya, Japan
Global precipitation observation by spaceborne radar
2. J. Srinivasan, IISc, Bangalore
Megha Tropiques: Indo-French satellite to study tropical convective systems
3. P. Balarama Rao, National MST Radar Facility, Gadanki
Radar scattering mechanisms
4. D. Narayana Rao, SV University, Tirupati
MST Radar and scientific applications
5. P.R. Mahapatra, IISc, Bangalore
Multiparameter radar observation of the lower atmosphere

(b) Symposium on Challenges of Infectious Diseases

1. Indira Nath, AIIMS, New Delhi
Scope of the symposium
2. M.K. Bhan, AIIMS, New Delhi
Developments in gastro-intestinal infections: Some unconventional associations
3. S.K. Acharya, AIIMS, New Delhi
Clinical and molecular aspects of Hepatitis in India
4. K. Srinath Reddy, AIIMS, New Delhi
Infections and cardiovascular diseases — The expanding spectrum
5. P.R. Narayanan, Tuberculosis Research Centre, Chennai
Tuberculosis, a continuing problem with newer challenges for India
6. J.V.R. Prasada Rao, Ministry of Health & Family Welfare, New Delhi
HIV/AIDS challenge in the new era
7. N.K. Ganguly, ICMR, New Delhi
Future technologies for epidemiology

C. Special Lectures

1. G.S. Agarwal, PRL, Ahmedabad
Controlling light by light-stoppage, storage and superluminal propagation of light
2. S.K. Pal, ISI, Kolkata
Soft computing, machine intelligence and data mining

D. Public Lectures

1. Albert Libchaber, Rockefeller University, New York, USA
Information science and molecular biology
2. K.S. Singh, formerly Anthropological Survey of India, Kolkata
Science, history and anthropology – A perspective on Prof. D.D. Kosambi's works and their impact

E. Lecture presentations by Fellows/Associates

1. Raghavan Varadarajan, IISc, Bangalore
Understanding and quantitating protein stability
2. Umesh Waghmare, JNCASR, Bangalore
Ab initio theory of ferroelectric materials
3. Amitabha Chattopadhyay, CCMB, Hyderabad
A novel fluorescence approach to monitor organization and dynamics of organized molecular assemblies
4. D.M. Salunke, NII, New Delhi
Molecular mimicry in biology
5. M.K. Sanyal, SINP, Kolkata
Growth mechanism and thermal properties of ultra-thin films
6. P.K. Chattaraj, IIT, Kharagpur
Chemical reactivity and density functional theory
7. A. Jayakrishnan, SCTIMST, Thiruvananthapuram
Immobile plasticizer in flexible PVC
8. Diptiman Sen, IISc, Bangalore
Conductance of quantum wires
9. R.B. Bapat, ISI, New Delhi
The pleasures of counting trees
10. P.C. Pandey, National Centre for Antarctic & Ocean Research, Goa
Antarctica: A continent of scientific frontiers
11. R. Raghavendra Rao, NBRI, Lucknow
Biogeography and biodiversity of the Himalaya: Conservation and utilization