Verma, Praveen Chandra see Banerjee, Suchitra

Verma, Susheel 872 (Scientific correspondence)

Vidhyalakshmi, A. 1438 (Research communication)

Vijay Kumar see Fakrudin, B.

Vijaya Kumar, T. see Rao, C. V. Dharma

Vijayalaxmi, K. K. see Krishna, Savitha N.

Vinit Kumar see Krishnagopal, Srinivas

Vinod, J. S. see Dinesh, S. V.

Viraktamath, C. A. see Joshi, Sunil

Virk, H. S. 7, 416, 1495, 1641 (Correspondence)

Vishwanath, P. R. 1013 (Historical notes)

Viswanathan, G. see Rao, M. Nageswara; see Subrahmanyam,

A. V.

Vo-Dinh, Tuan see Pal, Anjali

Vora, K. see Nair, A. G. C.

Walas, Fabien see Federici, Luca

Walawalkar, Mrinalini G. 1035 (Research news)

Wang, Lei see Wang, Yongjun

Wang, Min-Chao see Young, Chiu-Chong

Wang, Y. see Bharadwaj, Anshu; see Lium M.

Wang, Yongjun 1717 (Research communication)

Wangikar, U. see Raghunathan, C.

Wani, S. A. 1345 (Review article)

Warude, Dnyaneshwar see Joshi, Kalpana

Watve, A. see Jagtap, S.

Watve, A. V. see Chavan, Vishwas

Watve, Milind 95 (Research communication)

Wijesundara, D. S. A. see Seneviratne, K. A. C. N.

Wijeyamohan, S. see Vandercone, Rajnish

Wilkinson, M. see Gower, D. J.

Wongpomchai, Sugunya see Gangopadhyay, Gaurab

Xu, A. see Liu, M.

Yadav, A. V. 1176 (Scientific correspondence)

Yadav, Dadabhau see Shivagaje, Ashok

Yadav, M. C. see Singh, S. K.

Yashonath, S. see Bhide, Shreyas Y.

Yoshioka, Hiroshi see Madhavan, H. N.

Young, Chiu-Chung 1704 (Research communication)

Yuichi, Mori see Madhavan, H. N.

Yunus, Mohammad see Gupta, Anil K. (37)

Yusoff, K. see Varma, N. R. S.

Zacharias, Merry 1337 (Scientific correspondence)

Zhang, S. see Liu, M.

Zhang, Shicui see Wang, Yongjun

Zomawia, E. see Phukan, R. K.

## SUBJECT INDEX

Articles in Commentary, Historical notes, News, Opinion, Personal news, Research news; Books reviewed and letters in Correspondence are also listed alphabetically under the respective category name.

Academia 415 (Correspondence)

Acceleration record 1398 (Article, Geotechnics and Earthquake Hazards Special Section)

Achatina fulica 1657 (Scientific correspondence)

Acidic pollutants 1108 (Research communication)

Active fault 863 (Scientific correspondence)

Active tectonics 1269 (Research article)

Adansonia digitata 1709 (Research communication)

Adult brain 297 (Review article)

Aedes niveus 1179 (Scientific correspondence)

Age adjusted rate 285 (Scientific correspondence)

Ageing 1203 (Review article)

Agribiotech Task Force Report 426 (Commentary)

Agricultural biotechnology 425 (Commentary)

Agricultural postgraduates 131 (Research article)

Agricultural soils 317 (Research article)

Agro-bacterium rhizogenes 1442 (Research communication)

Agro-biodiversity 557 (Commentary)

AIFS 857 (Commentary)

Air-sea interaction 475 (Research article)

Airborne particulate matter 741 (General article)

Albian limestone 1516 (Scientific correspondence)

Algal blooms 1079 (General article)

Alismataceae 140 (Scientific correspondence)

Alkaline extraction method 1704 (Research communication)

Alkaline phosphatase 986 (Research communication)

Almora Nappe 995 (Research communication)

Alphonso mango 1045 (Scientific correspondence)

Amelioration 54 (Review article)

AmphiCB encoding 1717 (Research communication)

Amphiphile 1581 (Research communication)

Amplified fragment length polymorphism 60 (Research article)

Amplitude analysis 515 (Research communication)

Amplitude blanking 1605 (Research communication)

Amyloid phase 152 (Review article)

Anaerobic biomass fermentation 917 (Article, Application of

S&T to Rural Areas Special Section)

Anaimalai Hills 1282 (Research communication)

Ancient literature 415 (Correspondence)

Andaman islands 799 (Research communication); 1467

(Historical notes)

Angelica flauca 796 (Research communication)

Angles 11 (Correspondence)

Antarctica 420 (News)

Anthropogenic threats 447 (General article)

Antibiotics 1684 (Review article)

Antimalarial drug 1035 (Research news)

Aphanomyces invadans 289 (Scientific correspondence)

Apomictic cereal 292 (General article)

## SUBJECT INDEX

Apomixis 292 (General article)

Arabian sea 783,791 (Research communications)

Arithmetric progression 134 (News)

Arsenic phytotoxicity 342 (Research communication)

Arthobacter protophormiae 1263 (Research article)

Aspergillus niger 1180 (Scientific correspondence)

Astaxanthin 1290 (Research communication)

ASTRA 889 (Article, Application of S&T to Rural Areas Special Section)

Astrobiology 1341 (General article)

Astrology and science awareness 1030 (Correspondence)

Atherosclerosis 423 (Research news)

Atmospheric scattering 584 (General article)

ATP synthase 16 (Research news)

Authoratative lists 602 (General article)

Autocorrelation 370 (Research communication)

Avalanches 99 (Research communication)

Axel, Richard 1500 (News)

Ayurveda 1329 (Opinion)

Bacterial endophytes 687 (Research communication)

Bacterial strains 197 (Article, Membrane Proteins Special Section)

Bacterial transformation 734 (Scientific correspondence)

Base isolation 1426 (Article, Geotechnics and Earthquake Hazards Special Section)

Basic research 727 (Scientific correspondence)

Bay of Bengal 783,791 (Research communications)

Beach placers 1458 (Research communication)

Bearing capacity 1417 (Article, Geotechnics and Earthquake Hazards Special Section)

Benzoquinone 87 (Research communication)

Bhuj aftershocks 520 (Research communication)

Bhuj earthquake 637 (Research article); 811 (Research communication)

Bile acids 1666 (Review article)

Biodiversity conservation 430 (Scientific correspondence); 602 (General article)

Biodiversity information 749 (General article)

Bioenergy 932 (Article, Application of S&T to Rural Areas Special Section)

Biogas technology 917 (Article, Application of S&T to Rural Areas Special Section)

Biological fuel cell 455 (Review article)

Biological keys and tools 874 (General article)

Biological tissues 218 (Research article)

Biomass 908 (Article, Application of S&T to Rural Areas Special Section)

Biomass equations 683 (Research communication)

Bioremediation 73 (Research article)

Biotechnology 282 (Commentary); 874 (General article)

Biovar 1555 (Research article)

Blume, Martin 560 (In conversation)

Bombyx mori 383 (Research communication)

Bondla Wildlife Sanctuary 388 (Research communication)

Bone marrow 1438 (Research communication)

## **Book reviews**

Alzheimer Disease: Neuropsychology and Pharmacology 697 Advances in Marine Biology 115 A. K. Krishnaswami Ayyangar's Works on the History of Indian Mathematics 1752

Ancient Indian Astronomy and Contributions of Samanta Chandra Sekhar 393

Auxilliary Signal Design for Failure Detection 1146

Biotechnology – Explaining Horizons 1753

Calcium Channel Blockers 1147

City of Light – The Story of Fiber Optics 818

Classical Mechanics 818

Concise Encyclopedia of Plant Pathology 1462

Devil in the Mountain – A Search for the Origin of the Andes 699

Energy at the Crossroads: Global Perspectives and Uncertainties 1620

Ethical and Regulatory Aspects of Clinical Research 1619 Explaining the Universe 1619

Explorations: A Course in Reading, Thinking and Communication Skills 528

Finite Element Analysis Procedures in Engineering 1619 Free Boundary Problems: Theory and Applications 254

Genes, Trade and Regulation: The Seeds of Conflict in Food Biotechnology 113

A Handbook of English Grammar 528

A History of Vector Analysis – The Evolution of the Idea of a Vectorial System 1300

Hysteresis Machines 1011

An Introduction to Linear and Nonlinear Finite Element Analysis – A computational approach 1463

LASERS – Principles, Types and Applications 529

Photosynthesis in Algae 1301

A Primer of Special Relativity 1753

Principles of Radiometry in Radioactive Metal Exploration

Ramanujan - Essays and Surveys 1146

Red List of Threatened Vascular Plant Species in India – Complied from the 1997 IUCN List of Threatened Plants 114 Regional Groundwater Modeling 1011

Science Wallpaper for High School and Undergraduate Students 1754

Story of the Oceans 1302

Strange Curves, Counting Rabbits and Other Mathematical Explorations 697

Technology Transfer: Strategic Management in Developing Countries 254

Botanical nomenclature 602 (General article)

Botanical wealth 1642 (Correspondence)

Bottom simulating reflector 250 (Research communication)

Branchiostoma belcheri tsingtauense 244, 1717 (Research communications)

Brassica juncea 367 (Research communication)

Breakdown of K-cordierite 104 (Research communication)

Brownian motor 232 (Research communication)

Bt cotton 1096 (Research article)

Buck, Linda 1500 (News)

Buildings and environment 899 (Article, Application of S&T to Rural Areas Special Section)

Butterfly 1467 (Historical notes)

Caecilian amphibians 739 (Scientific correspondence) Calanoid copepod 109 (Research communication) Calcium carbonate 1597 (Research communication)

Canal irrigation 628 (Research article)

Candidatus 1183 (Scientific correspondence)

Carbon nanotubes 971 (Research communication)

Carbon transfer 674 (Research communication)

Catalytic materials 1700 (Research communication)

Caulerpa lentillifera 1321 (Correspondence)

Cauvery Basin 1516 (Scientific correspondence); 1738 (Research communication)

Cell growth 1275 (Research communication)

Central nervous system 383 (Research communication)

Centrifuge modelling 1405 (Article, Geotechnics and Earthquake Hazards Special Section)

Ceratovacuna lanigera 307 (Review article)

Ceropegia 553 (Correspondence)

CET watch 1494 (Correspondence)

Chandrasekharan, Venkataraman 822 (Personal news)

Chemical composition 654 (Research communication)

Chemiosmotic theory 16 (Research news)

Chemoprevention 1585 (Research communication)

Chitosan 1176 (Scientific correspondence)

Chloroquine-resistant malaria 726 (Correspondence)

Chronobiology 421 (News)

Cineraria maritima 1287 (Research communication)

Citrus 1183 (Scientific correspondence)

Clay 1747 (Research communication)

Coastal erosion 1232 (Research article)

Coastal Orissa 428 (Scientific correspondence)

Coda duration magnitude 520 (Research communication)

Collar rot 362 (Research communication)

Colour metallography 650 (Research communication)

Combustion efficiency 926 (Article, Application of S&T to Rural Areas Special Section)

# Commentary

The agribiotech Task Force Report 426

Agricultural biotechnology: Safe and responsible use 425

Creativity in science and music 1505

Higher education in a catatonic state? 282

HIV/AIDS in the developing world 857

Indian science slows down - V: The slack in the university sector 732

Man-made drought and the looming water crisis 20

On-farm conservation of plant genetic resources for food and agriculture 557

Pulse yields: Feeling the pulse 859

Rice-wheat cropping system - Food security and sustainability 1334

Science and its applications to societal security 1174 Statement on human cloning 1041

Communication technologies 960 (Article, Application of S&T to Rural Areas Special Section)

Community health care 967 (Article, Application of S&T to Rural Areas Special Section)

Complex formation 975 (Research communication)

Concave grating 1523 (General article)

Convective heat transfer 1237 (Research article)

Cook stoves 926 (Article, Application of S&T to Rural Areas Special Section)

Corals 1131 (Research communication)

Corbett Tiger Reserve 417 (Correspondence)

#### Correspondence

Appropriate sampling design in palaeobotany for correlating floristics with stratigraphy 850

An assessment of important physical traits shown by some captive red junglefowl in India 1498

Astrology and science awareness 1030

Cataloguing Indian biota 1321

CET watch 2004: The middle class love affair with 'scope' 1494

Cotton scenario in India 8

Decline of science in India 1029

Does India shine in scientific research? 7

Dramatically novel ideas 552

Elimination of lymphatic filariasis 1644

Enhancing quality of research 1641

Error in angles 11

Fate of agricultural postgraduats in India 131

Fifty years of the triple helix collagen 725

Flaw in statistical method 10

For whom the bells toll 276

Gero (geronto) phobia and Indian science 1029

How to convert subtraction into addition 9

The impediments preventing India from becoming a herbal giant 275

Indian famines revisited 1322

Indian researcher: The reluctant tool maker 1493

Indian scholars boost S&T research in Taiwan 131

Indian science: Diagnosing malady and suggesting remedy 1641

Interlinking of rivers: Ecologists wake up! 1030

Is Diclofenac the only cause of vulture decline? 1496

Isolation of the geological community 553

Is there anything like 'Indian Science'? 851

Managing water 132

Manganese nodules as a possible source of precious metals 278

Monitoring of chloroquine-resistant malaria 726

Need for periodic assessment of botanical wealth 1642

Occurrence of threatened fragrant *Ceropegia* in Toranmal Forests, Maharashtra 553

On the selection procedure of lecturers in universities and degree colleges 1165

Palk Bay: A future industrial complex site? 849

Plight of higher education in India 726

Problems and prospects of accurate science reporting in the press 552

Ramaseshan Fellowships 852

A rational approach to study ancient literature 415

Recognition of merit 132

Rediscovery of *Caulerpa lentilifera*: A potential food alga from Samiani Island, West Coast of India 1321

Reforms and funds crucial to enhance higher education and research in universities 1642

Reminiscences of G. N. Ramachandran 1495

Research papers from non-SCI journals can be indexed in SCI 1496

River linking 277

River linking: More a bane 725

River linking project: Case-specific approach is needed 1643

Secondary succession in the buffer zone of Corbett Tiger Reserve, Uttaranchal 417

Shanghai rankings and Indian universities 416

Sivaraj Ramaseshan – Reminiscences 8

Status of the academia 415

Tribute to an astonishing man: Francis Crick 551

Trickle down research: Do we need to turn from top-down to bottom-up? 1166

Turmeric and curcumin 1324

Where do we place the Indian cattle *Theileria mutants* of vore? 418

Yumthang: less-known valley of flowers in Sikkim Himalaya 1166

Water-fixing/producing bacteria for combating freshwater scarcity 1644

Water storage in Termanalia tomentosa 416

Women in science 1494

Cotton 8 (Correspondence)

Creativitiy in science 1505 (Commentary)

Creativity in music 1505 (Commentary)

Crick, Francis 551 (Correspondence)

Crinum woodrowii 1049 (Scientific correspondence)

Cross-pollination 872 (Scientific correspondence)

Crustal contamination 1614 (Research communication)

Crustal velocity 1607 (Research communication)

Cry1AC 1593 (Research communication)

Cucumber cotyledons 87 (Research communication)

Cucumber mosaic virus 1126 (Research communication)

Curcuma longa 44 (Review article)

Curcumin 44 (Review article); 1324 (Correspondence)

Curriculum design 32 (General article)

Curved surface 1237 (Research article)

Cycas rumphii 769 (Research communication)

Deccan intertrappean site 380 (Research communication)

Decycled sediment supply 1232 (Research article)

Deep lake sampling 420 (News)

Deep-sea environment 1747 (Research communication)

Deep water rice 1043 (Scientific correspondence)

Delhi iron pillar 1562 (Research article)

Denial of service 885 (General article)

Dermal ulcers 1139 (Research communication)

Designer milk 1530 (General article)

Designing curriculum 32 (General article)

Dhaincha 1507 (Scientific correspondence)

Diamonds 1577 (Research communication)

Diarrhoea 1341 (Review article)

Diclofenac 1496 (Correspondence)

Diesel exhaust emission 1700 (Research communication)

Dietary restriction 1203 (Review article)

Dimethylformamide 1652 (Scientific correspondence)

Dinosaur dung 1053 (Scientific correspondence)

Direct somatic embryogenesis 764 (Research article)

Diurnal variation 680 (Research communication)

DNA marker 469 (Research article)

Donor selection 1438 (Research communication)

DRDO (News)

Drought 20 (Commentary); 60 (Research article)

Dry deciduous forest 683 (Research communication)

DST's Women Scientists Scheme 852 (News)

Dumping site 73 (Research article)

Earias vittella 1593 (Research communication)

Earth pressures 1417 (Article, Geotechnics and Earthquake Hazards Special Section)

Earthquake 1354 (Article, Geotechnics and Earthquake Hazards Special Section)

Earthquake hazard 1193 (General article)

Earthquake-resistant design 1417, 1426 (Articles, Geotechnics and Earthquake Hazards Special Section)

Eastern Dharwar Craton 1607 (Research communication)

Eastern Ghats 28 (Scientific correspondence); 1614 (Research communication)

#### **Editorial**

The deepening tragedy of the commons 1027

Drug discovery: myth and reality 847

The foregin hand 723

Gerontophobia, ageing and retirement 1163

Law, science and climate change 1491

Measure and mismeasure of science 273

Revisiting an old triumph 549

Science and music: Truth and beauty 1639

Senses, science and the press 5

Sport and science: Olympic musings 413

Sprinting before we stand 129 The state of scientists 1319

EDUSAT 1034 (News)

Eigenfunctions 620 (Research article)

Electric current 854 (Research news)

Electronic catalogue 749 (General article)

Endophytic bacteria 67 (Research article)

Energy and buildings 899 (Article, Application of S&T to Rural Areas Special Section)

Engineering design 32 (General article)

Eocene 433 (Scientific correspondence)

Eremurus himalaicus 872 (Scientific correspondence)

Erythrina variegata 736 (Scientific correspondence)

ESR dating 1269 (Research article)

Euendolithic biota 868 (Scientific correspondence)

Evolution of sex 95 (Research communication)

Ferrar, M. L. 1467 (Historical notes)

Filamentous fungi 1431 (Research article)

Filariasis 1179 (Scientific correspondence)

Fish scales 692 (Research communication)

Flowering plants 1660 (General article)

Fluorescence correlation spectroscopy 239 (Research communication)

Fluorescence quenching 175 (Article, Membrane Proteins Special Section)

Food-borne pathogen 1345 (Review article)

Food insecurity 954 (Article, Application of S&T to Rural Areas Special Section)

Food security 1334 (Commentary)

Formicidae 1337 (Scientific correspondence)

Fossil chromosomes 865 (Scientific correspondence)

Fractal dimension 637 (Research article)

Fractured basement formations 147 (General article)

Free-electron lasers 1066 (General article)

Free energy 181 (Article, Membrane Proteins Special Section)

Free gas zone 667 (Research communication)

Frog ecology 81 (Research communication)

From the archives 22, 146, 284, 424, 731, 862, 1040, 1173, 1328, 1506, 1651

Fuelwood 926 (Article, Application of S&T to Rural Areas Special Section)

Fuzzy logic 99 (Research communication)

Gangolihat Dolomite 1733 (Research communication)

Garhwal Sub-Himalaya 1567 (Research article)

Gas chromatography 1589 (Research communication)

Gas engines 908 (Article, Application of S&T to Rural Areas Special Section)

Gas flow 854 (Research news)

Gas hydrate 515, 667, 1605 (Research communications)

Gasifer 908, 932 (Articles, Application of S&T to Rural Areas Special Section)

Gegeneophis nadkarnii 388 (Research communication)

Gene experession 1203 (Review article)

Gene regulation 1168 (Research news)

Genetic diversity 60,1555 (Research articles)

Genetic engineering 292 (General article)

Genetic fidelity 1589 (Research communication)

Genetic transformation 856 (Research news)

Genetic variability 358 (Research communication)

Geochronometer 1519 (General article)

Geological community 553 (Correspondence)

Geomatics approach 1115 (Research communication)

Geoscientific studies 1646 (News)

Geotechnical centrifuges 1405 (Article, Geotechnics and Earthquake Hazards Special Section)

Geothermal gradients 250 (Research communication)

Gerophobia 1029 (Correspondence)

Ghaggar river 1141 (Research communication)

Gill lamellae 1511 (Scientific correspondence)

Ginkgo 1512 (Scientific correspondence)

GIS 628 (Research article); 948 (Article, Application of S&T to Rural Areas Special Section)

Global warming 317 (Research article)

Globalized market 729 (Opinion)

Glossiphonia weberi 142 (Scientific correspondence)

Gobiids 433 (Scientific correspondence)

Godavari delta 1232 (Research article)

Goitre prevalence ratio 78 (Research communication)

Gossypium anomalum 286 (Scientific correspondence)

Gossypium hirsutum 25 (Scientific correspondence)

Granulocyte 491 (Research communication)

Graphic tools 1508 (Scientific correspondence)

Grid computing 11 (News)

Groundwater 942 (Article, Application of S&T to Rural Areas Special Section)

Group selection 95 (Research communication)

Growth inhibiton 1585 (Research communication)

Guaiacol peroxidase 342 (Research communication)

Guha, Bires Chandra 823 (Historical notes)

Gyps bengalensis 565 (Scientific correspondence)

Gypsum 1269 (Research article)

Habitat loss 1447 (Research communication)

Haematococcus pluvialis 1290 (Research communication)

Haemoglobinopathies 775 (Research communication)

Hairy root culture 1442 (Research communication)

Hard rock 658 (Research communication)

Heat shock response 986 (Research communication)

Helicoverpa armigera 1096 (Research article); 1654 (Scientific correspondence)

Hemolysin 190 (Article, Membrane Proteins Special Section)

Herbal drug 159 (Review article)

Herbal revolution 275 (Correspondence)

Herbicide resistance 367 (Research communication)

Heterochirality 1581 (Research communication)

Hevea brasiliensis 807 (Research communication)

Hexachlorocyclohexane 73 (Research article)

Higher education 282 (Commentary); 726, 1642 (Correspon-

Himalayan Frontal Thrust 1567 (Research article)

#### Historical notes

Bires Chandra Guha - Father of modern biochemistry in India

Description of rainfall variability in Buat -samhita of -mihira 531

Four hundredth anniversary of Kepler's supernova 1013

Lt Col. M. L. Ferrar - the 'butterfly mad' Chief Commissioner of the Andaman and Nicobar Islands 1467

Remembering my guru P. Maheshwari 1760

Remembering Panchanan Maheshwari - An eminent botanist of the twentieth century 1756

HIV 857 (Commentary)

Hoechst 33258 1256 (Research article)

Holocene 439 (Scientific correspondence)

Holocene climate 54 (Review article)

Hox puzzle 1038 (Research news)

Human cells 856 (Research news)

Human cloning 1041 (Commentary)

Human studies 1203 (Review article)

Hurst exponent 637 (Research article)

Hybrid rice 469 (Research article)

Hydrocarbon production 147 (General article)

Hydrogen peroxide 500 (Research communication)

Hydrological modelling 948 (Article, Application of S&T to Rural Areas Special Section)

Hydroxybenzoate 1263 (Research article)

Hypertension 1139 (Research communication)

Image analysis 348 (Research communication)

Immature inflorescence 764 (Research article)

Immune complexes 780 (Research communication)

Immune system 1536 (Review article)

Incidence of poverty 954 (Article, Application of S&T to Rural Areas Special Section)

## SUBJECT INDEX

Indian biota 749 (General article); 1321 (Correspondence)

Indian famines 1322 (Correspondence)

Indian Ocean 370 (Research communication)

Indian Ocean tropical cyclones 504 (Research communication)

Indian researcher 1493 (Correspondence)

Indian science 851 (Correspondence)

Indian shield 573 (Scientific correspondence)

Indo-Gangetic plains 1453 (Research communication)

Indo-US S&T forum 1499 (News)

Induction chemicals 491 (Research communication)

Indus Fan 1597 (Research communication)

Insecticide susceptibility 1722 (Research communication)

Internal velocity 1605 (Research communication)

International strategies 37 (General article)

Internet 885 (General article)

Intra-seasonal oscillations 325 (Research article)

Iodine deficiency 78 (Research communication)

Ion channels 166 (Article, Membrane Proteins Special Section)

Ion track membrane 642 (Research communication)

Isochrysis galbana 1339 (Scientific correspondence)

Isotopic age 439 (Scientific correspondence)

Jabalpur urban centre 1327 (News)

Jagannath meteorite 654 (Research communication)

Junglefowl 1498 (Correspondence)

Jute 680 (Research communication)

Kabir, Prabahan Kemal 1149 (Personal news)

Kameng and Sonitpur Elephant Reserve 1447 (Research com-

munication)

Karnaprayag landslides 1031 (News)

Kepler's supernova 1013 (Historical notes)

Kerala-Konkan basin 250 (Research communication)

Koyna earthquake 637 (Research article)

K/T boundary 1738 (Research communication)

Kumaun Tethys Himalaya 377 (Research communication)

Lactococcus lactis 1185 (Scientific correspondence)

Lala, Anil Kumar 396 (Personal news)

Laminar box 1398 (Article, Geotechnics and Earthquake Hazards Special Section)

Landraces 1115 (Research communication)

Large hadron collider 441 (Technical note)

Laser reflectometry 218 (Research article)

Layered systems 1370 (Article, Geotechnics and Earthquake Hazards Special Section)

Lecturers, selection procedure 1165 (Correspondence)

Lichens 83 (Research communication)

Light intensity 500 (Research communication)

Limnocharis flava 140 (Scientific correspondence)

Linear viscoelastic materials 1088 (Research article)

Lipid-protein interaction 203 (Article, Membrane Proteins Special Section)

Liquefaction 811 (Research communication); 1370, 1379, 1388 (Articles, Geotechnics and Earthquake Hazards Special Section)

Liquid crystals 152 (Review article)

Low level jet 475 (Research article)

Low period variability 791 (Research communication)

Low pressure 1245 (Research article)

Lower Eocene 1726 (Research communication)

Lunar science 1061 (General article)

Lymphatic filariasis 1644 (Correspondence)

Lyophilization 568 (Scientific correspondence)

Macro invertebrate 1508 (Scientific correspondence)

Magnesium alloy 1218 (Research article)

Magnetic field amplitude 332 (Research communication)

Maheshwari, Panchanan 1464 (Personal news); 1660 (General

article); 1756, 1760 (Historical Notes)

Malaria 1696 (Research article)

Malaria vectors 1722 (Research communication)

Manganese nodules 278 (Correspondence)

Mangifera indica 870 (Scientific correspondence)

Mangrove forests 1431 (Research article)

Mantle nitrogen 1577 (Research communication)

Mantle plumes 1170 (Research news)

Marker-assisted selection 607 (Review article)

Mars 1341 (General article)

Materials processing 1218 (Research article)

Meat samples 1278 (Research communication)

Mebiol gel 1275 (Research communication)

Medicinal herbs 796 (Research communication)

Meiosis 353 (Research communication)

Membrane protein 166, 175 (Article, Membrane Proteins Special Section)

Memory 297 (Review article)

Mercury 1180 (Scientific correspondence)

Meteoritic shower 428 (Scientific correspondence)

Methane emission 317 (Research article); 1084 (Review

Microfossils 868 (Scientific correspondence); 1733 (Research communication)

Micromus igorotus 1056 (Scientific correspondence)

Micropropagation 348 (Research communication)

Microstructure 642 (Research communication)

Microwave imager 504 (Research communication)

Microwave radiometer 370 (Research communication)

Microzonation 1193 (General article)

Mineral chemistry 555 (Research news)

Mitra, Sujit Kumar 395 (Personal news)

Modules degradation 1363 (Article, Geotechnics and Earthquake Hazards Special Section)

Molecular markers 159, 607 (Review articles)

Monolayers 1581 (Research communication)

Monsoon 325, 1245 (Research articles)

Monte Carlo simulation 218 (Research article)

Moon mission 1061 (General article)

Mushroom mycelian cultures 568 (Scientific correspondence)

Mycobacterial infections 771 (Research communication)

Mycobacterium tuberculosis 771 (Research communication)

Namdapha nature reserve 447 (General article)

Nanoparticles 486 (Research communication)

National priorities 37 (General article)

Natural gas 144 (Scientific correspondence) Neurogenes 297 (Review article)

Neutron activation 654 (Research communication)

### News

A celebration of science 1325

Deep lake sampling in Antarctica using helicopters 420

Disorder, complexity and biology 1648

EDUSAT – the Indian satellite for education 1034

Geoscientific studies in and around Delhi: An update 1646 Grid computing: Technology propelling frontiers of research 11

Indo-US S&T forum 1499

Landslide disaster of 24 September 2003 in Uttarkashi 134 Landslides at Karnaprayag: Another Uttarkashi in the making? 1031

Luring women back to science - DST's Women Scientists Scheme 852

National symposium on chronobiology 421

New Head for DRDO 852

NIPER has new Director 1033

The 2004 Nobel Prize in Physiology or Medicine: 'Odorant receptors and organization of the olfactory system' 1500

Perspectives in nonlinear dynamics 2004 1167

Physics education, basic research and new technologies 727

Primes in arithmetic progrssion 134

Public peer review – An alternative to impact factors 419

S. Ramaseshan Science Writing Fellowships 284

Seismic microzonation of Jabalpur Urban Centre: An experiment 1327

Nidar ophiolitic sequence 999 (Research communication)

NIPER 1033 (News)

Nitrification inhibitors 1084 (Review article)

Nitrogen 1704 (Research communication)

Nitrous oxide 317 (Research article)

Nobel Prize in Physiology or Medicine, 2004 1500 (News)

Noctiluca scintilans 990 (Research communication)

Noninvasive diagnostics 645 (Research communication)

Nonlinear dynamics 1167 (News)

Nucelotide sequences 494 (Research communication)

Nuclear structures 1388 (Article, Geotechnics and Earthquake Hazards Special Section)

Oceanic plagiogranite 999 (Research communication)

Olfactory system 1500 (News)

On-farm conservation 557 (Commentary)

### **Opinion**

Need for upgrading food quality monitoring capacities in the new globalized market 729

yurvéda 1329

Optical interferometry 228 (Research communication)

Orchard fertility 358 (Research communication)

Ortho cleavage 1263 (Research article)

Oryza sativa 353 (Research communication); 1051 (Scientific correspondence)

Otoliths 433 (Scientific correspondence)

Oxidation of iron 555 (Research news)

Oxygen isotopes 509 (Research communication)

Palaeobotany 850 (Correspondence)

Palaeoecology 1295 (Research communication)

Palk Bay 849 (Correspondence)

Palmitoylation 212 (Article, Membrane Proteins Special Section)

Pandanus amaryllifolius 1589 (Research communication)

Parthenium hysterophorus 1005 (Research communication)

Passive control 1426 (Article, Geotechnics and Earthquake Hazards Special Section)

Pathogenic bacteria 435 (Scientific correspondence)

Pearl oyster 1339 (Scientific correspondence)

Peer review 419 (News)

Pentoxylon 865 (Scientific correspondence)

#### Personal News

Venkataraman Chandrasekharan (1925–2003) 822

Prabahan Kemal Kabir 1149

Anil Kumar Lala (1950-2004) 395

Panchanan Maheshwari 1464

Sujit Kumar Mitra (1932-2004) 395

Raja Ramanna – a personal tribute 1152

Raja Ramanna – Down the memory lane 1150

N. K. Anant Rao (1915–2004) 1465

Ramachandran Srinivasan (1933–2004) 1622

M. S. Subbulakshmi (1916–2004) 1755

V. M. Thakur 1012

T. A. Venkitasubramanian 1303

Pest resistance 286 (Scientific correspondence)

Pharmaceutical pollution 565 (Scientific correspondence)

Pharmacognosy 159 (Review article)

Phase visualization 228 (Research communication)

Phosphatic stringers 1733 (Research communication)

Phosphorus distribution 650 (Research communication)

Photocells 339 (Research communication)

Phyllanthus emblica 1188 (Scientific correspondence)

Phylogenetic analysis 687 (Research communication)

Physics education 727 (Scientific correspondence)

Piper sarmentosum 141 (Scientific correspondence)

Plant breeding 607 (Review article)

Plant defence 1211 (Review article)

Plant regeneration 764 (Research article)

Plant resistance 1211 (Review article)
Plant tissue culture 67 (Research article)

Plantago ovata 1336 (Research communication)

Plasma proteins 203 (Article, Membrane Proteins Special Section)

Pollution indicator 435 (Scientific correspondence)

Polygalacturonase 1211 (Review article)

Polymer 339 (Research communication)

Population decline 565 (Scientific correspondence)

Potassic cordierite 104 (Research communication)

Poverty alleviation 960 (Article, Application of S&T to Rural Areas Special Section)

Pressure gradient 1237 (Research article)

Prostate cancer 1585 (Research communication)

Protein function 212 (Article, Membrane Proteins Special Section)

Protein modification 1530 (General article)

Proteins 152, 1211 (Review articles)

Proterozoic eon 280 (Research news) Protocatechuate 1263 (Research article)

Pulse yields 859 (Commentary)

Pyrolysis 981 (Research communication)

Qualitative traits 607 (Review article)

Quantum mechanical energy 620 (Research article)

Quartz C-axes 995 (Research communication)

Quercus leucotrichophora 674 (Research communication)

Radiation 1122 (Research communication)

Radioactive halo 662 (Research communication)

Rainfall variability 531 (Historical notes)

Rajaji National Park 1188 (Scientific correspondence)

Rajmahal hills 865 (Scientific correspondence)

Ralstonia solanacearum 1555 (Research article)

Ramachandran, G. N. 1495 (Correspondence)

Raman scattering 486 (Research communication)

Ramanella montana 80 (Research communication)

Ramanna, Raja 1150, 1152 (Personal news)

Ramaseshan, Sivaraj 8 (Correspondence)

Ramaseshan Fellowships 852 (Correspondence)

Rao, N. K. Anant 1465 (Personal news)

RAPD analysis 25 (Scientific correspondence)

RAPD marker 469 (Research article); 1654 (Scientific correspondence)

Rattan resources 90 (Research communication)

Receiver functions 573 (Scientific correspondence)

Recharge and correlation coefficient 658 (Research communication)

Recycled nitrogen 1577 (Research communication)

Reflectance imaging 645 (Research communication)

Regression analysis 520 (Research communication)

Remote sensing 683 (Research communication)

Research funding 1166 (Correspondence)

#### Research news

ATP synthase and the torsional mechanism: Resolving a 50-year-old mystery 16

Bridging the gap but breaking the rule: A tunicate twists the hox puzzle 1038

Gas flow over solid surfaces generates electric current 854 Genetic transformation of human cells by a soil phytopathogen presents common molecular strategies 856

A new antimalarial candidate 1035

Oxidation of iron sans oxygen fugacity: Fresh insights from lower mantle mineral chemistry 555

The oxygen state of the oceans of Proterozoic eon 280

Riboswitch: A new mechanism of gene regulation in bacteria

The row over earth's mantle plume concept 1170

Telomere shortening: A marker of atherosclerosis? 422

Residue burning 1713 (Research communication)

Response spectra 1354 (Article, Geotechnics and Earthquake Hazards Special Section)

Rhizoctonia solani 687 (Research communication)

Riboswitch 1168 (Research news)

Rice husk 981 (Research communication)

Rice soils 1084 (Review article)

Rice-wheat cropping system 1713 (Research communication)

River linking 277, 725, 1030, 1642 (Correspondence)

Rock motions 1354 (Article, Geotechnics and Earthquake Hazards Special Section)

Rosa 23 (Scientific correspondence)

Rotaxanes 232 (Research communication)

Rural energy 908, 932 (Articles, Application of S&T to Rural Areas Special Section)

Rural health 967 (Article, Application of S&T to Rural Areas Special Section)

Rural poverty 967 (Article, Application of S&T to Rural Areas Special Section)

S&T in India 732 (Commentary); 1029, 1641 (Correspondence)

S&T in Rural India 889 (Article, Application of S&T to Rural Areas Special Section)

Sacred groves of Manipur 430 (Scientific correspondence)

Saintpaulia ionantha 138 (Scientific correspondence)

Salmonella typhi 197 (Article, Membrane Proteins Special Section)

Salt iodization 1058 (Scientific correspondence)

Salt workers 1139 (Research communication)

Sampling design 850 (Correspondence)

Sandbox analogue modelling 235 (Research communication)

Saraswati river 1141 (Research communication)

Satellite imaging 584 (General article)

Scanning electron microscopy 692 (Research communication)

SCI journals 1496 (Correspondence)

Science reporting 552 (Correspondence)

Scientific research 7 (Correspondence)

Sclerotium rolfsii 362 (Research communication)

Sea level rise 1232 (Research article)

Seed germination 796 (Research communication)

Seismic data processing 515 (Research communication)

Seismic loading 1398 (Article, Geotechnics and Earthquake Hazards Special Section)

Seismic refraction 1607 (Research communication)

Seismic response 1363 (Article, Geotechnics and Earthquake Hazards Special Section)

Seismic site investigation 1388 (Article, Geotechnics and Earthquake Hazards Special Section)

Sesbania bispinosa 1507 (Scientific correspondence)

Shaking table 1398 (Article, Geotechnics and Earthquake Hazards Special Section)

Shanghai rankings 416 (Correspondence)

Shear modulus 1370, 1379 (Articles, Geotechnics and Earthquake Hazards Special Section)

Shear wave velocity 1388 (Article, Geotechnics and Earthquake Hazards Special Section)

Shock waves 734 (Scientific correspondence)

Signal recognition particle 244 (Research communication)

Signal sequence 986 (Research communication)

Singhbhum shear zone 662 (Research communication)

Single-molecule detection 239 (Research communication)

Sinodiaptomus indicus 109 (Research communication)

Site conditions 1354 (Article, Geotechnics and Earthquake Hazards Special Section)

Skin cancer detection 645 (Research communication)

Societal security 1174 (Commentary)

Soft sediment deformation 377 (Research communication)

Soft soil deposit 1193 (General article)

Soil water balance model 628 (Research article)

Solanum khasianum 1442 (Research communication)

Solar system 1341 (General article)

Solasodine 1442 (Research communication)

Solid state fermentation 917 (Article, Application of S&T to Rural Areas Special Section)

Sorbates 971 (Research communication)

Southwest monsoon 1245 (Research article)

Spalgis epius 571 (Scientific correspondence)

Spatial integration 954 (Article, Application of S&T to Rural Areas Special Section)

Spatial variations 1108 (Research communication)
Species diversity 799 (Research communication)

Spongy tissue 1045 (Scientific correspondence)

Spring constant 1370 (Article, Geotechnics and Earthquake Hazards Special Section)

Srinivasan, Ramachandran 1621 (Personal news)

Stem density 799 (Research communication)

Stepped combustion 1577 (Research communication)

Sterculia colorata 28 (Scientific correspondence)

Stomach cancer 285 (Scientific correspondence)

Subtraction 9 (Correspondence)

Sugarcane woolly aphid 307 (Review article)

Sun motion 1562 (Research article)

Superdiffusive motion 971 (Research communication)

Superoxide scavenging activity 83 (Research communication)
Sustainable building technologies 899 (Article, Application of

S&T to Rural Areas Special Section)
Sustainable development 37 (General article)

Tachypleus gigas 1511 (Scientific correspondence); 248 (Research communication)

Tea clones 60 (Research article)

Tectona grandis 358 (Research communication)

Tectonic evolution 1567 (Research article)

Telomere shortening 422 (Research news)

TEM studies 769 (Research communication)

Template synthesis 642 (Research communication)

Terminalia tomentosa 416 (Correspondence)

Terra Formation 1341 (General article)

Thakur, V. M. 1012 (Personal news)

Thalassaemias 775 (Research communication)

Theileria mutans 418 (Correspondence)

Therapeutic proteins 1530 (General article)

Threskiornis melanocephalus 1190 (Scientific correspondence)

Torsional mechanism 16 (Research news)

Trace elements 1536 (Review article)

Transmembrane helix 181 (Article, Membrane Proteins Special Section)

Triple helix collagen 725 (Correspondence)

Triticum aestivum 500 (Research communication)

Tropic of cancer 1562 (Research article)

Tryptophan fluorescence 175 (Article, Membrane Proteins Special Section)

Tubulin 383 (Research communication)

Turbidity flows 1597 (Research communication)

Turmeric 44 (Review article); 1324 (Correspondence)

Typhoid 1176 (Scientific correspondence)

Udayagiri 1562 (Research article)

ULF singals 332 (Research communication)

University science 732 (Commentary)

Upgrading 729 (Opinion)

Uranite 662 (Research communication)

Urinary iodine extraction 78 (Research communication)

Uttarakashi landslide 1600 (Research communication)

Uttarkashi landslide disaster 134 (News)

UV spectrometer 1523 (General article)

UV-B radiation 87 (Research communication)

Varaha-mihira 531 (Historical notes)

Venkitasubramanian, T. A. 1303 (Personal news)

Vertebrate fauna 1726 (Research communication)

Vertical array records 1363 (Article, Geotechnics and Earthquake Hazards Special Section)

Village community 960 (Article, Application of S&T to Rural Areas Special Section)

Village electrification 932 (Article, Application of S&T to Rural Areas Special Section)

Virus micronutrient 1536 (Review article)

Viscoelastic materials 1088 (Research article)

Vombisidris humboldticola 1337 (Research communication)

Vultures 1496 (Correspondence)

Water 132 (Correspondence)

Water crisis 20 (Commentary)

Water quality 942 (Article, Application of S&T to Rural Areas

Special Section); 990 (Research communication)

Water scarcity 1644 (Correspondence)

Watershed management 948 (Article, Application of S&T to

Rural Areas Special Section)

Watershed prioritization 948 (Article, Application of S&T to

Rural Areas Special Section)

Wealth creation in biotechnology 874 (General article)

Weathering history 509 (Research communication)

West Godavari district 1458 (Research communication)

Western Ghats 80,1282 (Research communications); 739 (Scientific correspondence)

Western Himalayas 863 (Scientific correspondence)

Wheat cropping system 1334 (Commentary)

Wild rose 23 (Scientific correspondence)

Wildlife management 1282 (Research communication)

Winter cooling 783 (Research communication)

Women in science 1494 (Correspondence)

Woody litter 1431 (Research article)

Xenotime 1458 (Research communication)

Yumthang 1166 (Correspondence)

Zygogramma bicolorata 1005 (Research communication)