

CURRENT SCIENCE

Volume 113 Number 3

10 August 2017

362 In this issue
GUEST EDITORIAL

- 363 An age-old question**
Shobhana Narasimhan

CORRESPONDENCE

- 365 Is India playing in the minor leagues in science?**, Gangan Prathap ■ **367 The pollu beetle in the Andaman Islands – concealing errors**, K. D. Prathapan ■ **368 Samuel Cnoll in Tranquebar and establishment of the first ‘pharmacy’ – Laboratorium Chymicum – in India in 1732**, Anantanarayanan Raman

NEWS

- 370 Science Last Fortnight** ■ **374 The accelerating universe**, S. Priya ■ **376 Geoeengineering and India**, G. Bala and Akhilesh Gupta ■ **377 Latest trends in quasicrystal research**, Nayuta Takemori and Alok Singh ■ **379 Shallow subsurface investigations for resource exploration and hazard estimation**, Girish Ch. Kothiyari, Sumer Chopra and M. Ravi Kumar

RESEARCH NEWS

- 381 National Physical Laboratory demonstrates 1 g Kibble balance: Linkage of macroscopic mass to Planck constant**, Anil Kumar, Harish Kumar, V. N. Ojha, Shakti Singh, Girija Moona, Satish, P. K. Dubey, H. K. Singh, Goutam Mandal and D. K. Aswal

COMMENTARY

- 383 Taking science to the people – easier said than done!**, P. J. Lavakare

TECHNICAL NOTE

- 385 Synthetic Aperture Sonar image of seafloor**, Saju Varghese, A. Anil Kumar, G. Nagendran, V. Balachandrudu, Nilofer Sheikh, K. G. Mohan, Kailash Singh, B. Gopakumar, Rajesh Joshi and R. Rajasekhar

GENERAL ARTICLES

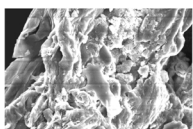
- 386 A bibliometric profile of *Current Science* between 1961 and 2015**
Peng Wang, Fangwei Zhu, Haoyang Song and Jianhua Hou
- 393 Drinking water sources in India: how safe is safe?**
Siroop Chaudhuri and Mimi Roy
- 403 Calibration of two-dimensional variably saturated numerical model for groundwater flow in arid inland basin, China**
Xiaomin Gu, Jingli Shao, Yali Cui and Qichen Hao

REVIEW ARTICLE

- 413 Evolution and progress in the application of radiation in cancer diagnosis and therapy**
Gaurav Aggarwal and Suresh Kumar Aggarwal

RESEARCH ARTICLES

- 422 Revisiting groundwater depletion and its implications on farm economics in Punjab, India**
S. K. Srivastava, Ramesh Chand, Jaspal Singh, Amrit Pal Kaur, Rajni Jain, I. Kingsly and S. S. Raju
- 430 Geophysical assessment of vulnerability of surficial aquifer in the oil producing localities and riverine areas in the coastal region of Akwa Ibom state, southern Nigeria**
N. J. George, J. G. Atat, I. E. Udoinyang, A. E. Akpan and A. M. George



439 **Exposure of *Eichhornia crassipes* (Mart.) Solms to salt water and its implications**
Temjensangba Imchen, S. S. Sawant and Wasim Ezaz

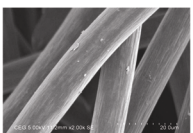
444 **Fruit peel waste: characterization and its potential uses**
Pranav D. Pathak, Sachin A. Mandavgane and Bhaskar D. Kulkarni

RESEARCH COMMUNICATIONS

455 **Comparative end-to-end evaluation of research organizations**
Gangan Prathap

457 **Fluorescence spectral features of blood components of pregnant women**
Sandhanasamy Devanesan, Mashaal AlShebly, Rudran Kalaivani, Krishnan Sivaji, Karim Farhat, Mohamad Saleh AlSalhi, Mohamed AlAtawi, Danny Rabah and Vadivel Masilamani

462 **Key technology network of BioMEMS through patent analysis**
Shu-Hao Chang



468 **Performance of cathode catalysts for bio-electricity from paper recycling, wastewater-fed, microbial fuel cells**
M. Radha and S. Kanmani

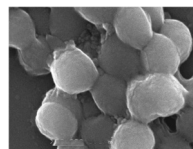
473 **Phosphorus accumulation associated with intense diagenetic metal-oxide cycling in sediments along the eastern continental margin of India**
C. Prakash Babu and V. Ramaswamy

478 **Estimation of geomorphic threshold in permanent gullies of lateritic terrain in Birbhum, West Bengal, India**
Sandipan Ghosh and Sanat Kumar Guchhait



486 **Mass balance estimation using geodetic method for glaciers in Baspa basin, Western Himalaya**
G. Vinay Kumar, Anil V. Kulkarni, Anil Kumar Gupta and Parmanand Sharma

492 **Luminescence dating of Neolithic pottery in North East India**
Sukanya Sharma and Pankaj Singh



496 **Antibacterial activity of protease hydrolysates isolated from *Silybum marianum***
Jing Yue, Zhicheng Zhu and Xinhua Li

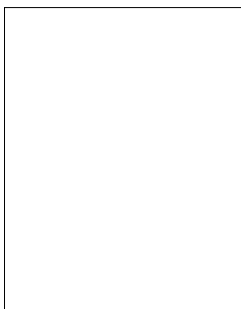
500 **Isolation and characterization of phosphorus solubilizing bacteria from manganese mining area of Balaghat and Chhindwara**
Shikha Dixit, K. K. Appu Kuttan and Rahul Shrivastava

BOOK REVIEWS

505 **A Petrographic Atlas of Ophiolite: An Example from the Eastern India–Asia Collision Zone**, Naresh Chandra Ghose, Nilanjan Chatterjee and Fareeduddin, *reviewed by* Manoranjan Mohanty ■ **506 Invertebrate Diversity and Conservation in the Western Ghats, India**, D. M. Priyadarsanan, M. Soubadra Devy, K. A. Subramanian, N. A. Aravind and N. K. Seena (eds), *reviewed by* R. J. Ranjit Daniels

HISTORICAL NOTES

508 **A historical perspective of Ganot's book in Maharashtra**, Siladitya Jana and Françoise Khantine-Langlois



◀ **COVER.** Melt water resources of Himalayan glaciers in the current scenario. See page 486.

Indexed in CURRENT CONTENTS/GEODATABASE/CHEMICAL ABSTRACTS/IndMED/SCOPUS/
WEB OF SCIENCE