CURRENT SCIENCE

Volume 114 Number 12

25 June 2018

2416 In this issue

EDITORIAL

2417 Biofortified crops to combat hidden hunger M. S. Swaminathan and P. C. Kesavan

CORRESPONDENCE

2419 Issues and strategies for rice residue management to unravel winter smog in North India

Rajbir Singh, Gulshan Mahajan, Simerjeet Kaur and Bhagirath Singh Chauhan

NEWS

- 2420 Science Last Fortnight
- 2424 Establishing/strengthening the state Climate Change Centre at Dehradun,
 Uttarakhand under NMSHE
 Tripti Jayal and Neetu Tyagi
- 2425 Gender-sensitization in Indian science: attitudes and action items
 Shubha Tole and L. S. Shashidhara

RESEARCH NEWS

2428 Controversy continues on the position of elements in the Periodic Table Eluvathingal D. Jemmis

COMMENTARY

2430 Finding Achilles heel of drug resistance in *Mycobacterium tuberculosis*Nisha Chandran, Mukta Sharma, Ashwin K. Jainarayanan and Samir K. Brahmachari

OPINION

2432 Relevance of modern technologies to Indian agriculture G. Padmanaban

SCIENTIFIC CORRESPONDENCE

- 2434 Do floodplain wetlands enhance the potential of fish ponds? Assessing supporting ecosystem service of Chatla wetland of Barak Valley, Assam, India Sultana Parven, Priyanka Sarkar and Tapati Das
- 2436 Largest freshwater lake 'Loktak' in Manipur needs urgent conservation
 Komal Salkar, Vishwanath Gadgil, Santosh Kumar Dubey, Milind Mohan Naik and
 Radha Raman Pandey
- 2437 Uranium mineralization in metasediments of North Delhi Fold Belt of Buchara area, Jaipur district, Rajasthan, India
 A. K. Patel, H. Yalla, M. B. Verma, A. K. Jain and L. K. Nanda

GENERAL ARTICLES

2440 Science and mega science: a perspective Rashmi Raniwala and Sudhir Raniwala



Bibliometric and visual analysis of planthopper research between 1980 and 2017

Chaoxing Hu and Lingzhen Cao

REVIEW ARTICLE

2453 Lithium-ion battery supply chain: enabling national electric vehicle and renewables targets

Epica Mandal Sarkar, Tanmay Sarkar and Mridula D. Bharadwaj

RESEARCH ARTICLES

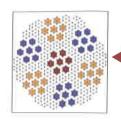
- A versatile 205 MHz stratosphere-troposphere radar at Cochin scientific applications
 K. Mohanakumar, K. R. Santosh, P. Mohanan, K. Vasudevan, M. G. Manoj, Titu K. Samson, Ajil Kottayil, V. Rakesh, Rejoy Rebello and S. Abhilash
- Impact of local factors on decision making a multi criteria modelling framework in wind energy investment
 Rahi Jain, Riddhi Panse and Satanand Mishra
- 2473 Navigational safety and traffic pattern analysis using AIS data on the western coast of India
 Saurav Mandal, Vishwanath Nagarajan and Om Prakash Sha
- 2482 Groundwater dynamics in North Bihar plains Rajiv Sinha, Surya Gupta and Santosh Nepal
- 2494 Effects of homegarden size on floristic composition and diversity along an altitudinal gradient in Central Himalaya, India
 Vibhuti, Kiran Bargali and S. S. Bargali
- Studies of forest fire induced changes in atmosphere over Uttarakhand, India, using space based observations and model simulations
 M. K. Madhav Haridas, P. V. N. Rao, K. Sreenivas Rao and Prijith Sudhakar

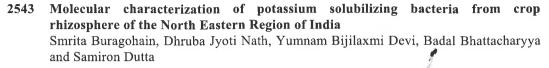
RESEARCH COMMUNICATIONS

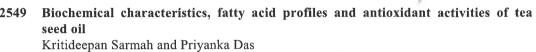
- 2513 Quality assurance of rituximab (anti-CD 20) antibodies by potency testing: determining the system suitability criteria and sample acceptance criteria
 Subhash Chand, Birendra Kumar, Vivek Morris Prathap, Surinder Singh and Richi V.
 Mahajan
- 2518 Improved square-Z-shaped DNG meta-atom for C- and X-band application
 Md. Mehedi Hasan, Mohammad Rashed Iqbal Faruque and Mohammad Tariqul Islam
- Analytical estimation of water contents, specific heat capacity and thermal profiles associated with enzymatic model compound β-cyclodextrin
 Gaurav R. Gupta, Pankaj D. Patil, Vasim R. Shaikh, Rahul R. Kolhapurkar, Dilip H. Dagade and Kesharsingh J. Patil
- 2530 Risk assessment of rail haulage accidents in inclined tunnels with Bayesian network and bow-tie model

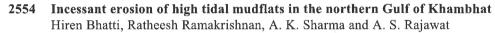
 Qingwei Xu and Kaili Xu
- Exclusion of putative CATSPER2 and STRC gene deletion and FOXI1 gene mutations in a unique cohort with sensorineural deafness and male infertility from south India

 Justin Margret Jeffrey, Jayasankaran Chandru, Amritkumar Pavithra, Murugesan Kalaimathi, Nagarathinam Indhumathi, Pangadan Ashraf and C. R. Srikumari Srisailapathy









Effect of synthetic astaxanthin, Lucantin on colour and physical quality of Indian white prawn, Fenneropenaeus indicus
Sambhu Chithambaran and Nasser K. Ayaril

BOOK REVIEWS

- 2561 Doing Science in India: My Second Innings, G. Padmanaban; reviewed by M. Vijayan
- 2562 The Quotable Darwin, Janet Browne (ed.); reviewed by Amitabh Joshi
- **Annual Review of Pharmacology and Toxicology, 2017,** Paul A. Insel *et al.* (eds); *reviewed by* Srivari Chandrasekhar

PERSONAL NEWS

2565 E. C. G. Sudarshan (1931–2018) Urjit A. Yajnik

HISTORICAL NOTES

2570 George Boole's Laws of Thought and Indian logic Subhash Kak



◀ COVER. Two-slots-four-elements dilemma. See page 2428.

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