

CURRENT SCIENCE

Volume 113 Number 5

10 September 2017

830 In this issue

GUEST EDITORIAL

831 Revamping higher education
S. K. Saidapur

CORRESPONDENCE

833 Rigorous enforcement of policy crucial to enhance scientific integrity, Govindasamy Agoramoorthy ■ 834 Copycats and impostors in science publishing: the case of *Current Science*, Jaime A. Teixeira da Silva ■ 835 Food and nutritional security, P. K. Gupta; *Response by* M. S. Swaminathan

NEWS

837 Science Last Fortnight ■ 841 World Ozone Day, S. Priya ■ 842 India International Science Festival 2016, Shilpa Pandey and Md. Firoze Quamar ■ 843 Green chemistry and engineering for sustainable development, Malti Goel ■ 844 Monitoring the spread and management of *Tuta absoluta*, Amer Fayad and Abhijin Adiga

OPINION

846 Climate change and human-wildlife conflicts in the Indian Himalayan biodiversity hotspot
Nishikant Gupta, Asha Rajvanshi and Ruchi Badola

COMMENTARY

848 Transforming Indian agriculture: is doubling farmers' income by 2022 in the realm of reality?
R. Sendhil, P. Ramasundaram and S. J. Balaji

851 A temporal analysis of the word 'impact' in titles published in *Current Science* between 1934 and 2015: to what impact?
R. Uma Shaanker

SCIENTIFIC CORRESPONDENCE

853 Citation indices and dimensional homogeneity, Gangan Prathap ■ 855 *Datura discolor* Bernh. (Solanaceae), an overlooked species in India, Bhagyashri B. Kumbhalkar and Mayur D. Nandikar ■ 857 Safflower (*Carthamus tinctorius* L.) – an underutilized leafy vegetable, Vrijendra Singh, R. R. Jadhav, G. E. Atre, R. V. Kale, P. T. Karande, K. D. Kanbargi, N. Nimbkar and A. K. Rajvanshi ■ 858 Temporal variation of phytoplankton assemblage in estuarine waters: implication of cyclone *Phailin*, S. K. Baliarsingh, Suchismita Srichandan, Aneesh A. Lotliker, M. F. Gracia-Escobar, Madhusmita Tripathy, K. C. Sahu and T. Srinivasa Kumar

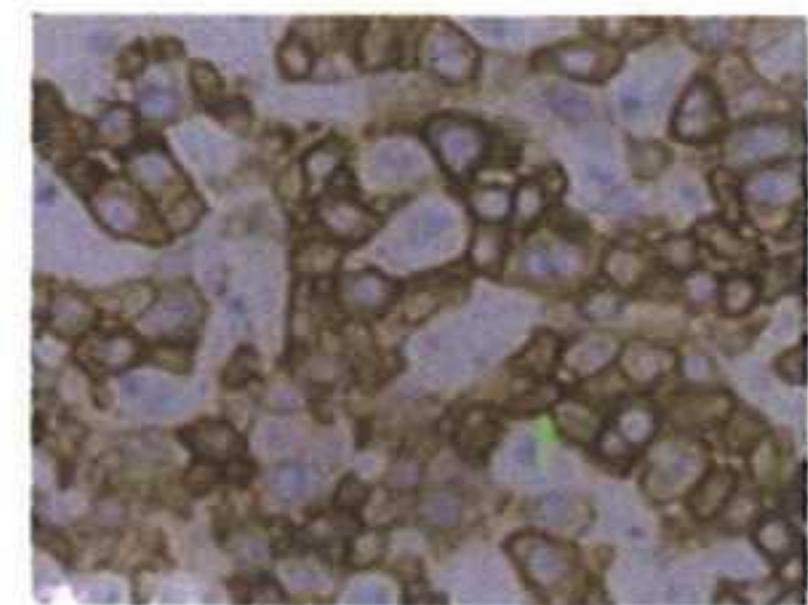
GENERAL ARTICLE

861 Need for regulatory policies in India, on the use of bisphenol A in food contact plastic containers
Duraisamy Mahamuni and Nirmaladevi Dhandayudapani Shrinithivihahshini



312
43





RESEARCH ARTICLES

- 869 **A new magnetic resonance imaging probe specifically targeting vascular endothelial growth factor receptor 2: synthesis, characterization and biological evaluation**
Xiaoguang You and Yikai Xu
- 877 **Co-registration of LISS-4 multispectral band data using mutual information-based stochastic gradient descent optimization**
S. Manthira Moorthi, D. Dhar and R. Sivakumar
- 889 **Wave-generated structures in the Siwalik rocks of Tista valley, eastern Himalaya: implication for regional palaeogeography**
Suchana Taral, Nandini Kar and Tapan Chakraborty
- 902 **A comparative assessment of the seismic response of an earthen dam using analytical simulation and empirical methods**
Srijit Bandyopadhyay, Raj Banerjee, Aniruddha Sengupta, Y. M. Parulekar and G. R. Reddy
- 911 **Material and energy balance calculations for commercial production of whole neem fruit powder using particle-size distribution and energy models**
Sonali Tajane, Praful Dadhe, Krishna Kanth Chole, Sachin Mandavgane and Sayaji Mehetre
- 919 **Physico-chemical studies on raw and processed moth caterpillar silks from the mega-biodiversity hotspots of India**
Pramod C. Mane, Nilam M. Qureshi, Manish D. Shinde, Sandesh R. Jadkar, Dinesh P. Amalnerkar and Ravindra D. Chaudhari
- 927 **Estimation of free speed of pedestrian flow on stairways at busy suburb rail transit station in India**
Shah Jiten, Joshi Gaurang, Arkatkar Shriniwas and Parida Purnima

RESEARCH COMMUNICATIONS

- 938 **Physico-chemical and tribological studies of *Argemone* biodiesel synthesized using microwave technique**
Shilpi Agarwal, Vijay K. Chhibber, Ajay K. Bhatnagar, Bhawana Srivastav, Amit Kumar, Shailey Singhal and Amit K. Sharma
- 941 **Isolation and structural elucidation of an isothiocyanate compound from *Indigofera tinctoria* Linn. extract**
Veena Sharma and Rashmi Singh
- 946 **Callus-mediated organogenesis in *Lilium polyphyllum* D. Don ex Royle: a critically endangered Astavarga plant**
G. S. Panwar, S. K. Srivastava and P. L. Uniyal
- 951 **Development of lifetime milk yield equation using artificial neural network in Holstein Friesian crossbred dairy cattle and comparison with multiple linear regression model**
Manisha Dinesh Bhosale and T. P. Singh
- 955 **Pliocene Indonesian Throughflow change and planktic foraminiferal diversity in the eastern subtropical Indian Ocean**
Ajai Kumar Rai, Vishwesh K. Pathak, Lakshmi K. Sharma and Ajhar Hussain
- 959 **Anthropogenic drivers shift diatom dominance–diversity relationships and transparent exopolymeric particles production in River Ganga: implication for natural cleaning of river water**
Usha Pandey, Jitendra Pandey, Anand V. Singh and Abha Mishra



- 965 **Sponge-associated bacterium, *Yangia pacifica*: a potential candidate for bioremediation of azo dyes**
N. S. Subina, Shanta Nair and Maria-Judith Gonsalves
- 969 **Hearing impairment of Indian agricultural tractor drivers**
Abhijit Khadatkar, C. R. Mehta, L. P. Gite, B. S. Narwariya and Anup Kumar
- 974 **Face recognition using a hybrid SVM–LBP approach and the Indian movie face database**
Francisco A. Pujol, Antonio Jimeno-Morenilla and José Luis Sánchez-Romero

BOOK REVIEW

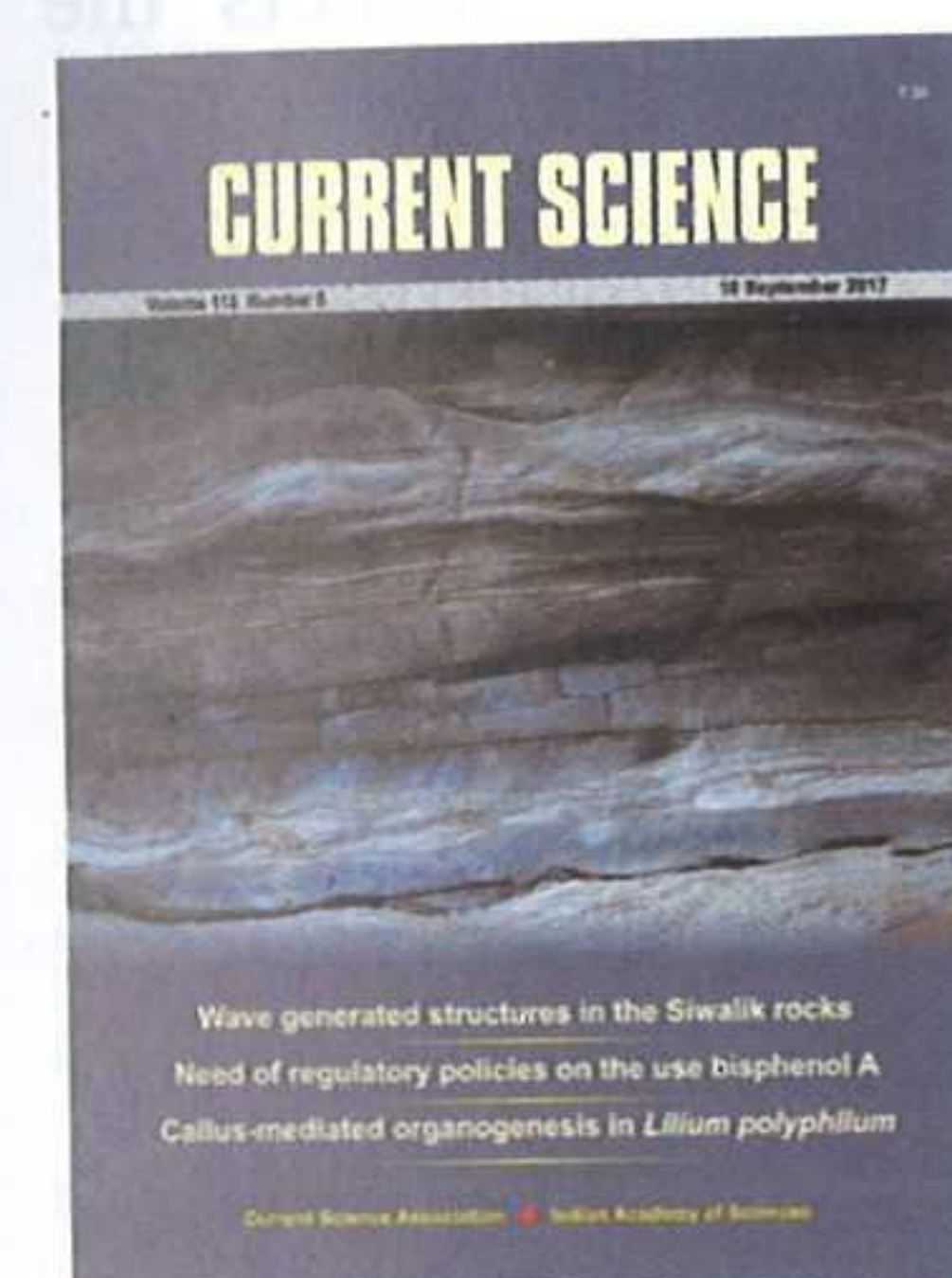
- 978 **Advances in Clinical Chemistry, Vol. 79** by Gregory S. Makowski (ed.), reviewed by S. Chandrasekhar

PERSONAL NEWS

- 979 **Udupi Ramachandra Rao (1932–2017)**
K. Kasturirangan and George Joseph
- 982 **Maryam Mirzakhani (1977–2017)**
Sameen Ahmed Khan

HISTORICAL NOTES

- 984 **Large-scale iron and steel production in the Coromandel: the earliest and longest survived Porto Novo Iron Works (1830–1859)**
Anantanarayanan Raman



◀ COVER. Alternation of mudstone with wave-rippled siltstone beds in the middle part of the Siwalik succession, Gish River section, north Bengal. Note symmetrical ripple forms with internal strata showing wave-generated features like bundled up-building, form discordance and bidirectional foresets. See page 889.

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