958 In this issue

GUEST EDITORIAL

959 Feeling the ‘pulses’ for the second green revolution
K. N. Ganeshaiah

CORRESPONDENCE

961 Synergetics for antibiotics?, S. N. Balasubrahmanyam
961 The need for developing scientific temper in India, H. S. Virk
962 CSIR in SIR 2016, Gangan Prathap

NEWS

965 Global grid of genetic gardens of biofortified crops, M. S. Swaminathan
966 Obsolete pesticide contamination: a new type of water and soil pollution, Abubaker B. Ali, Li Hong, Nazar A. Elshaikh and Yan Haofang
967 Discovery and naming of four new elements in the periodic table, Deepak Mathur
967 Sustainable development of the Indian Himalayan Region, Vaibhav Gosavi, Sandipan Mukherjee, Ranjan Joshi, Ravindra K. Verma, Kireet Kumar and Pitamber P. Dhyani
969 Metals and materials research, N. K. Mukhopadhyay
972 Science Last Fortnight

COMMENTARY

976 Ganoderma lucidum (Reishi): source of pharmacologically active compounds
Sarika Amdekar

OPINION

979 The importance of a preprint repository, Praveen Chaddah

SCIENTIFIC CORRESPONDENCE

981 Dry matter partitioning and growth analysis of soybean grown under elevated CO₂ and soil moisture levels, M. Madhu and Jerry L. Hatfield
984 Aconite from Sikkim Himalaya, India, Priyanka Agnihotri, Danish Husain and Tariq Husain
985 Caragana versicolor Benth. (Fabaceae), a keystone species of high conservation concern in the Hindu Kush Himalayan region, Amit Kumar, B. S. Adhikari and G. S. Rawat

GENERAL ARTICLES

988 The young generation of employees and their attitude towards work – a comparison of three countries
Maria-Madela Abrudan, Mirabela Matei and Teodora Roman

994 Trees for life: creating sustainable livelihood in Bundelkhand region of central India
S. B. Chavan, A. R. Uthappa, K. B. Sridhar, A. Keerthika, A. K. Handa, Ram Newaj, Naresh Kumar, Dhiraj Kumar and O. P. Chaturvedi

REVIEW ARTICLES

1003 Surface modification of titanium and its alloys for the enhancement of osseointegration in orthopaedics
Agnes Aruna John, Saravana Kumar Jaganathan, Eko Supriyanto and A. Manikandan

1016 Pedestrian crossing warrants – a review of global practices
Udit Jain and Rajat Rastogi
RESEARCH ARTICLES

1028 Numerical solution for one-dimensional Richards’ equation using differential quadrature method
Jamshid Nikzad, Seyed Saeid Eslamian, Mostafa Soleymannejad and Amir Karimpour

1037 Development of satellite high-definition television in Europe
Branimir Jaksic, Mile Petrovic, Krsto Jaksic, Ivana Milosevic and Ivana Marinkovic

1045 Guidance, navigation and control of a powered paraglidal aerial vehicle
Vindhya Devallay, Amit Kumar Mondal, A. J. Arun Jeya Prakash, Manish Prateek and Om Prakash

1055 Development of higher-order model for nonlinear interactions in hyperspectral data of mangrove forests
Somdatta Chakravorrtty and Devadatta Sinha

1063 Intra-puparial development of flesh fly Sarcophaga dux (Thomson) (Diptera, Sarcophaigidae)
Shuvra Kanti Sinha and Santanu Mahato

RESEARCH COMMUNICATIONS

1071 The inhibitory mechanism of compound K on A549 lung cancer cells through EGF pathway: an in silico and in vitro approach
Verónica Castro-Aceituno, Muhammad Hanif Siddiqi, Sungeun Ahn, Natarajan Sathishkumar, Hae Yong Noh, Shakina Yesmin Simu, Zuly E. Jiménez Pérez and Deok Chun Yang

1077 Microbial water desalination and bio-electricity generation – role of biomass carbon
A. Carmalin Sophia and V. M. Bhalambaal

1083 A time-series forecasting-based prediction model to estimate groundwater levels in India
Debasish Sena and Naresh Kumar Nagwani

1091 Cyclone Phyan-induced plankton community succession in the coastal waters off Goa, India
Gauns Mangesh, Kurian Siby, Shenoy M. Damodar, Naik Hema and S. W. A. Naqvi

1097 Conservation of Cremnoconchus Blanford 1869, an iconic freshwater gastropod genus from the Western Ghats, India
N. A. Aravind, Roshmi Rekha Sarma and N. A. Madhyastha

BOOK REVIEWS

1104 Game Theory and Mechanism Design, Y. Narahari, reviewed by Rajesh Sundaresan

1105 The Proof and the Pudding: What Mathematicians, Cooks, and You Have in Common, Jim Henle, reviewed by Sudhirendar Sharma

HISTORICAL NOTES

1106 The Grecian Doric-column lighthouse of Madras (1840) and its builder John Thomas Smith, Madras Army Corps of Engineers, Anantanarayanan Raman

COVER. Intra-puparial development of flesh fly Sarcophaga dux. See page 1063.

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