

# CURRENT SCIENCE

Volume 124 Number 1

10 January 2023

- 6 **In this issue**
- 
- EDITORIAL**
- 7 **Indoor air pollution and human health**  
H. Paramesh and Joshitha Sankam
- 
- NEWS**
- 9 **Technical sessions on climate change initiatives by DST @ CoP-27, 2022**  
Susheela Negi and Nisha Mendiratta
- 
- COMMENTARY**
- 10 **A real-time competition between humans and SARS-CoV-2**  
H. A. Ranganath
- 
- SCIENTIFIC CORRESPONDENCE**
- 13 **Magmatic-hydrothermal origin of granite-hosted Cu–Ba mineralization from southern Bundelkhand, Tikamgarh district, Madhya Pradesh, India**  
Abhinav Kumar, Geeta Bind and Dipak Hazra
- 
- GENERAL ARTICLES**
- 18 **Observed vis-à-vis projected crops yield in India in the context of climate change**  
Nalini Ranjan Kumar, Shilpi Kapoor, S. K. Srivastava and Naveen P. Singh
- 26 **A need to integrate metagenomics and metabolomics in geosciences and develop the deep-time digital earth-biome database of India**  
Pradeep Srivastava, Prasanta Sanyal, Sharmila Bhattacharya, Praveen K. Mishra, Suryendu Dutta, Rajarshi Chakravarti, Niraj Rai, Naveen Navani, Anoop Ambili, K. P. Karanth, Jahanavi Joshi, Sushmita Singh and Senthil Kumar Sadasivam
- 
- REVIEW ARTICLE**
- 38 **Mammalian diversity, distribution and potential key conservation areas in the Western Ghats**  
Honnnavalli N. Kumara, Santanu Mahato, Mewa Singh, Sanjay Molur and Avadhoot D. Velankar
- 
- RESEARCH ARTICLES**
- 50 **Association between hypertension and obesity: an empirical study of Lahaul valley, Himachal Pradesh, India**  
Mandeep Kaur and Kuldip Kaur
- 56 **Imprints of vehicular pollution in roadside dust from Kolkata, India: insights from magnetic susceptibility, geo-statistical and SEM studies**  
Supriya Mondal, Saurodeep Chatterjee, Rimjhim Maity, Debesh Gain and Dipanjan Mazumdar
- 63 **Wild *Solanum* species exhibit feeding antixenosis against ash weevil, *Mylokerus subfasciatus* Guerin-Meneville (Coleoptera: Curculionidae)**  
B. R. Jayanthi Mala, S. V. Krishnamoorthy, P. Saravan Kumar, T. H. Singh, K. S. Shiva-shanakara and P. D. Kamala Jayanthi





- 73 **Control and management of cyanophycean (*Spirulina platensis*) bloom in Padmatheertham, Thiruvananthapuram, India**  
K. G. Padmakumar, P. R. Remya, K. A. Stephy, Haritha Mohan, T. Preseetha, T. R. Arathi, B. Alan and Tessa Abraham

- 79 **Urban flood vulnerability assessment of Vadodara city using rainfall–run-off simulations**  
Harsh D. Patel, Gaurav V. Jain and Suvarna D. Shah

- 87 **Clay minerals and the adsorption of fullerenes: clues from iridium-enriched Cretaceous–Palaeogene Anjar intertrappean beds, Kachchh district, Gujarat, India**  
Pronoy Roy, G. Parthasarathy and Bulusu Sreenivas

- 94 **Effects of temperature and slope on the infiltration rate for a landfill surface**  
Lohit Jain and Sumedha Chakma



- 102 **Nesting biology of allodapine bee *Braunsapis picitarsis* (Cameron) from South India**  
P. S. Anusree Padmanabhan and Mani Chellappan

- 108 **Genetic diversity within and among populations of the fulvous fruit bat *Rousettus leschenaulti* using RAPD analysis**  
R. Steffi Christiane, U. Ramesh and T. Karuppudurai

- 115 **Cross-resistance and biochemical mechanism in an insecticide-resistant population of *Trichogramma chilonis* Ishii (Hymenoptera: Trichogrammatidae) and its parasitizing efficiency against invasive fall armyworm *Spodoptera frugiperda* (J.E. Smith)**  
Priyanka Dupatne, T. Venkatesan, Omprakash Navik, M. Mohan, K. M. Venugopal, Basavaarya, V. Linga, Y. Lalitha, G. Sivakumar and M. Ashwini

---

#### BOOK REVIEWS

- 123 **Cave Science: Insights from the Indian Subcontinent.** Jayant Biswas (ed.); *reviewed by* Rajiv Sinha
- 123 **Abiotic Stresses in Agriculture: Impacts and Management.** H. Pathak, Jagadish Rane, N. P. Kurade, D. D. Nangare and S. A. Kochevad (eds); *reviewed by* S. B. Chavan and Aliza Pradhan

---

#### PERSONAL NEWS

- 125 **Tapan Chakrabarti (1949–2022)**  
Rishiram Ramanan, Amit Bafana, Saravanadevi Sivanesan and Kannan Krishnamurthi
- 126 **Ashok Kumar Srivastava (1960–2022)**  
Rupesh S. Mankar
- 



- ◀ **COVER.** A view of the Padmatheertham pond in Thiruvananthapuram after the removal of algal bloom. See page 73.

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