

# CURRENT SCIENCE

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### EDITORIAL

- 1931 **Is Biological Diversity Act hampering biodiversity research?**  
Yogesh Shouche

### CORRESPONDENCE

- 1933 **Harold Maxwell-Lefroy and the management of pestiferous insects in urban environments in the early decades of the 20th century**  
Anantanarayanan Raman
- 1934 **Rationalization of the S. S. Bhatnagar Prizes scheme using CWTS Leiden 2019 data**  
Gangan Prathap

### NEWS

- 1936 **Science Last Fortnight**
- 1940 **Molecular systematics**  
Arun K. Pandey

### OPINION

- 1941 **Challenges for effective implementation of National Resource Efficiency Policy 2019**  
K. Lenin Babu and S. Jagadeesh

### COMMENTARY

- 1942 **A wild encounter to ensure a food secure 2050**  
Basabdatta Das, Samik Sengupta, Kashinath Bhattacharya and Swati Gupta Bhattacharya
- 1944 **India's second Biennial Update Report: five key takeaways**  
Shanal Pradhan and Gautam Goswami

### SCIENTIFIC CORRESPONDENCE

- 1947 **Point source-driven seasonal hypoxia signals habitat fragmentation and ecosystem change in River Ganga**  
Jitendra Pandey, Deepa Jaiswal and Usha Pandey
- 1949 **Yellow pan traps as an additional gadget for collecting sandhopper amphipods**  
K. Rajmohana and J. N. Trivedi

### GENERAL ARTICLES

- 1951 **P. C. Vaidya's contributions to mathematics and physics**  
A. A. Shashikumara and Rashmi Kumbar
- 1958 **Need for a clear techno-legal definition of blue gold: the river floodplains in India**  
Vikram Soni, Shashank Shekhar and Vikrant Jain
-

**SPECIAL SECTION: 150 YEARS OF PERIODIC TABLE**

- 1962 **Foreword**  
E. Arunan
- 1963 **A brief history of the periodic table**  
C. N. R. Rao
- 1967 **Lead kindly light: spectroscopy and the periodic table**  
S. Krishna Prasad
- 1971 **The elements of life**  
Sourav Ghosh and Govindasamy Mugesh
- 1986 **Dmitri Mendeleev (1834–1907) – Creator of the greatest table of elements**  
Indumati Rao

**RESEARCH ARTICLES**

- 1990 **Positron annihilation spectroscopic studies of sintering effect on sol-gel-synthesized SiO<sub>2</sub> wide band gap semiconductor nanocrystals**  
Anjan Das
- 1999 **Numerical analysis of the gas-particle two-phase flow in a multistep dust collector**  
Jiafeng Yao, Zheng Wang, Minghao Yu, Yaoao Wang, Bai Chen and Hongtao Wu
- 2006 **Carbon sequestration potential of mango orchards in India**  
A. N. Ganeshamurthy, V. Ravindra and T. R. Rupa
- 2014 **Carbon sequestration potential of agroforestry systems in the Indian arid zone**  
S. P. S. Tanwar, Praveen Kumar, Archana Verma, R. K. Bhatt, Akath Singh, Kanhaiya Lal, M. Pahdar and B. K. Mathur
- 2023 **The influence of nitrogen in nutrient solution on growth, nutrient uptake and enzymatic activity of *Anacardium othonianum* Rizz.**  
Layara A. Bessa, Marialva A. Moreira, Fabiano G. Silva, Luciana C. Vitorino and Clarice A. Megguer

**RESEARCH COMMUNICATIONS**

- 2034 **Development of optimal weight algorithm for efficient application of dual tree complex wavelet transform for resolution enhancement of satellite images**  
Akanksha Garg, Deepak Murugan and Dharmendra Singh
- 2040 **A smoothing motion method for high-speed cable-driven parallel camera robots**  
Huilong Wei, Yuanying Qiu, Yu Su and Ying Sheng
- 2049 **Numerical messages of plants under different stresses**  
M. Teuma Mbezi, Ambang Zachée, H. Ekobena Fouda and C. Kofané Timoleon
- 2052 **Infusing microbial consortia for enhancing seed germination and vigour in pigeonpea (*Cajanus cajan* (L.) Millsp.)**  
K. Raja, R. Anandham and K. Sivasubramaniam

**BOOK REVIEWS**

- 2059 **Who We Are And How We Got Here: Ancient DNA and the New Science of the Human Past.** David Reich; reviewed by RM. Pitchappan
- 2060 **Volcanic and Igneous Plumbing Systems: Understanding Magma Transport, Storage, and Evolution in the Earth's Crust.** Steffi Burchardt (ed.); reviewed by N. V. Chalapathi Rao
- 2062 **Comprehensive Remote Sensing, Volume 7: Atmosphere.** Editor in Chief: Shunlin Liang, Volume Editor: Mitchell D. Goldberg; reviewed by R. P. Singh and Rohit Pradhan

**PERSONAL NEWS**

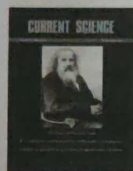
- 2064 **T. N. Seshan (1932–2019)**  
V. Siddhartha, Y. S. Rajan and Jai P. Singh

**HISTORICAL NOTES**

- 2067 **Oliver Howe Lowry – the ‘incorrigible addict’ of micro-analytical methods**  
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**Institutional Members**

**2076 Acknowledgements**



COVER. Dmitri Mendeleev (1834–1907) – Creator of the Table of Elements. See special section.

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