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SCHOLAR [scholar.google.com/citation
s?user=_dE1iCUAAAAJ&hl=en](https://scholar.google.com/citation?user=_dE1iCUAAAAJ&hl=en)

Dr. Abin sebastian PhD

Department of Botany

PROFILE

My work focuses on environmental biotechnology and plant-based cleanup methods (phytoremediation), including studies on managing trace elements in crops like rice and environmental decarbonization.

APPOINTMENT

Joined 03 August 2021 · **Teaching** 5 · **Industry** Nil · **Research** 8 Years

SPECIALISATION

Environmental Biotechnology

RESEARCH INTERESTS

Studying how environmental factors influence the physiological functioning · adaptation · and survival mechanisms of plants. · Phytotechnology: Leveraging plants · plant-based systems · and vegetation to address environmental challenges · clean up contaminated environments (phytoremediation) · or generate bio-products.

COURSES HANDLED

Fascinating World of Plant sciences · Ecotourism · Plant resources and ventures in Botany · Gardening and Landscaping · Herbal Technology · Plant Biotechnology · Analytical techniques in plant sciences · Molecular biology · Forestry · Plant Breeding

LABORATORIES

Plant Biotechnology · Analytical techniques in plant sciences · Molecular biolog

QUALIFICATIONS

PhD — Plant sciences

2014

Department of Plant Science, University of Hyderabad

NA · Thesis: Ecophysiology of cadmium exposed *Oryza sativa*

L.:insights into molecular interactions with iron

EXPERIENCE

Assistant Professor

2021 – Present

St.Georges College Aruvithura · Teaching

RESPONSIBILITIES

Coordinator

2021 – 2026

Forestry club

JOURNAL PAPERS

[1] Taoufik El Rasafi, Abdallah Oukarroum, Abdelmajid Haddioui, Hocheol Song, Eilhann E Kwon, Nanthi Bolan, Filip MG Tack, Abin Sebastian, MNV Prasad, Jörg Rinklebe, "Cadmium stress in plants: A critical review of the effects, mechanisms, and tolerance strategies," *Critical Reviews in Environmental Science and Technology*, Taylor & Francis, vol. 52, no. 5, pp. 675-726, 2022. ISSN 1064-3389. doi: <https://doi.org/10.1080/10643389.2020.1835435>. **IF 12.5**

BOOKS & CHAPTERS

[1] Editor, *Bioremediation of Emerging Contaminants Omics and Phytotech Approaches*, Majeti Narasimha Vara Prasad, Larry Erickson, Abin Sebastian, Sailaja Elchuri (Eds.), 1 ed., Elsevier, 2026, pp. 942. ISBN 9780443455032.

CITATION METRICS

3300

CITATIONS

21

H-INDEX

26

I10-INDEX

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PUBLICATIONS

Source: Google Scholar

TRAINING & FDPS

Induction program

Induction programme · University of Kerala · Thiruvananthapuram · Offline

January 2024–February 2024

AWARDS & HONOURS

Outstanding student scholar

International Botanical society

2017

LANGUAGES

Malayalam · English · Hindi