St. PETER'S
INSTITUTE OF HIGHER EDUCATION & RESEARCH
(DEEMED TO BE UNIVERSITY u/s 3 OF THE UGC ACT 1956)
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ISO 9001: 2015 Certified.
Avadi, Chennai - 600 054, Tamil Nadu.

ANNUAL PROGRESS REPORT FOR SDG 14 – 2024

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17.3.14. University publishes progress against SDG 14

At St. Peter's Institute of Higher Education and Research (SPIHER), the Life Science Departments—including Biochemistry, Microbiology, and Biotechnology—play a pivotal role in advancing the Sustainable Development Goal 14 (SDG 14): Life Below Water. These departments contribute to marine conservation through cutting-edge research, academic seminars, and conferences that focus on the protection and sustainable use of marine ecosystems.

As part of our commitment to environmental sustainability and community service, the National Service Scheme (NSS) at SPIHER organized a Beach Cleanup Drive aimed at promoting awareness about marine pollution and encouraging sustainable practices. This initiative brought together NSS volunteers, faculty members, and local communities to actively contribute to cleaning and preserving our coastal environments. SPIHER supports SDG 14 by promoting awareness and action toward the conservation of marine and freshwater ecosystems. The university encourages research and educational initiatives on water quality management, pollution control, and aquatic biodiversity. Through seminars, student projects, and community outreach, SPIHER spreads awareness about reducing plastic waste and protecting marine life. The institution's environmental clubs actively participate in clean-water campaigns and coastal conservation activities. By integrating sustainable practices and environmental education, SPIHER nurtures a sense of responsibility toward preserving oceans and aquatic resources for future generations.

Enhancing Environmental Awareness on the Impact of Plastic Pollution

Event Name: Enhancing Environmental Awareness on the Impact of Plastic Pollution
Organized by: Department of Microbiology
Date: 30.09.2024
Time: 09.30 am

Plastic pollution has emerged as one of the most critical threats to marine ecosystems, directly affecting the health of oceans, coastal regions, and aquatic life. In alignment with SDG 14: Life below Water, awareness initiatives on plastic pollution focus on educating individuals and communities about the urgent need to protect marine biodiversity. These programmes highlight the harmful effects of single-use plastics, microplastics, and improper waste disposal on marine organisms, coral reefs, and food chains.

Through workshops, campaigns, and clean-up drives, the importance of sustainable consumption, responsible waste management, and eco-friendly alternatives is emphasized. By fostering behavioural change and empowering citizens to reduce plastic use, these awareness efforts contribute to preserving oceans, promoting resilient ecosystems, and ensuring the sustainability of marine resources for future generations.

Programme Brochure

Program Title	**"Enhancing Environmental Awareness on the Impact of Plastic Pollution"**
Program Theme	To create awareness on plastic pollution among students To promote actions to protect the environment from plastic pollution
Duration of Event	Two Hours
Organized by	Department of Microbiology
Date and Time	30.09.2024 at 09.30 am
Co-ordinator	Mrs. R. Vijayalakshmi, NSS Event Coordinator Dr. D. Gideon Moses, AP/MICROBIO
Facebook Link	https://www.facebook.com/share/p/vMSevvPhGaXAh7qj/?mibextid=qi2Omg
Linkedin Link	https://www.linkedin.com/posts/spiherchennai_plasticpollution-environmentalawareness-saveourplanet-activity-7246019641435684864-Iz3E?utm_source=share&utm_medium=member_android

Instagram Link	https://www.instagram.com/p/DAfQXD6Pjdv/?igsh=Nnc1ZzhxaTFmcW10
Organizing Secretary	Dr. S. Ganesh Kumar, Asso. Prof./HoD/MICROBIO
Convener	Dr. P. Periyasamy, NSS Coordinator
Mode	Offline Mode
Venue	EEE Block Smart Room No. 258, SPIHER
No. of participants	37

Participants involved in the awareness programme

Public Links

https://www.instagram.com/p/DAfQXD6Pjdv/?igsh=Nnc1ZzhxaTFmcW10

https://www.facebook.com/share/p/vMSevvPhGaXAh7qj/?mibextid=qi2Omg

https://x.com/SpiherIndia/status/1840254079630529013?t=pclGE2OGp6_FG88hHw2CoQ&s=19

https://www.linkedin.com/posts/spiherchennai_plasticpollution-environmentalawareness-saveourplanet-activity-7246019641435684864-Iz3E?utm_source=share&utm_medium=member_android

Students Drawing Competition on

"Enhancing Environmental Awareness on the Impact of Plastic Pollution"

Enhancing Environmental Awareness on the Impact of Plastic Pollution

The Department of Microbiology, in collaboration with the NSS unit of SPIHER, organized a Students' Drawing Competition and Awareness Rally on the theme "Enhancing Environmental Awareness on the Impact of Plastic Pollution" on September 30th, 2024, at Block, Smart Room: 258. Both students and

The Secret Sauce Of Israel's Economy

Battle-testing weapons on the Palestinians

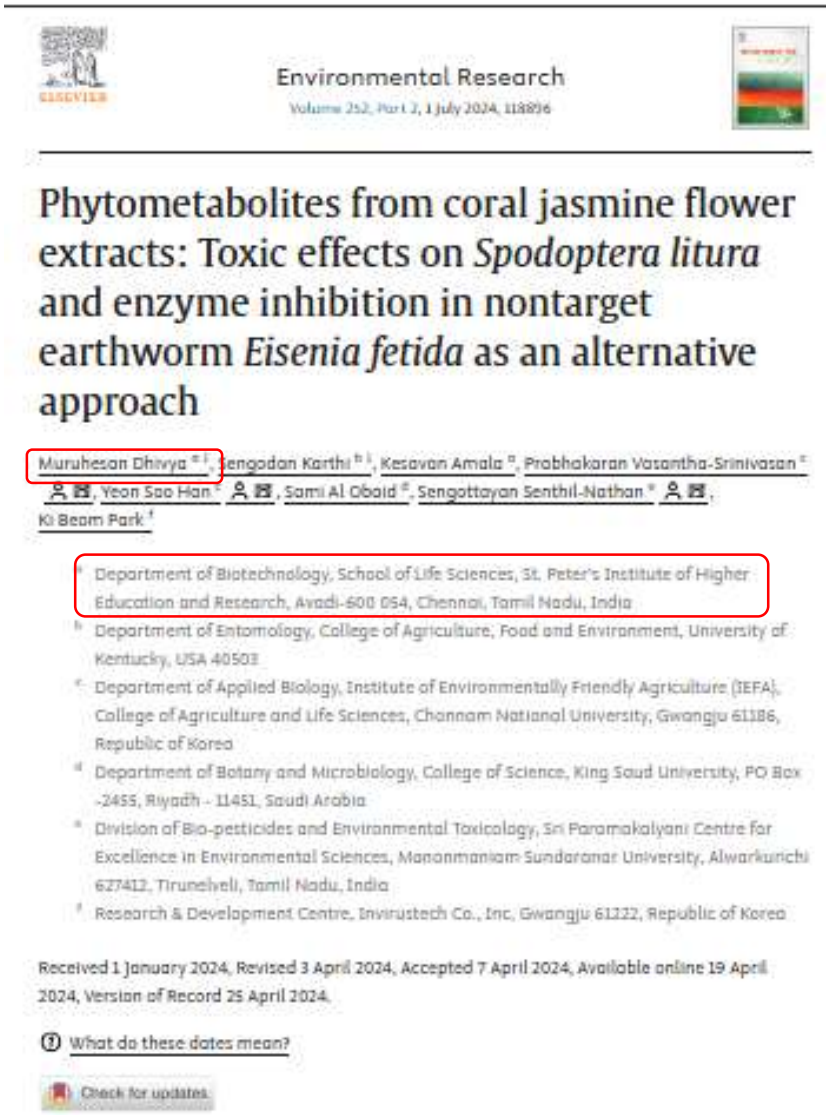
It's More Than Just About Tirupati Laddoos

State control of temples should end. Many argue against this, as did the TOI edit. But courts should give Hindus rights similar to those enjoyed by other communities

Environmental Awareness programme published in Newspaper

Research Articles published under SDG 14

1. Dhivya M, Karthi S, Amala K, Vasantha-Srinivasan P, Han YS, Al Obaid S, Senthil-Nathan , Park KB. Phytometabolites from coral jasmine flower extracts: Toxic effects on *Spodoptera litura* and enzyme inhibition in nontarget earthworm *Eisenia fetida* as an alternative approach. Environmental Research. 2024 Jul 1;252:118896.



Environmental Research

Volume 252, Part 2, 1 July 2024, 118896

Phytometabolites from coral jasmine flower extracts: Toxic effects on *Spodoptera litura* and enzyme inhibition in nontarget earthworm *Eisenia fetida* as an alternative approach

Muruhesan Dhivya [a] [1], Sengodan Karthi [b] [1], Kesavan Amala [a], Prabhakaran Vasantha-Srinivasan [c], Yeon Soo Han [c], Sami Al Obaid [d], Sengottayan Senthil-Nathan [e], Ki Beam Park [f]

[a] Department of Biotechnology, School of Life Sciences, St. Peter's Institute of Higher Education and Research, Avadi-600 054, Chennai, Tamil Nadu, India

[b] Department of Entomology, College of Agriculture, Food and Environment, University of Kentucky, USA 40503

[c] Department of Applied Biology, Institute of Environmentally Friendly Agriculture (IEFA), College of Agriculture and Life Sciences, Chonnam National University, Gwangju 61186, Republic of Korea

[d] Department of Botany and Microbiology, College of Science, King Saud University, PO Box -2455, Riyadh - 11451, Saudi Arabia

[e] Division of Bio-pesticides and Environmental Toxicology, Sri Paramakalyani Centre for Excellence in Environmental Sciences, Manonmaniam Sundaranar University, Alwarkurichi 627412, Tirunelveli, Tamil Nadu, India

[f] Research & Development Centre, Invirustech Co., Inc, Gwangju 61122, Republic of Korea

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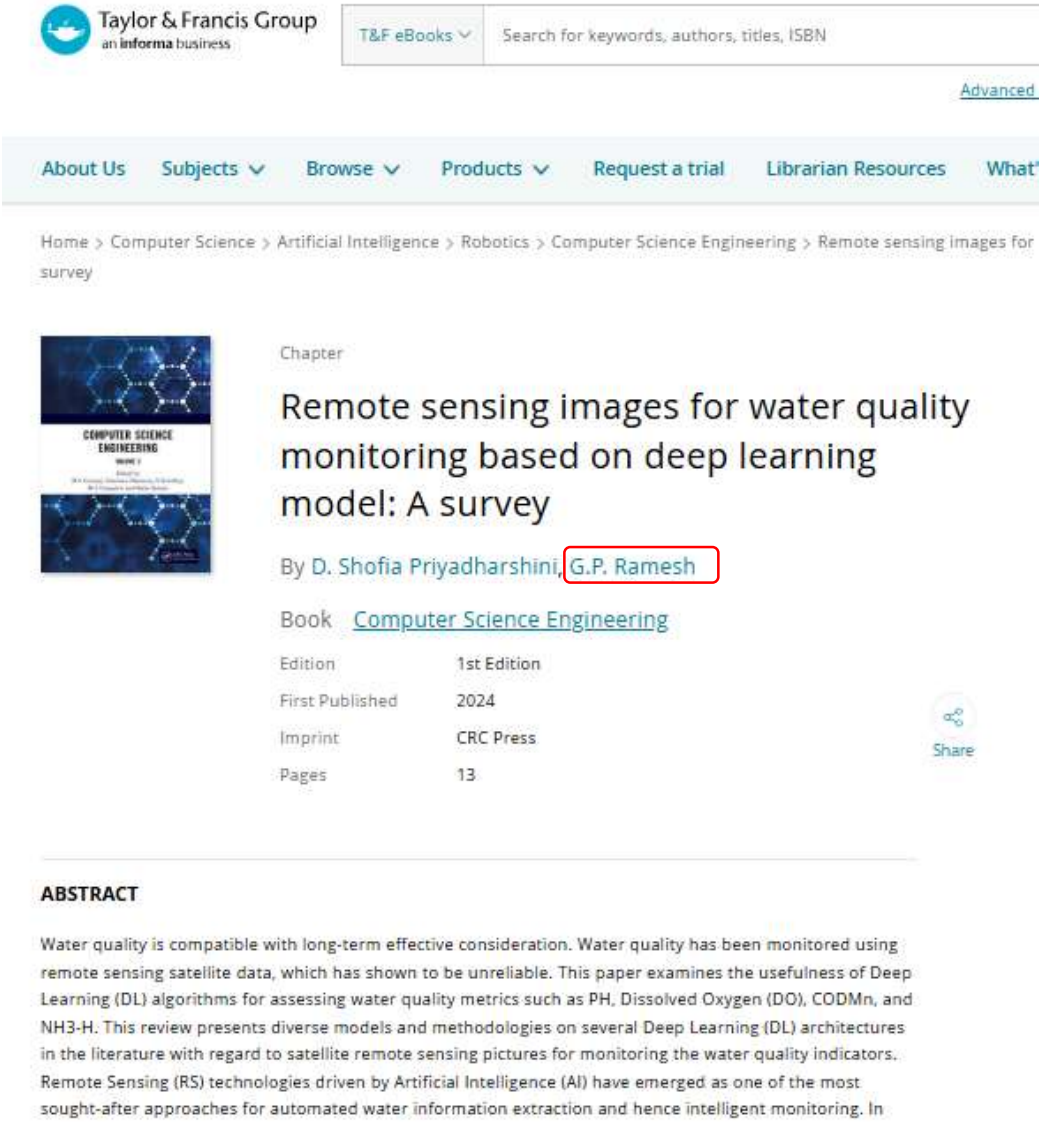
What do these dates mean?

Check for updates

2. **Priyadharshini DS, Ramesh GP. Remote sensing images for water quality monitoring based on deep learning model: A survey. InComputer Science Engineering 2024 Dec 20 (pp. 49-61). CRC Press.**



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Home > Computer Science > Artificial Intelligence > Robotics > Computer Science Engineering > Remote sensing images for survey

Chapter

Remote sensing images for water quality monitoring based on deep learning model: A survey

By D. Shofia Priyadharshini, G.P. Ramesh

Book Computer Science Engineering

Edition	1st Edition
First Published	2024
Imprint	CRC Press
Pages	13

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ABSTRACT

Water quality is compatible with long-term effective consideration. Water quality has been monitored using remote sensing satellite data, which has shown to be unreliable. This paper examines the usefulness of Deep Learning (DL) algorithms for assessing water quality metrics such as PH, Dissolved Oxygen (DO), CODMn, and NH3-H. This review presents diverse models and methodologies on several Deep Learning (DL) architectures in the literature with regard to satellite remote sensing pictures for monitoring the water quality indicators. Remote Sensing (RS) technologies driven by Artificial Intelligence (AI) have emerged as one of the most sought-after approaches for automated water information extraction and hence intelligent monitoring. In

Conclusion:

In conclusion, the initiatives carried out under SDG 17.3.14 reflect the institution's strong commitment to ensuring that global and national partnerships actively contribute to improving human lives and strengthening community resilience. By fostering collaborations that support technology transfer, knowledge sharing, and capacity-building, the institution ensures that individuals gain access to better tools, skills, and opportunities for advancement.

These partnerships help bridge gaps in resources and expertise, enabling students, researchers, and community members to benefit from innovative solutions, enhanced infrastructure, and inclusive development programmes. Through sustained cooperation and people-focused engagement, the institution ensures that the advantages of international and national alliances directly translate into improved human well-being and long-term empowerment.