



BIORADIANCE 2026: BRIDGING BIOLOGY, MEDICINE AND BIOTECHNOLOGY

The 14th International Conference, BIORADIANCE 2026, organized by the Pushpagiri Research Centre (PRC), was successfully held on 29 and 30 May 2026 at the Senate Hall, Pushpagiri Institute of Medical Sciences & Research Centre, Thiruvalla. The conference was conducted under the theme “Life Tech Conference: Bridging Biology, Medicine and Biotechnology”, bringing together researchers, academicians, healthcare professionals, and students to explore recent advancements in life sciences, biomedical research, and biotechnology.

The inaugural day focused on Laboratory Animal Research, emphasizing the role of ethical and innovative animal studies in advancing biomedical science. The conference was inaugurated by Dr. Reena Thomas, Principal, PIMS & RC, while Rev. Dr. Mathew Mazhavanceril, Director, Pushpagiri Research Centre, delivered the presidential address. Scientific sessions featured distinguished speakers including Dr. Vineeth Vijayan, who discussed multiscale engineering approaches for bone tissue engineering; Dr. Sachin J. Shenoy, who highlighted the principles of the 3Rs (Replacement, Reduction, and Refinement) in translational research; and Dr. Biju Chacko, who spoke on laboratory animal welfare and management. These sessions encouraged meaningful discussions on research ethics, innovation, and scientific rigor.

The second day commenced with a presidential address by Fr. Dr. Biju Varghese, CEO, Pushpagiri Medical Society. The Book of Abstracts was officially released by Prof. Dr. Manoj Kumar Arora, Vice Chancellor, Chinmaya Vishwa Vidyapeeth. The scientific programme featured renowned national and international experts, including Prof. Christian Demitri (University of Salento, Italy), Dr. Avneesh Chopra (Charité–Universitätsmedizin Berlin), Dr. Fernando Gomes (Federal University of Rio de Janeiro), and Dr. Nebu George Thomas, who shared insights on biomaterials, regenerative medicine, biomedical innovation, and translational research.

A major attraction of the conference was the active participation of young researchers through Oral Presentation Competitions, Poster Presentations, and “Synapse”, an innovative idea presentation platform. These sessions provided opportunities for participants to present their research, exchange ideas, and engage with experts from diverse disciplines.

The conference concluded with a valedictory function attended by Prof. Dr. Sabu Thomas as Chief Guest. Winners of the academic competitions were honored, and the PRC Academic Excellence Awards were presented. Stakeholders associated with the FRAIT Project were also felicitated for their valuable contributions.

Supported by the Department of Biotechnology (DBT) and the Anusandhan National Research Foundation (ANRF), BIORADIANCE 2026 successfully promoted scientific collaboration, innovation, and interdisciplinary research, reaffirming Pushpagiri Research Centre’s commitment to academic excellence and biomedical advancement.



IN-HOUSE BREEDING FACILITY SANCTIONED

The Ministry of Animal Husbandry, Govt of India has sanctioned Breeding Facility in Laboratory Animal Research Facility, Pushpagiri Institute of Medical Sciences and Research Centre, Tiruvalla under the scheme "Research for Education purpose (Rat, Mice, Rabbit) and Breeding for in-house use (Rat, Mice) of Small Animals".

डॉ. एस. के. दत्ता
सदस्य सचिव (सीसीएसईए)
Dr. S. K. Dutta
Member Secretary (CCSEA)



सत्यमेव जयते

भारत सरकार
मत्स्यपालन, पशुपालन एवं डेयरी मंत्रालय
पशुपालन एवं डेयरी विभाग
पशुओं पर प्रयोगों संबंधी नियंत्रण और पर्यवेक्षण
के लिए समिति (सीसीएसईए)
Government of India
Ministry of Fisheries, Animal Husbandry and Dairying
Department of Animal Husbandry and Dairying
Committee for Control and Supervision
of Experiments on Animals (CCSEA)

No. 25/441/2009-AWD

Date: 19/May/2026

To,

Dr. Vikram Gowda, Chairman IAEC
Pushpagiri Medical College Sciences & Research Centre
Tiruvalla - 689 101 Kerala
E-mail: vikramgowda@pushpagiri.in
Mobile: 9562947479

Subject: Amendment in the purpose of registration – regarding.

Sir,

With reference to your application on the above mentioned subject, your request for inclusion of purpose Breeding for in-house use of small animals has been approved.

The registration of animal house facility of Pushpagiri Medical College Sciences & Research Centre with CCSEA is hereby amended as "Research for Education purpose (Rat, Mice, Rabbit) and Breeding for in-house use (Rat, Mice) of small animals". The maximum housing capacity in the animal house facility of your establishment is 400 Rat, 400 Mice and 12 Rabbit.

Further, the registration number of your establishment has also been amended as **602/PO/ReBi/S/2002/CCSEA**.

The above registration number should be quoted in all future correspondence with this office.

Yours sincerely,

(Dr. S. K. Dutta)
Member Secretary (CCSEA)

MEETING WITH HON. VICE CHANCELLOR PROF. (DR.) MANOJ KUMAR ARORA, CHINMAYA VISHWA VIDYPEETH

A meeting was organised with Prof. (Dr.) Manoj Kumar Arora, Vice Chancellor, Chinmaya Vishwa Vidypeeth on 16th April, 2026. Dr. Nebu George Thomas, Dr. Aniket Naha and Dr. Ampadi AN were present from Pushpagiri Research Centre and Dr. Praveen KM and Mr. Athul were present on behalf of Chinmaya Vishwa Vidypeeth. The discussions focused on initiating joint research projects, organizing collaborative conferences, and submitting joint project proposals. CVV also assured its support in the patenting and commercialization of products developed by Pushpagiri Research Centre. In addition, the Hon. Vice Chancellor graciously agreed to participate in Bioradiance 2026 as the Chief Guest.



CHINMAYA VISHWA VIDYPEETH RECOGNISED PUSHAGIRI RESEARCH CENTRE AS APPROVED RESEARCH CENTRE

Chinmaya Vishwa Vidypeeth recognised Pushpagiri Research Centre as their approved Research Centre for carrying out research and for PhD admissions

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Vishwa Vidypeeth**
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For admission to the Ph.D. programme in Psychology, an M.A./M.Sc. in the concerned subject obtained through regular mode is mandatory.

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- General Candidates: Entrance Test + Presentation + Interview
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Opening of Online Application Portal : 05 May 2026
Closing of Online Application Portal : 25 May 2026
Date of Ph.D. Entrance Examination : 14 June 2026
Announcement of Entrance Test Results : 20 June 2026

Contact us: doctoral.office@cvv.ac.in
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Pushpagiri Institute of Medical Sciences and Research Centre -

1st Approved Private Research Centre in Central Travancore

Pushpagiri Institute of Medical Sciences hosts the Pushpagiri Research Centre (PRC) which was established in 2010. It serves as the 'Central Research Facility' to the various institutions under Pushpagiri Medical Society which includes Pushpagiri Institute of Medical Sciences, Pushpagiri College of Nursing, Pushpagiri College of Pharmacy, Pushpagiri College of Allied Sciences, Pushpagiri College of Dental Sciences alongside Pushpagiri Medical College Hospital. PRC has now grown to become one of the leading private research centres in the Central Travancore region of Kerala, featuring multifaceted and multidimensional research laboratories, which have all the facilities for conducting transdisciplinary biomedical research.

Approvals and Accreditations of PRC

- i. PRC is a Scientific and Industrial Research Organization (SIRO) recognized by the Department of Scientific and Industrial Research (DSIR), Ministry of Science & Technology, Government of India for the 5th consecutive time
- ii. PRC is an approved Ph.D. Centre under the Kerala University of Health Sciences (KUHS) and Helsinki University, Finland
- iii. PRC got an active Institution Review Board (IRB) that is registered to Director of Health Research (DHR)
- iv. PRC has an Animal Ethics Committee and CCSEA approved Animal House Facility
- v. PRC hosts several ongoing national and international projects from eminent funding agencies

PRC's saliency lies in developing innovative patents and products, research publications in international peer reviewed journals of repute upon fostering in sustainable therapeutic regimens. PRC holds active Memorandum of Understandings (MoUs) with reputed institutions affiliated to central and state governments,

autonomous colleges and institutions, private companies and firms from various sectors.

Ph.D. Admissions Open (Full Time/Part Time):

PhD admissions are open under the Joint PhD programme between Pushpagiri Research Centre (PRC), Tiruvalla, and Chinmaya Vishwa Vidyapeeth (CVV), Ernakulam. For eligibility and other information, please visit <https://www.cvv.ac.in/study-program/doctoral-phd-programmes/>. The online application form and detailed brochure related to PhD admissions can be downloaded from the website.

About Chinmaya Vishwa Vidyapeeth (CVV)

Chinmaya Vishwa Vidyapeeth (CVV) is a pioneering institution that brings together the best of ancient Indian wisdom and contemporary education. CVV is a part of the Chinmaya Mission, an organisation with over 50 years of educational excellence across 100+ institutions and over one million students impacted.

Established in 2016, under Section 3 of the UGC Act, CVV is a de novo Deemed-to-be University. Our academic offerings span humanities, commerce, education, performing arts, and engineering, thoughtfully designed to balance rigorous scholarship with values-based learning.

CVV nurtures not only intellectual excellence but also ethical leadership, self-awareness, and purpose-driven living. With campuses in Kerala and Maharashtra, offering state-of-the-art eco-conscious facilities to host over 5,000 students, CVV is poised to become a national and global hub for cultural revitalisation, innovation, and impact.

Thrust Areas

- Medical Biotechnology
- Microbiology & Bioinformatics
- AI/ML based Drug Discovery
- Biomaterials & Tissue Engineering

- Nanocomposite materials
- Pre-clinical trials for Biomaterials, Pharmacology, Toxicology & Pathological analysis
- Molecular Biology and Cell Biology
- Nanobiotechnology & Immunology

Contact Us

For more information about the joint Ph.D. programme, please contact us at:

- Dr. Aniket Naha Ph.D. Program Coordinator, Pushpagiri Research Centre (PRC), Email: draniketnaha@pimsrc.edu.in, phdadmissions@pimsrc.edu.in
- Dr Raisun Mathew, Assistant Dean - Doctoral Programmes, Chinmaya Vishwa Vidyapeeth, Email: asstdean.doctoral@cvv.ac.in

Locations:

Pushpagiri Research Centre (PRC)

6th Floor, Mother & Child Block,

Pushpagiri Institute of Medical Sciences & Research Centre Tiruvalla,

Pathanamthitta, Kerala, India, Pin - 689101

Website: <https://www.prc.pushpagiri.in/>

Location: https://maps.app.goo.gl/ohzfmQShNKCqxaLg6?g_st=aw

Chinmaya Vishwa Vidyapeeth (Deemed to be University)

Adi Sankara Nilayam, Adi Sankara Marg,

Veliyanad, PO, Arakkunnam,

Kerala, India, Pin- 682313

Lalita Pratishthanam (LP, Onakoor Facility)

Chinmaya Eswar Gurukula Veliyanad (Piravom Facility)

Prajna Pratishthanam (Ernakulam Facility) Warriam Road

Chinmaya Naada Bindu Gurukula (Pune Facility)

Website: <https://www.cvv.ac.in/>

INVITED TALK BY DR. BASTIEN SEANTIER ON CELLULOSE INNOVATIONS AT PRC



The use of cellulose for emerging applications: From moulded cellulose to CNF composites

By **Dr Bastien Seantier**
UMR CNRS 6027, UBS, ENSTA, INP, UBO, Lorient, France.

Date: 2pm, May 5th

Sustainable packaging Advanced lightweight parts

Dr. Bastien Seantier delivered a talk titled “The Use of Cellulose for Emerging Applications: From Moulded Cellulose to CNF Composites” on 5th May, 2026. In his presentation, Dr. Seantier explored the renewed role of cellulose in modern engineering applications, tracing its development from conventional moulded cellulose products to advanced cellulose nanofiber (CNF) composites. He emphasized the material’s growing importance in sustainable packaging and lightweight structural components, highlighting cellulose as a renewable and environmentally friendly alternative to conventional plastics while maintaining strong performance characteristics.



DR. ANIKET NAHA AS RESOURCE PERSON

Dr. Aniket Naha, Scientist from PRC, was invited as a Resource Person at the Indian Council of Medical Research–Department of Health Research sponsored National Workshop held at REVA University on 9th May 2026. During the workshop, he delivered a talk on “Bioinformatics and Artificial Intelligence in Natural Product Based AMR Drug Discovery,” highlighting the role of computational biology and AI-driven approaches in accelerating antimicrobial resistance (AMR) drug discovery from natural products



DR. ANIKET NAHA INVITED AS RESOURCE PERSON AT NATIONAL WORKSHOP

Dr. Aniket Naha, Scientist from PRC, was invited as a Resource Person at the Five Days National Workshop on Genomic and Metagenomic Approaches for Detection and Tracking of Antimicrobial Resistance (AMR) pathogens on 19th May, 2026 at Department of Biotechnology, Kongunadu Arts and Science College, Coimbatore. He also delivered a talk on "Antimicrobial peptides for combating drug-resistant bacterial infections".



DR. SOUMYA RS PRESENTED HER FINDINGS IN CONTINUING MEDICAL EDUCATION SESSION

Dr. Soumya RS, Scientist at PRC presented her research findings entitled "Beyond Statins: Unlocking the Potential of PCSK9 Inhibitors from Natural Sources" during the Continuing Medical Education session conducted by Pushpagiri Institute of Medical Sciences and Research Centre, Tiruvalla on 07.05.2026.



DR. NEBU GEORGE THOMAS AS INTERNATIONAL SCIENTIFIC SUPERVISOR

Dr. Nebu George Thomas, Scientist and Professor, has been appointed as International Scientific Supervisor of first-year doctoral student Anastassiya Kukhareva, enrolled in the group of educational programs 'Chemical Engineering and Processes', and 'Innovative Technologies and New Inorganic Materials'. The title of the doctoral dissertation is "Development of a nano-biocomposite wound-healing material with antibacterial properties based on pectin and nanocellulose."



Prathap, S., Rajesh, K. S., Thomas, N. G., Binsi, P. K., Surya, S., Prathap, M. S., & Das, R. (2026). Comparative evaluation of the effectiveness of a novel composite bone substitute synthesized from eggshell-derived hydroxyapatite and fish collagen in bone regeneration of critical-sized calvarial defects in Wistar rats. *Frontiers in Dental Medicine*, 6, 1731880. <https://doi.org/10.3389/fdmed.2025.1731880>

Ind. J. Pharm. Edu. Res., 2026; 60(3):1013-1020.
<https://www.ijper.org>

Original Article

***In vitro* Characterisation of an Injectable Composite Graft Material Synthesised from Collagen Extracted from Fish Scales and Eggshell-Derived Hydroxyapatite**

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ABSTRACT

Aim/Background: Collagen and hydroxyapatite have been used as scaffold for bone repair encouraging cell adhesion and growth. Composites synthesized from hydroxyapatite and collagen mimic biomechanical properties of natural bone. Extensive efforts have been made to fabricate graft materials from natural sources to mimic biochemical and biomechanical properties of natural bone. The present study is aimed to synthesise a composite graft from eggshell derived hydroxyapatite and fish collagen and characterize the novel material. **Materials and Methods:** The composite graft material was prepared using eggshell derived hydroxyapatite (60%) and fish derived collagen (40%) by lyophilisation. The prepared novel material was characterised using FTIR, XRD and SEM Cell viability was assessed using MTT assay. The material is then mixed with a suitable binder (glycerol). **Results:** The FTIR and XRD analysis confirms a composite material of hydroxyapatite- collagen composite graft. The ratio of hydroxyapatite to collagen was 60:40. Crystallinity of the hydroxyapatite was not disrupted by the collagen. The collagen particles agglomerated with each other as well as on hydroxyapatite particles according to SEM. The composite graft was found to be noncytotoxic. **Conclusion:** In the present study eggshell derived hydroxyapatite and fish collagen has been used to synthesize a composite graft. Glycerine has been used as a binder to improve the properties. The prepared novel composite material exhibited good cell viability and may be effectively used as an alternative to conventional bone substitutes.

Keywords Bone graft, Composite, Eggshell, Hydroxyapatite, Fish Collagen, Characterisation.

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