

RESEARCH CENTRE UPDATES



Pushpagiri Research Centre Scientist Awarded Best Paper Presentation at National Biotechnology Conference

Dr. Yogesh Bharat Dalvi, a distinguished scientist at the Pushpagiri Research Centre (PRC), alongside his dedicated research team, recently unveiled ground-breaking findings in the field of biotechnology. Their study, titled "Assessing the Anti-Cancer Potential of Ganoderma applanatum: In Vitro and In Vivo Approaches," was showcased at the esteemed National Conference on Recent Trends in Biotechnology Research. The event took place on March 22, 2024, at the prestigious Arunai Engineering College in Tiruvannamalai, Tamil Nadu, India. Dr. Yogesh's exceptional work not only captivated the audience but also earned him the esteemed accolade of Best Paper Presentation at the conference. This recognition not only celebrates his individual brilliance but also stands as a testament to the collective excellence of Pushpagiri Research Centre. The research sheds light on the promising anti-cancer properties of medicinal endemic mushroom Ganoderma applanatum, offering both in vitro and in vivo insights. Such ground-breaking discoveries hold significant promise in advancing the field of cancer research and fostering hope for novel therapeutic interventions. As Pushpagiri Research Centre continues to push the boundaries of scientific discovery, the impact of Dr. Yogesh's research resonates not only within the scientific community but also among those hopeful for advancements in cancer treatment and beyond.



Pushpagiri Research Centre Continues to Foster Collaborative Innovation with CIFT



"In a significant stride towards advancing collaborative research and innovation, Pushpagiri Research Centre (PRC) proudly announces the renewal of its Memorandum of Understanding (MoU) with the Central Institute of Fisheries Technology (CIFT). The renewal ceremony, held on April 18, 2024, marks a milestone moment in the enduring partnership between the two esteemed institutions, which has flourished since its inception in 2017. Led by the visionary leadership of Rev. Dr. Mathew Mazhavancheril, Director and Head of Pushpagiri Research Centre, the renewal of the MoU underscores PRC's steadfast commitment to fostering enduring collaborations aimed at driving scientific advancement and societal impact. Since its inception, the partnership between PRC and CIFT has yielded remarkable outcomes, ranging from groundbreaking publications to the development of cutting-edge technologies. However, beyond academic achievements, the collaboration has also borne fruit in the realm of commercialization, with several patents emerging as a testament to the fruitful synergy between the two institutions. Highlighting the ethos of PRC, Rev. Dr. Mathew Mazhavancheril emphasized the institution's unwavering support for scientific exploration and innovation. "At Pushpagiri Research Centre, we believe in empowering our scientists to pursue their areas of expertise with the utmost freedom and support," remarked Rev. Dr. Mathew. "Our collaborative efforts with CIFT exemplify our shared vision of leveraging collective expertise to address pressing challenges and drive meaningful change." In a parallel development, Pushpagiri Research Centre's research team achieved another milestone by signing Memoranda of Agreement (MoA) for two joint patents, spearheaded by Dr. Nebu. Dr. Nebu's leadership, coupled with the invaluable wet lab support provided by Dr. Yogesh Bharat Dalvi and the guidance of Rev. Dr. Mathew Mazhavancheril, underscores the collaborative spirit and interdisciplinary approach embraced at PRC. As Pushpagiri Research Centre continues to chart new frontiers in scientific research and innovation, the renewal of its partnership with CIFT and the signing of joint patents exemplify its commitment to driving impactful change through collaborative endeavors. With a shared vision and a dedication to excellence, PRC and its partners stand poised to shape the future of scientific discovery and technological innovation, leaving an indelible mark on society and beyond.

Orientation training programme on 'Animal House Etiquettes and Animal Welfare Aspects', 29-04-2024a

An Orientation Training was organised for the students of PRC on "Animal House Etiquettes and Animal Welfare Aspects" by the Veterinary Officer, Dr. Purnima C. in coordination with Dr. Soumya R.S., Member Secretary and Dr. Santosh Pillai, Chairman of IAEC on 29-04-2024 from 10.00am to 12.00pm. The programme started with a lecture on the topic, at the conference hall of PRC by 10.00 am. An opportunity was provided to the students for visiting animal house to observe routine activities and to get familiarized with the available facilities. Twenty students of PRC faculty members participated in the training.



Thermo Scientific™ BioMate™ 160 UV-Visible Spectrophotometer



Spectrophotometer Biomate 160 was installed at Pushpagiri Research Centre and placed in Pushpagiri Centre for Virology. The BioMate 160 Spectrophotometer offers pre-programmed assay methods for nucleic acid and protein concentration as well as cell culture measurements. Optimized for usability and performance, this platform features a high-resolution color touchscreen, and optional Wi-Fi networking Installation and demonstration of Spectrophotometer Biomate 160 along with training programme was conducted on 25/04/2024 at Pushpagiri Centre for Virology and training program has been given for both staff and students.

Dr. Soumya R.S published two book chapters in the book entitled 'Medical Additive Manufacturing: Concepts and Fundamentals' Elsevier Publishers. The chapters are

Medical additive manufacturing— The way to the future!

13

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13.1 Introduction

The term “3D printing” or “additive manufacturing” refers to a technique where objects are constructed layer by layer and physical components are produced using computer-aided design [1]. These techniques are commonly known as toolless processes. Hideo Kodama of the Nagoya Municipal Industrial Research Institute used additive

Medical additive manufacturing— the magic wand for cardiology

18

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18.1 Introduction

Cardiovascular disease (CVD) is currently one of the major killers and the major source of death globally. Patients with this illness have a lower standard of living, and this issue necessitates the assistance of millions of people [1]. CVD is a parasol term that explains a series of diseases that infect the heart and the blood vessels. The progression of CVD mostly leads to the deterioration of one or more structures and cells of the heart, leading to the need for replacement to improve the prognosis of affected patients. Many therapeutic options are accessible for treating CVD, including pharmacological and surgical treatments [2]. For example, synthetic vascular grafts are commonly used medical devices in surgical procedures. In addition, grafting tissues from patients' bodies, donors, animals, or artificial constructs has