

Meeting held between Pushpagiri Research Centre & Stellar Bio-sol/ bio-med.

On 16/03/24, a collaborative meeting between Pushagiri Research Centre and Stellar Biosol/Bio-Med was convened at the esteemed premises of Pushagiri Research Centre's conference hall, under the chairmanship of, Rev. Dr Mathew Mazhavanceherry, Director Pushapgiri Research Centre. The meeting aimed to explore avenues for potential clinical trials, with a particular focus on the innovative products of Stellar Biosol/Bio-Med, renowned for their specialization in Chitosan and its derivatives. Mr. Benny Thomas alongside Dr. Dominique Gillet (Ph.D. in Oceanography), represented Stellar Biosol in the meeting and provided a brief overview of other Chitosan-derived products developed by their firm of notable interest was the "Cura Film," a groundbreaking product tailored for wound dressing applications, with discussions centered around its viability for deployment within the healthcare ecosystem.



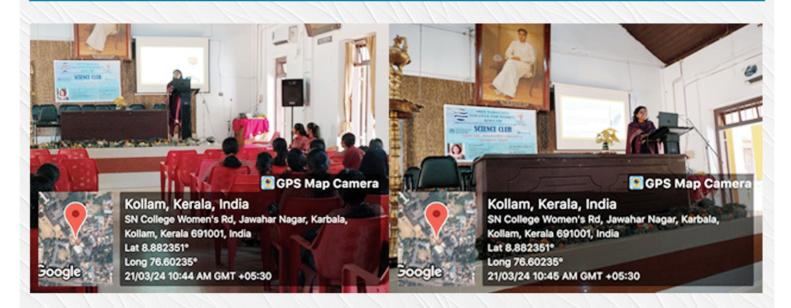
Meeting was attended by **Dr. Vikram Gowda**, Vice Principal PIMS & RC, **Dr. Cyril Joseph**, HOD, Dept of Plastic Surgery, **Dr Chintu Sabu George**, Assistant Professor, Dept of Plastic Surgery, **Dr. Nebu George Thomas**, Professor of Periodontics, **Dr. Robinson P George**, Professor of Surgery and faculty of Research Centre.

Memorandum of Understanding (MoU) signed between Vinayaka Mission Homeopathic Medical College and Hospital, Salem, Tamil Nadu and the Pushpagiri Research Centre:



Vinayaka Mission's Homoeopathic Medical College and Hospital, is a Pioneer institution in the field of Quality based Homoeopathic Medical education providing disciplined academic education and scientific research in Homoeopathy and caters to the health of the society with a reputable Hospital providing Out- Patient and In- Patient care.

A MoU was signed by **Dr. E.Rathnasabapathi**, **M.D**, **Ph.D.**, **Principal**, Vinayaka Mission's Homoeopathic Medical College and **Rev. Dr. Mathew Mazhavancheril**, the Director & Head of Research, Pushpagiri Research Centre on 11-03-2024 in the presence of faculty from Vinayaka Mission's Homoeopathic Medical College Dr. Arun R Nair, M.D. and other PRC Faculty members. The duration of MOU is for 5 years, and the major objectives are to enhance research particulary on animal and clinical, knowledge exchange, and human resource training.



Dr. Soumya R.S. delivered talk as Resource Person on the Topic 'Mitochondria-Fascinating Therapeutic Targets' on 21/03/2024, at S.N College for Women Kollam. In this captivating session, she explained the multifaceted roles of mitochondria, from energy production to their impact on various diseases. Graduates and post graduate students of science stream gained insights into emerging therapeutic strategies and the clinical implications of targeting these remarkable organelles.

Research Methodology Workshop for Dental Post Graduate Residents at Pushpagiri College of Dental Sciences

Research Methodology workshop 2024 for post graduate residents of Pushpagiri College of Dental Sciences was conducted on 15th 8 16th March 2024 by Clinical Epidemiology Unit, Pushpagiri Research Centre in collaboration with Department of Community Medicine. Two-day workshop was designed to have interactive academic sessions in the forenoon session and group work in the afternoon for which participants were divided into 3 groups with a faculty as mentor. CEU members, faculty of Community Medicine, PIMS & RC and Dr Aniket Naha, (Scientist, Medical Biotechnology and Computational Drug Designing Lab) Served as the resource person from PRC handled various academic sessions over two days. During Day 1 group work, delegates worked upon their research topic and formulated their research question, listed out their study objectives and identified the study design that they will be using for their study. Dr. Aniket delivered a talk on "Mastering Manuscripts: Empower your Research with Mendeley Reference Management System".



On Day 2, Dr Aniket Naha, Scientist, PRC gave a hands-on training for the participants on using the referencing software Mendeley. Group work on 2nd day focused on preparing the research protocol during which each delegate prepared the protocol for their proposed thesis topic. Workshop was attended by first year postgraduates and faculty of Pushpagiri college of Dental Sciences.

MOU signed with SMOconnect Clinical Research Services Pvt Ltd

On 8th March 2024, an MOU was signed with SMOconnect Clinical Research Services Pvt Ltd, a leading Clinical Research Organization with a proven track record in clinical trials. Established in the year 2009, SMO connect has been instrumental in facilitating high-quality clinical trials following ICH GCP guidelines and country regulations for clinical research. They have successfully completed more than 200 clinical trials in various therapeutic areas. This collaboration aims to elevate clinical trial excellence by leveraging our expertise and SMOconnect's established track record in facilitating high-quality trials adhering to international standards.



Research Day Celebration



PUSHPAGIRI COLLEGE OF DENTAL SCIENCES





RESEARCH DAY

VENUE: DENTAL COLLEGE AUDITORIUM
DATE: 22.03.2024 TIME: 9.30 A.M TO 12.00 NOON



REV DR BIJU VARGHESE



PROF. DR C.T. ARAVINDAKUMAR



PROF DR NANDAKUMAR KALARIKKAL



REV DR MATHEW MAZHAVANCHERIL



DR ROJIN ABRAHAM



REV FR ABY VADAKKUMTHALA



DR ABY MATHEW T

Research Day Celebration

The Research Day was celebrated at Pushpagiri College of Dental Sciences on 22 March 2024 from 9.30a.m at the College Auditorium. Dr Aby Mathew T, Principal welcomed all for the programme. The presidential address was by CEO of Pushpagiri Group of Institutions Rev Fr Biju Varghese. The inaugural address and lighting of the lamp was by Prof. Dr C.T. Aravindakumar, Vice Chancellor, M.G. University. The Keynote address was by Prof. Dr Nandakumar Kalarikkal, Senior Professor, M.G. University. The Guest of Honour of the programme was Rev Dr Mathew Mazhavancheril, Director and Head of Pushpagiri Research Center. Felicitation speech was by Dr A Devadathan and Dr Benley George. Dr Sunil S said the vote of thanks. There was a research orientation session by Dr Rojin Abraham, Head of Neuro Surgery, Believers Church Medical College Hospital. A research highlighting session by the PGs and Interns was also conducted during the programme.







Research Awards for faculties and students were distributed during function





Presenting Bioradiance 2024 by Pushpagiri Research Centre:

- ✓ Join the International Conference on Frontiers in Antimicrobial Sciences
- **mate:** May 16th 18th, 2024
- Explore Global Advances & Updates on Antimicrobial Research and Resistance Strategies with us.
- 除 Organized by Pushpagiri Research Centre, PIMS & RC
- Save the dates! Your presence is pivotal for advancing the frontiers of antimicrobial sciences. Let's delve into breakthroughs together!



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Current Research in Biotechnology





Algal-based membrane bioreactors for effective removal of hazardous and toxic contaminants: A comprehensive review



Soumitra Nath a, Ashim Das Astapati b, Aniket Naha c, Indu Sharma d, Maulin P. Shah c

ARTICLE INFO

Keywords: Algal-based membrane bioreactors (MBRs) Hazardous and toxic contaminants Operating parameters Performance indicators Wastewater treatment

ABSTRACT

In present times, there is increasing potential of algal-based membrane bioreactors (MBRs) considering the removal of hazardous and toxic contaminants from different wastewater sources. The article summarizes on various types of contaminants that can be effectively removed using algal-based MBRs, including heavy metals and emerging contaminants. The selection criteria, advantages and limitations of different algal species used in algal-based MBRs are also discussed. For optimal performance of algal-based MBRs, operating parameters viz. hydraulic retention time, organic loading rate, nutrient levels, light intensity and duration are essential. The review further highlights the efficient removal of hazardous and toxic contaminants, biomass productivity, and membrane fouling as critical performance indicators. Various applications of algal-based MBRs, particularly in the treatment of municipal and industrial discharges, landfill leachate treatment, and bioremediation of contaminated sites, are also discussed. Finally, the current review identifies the technological limitations, scaleup challenges, and economic feasibility of algal-based MBRs and provides directions of future researches. On the whole, algal-based MBRs offer a sustainable and worthwhile solution in the eradication of harmful and lethal contaminants from various effluent sources.

Department of Biotechnology, Gurucharan College, Silchar 750004, Assam, India

b Department of Botany, Gurucharan College, Silchar 700004, Assam, India

⁶ Medical Biotechnology and Computational Drug Designing Laboratory, Pushpagiri Research Centre, Pushpagiri Medical Society, Tiruvalla 669101, Kerala, India

Department of Microbiology, Assam University, Silchar 793011, India

Environmental Microbiology Lab, Environmental Technology Ltd., Ankleshwar 393001, Gujarat, India