



**DEPARTMENT OF CHEMISTRY**  
**NEWMAN COLLEGE, THODUPUZHA**  
**CHEMISTRY ALUMNI ASSOCIATION**

**Under**  
**DBT STAR COLLEGE PROGRAMME**

**ALUMNI LECTURE SERIES - 2022**

**"DISCOVERY OF NEW PHOTOCATALYSTS USING  
CRYSTAL STRUCTURE PREDICTION AND  
HIGH PRESSURE SYNTHESIS TECHNIQUES".**

Chief Guest:



**Dr. Alwin James**

(Research Assistant Stony Brook University, New York)

**Date & Time: 11 MARCH 2022; 10.00 A.m.**



Google Meet

**NEWMAN COLLEGE, THODUPUZHA**

(RE-ACCREDITED BY NAAC WITH 'A' GRADE AT CGPA 3.32)

RANKED 78 IN THE NATIONAL LEVEL (NIRF 2019)

(Affiliated to Mahatma Gandhi University, Kottayam)

Thodupuzha East P.O., Kerala-685585, Ph: 04862 229797, 222686

e-mail: [newmancollegethodupuzha@gmail.com](mailto:newmancollegethodupuzha@gmail.com), Web: [newmancollege.ac.in](http://newmancollege.ac.in)

**Chemistry@Newman:** The DST-FIST and KSCSTE-SARD supported Department of Chemistry at Newman College, Thodupuzha is a potential centre of learning in chemical sciences. As a department, it was started in the year 1967 and has celebrated fifty years of its existence in 2017. The department give importance to academic as well as research activities. In 2018 it is promoted as a research department by Mahatma Gandhi University. The Chemistry department enjoys financial assistance from government agencies including UGC, DST, DBT, SERB, KSCSTE, and SRIBS and has dedicated research laboratories with advanced instrumental facilities like IR, UV-Vis DRS with Peltier, Fluorescence spectrometer, Electrochemical work-station etc. Approximately 100 research publications has came out from the department during the last 10 years, which include reviews, research articles, book chapters, edited books etc. Major research focuses include amphiphilic biopolymers, eco-design of materials, sustainable and clean energy materials, (bio) polymeric nanocomposites, nanomaterials for biomedical applications etc.



**Dr. Alwin James** is a Research Assistant at Stony Brook University, New York, USA. Dr. Alwin is an alumnus of this Department and completed his masters during 2008-2010. After completing the masters, he worked as a project assistant at Sree Chitra Tirunal Institute for Medical Sciences and Technology (SCTIMST), Thiruvananthapuram, Kerala before moving to United States of America for the doctoral studies. In the US, Dr. Alwin worked as a Teaching Assistant during 2013-14 at Stony Brook University, New York. He completed the Doctor of Philosophy in Chemistry in 2022 from the University. Alwin has credible experience in the field of photocatalysis and has many publications in indexed journals. He is best known for the discovery of Barium Tantalum Oxynitride visible light active photocatalyst at high pressure and temperature and resolution of the structure of a Gallium Titanium oxynitride using x-ray diffraction and neutron scattering.

**Dr. Bejoy Thomas**  
Ph.: 9497579673

**Ms. Sona John**  
Ph.: 9562845410

**Dr. Anju T. R.**  
(Co-ordinators)

**Prof. Biju Peter**  
HoD Chemistry

**Dr. Thomson Joseph**  
Principal