

## Faculty Profile:

1. **Name:** Dr. S. Anne Pauline
2. **Designation:** Temporary Assistant Professor
3. **Educational Qualification:** M. Sc., M. Phil., Ph. D.
4. **Courses taught at MCC:** (i) Coordination Chemistry  
(ii) Nuclear Chemistry  
(iii) Biological Chemistry  
(iv) Chemistry in Everyday life  
(v) Practical II – Qualitative Analysis  
(vi) Practical III – Organic Analysis, Gravimetry  
(vi) Practical I - Biochemistry
5. **Administrative Experience, if any, in MCC:** Nil
6. **Orientation and Refresher Courses Attended:** Nil
7. **Papers presented in National & International Seminars / Conferences:**
  - (i) **Anne Pauline, S & Rajendran, N,** ‘Enhanced bioactivity and corrosion resistance of nanoporous niobium oxide for orthopaedic applications’, at Indo – Australian Conference on Biomaterials, Tissue Engineering, Drug Delivery System & Regenerative Medicine (BiTERM – 2015) held on 5-7 February, 2015 at Anna University, Chennai, India.
  - (ii) **Anne Pauline, S & Rajendran, N,** ‘*In vitro* biocompatibility and electrochemical analysis of nanoporous Nb-incorporated TiO<sub>2</sub> coating for orthopaedic implants’, at International Conference on Surface Engineering for Research and Industrial Applications (Interfinish SERIA 2013) held on 7-9 August, 2013 at Rajalakshmi Engineering College, Chennai, India.
  - (iii) **Anne Pauline, S & Rajendran, N,** ‘Novel bioactive nanostructured TiO<sub>2</sub> coated 316L SS for orthopaedic implants’, at International Corrosion Prevention Symposium for Research Scholars held on February 28-March 2, 2013 at Hotel GRT Grand, Chennai, India.
  - (iv) **Anne Pauline, S & Rajendran, N,** ‘Electrochemical evaluation of bioactive HAP/TiO<sub>2</sub> coating on 316L SS for orthopaedic application’ at 10<sup>th</sup> International

Symposium on Advances in Electrochemical Science and Technology (ISAEST 10) held on 28-30 January, 2013 at Hotel Green Park, Chennai, India.

- (v) **Anne Pauline, S** & Rajendran, N, 'Electrodeposition of novel bioactive Hydroxyapatite coating on surface passivated 316L SS: Evaluation of electrochemical behaviour and bioactivity', at CORCON 2012 held on 26-29 September 2012 at Hotel Grand Hyatt, Goa, India.
- (vi) **Anne Pauline, S** & Rajendran, N, 'Effect of Strontium incorporation into Niobium Oxide Coating on 316 L SS for Orthopaedic Application: Electrochemical Characterization and *In vitro* Evaluation', at 17<sup>th</sup> National Convention of Electrochemists held on September 14-15, 2012 at B. S. Abdur Rahman University, Chennai, India.
- (vii) **Anne Pauline, S** & Rajendran, N, 'Novel Strontium Incorporated Niobium Oxide Coating on 316 L SS for Orthopaedic Application: Electrochemical Characterization and *in vitro* Evaluation' at RTBTE-2012 held on July 27-28, 2012 at Velammal Institute of Technology, Chennai, India.
- (viii) **Anne Pauline, S** & Rajendran, N, 'Fabrication and evaluation of bioactivity and corrosion performance of nanoporous Sr incorporated TiO<sub>2</sub> film on 316L SS for orthopaedic implants', 2<sup>nd</sup> International Conference on "Nanotechnology at the Bio medical interface" held on 21-24 February 2012 at Amrita University, Cochin, Kerala, India.
- (ix) **Anne Pauline, S** & Rajendran, N, 'Evaluation of corrosion performance of Strontium titanate composite membrane on 316L SS in 3.5 % NaCl solution, CORCON 2011 East Asia & Pacific Area Corrosion Conference (CORCON 2011), Intercontinental The Lalit Mumbai, Mumbai, 28<sup>th</sup> Sept to 1<sup>st</sup> Oct. 2011.
- (x) **Anne Pauline, S**, Joseph Raj, X, Nanjundan, S & Rajendran, N, 'Synthesis, Characterization and Corrosion Protection Property of Terpolymers of poly (MA-co-MMA-co-HMBD) containing Benzimidazole Derivative As Pendant Group', CORCON2010 East Asia & Pacific Area Corrosion Conference (CORCON 2010), Intercontinental The Lalit Goa Resort, Goa, 24-26 Sept. 2010.
- (xi) **Anne Pauline, S**, Sahila, S, Nanjundan, S & Rajendran, N, 'Synthesis, Characterization and Electrochemical Evaluation of poly (AMBT-co-BMA)

coated brass' at the Sixteenth National Congress on Corrosion Control (NCCI 2010), Hotel Accord Metropolitan, Chennai, 17-19 Sept 2010.

#### **8. Publications&Books Authored:**

- (i) **Anne Pauline, S** & Rajendran, N, 'Corrosion behavior and biocompatibility of nanoporous Niobium incorporated Titanium oxide coating for orthopaedic applications', *Ceram. Int*, 43 (2017) 1731-1739, **I.F: 2.75**.
- (ii) **Anne Pauline, S** & Rajendran, N, 'Effect of Sr on the bioactivity and corrosion resistance of nanoporous niobium oxide coating for orthopaedic applications, *Materials Science & Engineering C*, 36(2014) pp. 194-205, **I.F: 3.4**.
- (iii) **Anne Pauline, S** & Rajendran, N, 'Biomimetic novel nanoporous niobium oxide coating for orthopaedic applications', *Applied Surface Science*, 290 (2014) pp. 448-457, **I.F: 3.1**.
- (iv) **Anne Pauline, S**, Kamachi Mudali, U & Rajendran, N, 'Fabrication of nanoporous Sr incorporated TiO<sub>2</sub> coating on 316L SS: Evaluation of bioactivity and corrosion protection', *Materials Chemistry and Physics*, 142 (2013) pp. 27-36, **I.F: 2.2**.
- (v) **Anne Pauline, S**, Sahila, S, Gopalakrishnan, C, Nanjundan, S & Rajendran, N, 'Synthesis, characterization and corrosion protection property of terpolymers derived from poly (MAn-co-MMA) containing benzimidazole derivative as pendant group', *Progress in Organic Coatings*, vol. 72(3) (2011) pp. 443-452, **I.F: 2.6**.
- (vi) **Anne Pauline, S** & Rajendran, N, "Enhanced corrosion resistance and bioactivity of nanoporous niobium oxide coating prepared by modified sol-gel process", (Communicated).

#### **9. Resource Person in Conferences/Workshops etc.:**

Gave a presentation on 'Corrosion Control in Waste Water Treatment Plants' on 20-11-2014 at the 'Training Programme on Corrosion Control' held at Chennai Metro Water and Sewage Control Board, Ayanavaram, Chennai - 600023.

## **10. Recognition as Research Supervisor for M.Phil. and Ph.D.: Nil**

## **11. Other Distinctions**

- ✓ Qualified Tamilnadu State Eligibility Test (TNSET 2016) for Lectureship.
- ✓ CSIR-SRF fellowship “Fabrication of Novel Nanoporous TiO<sub>2</sub>-Ta<sub>2</sub>O<sub>5</sub> coating on 316L SS processed by sol-gel method for orthopaedic application”, April 2012 to March 2014.
- ✓ DST-PURSE Fellowship “Design and Development of Nanoporous Metal Oxides for Biomedical Applications”, from May 2010 to March 2012.
- ✓ General Secretary, National Association for Corrosion Engineers (NACE) Gateway India Section - South Zone - Student Section (August 2011- August 13).
- ✓ Organizing Committee Member, International Corrosion Prevention Symposium for Research Scholars (CORSYM-2013), GRT Grant, Chennai, India, February 28<sup>th</sup> – March 2<sup>nd</sup>, 2013.

## **12. Recent Passport size photograph**

