#### **FACULTY PROFILE**



**Dr. R. Lakshmi is** currently working as a Assistant Professor in the Department of Chemistry, Auxilium College, Vellore, TamilNadu, India. She obtained her M.Sc. degree from Vellore Institute of Technology (VIT, Vellore) in 2009, M. Phil from Loyola College, Chennai in 2010 and Ph.D. degree from the VIT, Vellore in 2016. She has 7 years of teaching experience. Her research interests include Bioceramics, Biopolymers, Composites and Bone Tissue Engineering. She published 7 international papers, 1 national paper, 1 book chapter and filed 1 XRD pattern of Wollastonite in JCPDS.

1. Name: Dr. R. Lakshmi

2. Designation: Assistant Professor, Department of Chemistry

3. Qualification: M. Sc., M. Phil., Ph. D

4. Mobile number: 8610997801

5. E-mail id: lakshmi.ravy@gmail.com

lakshmir@auxiliumcollege.edu.in

6. Teaching Experience: 6 years 10 months

7. Area of specialization: Biomaterials

8. Positions Held in Auxilium:

❖ I PG Tutor

❖ Incharge of UG Association Activity (From 2020 onwards)

❖ Incharge of PG Log Book Register (From 2016 onwards)

❖ Incharge of PG End Semester Mark Register (From 2016 onwards)

❖ Incharge of College Photo Album ((From 2020 onwards)

❖ Incharge of Herbal oil preparation (2023)

❖ Incharge for I PG online course

9. Research Experience and Guidance: 8 years

10. Projects Completed / Ongoing: Nil

- 11. No. of Papers Published: 8
- 12. No. of Papers Presented in the National/ International/ Seminars/ Workshops/ Conferences: 8
- 13. No. of Seminars/Workshops/Conferences organized: 2
- 14. No. of Books Published/Edited/Co-edited: 1
- 15. Membership in professional bodies (Descriptive): Nil
- 16. Other bodies (Descriptive): Incharge of RUSAC (From 2016-2020)
- 17. Honors & awards received (Descriptive): Nil
- 18. No. of Online Courses completed (Minimum of 4 Weeks): Nil
- 19. Any Other (Descriptive): Nil

#### JOURNAL PAPERS PUBLISHED

- Lakshmi R and Sasikumar S. 'Morphological influence of hydyoxyapatite nucleation on the surface of nano crystalline wollastonite – a invitro study', International Journal of Nanomedicine, October – 2015, Vol. 10, pp 129-136.
- 2. Lakshmi R, Velmurugan V and Sasikumar S. 'Preparation and phase evolution of wollastonite by sol-gel combustion method using sucrose as the fuel', Combustion Science and Technology, November 2013, Vol. 185, pp1777–1785.
- 3. Manohar Reddy P, Ravy Lakshmi, Febin Prabhu Das and Swamiappan Sasikumar. 'Synthesis, characterization and formulation of sodium calcium silicate bioceramic for drug delivery applications', Science and Engineering of Composite Materials, December 2014, Vol. 23, pp 1-5.
- Lakshmi R and Sasikumar S. 'Synthesis and characterization studies of bioactive wollastonite by sol-gel combustion method by using citric acid as a fuel', Advanced Materials Research, October – 2012, Vol. 584, pp 479-483.
- 5. Lakshmi R and Sasikumar S. 'Bioactive Wollastonite synthesized by Sol-Gel Combustion method by using tartaric acid as a fuel for Bone regenerative applications', Journal of Indian Chemical Society, May 2015, Vol. 92, pp 634 636.
- 6. Lakshmi R, Rajan Choudhary, Deepalekshmi Ponnamma, Kishor Kumar Sadasivuni, Sasikumar Swamiappan. 'Wollastonite Composite Scaffolds Offer Better Surface for Hydroxyapatite Formation', Bulletin of Materials Science, June 2019, Vol. 42, pp 107.

- 7. Rajan Choudhary, Anuj Kumar, Vijay Nag Ellapani, Baruah Trinayan, Muruganandam Loganathan, Lakshmi Ravy, Vijayakumar Vijayaparthasarathi, Amit Mahindrakar Babura, Shantha Kumar, Deepalekshmi Ponnamma, Kishor Kumar Sadasivuni and Sasikumar Swamiappan. 'Production of Biodiesel from Soyabean Oil in Less Time and at Low Temperature', July 2022, Asian Journal of Chemistry, Vol.34, No. 8, pp 2173-2177.
- 8. Lakshmi R, Rajan Choudhary, Fedor Senatov, Sergey Kaloshkin, Shobana Kothandam,
  Deepalekshmi Ponnamma, Kishor Kumar Sadasivuni and Sasikumar Swamiappan
  'Wollastonite / Polycaprolactone composites', International Journal of Nano and
  Biomaterials, June 2023, Vol. 10, No. 2.

### **JCPDS FILING**

1. XRD pattern of Wollastonite was filed in JCPDS

### **BOOK CHAPTER**

1. C. Rajan, R. Lakshmi, S. Sasikumar. Nanomaterials as bioceramics - Ecofriendly nanohybrid material for advanced engineering applications, CRC press, 435-445.

#### **CONFERENCE ORGANISED**

- As Organizing Secretary for one day National Seminar on "Advances in Materials Chemistry (AMC'19)", on 6<sup>th</sup> December 2019, in Department of Chemistry, Auxilium College, Vellore.
- 2. As Organizing Secretary for two days International webinar on "Materials Chemistry for Environmental Sustainability" on 18<sup>th</sup> & 19<sup>th</sup> October 2021, in the Department of Chemistry, Auxilium College, Vellore.

## PAPERS PRESENTED IN CONFERENCES/ SEMINARS/WORKSHOP/ORIENTATION

1. R. Lakshmi and S. Sasikumar, "Synthesis and Characterization studies of bioactive Wollastonite by Sol-Gel combustion method by using Citric acid as a fuel", International Conference on Recent Trends in Advanced Materials (ICRAM), held at VIT University, Vellore during 20-22, February 2012.

- 2. R. Lakshmi and S. Sasikumar, "Synthesis of Wollastonite by Sol-Gel Combustion method using sucrose as a fuel", Fourth International Conference on Recent Advances in Composite Materials (ICRACM-2013) held at International Centre, Goa, India during 18-21, February 2013.
- 3. R. Lakshmi, Amit. B. Mahindrakar and S. Sasikumar, "Preparation of Wollastonite Ceramics by Sol-gel combustion synthesis for the enhancement of mechanical properties of cement concrete", Recent Trends in Materials Chemistry (RTMC-2013) held at VIT University, Vellore during 25-27, July 2013.
- 4. R. Lakshmi and S.Sasikumar, "Preparation of Wollastonite by Sol-gel Combustion Method for Bone Regenerative Application", International Conference on Emerging Trends in chemical Sciences (IETC-2013), held at VIT University, Vellore during 5-7, December 2013.
- R. Lakshmi and S.Sasikumar, "Preparation and Characterisation of Nanocrystalline-Wollastonite for the Biomedical Application", National Conference on Challenges in Biomaterials Research (NCCBMR) held at VIT University, Vellore during 23-24, December 2013.
- 6. R. Lakshmi and S. Sasikumar, "Preparation of Wollastonite and its application as Bone Regenerative Material", Medical hackathon, "CAMTech India Medical Hackathon", on November 26, 2012 at VIT University, Vellore, India.
- 7. R. Lakshmi won first prize for the paper presentation on the topic "Invitro Cytocompatibility Studies of Wollastonite", IV –National conference on Emerging Trends in Chemical and Biological Sciences (ETCBS 2018)" on January 5, 2018, D. K. M. College, Vellore, India.

# CONFERENCES/ SEMINARS/WORKSHOP/ORIENTATION/FDP ATTENDED

- 1. R. Lakshmi, participated in the National Workshop "Advanced Materials Characterization Techniques" on March 23, 2013, Department of Physics, S.V University, Tirupati, India.
- 2. R. Lakshmi, participated in the National Conference on "Journey to Excellence", on 9-11 February 2017, Auxilium College, Vellore.

- 3. R. Lakshmi, participated in the "International Symposium on Health Care System in Cancer Biology", on September 20, 2017, Adhiparasakthi College of Arts and Science, Vellore, India.
- 4. R. Lakshmi, participated in the National Seminar on "Recent Research in Chemical Sciences" on January 19, 2018, Auxilium College, Vellore.
- 5. R. Lakshmi, participated in the National Workshop "Biological Diversity Act" on Enviro Club, January 18 & 19, 2019, Auxilium College, Vellore.
- 6. R. Lakshmi, participated in the Faculty Development Programme "Enriching and Enhancing the effectiveness of teaching using 21st Century Skills Sets" on June 05-07, 2019, Haskalah Academy, Auxilium College, Vellore.
- 7. R. Lakshmi, participated in the State Level Workshop "Intellectual Property Rights" on August 02 & 03, 2019, Research Cell and IPR Cell, Auxilium College, Vellore.
- 8. R. Lakshmi, participated in the International Seminar "Contemporary Developments in Chemistry (CDC -2020)" on January 9, 2020, PG & Research Department of Chemistry, C.Abdul Hakeem College, Melvisharam.
- 9. R. Lakshmi, participated in the National Conference "Teaching, Learning and Evaluation: Changes and Challenges" on January 30 & 31, 2020, IQAC, Auxilium College, Vellore.
- 10. R. Lakshmi, participated in the Faculty Development Programme (Online)
  "Uncovering PIAZZA for Effective Teaching" on May 27, 2020, Department of Plant Biology and Plant Biotechnology, Presidency College (Autonomous), Chennai.
- 11. R. Lakshmi, participated in the Faculty Development Programme (Online), "Online Teaching Via Google LMS During Covid-19 Pandemic" on May 28 30, 2020, IQAC,
  C. Abdul Hakeem College, Melvisharam, Ranipet.