

REVATHI THIYAGARAJAN

New KVS Nagar, Kalanivasal, Near Sahayamatha School,
Karaikudi, Tamilnadu, India.

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EDUCATION

Alagappa University, Tamilnadu, India.

Ph.D. Chemistry, Area of specialization: Hybrid composite materials for biological studies. *July 2015 - Mar 2021*.

M.Phil. (Chemistry), *July 2006 - Feb 2008*.

M.Sc. (Industrial Chemistry), *July 2004 - April 2006*.

Tamil University, Tamilnadu, India.

B.Ed. Dec - 2006.

APSA College, Madurai Kamaraj University, Tamilnadu, India.

B.Sc. (Chemistry), *June 2001 - April 2004*.

RESEARCH EXPERIENCE

Doctoral program: Alagappa University, July 2015 - Mar 2021.

- Preparation and characterization of pumpkin seed-metal oxide nanocomposite for enhanced biological activities.
- Synthesis and characterization of chitosan-PVA film containing metal oxide particles.
- Synthesis and characterization of groundnut-ZnO composites.
- Studied the antibacterial activities of the chitosan-ZnO/CuO composite.

Master of Philosophy: Research Project as a part of the course work at Alagappa University. *July 2006 - April 2008*.

Project title: A study of acetone ratio on dye uptake of cyanoethylated cotton fabrics.

Master Program: Research Project as a part of the course work at Alagappa University. *Dec 2005 - April 2006*.

Project title: Effect of co-polymerization on the properties of silk fabric.

TEACHING EXPERIENCE

- Worked as a chemistry teacher from 22.05.2006 to 01.07.2010 in Annai Velankanni Matric. Hr. Sec. School, Singampunari, Sivaganga, Tamilnadu.
- Worked as a Guest Lecturer from 03.12.2012 to 10.04.2015 in V.S.S. Government Arts College, Pulankurichi, Sivaganga, Tamilnadu.
- Conducted Textile Processing Lab Practical from Dec - 2015 to Mar - 2016, Nov - 2016 to Apr - 2017, Dec - 2017 to Apr - 2018 and Dec - 2018 to Apr - 2019 in B.Voc - Fashion Technology, Alagappa Institute of Skill Development, Alagappa University, Karaikudi, Tamilnadu.
- Conducted Advanced Wet Processing-Lab Practical from Dec - 2017 to Apr - 2018 and Dec - 2018 to Apr - 2019 in M.Voc-Fashion Technology, Alagappa Institute of Skill Development, Alagappa University, Karaikudi, Tamilnadu.
- Currently working as a Guest lecturer in VSS Govt Arts college, Pulankurichi from 25.01.2023.

PUBLICATIONS

1. **T. Revathi** and S. Thambidurai, Synthesis of chitosan incorporated neem seed extract (*Azadirachta indica*) for medical textiles, International Journal of Biological Macromolecules, 104 (2017) 1890-1896. (I.F. - 6.9).
2. **T. Revathi** and S. Thambidurai, Immobilization of ZnO on Chitosan-Neem seed composite for enhanced thermal and antibacterial activity, Advanced Powder Technology, 29 (2018) 1445– 1454. (I. F. - 4.8).
3. **T. Revathi** and S. Thambidurai, Cytotoxic, antioxidant and antibacterial activities of copper oxide incorporated chitosan-neem seed biocomposites, International Journal of Biological Macromolecules, 139 (2019) 867– 878. (I. F. - 6.9).
4. **T. Revathi** and S. Thambidurai, Biological activities of flower-like brushite structured CS-MgO-NS nanocomposites, (Communicated).

BOOK CHAPTER IN ELSEVIER PUBLICATIONS

1. S.Thambidurai and **T. Revathi**, one chapter on Biopolymer based metal oxide hybrid composites for medical textiles in the Book of Features of polymer-metal oxide composites applications, to be published by Elsevier in the Year of 2021 (Under Preparation).

ACHIEVEMENTS

- Graduated from APSA College, Thiruppathur with a B.Sc degree in Chemistry with an average of 62 % (**First class**)
- Graduated from Alagappa University, Karaikudi with a M.Sc degree in Industrial Chemistry with an average of 80 % (**First Class**)
- Graduated from Alagappa University, Karaikudi with a M.Phil degree in Chemistry with an average of 70 % (**First Class**)
- Senior Research Fellow (From Nov 2017 - Nov 2020): **UGC - BSR Fellowship**, New Delhi, India.

ADDITIONAL SKILLS

Experience in Image J (Image processing software) Program, Origin, Chemdraw & Chem 3D Ultra 8.0 and Microsoft Office.

PAPERS PRESENTED IN CONFERENCES

1. **T. Revathi** and S. Thambidurai, Thermal stability and Antibacterial properties of Chitosan-Magnesium Oxide Nanocomposite, “ International Conference on Frontier Areas in Chemical Technologies (FACTs - 2019)” organized by Department of Industrial Chemistry, Alagappa University, Karaikudi, on July 25 - 27, **2019**.
2. **T. Revathi** and S. Thambidurai, Interaction of Chitosan-ZnO nanocomposite for better antibacterial activity, “ International Conference on Frontier Areas in Chemical Technologies (FACTs - 2017)” organized by Department of Industrial Chemistry, Alagappa University, Karaikudi, on July 06 - 08, **2017**.
3. **T. Revathi** and S. Thambidurai, Durable antibacterial activity of cotton fabric loaded with chitosan/Neem seed composite, “ International Conference on Technical and Green Textiles” organized by Department of Textile Technology, Bannari Amman Institute of Technology, Sathyamangalam, Erode, India, on February 17 & 18, **2017**.
4. **T. Revathi** and S. Thambidurai, Synthesis of chitosan incorporated neem seed extract (Azadirachta Indica) for medical textiles, (11th APCCS) & (5th ICCS) organized by Indian Chitin and Chitosan Society, Kochi, Kerala, India on September 28 - 30, **2016**.
5. **T. Revathi** and S. Thambidurai, Biosynthesis of copper oxide nanoparticles using Azadirachta indica (neem) seed extract, “ International Conference on Chemistry of Biomolecules-Current Trends and Future Perspectives (ICCBCTFP - 2016)” organized

by the PG & Research Department of Chemistry, School of Biological Science, Madurai Kamaraj University, Trichy, on July 27 & 28, **2016**.

WORKSHOP ATTENDED

1. Participated in Safety and security of women and girls in public spaces: Planning and Designing Mechanism “ National Seminar - 2015” organized by Department of Women's studies Alagappa University, Karaikudi in collaboration with National Commission for Women, New Delhi, India, on December 4 & 5, **2015**.
2. Participated in the “ National Workshop on Materials Chemistry for Future Industrial Development - 2017 (MATCH FIND - 2017),” organized by Department of Industrial Chemistry, Alagappa University, Karaikudi, January 6 & 7, **2017**.
3. Participated in UV blocking and antibacterial activity of Chitosan-MgO biocomposites on cotton fabric, “ National Workshop on Advanced Nanomaterials For Sustainable Energy And Sensor Applications (AN-SEA - 2020)” organized by the Research scholars of School of Physical and Chemical Sciences, Alagappa University, Karaikudi, on March 04 - 06, **2020**.

PERSONAL PROFILE

Name	: Revathi Thiyagarajan	
Date of Birth	: 20.06.1984	
Sex	: Female	
Nationality	: Indian	
Marital Status	: Married	
Languages Known	: Tamil	: Native
	: English	: Proficient

REFERENCES

Dr. S.Thambidurai

Professor

Department of Industrial Chemistry

Alagappa University

Karaikudi - 630003,

Tamilnadu, India.

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