



**Dr. M. SUNDRARAJAN**  
**Assistant Professor**

### Contact

Address : Department of Industrial Chemistry  
Alagappa University  
Karaikudi – 630 003  
Tamil Nadu, INDIA

Employee Number : 12408

Date of Birth : 10-04-1970

Contact Phone (Office) : +91 4565 228836

Contact Phone (Mobile) : +91 9444496151

Contact e-mail(s) : [sundrarajan@yahoo.com](mailto:sundrarajan@yahoo.com), [sundrarajanm@alagappauniversity.ac.in](mailto:sundrarajanm@alagappauniversity.ac.in)

Skype id : msundrarajan

### Academic Qualifications: M.Sc., Ph.D

### Teaching Experience: 13.6 Years

### Research Experience: 20.6 Years

### Additional Responsibilities

1. Ragging Contact Person, Alagappa University (2008 to till date)
2. Treasurer of Alumni, Dept. of Industrial Chemistry, Alagappa University (2018 – till date)
3. University representative – Director of Distance Education Examination, Alagappa University (2008-till date)

4. Wet Lab In charge, Dept. of Industrial Chemistry, Alagappa University (2008 - till date)
5. Deputy warden, PG Men's Hostel, Alagappa University (2009 – 2010)

### Areas of Research

- ❖ Nano-materials Chemistry
- ❖ Green & Environmental Chemistry
- ❖ Organic Chemistry
- ❖ Textile Chemistry

### Research Supervision / Guidance

| Program of Study |             | Completed | Ongoing |
|------------------|-------------|-----------|---------|
| Research         | Ph.D.       | 11        | 04      |
|                  | M.Phil.     | 20        | 01      |
| Project          | PG          | 48        | 06      |
|                  | UG / Others | 06        | 00      |

### Publications

| International |             | National |             | Others                                  |
|---------------|-------------|----------|-------------|---|
| Journals      | Conferences | Journals | Conferences | Books / Chapters / Monographs / Manuals |
| 75            | 63          | 4        | 97          | 9 Chapters                              |

### Research out put Details by Google Scholar

|                 |   |      |
|-----------------|---|------|
| h-index         | : | 21   |
| i10 index       | : | 31   |
| Total Citations | : | 1223 |

### Funded Research Projects

#### Completed Projects

| S. No | Agency | Period |    | Project Title | Budget (Rs. In |
|-------|--------|--------|----|---------------|----------------|
|       |        | From   | To |               |                |

|   |            |            |            |   | lakhs) |
|---|------------|------------|------------|---|--------|
| 1 | AURF       | 06.11.2009 | 05.11.2010 | Studies on the effect of eco-friendly materials in textile  | 0.64   |
| 2 | AURF       | 13.04.2010 | 12.10.2010 | Physico-chemical studies on borewells water in Tirupur District                                     | 0.20   |
| 3 | DST - SERC | 18.01.2010 | 17.01.2013 | Source reduction of pollutants from textile effluent by Greener route                               | 19.33  |
| 4 | UGC        | 01.02.2010 | 28.02.2013 | Effective minimization of Pollution load in reactive dye bath using eco-friendly salt and ozonation | 4.33   |

### Ongoing Projects

| S. No | Agency | Period |    | Project Title | Budget (Rs. In lakhs) |
|-------|--------|--------|----|---------------|-----------------------|
|       |        | From   | To |               |                       |
| 1     | Nil    |        |    |               |                       |
| 2     | Nil    |        |    |               |                       |

### Consultancy Projects

| S. No | Agency | Period |    | Project Title | Budget (Rs. In lakhs) |
|-------|--------|--------|----|---------------|-----------------------|
|       |        | From   | To |               |                       |
| 1     | Nil    |        |    |               |                       |
| 2     |        |        |    |               |                       |

Others -

**Note: Budget must be rounded to two decimal places**

### Patents

1. Granted: **Korean Patent**  
Inventors: Hong Sun Lg, J. Suresh, R. Yuvakumar, J. Nathanael, **M. Sundrarajan**  
Patent Number: 10-1617994
2. Published: **Indian Patent**  
Inventors: **M. Sundrarajan**, Hong Sun Lg, J. Suresh, R. Yuvakumar, R. R. Gandhi  
Application Number: 3557/CHE/2014 A  
Publication Date: 01/07/2016

## Distinctive Achievements / Awards

1. DST – FAST track **Young scientist award** in year 2009
2. **Alagappa Excellence Award for Research** – 2016 given by AURF, Alagappa University, Karaikudi.
3. The research paper entitled “Studies on the effect of Ionic liquid in synthesis of ZnO nanostructure using plant extract and their performance in antibacterial activity” has won the **Best Paper Award** in New opportunities and challenges in chemical research (NOCCR – 2014), A.V.V.M. Sri Pushpam College, Poondi, Thanjavur Dt.
4. The research paper entitled “Structural synthesis of fluorapatite nanocrystals using different imidazolium based ionic liquid: A green process” has won the **Best Paper Award** in National conference on Biomaterials in Medicinal Chemistry, Madurai Kamaraj University, Madurai.
5. **Best Article Award** from Chinese Society of Metals for article entitled “Ionic Liquids Assisted Synthesis of ZnO Nanostructures: Controlled Size, Morphology and Antibacterial Properties” , Journal of Materials Science and Technology.
6. **Bharat Gaurav Award** (2017) from India International Friendship Society - New Delhi.
7. **Best Citizens of India Award** (2017) from Best Citizens of India- New Delhi.

## Events organized in leading roles

### Number of Seminars / Conferences / Workshops / Events organized: 12

1. National Seminar on Recent Advances in Textile and Electrochemical Science (RATES 2008); Department of Industrial Chemistry, Alagappa University, Karaikudi; December 19-20<sup>th</sup> 2008 - **Co-convener**.
2. National Conference on Recent Trends in Green Synthesis (RTGS-2011); Department of Industrial Chemistry, Alagappa University, Karaikudi; 5-6<sup>th</sup> August 2011 – **Convener**.
3. UGC Sponsored Workshop on “Chemistry – Our Environment, Our Life and Our Future” Department of Industrial Chemistry, Alagappa University, Karaikudi; 22-23<sup>rd</sup> December 2011- **Organizing Secretary**.
4. National Seminar on Recent Advances in Textile and Electrochemical Science (RATES 2012); Department of Industrial Chemistry, Alagappa University, Karaikudi; March 22-23<sup>rd</sup> 2012 - **Member**.
5. International Conference on Recent Advances in Textile and Electrochemical Science (RATES 2013); Department of Industrial Chemistry, Alagappa University, Karaikudi; March 21-23<sup>rd</sup> 2013 - **Member**.

6. International Workshop on Frontier Areas in Chemical Technologies by Department of Industrial Chemistry, Alagappa University, Karaikudi; February 21-22<sup>nd</sup> 2014 – **Member**.
7. National seminar on Frontier Areas in Chemical Technologies by Department of Industrial Chemistry, Alagappa University, Karaikudi; March 6- 7<sup>th</sup> 2015 – **Member**.
8. International conference on Frontier Areas in Chemical Technologies by Department of Industrial Chemistry, Alagappa University, Karaikudi; March 21-23<sup>rd</sup> 2016 – **Member**.
9. **Special lecture** delivered entitled on " " in the **Chairperson** of a Technical Session in the International conference on Renewable Energy Science and Technology (ICREST – 2017) organized by Department of Energy Science, Alagappa University, Karaikudi on 10 – 11<sup>th</sup> March 2017.
10. **Chairperson** of a Technical Session in the International conference on Frontier areas in chemical technology organized by Department of Industrial Chemistry, Alagappa University, Karaikudi on 6 – 8<sup>th</sup> July 2017.
11. **Organizing Secretary**, National conference on Frontier areas in chemical technology organized by Department of Industrial Chemistry, Alagappa University, Karaikudi on 22<sup>nd</sup> – 23<sup>rd</sup> March 2018.
12. **Chairperson** of a Technical Session for Chemistry in the International conference on Humanities, Arts and Science organized by University of Putra Malaysia (UPM), Malaysia on 23 – 28<sup>th</sup> August 2018.

### Events Participated (optional)

#### Conferences / Seminars / Workshops: 08

1. Two days national conference on Advances in chemicals for textile polymers- Application and quality Assurance (ACTPAQ 2011) organised by Department of chemistry, PSG college of Technology, coimbatore on 17-18<sup>th</sup> February 2011
2. Two days national conference on Structure solving by Powder X Ray Diffraction organised by Department of Physics, Alagappa University, Karaikudi on 26- 27<sup>th</sup> July 2011.

3. Three days IndoUkworkshop for Current Development of wastewater treatment in india organised by Department of chemical Engineering, NIIT,Trichy on29-31st August 2011.
4. One day National Seminar attended at Tirupur- Textile Testing Methods By SDL ATLAS & Premier Color Scan Ltd., Mumbai on 7th September 2011.
5. One day International Workshop attended at Tirupur- Weathering & Light Fastness Testing of Textiles By Q Lab, USA on 7th December 2011.
6. Two daysnational workshop on Expansion and Enrichment of Distance Learning organised by Directorate of Distance Education, Alagappa University, Karaikudi on 27-28<sup>th</sup> March 2012.
7. One day orientation programme on preparation for Cmpetitive examination and capacity building conducted by attended at Alagappa university study circle on 28<sup>th</sup> September 2015.
8. Two days national workshop on Digitalization of Information sources in libraries using open source software in Academic institutions., by Central Library , Alagappa University, Karaikudi on15-16<sup>th</sup> December 2016.

### **Other Training Programs**

1. Orientation course attended at UGC-Academic Staff College, Pondicherry University, Pondicherry – 19.8.2010-15.9.2010.
2. Referresher course attended at UGC-Academic Staff College, Madurai kamaraj University, Madurai – 12.07.2012-01.08.2012
3. Referresher course attended at UGC-Academic Staff College, Madurai kamaraj University, Madurai – 23. 12.2014 - 12.01.2015

### **Overseas Exposure / Visits**

1. Visiting Malaysia for International Conference

### **Membership in**

#### **Professional Bodies**

1. Life Member: The Indian Science Congress Association, Kolkata – 700 017
2. Asian Journal of Chemistry, India – Life Member

#### **Editorial Board**

1. Xxx
2. xxx

## Advisory Board

1. Xxx
2. xxx

## Academic Bodies (such as Board of Studies etc.,)

1. Special Invitee in the Board of studies in M. Sc Chemistry, Alagappa University
2. Guide cum – convener in Ph.D Doctoral Committee for 11 students in year 2008 to 2019
3. Member in M.Phil DDE viva - voce committee, Alagappa University
4. Member in Ph.D scholar selection committee in chemistry, Alagappa University
5. Cultural Club Coordinator, Dept. of Industrial Chemistry, Alagappa University (2015 – 2016)
6. Squad Team, Affiliated College Examination, Alagappa University (2015 & 2017)
7. NAAC Coordinator, Dept. of Industrial Chemistry, Alagappa University (2018 – tilldate)

## Others

1. External examiner for the evaluation of 2 M.Phil Dissertation and viva-voce during the year 2008 and 2011.
2. Judge in Inspire Award Science Expo organised by Department of Science and Technology, New Delhi on 22<sup>nd</sup> August 2014.
3. **i. Reviewer for Elsevier ( Hazardous Materials)** the manuscript titled “Decolorization of C.I.Reactive Red 2 by catalytic Ozonation processes”.
- ii. Reviewer for Elsevier ( Desalination)** the manuscript titled” Textile wastewater reuse as an alternative water source for dyeing and finishing processes: A case study.
- iii. Reviewer for Elsevier (Natural Products Research)** The he manuscript of title “ Silk fabric dyed with extract of sophora flower bud”.

## d. Number of Books written

**For DDE:** Organic chemistry : 2 units  
Instrumental methods of analysis : 5 units

### Resource persons in various capacities

Number of Invited / Special Lectures delivered: **01**

|   |   |  |               |
|---|---|--|---------------|
| Adverse effect of textile dye effluents in environment and treatment methods: an overview | National seminar on textile dye effluents and its health impacts-A biomedical approach        | K.S.Rangasamy<br>College of Arts and Sciences,<br>Tiruchengode | National      |
| <b>Details of Patent filing</b>   | Science campus,<br>Alagappa<br>University,<br>Karaikudi on 13 <sup>th</sup><br>February 2017. | Science<br>campus,<br>Alagappa<br>University                   |               |
| <b>Synthesis of nanomaterials by greener approach and their biological application”</b>   | international<br>conference on<br>Frontier areas of<br>Nanomaterials                          | Departme<br>nt of<br>Chemistry,<br>Shri<br>Sakthi              | International |

### Others

1. Articles published in Newspapers / Magazines : xx
2. Products developed : xx
3. No. of PhD Thesis evaluated : 11
4. No. of PhD Public Viva Voce Examination conducted : 11
5. Sequences submitted in GenBank

\*\*Social Interests and Initiatives / Articles in News papers etc can also be included

### Recent Publications



1. M. Balaji, P. Nithya, S. Jegatheeswaran, S. Selvam, **M. Sundrarajan**, (2019) "Ornamental Morphology of Ionic liquid Functionalized Ternary Doped N, P, F and N, B, F-Reduced Graphene oxide and Their Prevention Activities of Bacterial Biofilm-Associated with Orthopedic Implantation, Journal: Materials Science & Engineering C, Vol. 98, 1122-1132. (Impact Factor: 5.08).
2. M. Balaji , P. Nithya , S. Jegatheeswaran , S. Selvam, **M. Sundrarajan**, (2018) "Ternary nanocomposite designed by MWCNT backbone PPy/Pd for efficient catalytic approach toward reduction and oxidation reactions, Journal of Advanced Powder Technology, Vol. 29, 3173-3182. (Impact Factor: 2.943).
3. A. Sangili, M. Annalakshmi, S-M. Chen, P. Balasubramanian, **M. Sundrarajan**, (2018), Synthesis of silver nanoparticles decorated on core-shell structured tannic acid coated iron oxide nanospheres for excellent electrochemical detection and efficient catalytic reduction of hazardous 4-nitrophenol, Composites Part B, doi: <https://doi.org/10.1016/j.compositesb.2018.10.084>. (Impact Factor: 4.902).
4. J. Kalaiselvi, **M. Sundrarajan**, M. Ramesh Prabhu, (2018) "Preparation and Characterization of chitosan- based nanocomposite hybrid polymer electrolyte membranes for fuel cell application", Journal of Ionics, Doi.org/10.1007/s11581-018-2485-7. (Impact Factor: 2.347).
5. J. Suresh, G. Pradheesh, V. Alexramani, **M. Sundrarajan**, S. Ig Hong, (2018) "Green synthesis and characterization of hexagonal shaped MgO nanoparticles using insulin plant (*Costus pictus* D. Don) leave extract and its antimicrobial as well as anticancer activity", Journal of Advanced Powder Technology, Doi.org/10.1016/j.appt.2018.04.003. (Impact Factor: 2.943).
6. P. Nithya, M. Balaji, S. Jegatheeswaran, S. Selvam, **M. Sundrarajan**, (2018) Facile biological synthetic strategy to morphologically aligned CeO<sub>2</sub>/ZrO<sub>2</sub> core nanoparticles using *Justicia adhatoda* extract and ionic liquid: Enhancement of its bio-medical properties, Journal of Photochemistry & Photobiology, B: Biology, Vol. 178, 481-488. (Impact Factor: 3.158).

7. S. Jegatheeswaran, S. Selvam, J. Anandha Raj, M. Balaji, K. Bama, **M. Sundrarajan**, (2017) “ Influences of ionic liquid and temperature on the tailorable surface morphology of F-apatite nanocomposites for enhancing abilities for orthopedic implantation”, *Journal of Materials Science & Engineering C*, Vol. 84, 99-107. (Impact Factor: 5.080).
8. M. Balaji, S. Jegatheeswaran, P. Nithya, P. Boomi, S. Selvam, **M. Sundrarajan**, (2018) “ Photoluminescent reduced graphene oxide quantum dots from latex of *Calotropis gigantea*, for metal sensing, radical scavenging, cytotoxicity, and bioimaging in *Artemia salina*: A greener route”, *Journal of Photochemistry & Photobiology, B: Biology*, Vol. 178, 371-379. (Impact Factor: 3.158).
9. **M. Sundrarajan**, K. Bama, G. Selvanathan, M. Ramesh Prabhu, (2018) “Ionic liquid-mediated: Enhanced surface morphology of silver/manganese oxide/bentonite for improved biological activities”, *Journal of Molecular Liquids*, Vol. 249, 1020 – 1032. (Impact Factor: 4.513).
10. M. Balaji, S. Jegatheeswaran, S. Selvam, A. Sangili and **M. Sundrarajan**, (2017) “Highly Biological Active Antibiofilm, Anticancer and Osteoblast Adhesion Efficacy from MWCNT/PPy/Pd nanocomposite”, *Journal of Applied Surface Science*, Vol. 434, 400 - 411. (Impact Factor: 3.387).
11. Bama Krishnan and **Sundrarajan Mahalingam**, (2017) “Ag/TiO<sub>2</sub>/bentonite nanocomposite for biological applications: synthesis, characterization, antibacterial & cytotoxic investigation”, *Journal of Advanced Powder Technology*, Vol. 28, 2265-2280. (Impact Factor: 2.943).
12. K. Bama and **M. Sundrarajan**, (2017), “Improved surface morphology of silver/copper oxide/bentonite nanocomposite using aliphatic ammonium based ionic liquid for enhanced biological activities” *Journal of Molecular Liquids*, Vol. 241, 1044 - 1058 (Impact Factor: 4.513).
13. **M. Sundrarajan**, K. Bama, M. Bhavani, S. Jegatheeswaran, S. Ambika, A. Sangili, P. Nithya, and R. Sumathi, (2017) “Obtaining titanium dioxide nanoparticles with spherical shape and antimicrobial properties using *M. citrifolia* leaves extract by

hydrothermal method”, Journal of Photochemistry & Photobiology, B: Biology, Vol.171, 117 – 124 (Impact Factor: 3.158).

14. **M. Sundrarajan**, S. Jegatheeswaran, S. Selvam, R. Gowri, M. Balaji, and K. Bharathi, (2017) “Green approach: Ionic liquid assisted synthesis of nanocrystalline ZnO in phyto medium and their antibacterial investigation”, Journal of Materials Letters, Vol. 201, 31-34. (Impact Factor: 2.687)
15. S. Selvam, B. Balamuralitharan, S. Jegatheeswaran, Mi-Young Kim, S.N. Karthicka, J. Anandha Raj, P. Boomi, **M. Sundrarajan**, K. Prabakar, Hee-Je Kim, (2017) “Electrolyte imprinted graphene oxide-Chitosan chelate with copper crosslinked composite electrodes for intense cyclic stable flexible super capacitors”, Journal of Materials Chemistry A, Vol.5, 1380-1386. (Impact Factor: 9.931).
16. K. Bama and **M. Sundrarajan**, (2017), “Synthesis and characterization of Mn<sub>3</sub>O<sub>4</sub>/BC nanocomposite and its antimicrobial activity” Journal of inorganic and organometallic polymers and materials, Vol. 27, 275-284. (Impact Factor: 1.74).
17. K. Bama and **M. Sundrarajan**, (2017), “Facile Synthesis and antimicrobial activity of manganese oxide/bentonite nanocomposite”, Journal of Research on chemical intermediates, Vol. 43, 2351-2365. (Impact Factor: 1.674).
18. S. Ambika and **M. Sundrarajan**, (2016), “[EMIM] BF<sub>4</sub> ionic liquid-mediated synthesis of TiO<sub>2</sub> nanoparticles using Vitex negundo Linn extract and its antibacterial activity”, Journal of Molecular liquids, Vol. 221, 986-992. (Impact Factor: 4.513).
19. S. Jegatheeswaran, S. Selvam, V. Sri Ramkumar, and **M. Sundrarajan**, (2016), “Novel strategy for f-HAp/PVP/Ag nanocomposite synthesis from fluoro based ionic liquid assistance: Systematic investigations on its antibacterial and cytotoxicity behaviors”, Journal of Materials science and engineering C, Vol. 67, 8-19. (Impact factor: 5.080).
20. S. Jegatheeswaran, S. Selvam, V. Sri Ramkumar and **M. Sundrarajan**, (2016), “Facile green synthesis of silver doped fluor-hydroxyapatite/ $\beta$ -cyclodextrin nanocomposite in the dual acting fluorine-containing ionic liquid medium for bone substitute

- applications”, Journal of Applied surface science, Vol. 371, 468-478. (Impact Factor: 4.439).
21. **M. Sundrarajan**, S. Jegatheeswaran, S. Selvam, N. Sanjeevi, M. Balaji, (2015) “The ionic liquid assisted green synthesis of hydroxyapatite nanoplates by *Moringa oleifera* flower extract: A biomimetic approach”, Journal of Materials and Design, Vol. 88, 1183–1190. (Impact Factor: 4.525).
  22. S.K. Kannan, **M. Sundrarajan**, (2015) “Green synthesis of ruthenium oxide nanoparticles: Characterization and its antibacterial activity”, Journal of Advanced powder technology, Vol.26, 1505-1511. (Impact Factor: 2.943).
  23. S. Ambika and **M. Sundrarajan**, (2015) “Plant-extract mediated synthesis of ZnO nanoparticles using *Pongamia pinnata* and their activity against pathogenic bacteria”, Journal of Advanced Powder Technology, Vol. 26, 1294-1299 (Impact Factor: 2.943)
  24. S. Ambika and **M. Sundrarajan**, (2015) “Green biosynthesis of ZnO nanoparticles using *Vitex negundo* L.extract: Spectroscopic investigation of interaction between ZnO nanoparticles and human serum albumin”, Journal of Photochemistry and PhotobiologyB: Biology, Vol. 149, 143-148. (Impact Factor: 3.165).
  25. S.K. Kannan and **M. Sundrarajan**, (2015) “Biosynthesis of Yttrium oxide nanoparticles using *Acalypha indica* leaf extract”, Journal of Bulletin of Materials Science, Vol. 38, 945-950. (Impact Factor: 1.08).
  26. S. Ambika and **M. Sundrarajan**, (2015) “Antibacterial behavior of *Vitex negundo* extract assisted ZnO nanoparticles against pathogenic bacteria”, Journal of Photochemistry and PhotobiologyB: Biology, Vol.146, 52-57. (Impact Factor: 3.165).
  27. S. Jegatheeswaran and **M. Sundrarajan**, (2015) “PEGylation of novel hydroxyapatite/PEG/Ag nanocomposite particles to improve its antibacterial efficacy”, Materials Science and engineering C, Vol.51, 174-181. (Impact Factor: 5.080).
  28. R. Rajiv Gandhi, S. Senthil, R. Rajappan, K. Ramesh, S. Gowri, J. Suresh and **M. Sundrarajan**, (2015) “Ionic liquids: A Green solvent for the Biosynthesis of MgO

Nanoparticles Using Banana Stem Plant Extract”, Journal of Nanoengineering and Nanomanufacturing, Vol.5, 1-7. (Impact Factor:-)

29. K. Ramanujam and **M. Sundrarajan**, (2014) Biocidal activities of monochloro triazine -b- cyclodextrin with MgO modified cellulosic fabric, The Journal of the Textile Institute; In press. (Impact Factor: 0.725)
30. K. Ramanujam and **M. Sundrarajan**, (2014) “Antibacterial effects of biosynthesized MgO nanoparticles using ethanolic fruit extract of *Emblica Officinalis*”, Journal of Photochemistry and Photobiology B: Biology, Vol.141, 296-300. (Impact Factor: 3.165).
31. R.Rajiv Gandhi, S. Senthil, R. Rajappan, K. Ramesh and **M. Sundrarajan**, (2014) “[BMIM] BF<sub>4</sub>, [EMIM] BF<sub>4</sub> and [BMIM] PF<sub>6</sub> Ionic liquids assisted synthesis of MgO nanoparticles: Controlled size, much morphology and antibacterial properties”, Journal of Bionanoscience, Vol. 8, 1-7. (Impact Factor: 1.17).
32. S. K. Kannan and **M. Sundrarajan**, (2014) “A Green approach for the synthesis of a cerium oxide nanoparticle: Characterization and antibacterial activity”, International Journal of Nanoscience, Vol. 13 [3], 1-7. (Impact Factor: 0.56).
33. M. Ramalakshmi, P. Shakthivel and **M. Sundrarajan**, (2014) “Novel method of room temperature ionic liquid assisted Fe<sub>3</sub>O<sub>4</sub> nanocubes and nanoflakes synthesis”, Journal of Materials Research Bulletin, Vol. 48 [8], 2758-2765. (Impact Factor: 2.873).
34. R. Yuvakumar, J. Suresh, A. Joseph Naathanael, S.I. Hong and **M. Sundrarajan**, “Novel green synthesis strategy to prepare ZnO nanocrystals using rambutan (*Nephelium lappaceum* L.) peel extract and its antibacterial applications”, Journal of Material Science and Engineering C, Vol. 41, 17-27. (Impact Factor: 5.080).
35. R. Yuvakumar, J. Suresh, A. Joseph Naathanael, S.I. Hong and **M. Sundrarajan**, (2014) “Rambutan (*Nephelium lappaceum* L.) peel extract as synthesis of nickel oxide nanocrystals”, Journal of Materials letters, Vol. 128, 170-174. (Impact Factor: 2.687).

36. S.Ambika and **M. Sundrarajan**, (2014) "Synthesis of  $\beta$ -cyclodextrin /ZnO nanocomposites and its improve antibacterial activity on cotton fabric", World journal of pharmacy and pharmaceutical sciences, Vol. 3 [4], 751-761. (Impact Factor: 0.19).
37. K. Ramanujam and **M. Sundrarajan**, (2014) "Grafting of cellulosic fabric using PVP with MgO nanoparticles for improve performance of bacterial and fungal pathogens", World journal of pharmacy and pharmaceutical sciences, Vol. 3 [3], 1989-2004. (Impact Factor: 0.19).
38. R. Yuvakumar, J. Suresh, A. Joseph Naathanael, S. I. Hong and **M. Sundrarajan**, (2014) "Antibacterial and wash durability properties of untreated and treated cotton fabric using MgO and NiO nanoparticles", Journal of Applied mechanics and materials, Vol. 508, 48-51. (Impact Factor: 0.16).
39. R. Yuvakumar, J. Suresh, A. Joseph Naathanael, S. I. Hong and **M. Sundrarajan**, (2014) "A comparative study on antibacterial and wash durability behavior of ZnO and CuO nanoparticles treated cotton fabric using sodium alginate as cross linker", Journal of Applied mechanics and materials, Vol. 508, 44-47. (Impact Factor: 0.16).
40. S. Gowri, R. Rajiv Gandhi and **M. Sundrarajan**, (2014) "Structural, optical, antibacterial and antifungal properties of zirconia nanoparticles by biobased protocol", Journal of material science and technology, Vol. 30 [8], 782-790. (Impact Factor: 3.609).
41. S. Gowri, R. Rajiv Gandhi and **M. Sundrarajan**, (2013) "Green synthesis of tin oxide nanoparticles by aloe vera: Structural, optical and antibacterial properties", Journal of nanoelectronics and optoelectronics, Vol.8, 1-10. (Impact Factor: 0.59).
42. M. Ramalakshmi and **M. Sundrarajan**, (2013) "[BMIM] [TfO] Ionic liquid-assisted oriented growth of  $\text{Co}_3\text{O}_4$  nanoworms materials", Journal of Materials Research Bulletin, Vol. 48 [2], 618-623. (Impact Factor: 2.873).
43. **M. Sundrarajan** and A. Rukmani, (2013) "Inclusion of Thymol into bio-polished cyclodextrin grafted fabric for durable enhanced microbial resistance", Journal of green science and technology, Vol. 1 [1], 6-13. (Impact Factor :-)

44. R. Rajiv Gandhi, S. Gowri, J. Suresh and **M. Sundrarajan**, (2013) "Ionic liquid assisted synthesis of ZnO nanostructures: controlled size, morphology and antibacterial properties", Journal of material science and technology, Vol. 29 [6], 533-538. (Impact Factor: 3.609).
45. **M. Sundrarajan** and A. Rukmani, (2013) "Durable antibacterial finishing on cotton by impregnation of limonene microcapsules", Journal of Advanced chemistry letters, Vol.1, 40- (Impact Factor: 1.20).
46. R. Rajiv Gandhi, J. Suresh, S.Gowri and **M. Sundrarajan**, (2012) Facile and green synthesis of ZnO nanostructures using Ionic liquid assisted banana stem extract route, Advanced science letters; Vol.18, 234-240. (Impact Factor:1.2).
47. R. Rajiv Gandhi, J. Suresh, S. Gowri, S. Selvam and **M. Sundrarajan**, (2013) "Ultrasonic dyeing of enzyme treated organic cotton using nyctanthes arbor- triatis, Journal of Chemical science transactions, Vol. 2 [2] 642-648 (Impact Factor:-)
48. R. Rajiv Gandhi, S. Gowri, J. Suresh and **M. Sundrarajan**, (2012) "Ionic liquid assisted synthesis of ZnO nanoparticles: Growth mechanism under different calcination temperature", Journal of nanoelectronics and optoelectronics, Vol.8, 1-4. (Impact Factor: 0.59).
49. M. Ramalakshmi and **M. Sundrarajan**, (2013) "Ionic liquid- assisted synthesis of nickel oxide magnetic nanoparticles", Asian journal of chemistry; Vol. 25 [6], 3081-3083. (Impact Factor: 0.14).
50. J. Suresh, R. Rajiv Gandhi, S. Selvam and **M. Sundrarajan**, (2013) "Synthesis of magnesium oxide nanoparticles by wet chemical method and it's antibacterial activity", Journal of Advanced materials research, Vol. 678, 297-300. (Impact Factor: 0.23).
51. J. Suresh, R. Rajiv Gandhi, S. Gowri, S. Selvam and **M. Sundrarajan**, (2012) "Antibacterial activity of magnesium (II) ions loated cyclodextrin- grafted- cotton fabric", Asian journal of chemistry, Vol. 24 [12], 5629-5631. (Impact Factor: 0.14).
52. **M. Sundrarajan**, J. Suresh and R. Rajiv Gandhi, (2012) "A comparative study on antibacterial properties of MgO nanoparticles prepared under different calcination

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