Resume

Dr. SRINIVASAN ANANDAN
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Center for Nano-materials
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Date of birth: 10.05.1978

Academic Qualifications:

2003 to 2006 **Doctor of Philosophy** (Chemistry), Anna University, Chennai, India
Thesis title**: 'A systematic study of the photocatalytic degradation of model pollutants by employing supported and metal doped TiO_2 and ZnO'**

2001 to 2003 **Master of Philosophy** (Chemistry), Bharathidhasan University, Thiruchirappalli, India. Thesis title**: 'Bio-Pharmacology of some isolated pigments'.**

1999 to 2001 **Master of Science** in General Chemistry from Bharathidhasan University, Thiruchirappalli, India

1996 to 1999 **Bachelor of Science** in Chemistry from Bharathidhasan University, Thiruchirappalli, India

Professional Experience:

Oct. 2018 to till date: Working as **Scientist-E** at International Advanced Research Centre for Powder Metallurgy & New Materials (ARCI), Hyderabad, INDIA

June 2014 to Sep. 2018: Working as **Scientist-D** at International Advanced Research Centre for Powder Metallurgy & New Materials (ARCI), Hyderabad, INDIA

June 2012 to June 2014: Worked as **Senior Scientist on Contract** at International Advanced Research Centre for Powder Metallurgy & New Materials (ARCI), Hyderabad, INDIA

Apr. 2011 to May 2012: Worked as **JSPS (Japan Society for Promotion of Science) Fellow** at Tokyo Institute of Technology, Tokyo, Japan.

Apr. 2010 to Mar. 2011: Worked as **JSPS (Japan Society for Promotion of Science) Fellow** at National Institute of Advanced Industrial Science and Technology (AIST), Tsukuba, Japan.

Apr. 2009 to Mar.2010: Worked as **Post-doctoral Research Scientist** at National Institute of Advanced Industrial Science & Technology (AIST), Tsukuba, Japan.

Apr. 2007 to Mar. 2009: Worked as **Post-doctoral Researcher** at Department of Applied Chemistry, Kanagawa Institute of Technology (KAIT), Atsugi, Japan.

Apr. 2006 to Mar. 2007: Worked as **Post-doctoral Researcher** at National Institute of Materials Science (NIMS), Tsukuba, Japan.

Awards/Honors/Fellowships/Membership

- ✓ Awarded a prestigious **"JSPS FELLOWSHIP"** by Japan Society for Promotion of Science, Japan
- ✓ Awarded **"YOUNG SCIENTIST AWARD"** by the Material Research Society of Japan at IUMRS-ICA 2008, Nagoya, Japan.
- ✓ Venus International Foundation awarded **"OUTSTANDING SCIENTIST AWARD"** for his contribution and achievement in the field of Nanomaterials during 3rd Annual Research Meet held at Chennai on 11th November 2017.
- ✓ **Best Oral Presentation Award for the co-authored paper entitled** "Design, Development and Real-Time Demonstration of Supercapacitor Powered Electric Bicycle" at the International Conference on 'Super Capacitors and Energy Storage Applications (ICSEA-2019)' held at Thrissur, Kerala during March 08 - 09, 2019.
- ✓ **Best Poster presentation award for the co-authored paper entitled** "Graphene sheets like nanoporous carbon derived from Agricultural bio-waste (jute stick) as electrode material for high performing Supercapacitors" at the "Battery Technologies & Electric Mobility" at HP Green R & D Centre, Bangalore on March 8-9, 2018.
- ✓ **Best Poster presentation award with the Cash Prize of Rs.20,000 for the co-authored paper entitled** "Large Scale Synthesis of High Performance Zero Strain Lithium Titanate For High Energy Density Li-ion Battery Application" at the 9th Bengaluru INDIA NANO 2017 held during 7-8th December 2017 at Bangalore.

- ✓ **Best poster presentation award for the co-authored paper entitled** "Technology development of nanostructures titania microspheres for self-cleaning application" presented in 8th Bangalore INDIA NANO conference held during 3-4th March 2016 at The Lalit Ashok, Bengaluru.
- ✓ **Best oral presentation award for the co-authored paper entitled** "Ordered mesoporous carbon as an efficient anode material for lithium ion battery application" presented in National Conference on Carbon Materials 2015 (NCCM 2015) held during 26-28th November 2015 at IIC, New Delhi.
- ✓ One of the organizing committee members in the **IUMRS-ICA2008** conference held in Nagoya, Japan on December 2008.
- ✓ Member of Material Research Society of Japan (Reg. No. MRS-J, No.3441).
- ✓ Chaired a session in the **IUMRS-ICA2008** conference which was held in Nagoya, Japan in December 2008.
- ✓ Provisionally selected for **Junior Project Fellowship** in UGC Sponsored Research Project in Anna University, India.
- ✓ Reviewer for international referred journals like ACS, RSC and Elsevier.

Field of Interest:

Material development for Energy storage technologies (Li-ion battery, Supercapacitor, & Li-ion capacitor); Development of UV and visible-light driven photocatalsyts for Self-cleaning application; Development of large scale process for the synthesis of Nanomaterials

Research Expertise:

- Development of cathode and anode materials by cost-effective large scale process large scale process suitable for Electric Vehicles (EVs) Application
- carbon coating on electrode materials by unique process to increase the electronic conductivity.
- Up-scaling of Li-ion battery materials by High energy milling process
- Validation of electrode materials at coin cell level and benchmarking with commercial materials.
- Development of bio-mass derived porous carbon materials by physical/chemical activation process
- Up-scaling of porous carbon materials and its validation at coin cell level
- Design, development and demonstration supercapacitor powered module for Electric Vehicles(EVs) application.
- Design and synthesis of visible light and UV-light-driven active photocatalysts.
- Photocatalytic evaluation for fuel cell (H_2) production, pollutants degradation and testing antibacterial activity.
- Water-photo-oxidation reaction on rutile TiO_2 single crystal by high energy synchrotron x-ray radiation.
- Synthesis of mesoporous materials, mesoporous carbon and carbon nitrides.

Patents:

1. **S. Anandan**, P.M. Pratheeksha, R. Vijay and Tata N. Rao, A method of producing high performance lithium titanate anode material for lithium ion battery applications, Inventors: on **PCT International Application No. PCT/IN2018/050080** dated 17.02.2018.

2. **S. Anandan**, P.M. Pratheeksha, R. Vijay and Tata N. Rao, A method of producing high performance lithium titanate anode material for lithium ion battery applications, Inventors: **Japan Patent Application No. 2019-520394** based on PCT International Application No. PCT/IN2018/050080 dated 17.02.2018.

3. **S. Anandan**, P.M. Pratheeksha, R. Vijay and Tata N. Rao, A method of producing high performance lithium titanate anode material for lithium ion battery applications, **Indian Patent Application No. E-2/1972//2017/DEL** dated 27th December, 2017.

4. S. Sakthivel, **S. Anandan**, Tata N. Rao, Method of producing nanostructured C-TiO_2 composite material for visible light active photocatalytic self-cleaning applications, **Indian Patent Application No. 201811011478** dated 28th March, 2018.

5. **S. Anandan**, K. Nanaji, and Tata N. Rao, "Method of producing graphene like structured nanoporous carbon material from Jute stick based bio-waste for Energy Storage applications and the product thereof" **Indian Patent Appl. No. E-2/276//2018/DEL**,16th February, 2018.

6. **S. Anandan**, G. Sivakumar, T. N. Rao, S. V. Joshi, "Method of producing high performance visible-light-active photocatalytic materials for self-cleaning applications" **Indian Patent Appl. No. 2625/DEL/2015, Filing Date: August 25, 2015.**

7. A. Vinu, **S. Anandan**, P. Srinivasu, N. Gokulakrishnan, T. Mori, K. Ariga, Synthesis of Nitrogen-Doped Mesoporous Carbon using Templating Technique, Ref.: **JP5294234, dt. 21/06/2013.**

8. A. Vinu, **S. Anandan**, K. Ariga, T. Mori, Mesopoorus Carbon Nitride Materials and Method for Producing the Same, Ref.: **PCT/JP2008/056802, April 16, 2008.**

9. Y. Ikuma**, S. Anandan**, K. Niwa, N-doped mesoporous titanium dioxide, Ref.: **JP 2008-118840, April 30, 2008**.

10. A.Vinu, **S. Anandan,** T. Mori, K. Ariga,Three Dimensional Cubic Mesoporous Carbon Nitride with Bimodal Pores and a method for Preparing the Same, Ref.: **JP 2007-99061**. **April 5, 2007.**

Publications:

1. R Saai Harini, D Easwaramoorthy, V Sai Muthukumar, R Gowrishankar, **S. Anandan**, **"**Bandgap engineered (tin & carbon co-doped) bismuth titanate nanowires for improved visible-light assisted photocatalytic application", ***Environmental Nanotechnology, Monitoring & Management*** **2019** (in press)**.**
2. Katchala Nanaji, R. K. Srii Kiran Janardhana, Tata Narasinga Rao, **Srinivasan Anandan**,* Energy Level Matching for Efficient Charge Transfer in Ag Doped Ag Modified TiO2 for Enhanced Visible Light Photocatalytic Activity, ***J. Alloys and Compounds*** , 794, 662-671, **2019.**
3. N. Lakshmana Reddy, V. Navakoteswara Rao, M. Vijayakumar , R. Santhosh, **S. Anandan**, M. Karthik , M.V. Shankar ,Kakarla Raghava Reddy, Nagaraj P. Shetti , M.N. Nadagouda , Tejraj M. Aminabhavi, "A review on frontiers in plasmonic nano-photocatalysts for hydrogen production", ***International Journal of Hydrogen Energy***, 44, 10453-10472, ***2019***.
4. Tejassvi, E. Hari Mohan; Neha Y. Hebalkar; A. Jyothirmayi, B.V. Sarada, **S. Anandan**, Krishna Mohan Mantravadi, T N Rao, "Flexible and free-standing carbon nanofiber matt derived from electrospun polyimide as an effective interlayer for high performance Lithium Sulfur batteries" ***J. Material Science,*** 54, 9075, **2019**.
5. P. M. Pratheeksha, J. Sri Rajeshwari, D. Paul Joseph, T. N. Rao, and **S. Anandan**,* "Investigation of *in-situ* carbon coated $LiFePO_4$ as a superior cathode materials for Lithium ion batteries", ***Journal of Nanoscience and Technology,*** 19, 3002, **2019**.
6. Katchala Nanaji, E. Hari Mohan, Sarada V Bulusu, U. V. Varadaraju, Tata Narasinga Rao, **S. Anandan**,* "One Step Synthesized Hierarchical Spherical Porous Carbon as an Efficient Electrode Material for Lithium ion Battery", ***Materials Letters****,* 237, 156-160, **2019**.
7. Katchala Nanaji, U. V. Varadaraju, Tata Narasinga Rao, **S. Anandan**,* "Robust, Environmentally Benign Synthesis of Nanoporous Graphene Sheets from Bio-waste for Ultrafast Supercapacitor Application", ***ACS Sustainable Chemistry and Engineering***, 7, 2516-2529, **2019**.
8. E. Hari Mohan, **S. Anandan,** B. V. Appa Rao, Tata. N. Rao, "Neem Leaves-Derived Micro and Mesoporous Carbon as an Efficient Polysulfide Inhibitor for Sulfur Cathode in a Li-S Battery", ***Chemistry Letters,*** 48, 62-64, **2019**.
9. E. Hari Mohan, K.Nanaji, **S. Anandan**, B.V. Sarada, M. Ramakrishna, A. Jyothirmayi, B.V. Appa Rao, T. N. Rao, "One-step Induced Porous Graphitic

Carbon Sheets as Supercapacitor Electrode Material with Improved Rate Capability" ***Materials Letters***, 236, 205-209, **2019**.

10. Y. Ikuma, M. Yamana, S. Yogose, K. Niwa, **S. Anandan**, D. Kuroda, H. Tajiri, O. Sakata, "Surface X-ray diffraction study of annealed single crystal rutile TiO2 (001) surface" ***Ionics***, 25, 1879-1886, **2019**.
11. Tadepalli Mitravinda, Katchala Nanaji, **S. Anandan**, Adduru Jyothirmayi, Venkata Sai Kiran Chakravadhanula, Chandra Shekhar Sharma, Tata Narasinga Rao, "Facile Synthesis of Corn Silk Derived Nanoporous Carbon for an Improved Supercapacitor Performance", ***Journal of The Electrochemical Society***, 165 (14) A1-A11, **2018**.
12. K. Nanaji, A. Jyothirmayi, U.V. Varadaraju, T. N. Rao, S. Anandan,* Facile synthesis of mesoporous carbon from furfuryl alcohol-butanol system by EISA process for supercapacitors with enhanced rate capability, ***Journal of Alloys and Compounds***, 723, 488-497, **2017**.
13. Tejassvi Pakki, Sudhakara S. Sarma, Neha Y. Hebalkar, S. Anandan, Krishna Mohan Mantravadi and Tata N. Rao, Enhanced Electrochemical Performance of Electrospun SiO_2 Nanofibers as Binder-Free Anode, ***Chemistry Letters,*** 46, 1007-1009, **2017**.
14. P. M. Pratheeksha, E. Hari Mohan, B. V. Sarada, M. Ramakrishna, K. Hembram, P. V. V. Srinivas, P. Joseph, Tata N. Rao and **S. Anandan**,* Development of a Novel Carbon-Coating Strategy for Producing Core-Shell Structured Carbon Coated $LiFePO_4$ for Improved Li-ion Battery Performance, ***Physical Chemistry chemical Physics,*** 19, 175-188, **2017**.
15. Raju Kumar, G. Sivakumar, R.K. J. Sri Kiran, T. N. Rao, S. V. Joshi, **S. Anandan**,* "Facile one step route for the development of in-situ co-catalyst modified Ti^{3+}-self doped TiO_2 for improved visible-light photocatalytic activity" ***ACS Appl. Mater. Interf.*** Vol. 8, pp.27642-27653, **2016.**
16. Raju Kumar, D. Navadeepthy, K. Hembram, T. N. Rao, **S. Anandan**,* "Visible-light induced photocatalytic disinfection of *E.coli* pathogens with Fe^{3+}-grafted ZnO nanoparticles" ***Energy and Environment Focus*** Vol. 4, pp. 232-238, **2015.**
17. Y. Ikuma, S. Ogoe, M. Mitsugi, K. Niwa, **S. Anandan**, E. Yamauchi, H. Tajiri, O. Sakata, "Surface X-ray diffraction study and photocatalytic activity of HF-treated single crystal rutile TiO_2 (001) surface" ***Ionics*** Vol. 21(9), p 2495-2501, **2015**.
18. M.B. Sahana, S. Vasu, N. Sasikala, **S. Anandan**, H. Sepehri-Amin, C. Sudakar, R. Gopalan, "Raman spectral signature of Mn-rich nanosclae phase segregation in carbon free $LiFe1\text{-}xMnxPO_4$ prepared by hydrothermal technique" ***RSC Adv.*** Vol. 4, pp. 64429-64437, **2014**.

19. Raju Kumar, **S. Anandan**,* K. Hembram, T. N. Rao, "Efficient ZnO-based visible-light-driven photocatalyst for anti-bacterial applications" ***ACS Appl. Mater. Interf.*** Vol. 6, pp.13138-13148, **2014.**

20. Y. Ikuma, S. Ogoe, S. Nakamura, K. Niwa, **S. Anandan**, H. Tajiri, O. Sakata, "Effect of multiple parallel grooves on the photocatalytic activity of rutile Ti_{O2} surfaces" ***Key Engineering Materials***, Vol.617, pp.109-112, **2014**.

21. **S. Anandan,*** T. N. Rao, R. Gopalan, and Y. Ikuma, " Fabrication of visible-light driven N-doped ordered mesoporous Ti_{O2} and their photocatalytic applications" ***J. Nanosci. Nanotechnol.*** Vol. 14, pp.3181-3186, **2014**.

22. S. Bhuvaneswari, P. M. Pratheeksha, **S. Anandan,*** D. Rengappa, R. Gopalan, and T. N. Rao "Efficient reduced graphene oxide grafted porous Fe_3O_4 composites as a high pperformance anode material for Li-ion batteries" ***Phys. Chem. Chem. Phys,*** Vol. 16, pp.5284-5294, **2014.**

23. **S. Anandan,** T. N. Rao, M. Sathish, D. Rengappa, I. Honma, and M. Miyauchi, " Supper--hydrophilic Graphene loaded TiO_2 thin-film for self-cleaning applications" ***ACS Appl. Mater. Interf.*** Vol. 3, pp.207-212, **2013**.

24. B. Palanisamy, C. M. Babu, B. Sundaravel, **S. Anandan,** M. Palanichamy, and V. Murugesan, "Sol-gel synthesis of mesoporous mixed Fe_2O_3/TiO_2 photocatalyst: Application to degradation of 4-chlorophenol" ***J. Hazard. Mater.*** Vol. 252-253, pp.233-242, **2013**.

25. B. Palanisamy, C. M. Babu, B. Sundaravel, **S. Anandan,** and V. Murugesan, " Efficient visible-light active mesoporous Ce-incorporated TiO_2 photocatalysts for the degradation of _4-chlorophenol" ***J. Nanosci. Nanotechnol.*** Vol. 13, pp.2573-2581, **2013**.

26. **S. Anandan,** and M. Miyauchi, "Chemically stable WO_3 based thin-film for visible-light induced oxidation and super-hydrophilicity" ***J. Phys. Chem. C***, Vol. 116, pp.15421-15426, **2012**.

27. **S. Anandan,** and M. Miyauchi, "Improved photocatalytic efficiency for WO_3 system by an efficient visible-light-induced hole transfer" ***Chem. Commun.***, Vol. 48, pp.4323-4325, **2012**.

28. S. N. Talapaneni, **S. Anandan,** G. P. Mane, C. Anand, S. Varghese, A. Mano, T. Mori, and A. Vinu, "Facile synthesis and basic catalytic application of 3D mesoporous carbon nitride with a controllable bimodal distribution" ***J. Mater. Chem.,*** Vol. 22, pp.9831-9840, **2012**.

29. **S. Anandan,*** Y. Ikuma, and V. Murugesan *"*Highly Active Rare-earth Metal-La-doped Photocatalysts: Fabrication, Characterization and Their Photocatalytic Activity*"* ***Int. J. Photoenergy*** Vol. 2012, pp.1-10, **2012**.

30. K. Niwa, R. Kuramoto, **S. Anandan**, and Y. Ikuma *"*Zeta potential and hydrogen production of mesoporous titanium dioxide*"* ***Procedia Engineering,*** Vol.36, pp.62-67, **2012**.

31. **S. Anandan,** and M. Miyauchi, "Ce-doped ZnO ($Ce_xZn_{1-x}O$) becomes an efficient visible-light-sensitive photocatalyst by co-catalyst (Cu^{2+}) grafting" ***Phys. Chem. Chem. Phys.*** Vol.13, No. 33, pp.14937-14945, **2011**.

32. **S. Anandan,** N. Ohashi, and M. Miyauchi, "ZnO-based visible-light photocatalysts: Band-gap engineering and Multi-electron reduction by co-catalyst" ***Appl. Catal. B. Environ.*** Vol.100, pp. 502-509, **2010**.

33. **S. Anandan,** and M. Miyauchi, "Photocatalytic activity of Cu^{2+}-grafted metal doped ZnO photocatalysts under visible-light irradiation", ***Electrochemistry*****,** Vol.79, pp.842-844, **2011**.

34. M. Miyauchi, Z. Liu, Z. Zhao, **S. Anandan,** K. Hara, "Single crystalline zinc stannate nanoparticles for efficient photo-electrochemical devices" ***Chem. Commun.,*** Vol. 46, pp. 1529, **2010**.

35. **S. Anandan**, A. Vinu, K. L. P. Sheeja Lovely, N. Gokulakrishnan, P. Srinivasu, T. Mori, V. Murugesan, V. Sivamurugan, K. Ariga "Photocatalytic activity of La-doped ZnO for the degradation of monocrotophos in aqueous suspension" ***J. Mol. Cat. A: Chem.,*** Vol. 266, No. 1-2, pp.149-157, **2007**.

36. M. Miyauchi, Z. Liu, Z. Zhao, **S. Anandan,** H. Tokudome, "Visible-light-driven super-hydrophilicity by interfacial charge transfer between metal ions and metal oxide nanostructures" ***Langmuir,*** Vol. 26, pp. 796-801, **2010**.

37. A. Vinu, K.Z. Hossain, P. Srinivasu, M. Miyahara, **S. Anandan**, N. Gokulakrishnan, T. Mori T, K. Ariga and V.V. Balasubramanian "Carboxy-Mesoporous Carbon and Its Excellent Adsorption Capability for Proteins" ***J. Mater. Chem.***, Vol.17, No. 18, pp.1819-1825, **2007**.

38. **S. Anandan**, A. Vinu, N. Venkatachalam, B. Arabindoo and V. Murugesan, "Photocatalytic activity of ZnO impregnated Hβ and mechanical mix of ZnO and Hβ in the degradation of monocrotophos in aqueous solution" ***J. Mol. Cat. A: Chem.,*** Vol. 256, No. 1-2, pp. 312-320, **2006**.

39. **S. Anandan**, A. Vinu, N. Gokulakrishnan, P. Srinivasu, T. Mori, V. Murugesan, K. Ariga "Photocatalytic degradation of 2,4,6-trichlorophenol using lanthanum

doped ZnO in aqueous suspension" ***Catal. Commun.*** Vol. 8, No. 9, pp. 1377-1382, **2007**.

40. **S. Anandan**,* V. Murugesan and Y. Ikuma "Anionic (IO_3^-) Non-Metal Doped TiO_2 Nanoparticles for the Photocatalytic Degradation of Hazardous Pollutant in Aqueous Suspension" ***Catal. Commun.*** Vol.10, No. 6, pp.1014-1019, **2009**.
41. S. **Anandan**,* Y. Ikuma, K. Kakinuma and K. Niwa "Synthesis and characterization of highly crystalline novel mesoporous C&N doped TiO_2 Nanophotocatalyst" ***Nano***, Vol.3, No. 5, pp. 367-372, **2008**.
42. **S. Anandan*** and Y. Ikuma, "Synthesis and characterization of Anionic doped TiO_2 nanophotocatalyst with enhanced photocatalytic activity" ***Trans. Mater. Res. Soc. Jpn.,*** Vol. 34, No.1, pp. 161-164, **2009**.
43. **S. Anandan**,* Y. Ikuma, T. Kudoh, Y. Ogita and V. Murugesan "Nanosize lanthanum doped semiconductors: Synthesis, characterization and their photocatalytic activity" ***Adv. Mater. Res.*** Vol.31, pp. 212-214, **2008**.
44. **S. Anandan**, A. Vinu, T. Mori, K. Ariga "Synthesis of nitrogen-doped mesoporous carbon using templating technique" ***Trans. Mater. Res. Soc. Jpn.,*** Vol. 32, No. 4, pp. 1003-1005, **2007**.
45. K. Niwa, K. Tamura, **S. Anandan**, and Y. Ikuma "Hydrogen production using mesoporous titanium dioxide" ***Adv. App. Cer.,*** Vol.111, No. 1&2, pp.34-38, **2012**.
46. Y.Ikuma, H. Tajiri, K. Ishiguro, **S. Anandan**, K. Niwa, O. Sakata, and K. Nakata, "Preparation of ordered 1x1 surface of rutile TiO_2 (001) for surface x-ray diffraction study," ***Trans. Mater. Res. Soc. of Japan***, Vol. 36, No. 3, 535-539, **2011**.
47. Y. Ikuma, **S. Anandan** and K. Niwa "Lattice parameter, defect concentration and oxygen diffusion in ceria solid solutions" ***Trans. Mater. Res. Soc. Jpn.,*** Vol. 35, No.3, pp. 485-489, **2010**.
48. A.Vinu, **S. Anandan**, C. Anand, P. Srinivasu, K. Ariga and T. Mori, "Fabrication of partially graphitic three dimensional nitrogen doped mesoporous carbon using polyaniline nanocomposite through nanotemplating method" ***Micropor. Mesopor. Mater.*** Vol. 109, No. 1-3, pp. 398-404, **2008**.
49. J. Rajesh Banu, **S. Anandan**, S. Kaliappan and Ick Tae-Yeom "Treatment of diary wastewater using anaerobic and solar photocatalytic methods" ***Solar Energy*** Vol.82, pp. No. 9, 812-819, **2008**.
50. A. Vinu**,** T. Krithiga**,** N. Gokulakrishnan, P. Srinivasu, **S. Anandan**, K. Ariga, V. Murugesan, V.V. Balasubramanian and T. Mori "Halogen free acylation of toluene over FeSBA1 molecular sieves", ***Micropor. Mesopor. Mater.*** Vol.100, No. 1-3, pp. 87-94, **2007**.

51. M. V. Shankar, **S. Anandan**, N. Venkatachalam, B. Arabindoo and V. Murugesan, "Fine route for an efficient removal of 2,4-dichlorophenoxyacetic acid (2,4-D) by zeolite- supported TiO_2" ***Chemosphere*** Vol. 63, No.6, pp. 1014-1021, **2006**.
52. M.V. Shankar, **S. Anandan**, N. Venkatachalam, B. Arabindoo and V. Murugesan, "Novel thin-film reactor for photocatalytic degradation of water-borne endocrine disrupting chemicals" ***J. Chem. Technol. Biotechnol.*** Vol. 79, No. 11, pp. 1279 –1285, **2004**.
53. N. Venkatachalam, A. Vinu**, S. Anandan**, B. Arabindoo and V. Murugesan, "Visible light active photocatalytic degradation of bisphenol-A using nitrogen doped nanocrystalline TiO_2 prepared by low temperature sol-gel process", ***J. Nanosci. Nanotechnol.*** Vol. 6, No. 8, pp. 2499-2507, **2006**.
54. A. Vinu**, S. Anandan**, N. Gokulakrishnan, P. Srinivasu, K. Ariga, V. Murugesan, V.V. Balasubramanian and T. Mori**,** "Mesoporous nitrides through nano-hard templating techniques", ***Solid state Phenomena*** Vol. 119, pp. 291-294, **2007**.
55. P. Srinivasu, A. Vinu, N. Gokulakrishnan**, S. Anandan**, T. Mori, K. Ariga "Novel microporous carbon material with flower like structure templated by MCM-22" ***J. Nanosci. Nanotechnol.*** Vol.7, No. 8, pp.2913-2916, **2007**.
56. D.P. Sawant, A. Vinu, S.P. Mirajkar, F. Lefebvre, K. Ariga, **S. Anandan,** T. Mori, C. Nishimura and S.B. Halligudi, "Silicotungstic acid/zirconia immobilized SBA-15 for esterifications", ***J. Mol. Cat. A: Chem.,*** Vol.271, No. 1-2, pp. 46-56, **2007.**
57. A. Vinu**,** T. Mori, S. Hishita, **S. Anandan**, V.V. Balasubramanian and K. Ariga "One and Three Dimensional Mesoporous Carbon Nitride Molecular Sieves with Tunable Pore Diameters", ***Stud. Surf. Sci. Catal.*** Vol.165, pp. 905-908, **2007**.
58. Nanaji, Katchala, Upadhyayula, varadaraju, Tata, Narsinga Rao, **S.Anandan**, "Graphitic porous carbon sheets as high performance anode material for lithium ion battery application", ***Chemistry Letters*** (Under Review).
59. PM Pratheeksha, Srinivas, Pavan, Joseph, Paul, Tata, Narsinga Rao, **S.Anandan,** "Solid state synthesis of LiNi0.5Co0.2Mn0.3O2 as a high energy density cathode for high energy lithium ion battery application", ***Chemistry Letters*** (Under Review).
60. E. Hari Mohan; Katchala Nanaji; **S. Anandan**, B. V. Appa Rao, Tata Narasinga Rao, "Porous Graphitic Carbon Sheets with High Sulfur Loading and Dual Confinement of Polysulfide Species for Enhanced Performance of Li-S Batteries" ***Chem Sus Chem*** (Under Review).
61. Boya Venugopal, PM Pratheeksha, Mantripragada Rama Krishna, BV Sarada, Tata Narasinga Rao, Paul Joseph Daniel and S. Anandan *, High Performance Carbon Coated Mesoporous SnO_2 Nanoparticles as an Efficient Anode Material for Lithium Ion Battery Applications, ***ACS Sustainable Chemistry and Engineering*** (Submitted).

Academic Activities:

- ✓ Supervising 2 Ph.D students
- ✓ Completed 6 master thesis
- ✓ Guided 4 Trainees & 6 summer internship students
- ✓ Reviewed M.Tech.(Res.) and and M.Phil. dissertation
- ✓ Reviewed Ph.D dissertation from Bharathidhasan University, Anna University & Madurai Kamaraj University.

Book Chapter:

1 **S. Anandan**, Neha Hebalkar, B. V. Sarada, Tata N. Rao, "Nano manufacturing for Aerospace Applications" in the 'Source Books from the Book series of Indian Institute of Metals (IIM) on Aerospace Materials and Technologies' (ed.) N. Eswara Prasad, and RJH Wanhill, Vol.2, 2016.

2 **S. Anandan**, Y. Ikuma and K. Niwa, An overview of Semi-conductor Photocatalysis: Modification of TiO_2 nanomaterials in Solid-State Chemistry and Photocatalysis of Titanium dioxide, Solid State Phenomena, Vol. 162 (2010) pp. 239-260, Edited by M.K. Nowotny and J. Nowotny, Publisher: Trans Tech Publications, Switzerland.

Conference Proceedings:

1. **S. Anandan**, J. Rajesh Banu, N. Venkatachalam, S. Kaliappan, Banumathi Arabindoo and V. Murugesan, Combinative biological and photocatalytic degradation of diary wastewater' International Conference on Advances in Industrial Wastewater Treatment, Centre for Environmental Studies, Anna University, India, February 9-11, 2005.
2. **S. Anandan**, N. Venkatachalam, M.V. Shankar, Banumathi Arabindoo and V. Murugesan, 'Photocatalytic degradation of waterborne endocrine disrupting chemicals with novel thin-film reactor' National seminar on Role of Chemistry in the Emerging Areas of Applied Sciences, Sri Venkateswara University, Tirupati, India, March 15-17, 2004.
3. N. Venkatachalam, **S. Anandan,** M.V. Shankar, Banumathi Arabindoo and V. Murugesan, 'Zeolite based photocatalytic mineralisation of environmental estrogenic pollutant in the aqueous medium' National Seminar on Role of Chemistry in the Emerging Areas of Applied Sciences, Tirupati March 15-17, 2004.

Invited Lecture:

1. Dr. Srinivasan Anandan delivered an invited lecture on “Large scale synthesis of nanostructured materails for Electric Vehicles (EVs) Application” at National Conference on Advances in Nano and Functional Materials (NCANFM-2019) held at the Department of Physics, Osmania University, Hyderabad. on 31st January 2019.
2. Dr. Srinivasan Anandan delivered an invited lecture on “Large scale synthesis of nanostructured materails for Electric Vehicles (EVs) Application” at National conference on Advanced Research and Technology in Chemical Eng. & Its Allied Fields held at the Department of Chemical Eng. CBIT Hyderabad on 22nd March 2019.
3. Delivered a lecture on “Development of Visible-light-active Photocatalysts for Energy and Environmental Issues” at the International Conference on “Frontiers in Advanced Materials and their Applications” (FAMA’18) on 9 th January, 2018 at Bishop Heber College, Tiruchirappalli, Tamil Nadu, India.
4. Dr. Srinivasan Anandan delivered an invited lecture on “Development of Advanced Nanostructured Materials for Self-Cleaning Photocatyalytic Applications” at ‘4th International Conference on Chemical and Environmental Research (ICCER-2018)’ held at Jamal Mohamed College, Tiruchirappalli on December 19, 2018.
5. Delivered a lecture on “Development of Nanomaterials for Energy Storage (Li-ion batteries and Super capacitors) and Environmental application” on 12th May, 2017 at GMR Institute of Technology, Rajam, Andhrapradesh, India.
6. Delivered a lecture on “Development of Nanomaterials for Energy Storage (Li-ion batteries and Super capacitors) application at the Refresher Course in Material Sciences (ID) which was jointly organized by the UGC-HRDC (Academic Staff College) and Central Facilities for Research and Development, Osmania University on 15th February 2017.
7. Delivered a lecture on “Development of Visible-light-active Photocatalysts for Environmental Issues” at at the 3rd National seminar on Advanced Oxidation Processes, (AOP-2017) during December 17-19, 2017 at Anna University – BIT campus, Tiruchirappalli, Tamilnadu India.
8. Delivered an invited lecture on "Application of Nanotechnology in Self-cleaning and Battery Materials" at the ‘Seminar on Nanoscience Technological Applications, held at Hyderabad on January 30, 2016.
9. Delivered an invited talk in National conference on Materials for Energy Conversion and Storage (NCMECS 2015), VIT, Chennai, 20-21, March 2015.

Conference Presentation (National/International):

1. T. Mitravinda, S. Anandan, Chandrasekhar Sharma, T N Rao "Design and Development of Nitrogen Doped Nano Porous Activated Carbon as Electrode Active Material for Super Capacitor" at 'ChEmference 2018' held at IIT Bombay during May 19 - 20, 2018.
2. Pavan Srinivas Veluri, S. Anandan, R. Vijay, T N Rao, "Increasing the Energy Density of Supercapacitors using a Battery Electrode in Asymmetric Configuration for Electric Vehicle Application" at 'Carbon MEMS: New Horizons' at IIT, Hyderabad during December 05 - 07, 2018.
3. K. Nanaji, U.V. Varadaraju, T N Rao, S. Anandan "Three Dimensional Ordered Mesoporous Carbons with Tunable Pore Sizes as Efficient Electrode Material for Improved Lithium Ion Battery and Supercapacitor Applications" at 'Carbon MEMS: New Horizons' at IIT, Hyderabad during December 05 - 07, 2018.
4. Bharathi Sankar, M. Karthik, S. Anandan, R. Vijay, T N Rao "Design, Development and Real – Time Demonstration of Supercapacitor Powered Electric Bicycle" at 'International Conference on 'Super Capacitors and Energy Storage Applications (ICSEA-2019)' held at Thrissur, Kerala during March 08 - 09, 2019.
5. K. Nanaji, U.V. Varadaraju, T N Rao, S. Anandan "Graphene Sheets like Nanoporous Carbon Derived from Agricultural Biowaste (jute stick) as Electrode Material for High Performing Super capacitors" at 'International Conference on Super Capacitors and Energy Storage Applications (ICSEA-2019)' held at Thrissur, Kerala during March 08 - 09, 2019.
6. A poster on "Graphene sheets like nanoporous carbon derived from Agricultural bio-waste (jute stick) as electrode material for high performing Supercapacitors" by K. Nanaji, U.V. Varadaraju, T. N. Rao, S. Anandan in workshop on "Battery Technologies & Electric Mobility"at HP Green R & D Centre, Bangalore, March 8-9, 2018.
7. A poster on "Large Scale Synthesis of High Performance Zero Strain Lithium Titanate for High Energy Density Li-ion Battery Application" by P.M. Pratheeksha, S. N. Baba, P.V.V. Srinivas, P.S. Veluri , D. Paul Joseph, R. Vijay, T. N. Rao, S. Anandan presented during 9th Bengaluru India Nano- Dec- 7th -9th 2017.
8. A poster on "Bio-waste inspired graphene sheet like nanoporous carbon as a versatile electrode material for energy storage applications" by K. Nanaji, U.V. Varadaraju, T. N. Rao, S. Anandan presented during 9th Bengaluru India Nano- Dec- 7th -9th 2017.
9. A poster on "Cobalt doped carbon nanofibers as an effective interlayer for high performance lithium-sulfur batteries" P. Tejassvi, K. Mohan, T. N. Rao, S. Anandan presented during 9th Bengaluru India Nano- Dec- 7th -9th 2017.
10. A poster on "Synthesis of nanoporous carbon from novel agro-waste precursor through a facile strategy for Supercapacitor application" by T. Mitravinda, K. Nanaji, S. Anandan, Chandra S. Sharma, T. N. Rao, presented during 9th Bengaluru India Nano- Dec- 7th -9th 2017.

11. **S. Anandan** "Application of Nanotechnology in Self-cleaning and Battery Materials" invited lecture at the 'Seminar on Nanoscience Technological Applications, held at Hyderabad on January 30, 2016.
12. Dr. Srinivasan Anandan delivered a lecture on "Development of Nanomaterials for Energy Storage (Li-ion batteries and Super capacitors) and Environmental Application" at Dept. of Ceramic Engineering, National Institute of Technology, Rourkela on 3rd August 2016 during visit to NIT Rourkela as a Examiner for M.Tech viva-voce examination.
13. Dr. Srinivasan Anandan delivered a lecture on "Development of core-shell structured carbon coated electrode materials for improved Li-ion battery performance" at Division of Chemistry, School of Advanced Sciences, Vellore Institute of Technology, Chennai on 12th August 2016 during visit to VIT Chennai as a Doctoral Committee member of doctoral student.
14. Dr. Srinivasan Anandan delivered a lecture on "Development of Nanomaterials for Energy Storage (Li-ion batteries and Super capacitors) application at the Refresher Course in Material Sciences (ID) which was jointly organized by the UGC-HRDC (Academic Staff College) and Central Facilities for Research and Development, Osmania University on 15th February 2017.
15. A poster on "Facile synthesis of mesoporous carbon by evaporation induced self-assembly as electrode material for supercapacitors with enhanced rate capability" by K. Nanaji, U.V. Varadaraju, Tata N. Rao, S. Anandan presented during Nano India 2017 at IIT Delhi on March 15-16, 2017.
16. A poster on "Development of indigenous electrode materials by large scale process for Li-ion battery application" by P.M. Pratheeksha, B. Venugopal, D. Paul Joseph, K. Hembram, Tata N. Rao, S. Anandan presented during Nano India 2017 at IIT Delhi on March 15-16, 2017.
17. P. M. Pratheeksha, J. Shyamala Gowri, D. Paul Joseph, T. N. Rao, **S. Anandan**, Development of conductive carbon nitride (CN) network on $LiFePO_4$ by a novel polymerization process for Li-ion battery application, National conference on Frontiers in chemical science and technology by Department of chemistry – NITW -28th -29th January 2016.
18. P.M. Pratheeksha, P. M. Pratheeksha, J. Sri Rajeshwari, D. Paul Joseph, T. N. Rao, **S. Anandan**, "Investigation of in-situ carbon coated LiFePO4 as a superior cathode material for lithium ion batteries" at the 'National Conference on Carbon Materials 2015' held at New Delhi during November 26-28, 2015.
19. K. Nanji, U.V. Varadaraju, T.N. Rao, **S. Anandan**, "Ordered mesoporous carbon as an efficient anode material for lithium ion battery application" at the 'National Conference on Carbon Materials 2015' held at New Delhi during November 26-28, 2015.

20. P. M. Pratheeksha, S. Amarnath, D. Paul Joseph, T. N. Rao , **S. Anandan**, "$LiFePO_4$, a promising high-efficient cathode material for rechargeable Lithium ion battery application" at the '7th Indo Korean joint workshop on Green mobility and Energy materials' held at Hyderabad during November 26-27, 2015.
21. K. Nanji, U.V. Varadaraju, T.N. Rao, **S. Anandan** "A Hierarchical Porous Carbon as an Efficient Anode Material for High Power Lithium-Ion Battery" at the '7th Indo Korean joint workshop on Green mobility and Energy materials' held at Hyderabad during November 26-27, 2015.
22. **S. Anandan** and M. Miyauchi, "Development of Efficient ZnO-based Visible-light Photocatalysts: Metal-ion Doping and Co-catalyst Modification", The 16th International Conference on TiO_2 Photocatalysis: Fundamentals and Applications (TiO_2-16), Town & Country Resort, Sandiego, California, USA, 7-10th November, 2011.
23. Y. Ikuma, Y. Miyauchi, **S. Anandan** and K. Niwa, "Decomposition of methylene blue by photocatalytic activity of crystalline mesoporous TiO_2," 18th International Conference on Solid State Ionics, Warsaw, Poland, 7th July, 2011.
24. **S. Anandan** and M. Miyauchi, "ZnO- based Visible-light Photocatalysts: Band-gap Engineering and Grafting of Co-catalyst" 17th Photocatalysis Symposium by Photochemical society of Japan, KASP, December, 2010.
25. **S. Anandan** and M. Miyauchi, "Fabrication of ZnO-based Visible-light Photocatalysts: by Band-gap Engineering and Multi-electron reduction" 3rd International Congress on Ceramics, Osaka, Japan, November 2010.
26. R. Kuramoto, Y. Miyauchi, **S.Anandan**, K. Niwa and Y. Ikuma, "Synthesis and photocatalytic activity of mesoporous TiO_2 powder," The 20th Academic Symposium of Materials Research Society of Japan, 21st December, 2010.
27. R. Kuramoto, Y. Miyauchi, **S. Anandan**, K. Niwa and Y. Ikuma "Hydrogen production by mesoporous titanium dioxide," Ceramic Fiesta in Kanagawa, December 11, 2010.
28. Y. Ikuma, **S. Anandan**, H. Fukushima, and K. Niwa, "Synthesis and photocatalytic activity of crystalline mesoporous C and N-co-doped TiO_2 nanophotocatalyst," 2010 MRS Fall Meeting, Boston, MA, 30st November, 2010.
29. **S. Anandan** and M. Miyauchi, "Fabrication of ZnO-based visible light photocatalyst by band-gap engineering and multi-electron reduction" 3rd International Conference on Ceramics (ICC-3), International Congress Center, Osaka, Japan, 14-18 November, 2010.
30. R. Kuramoto, Y. Miyauchi, K. Niwa, Y. Ikuma, **S. Anandan**, "Fabrication of mesoporous TiO_2 and its characterization by methylene blue," The 26th Ceramic

Research Conference of Kanto Branch, The Ceramic Society of Japan, Hitachi, Japan, 23rd July, 2010

31. Y. Yanagida, **S. Anandan**, K. Niwa, Y. Ikuma, "Formation of hydrogen by mesoporous TiO_2 with sun light irradiation," Ceramic Fiesta in Kanagawa, 12th December, 2009.
32. Y. Miyauchi, **S. Anandan**, K. Niwa, Y. Ikuma, "Synthesis of mesoporous TiO_2 and decomposition of methylene blue by the oxide," Ceramic Fiesta in Kanagawa, 12th December, 2009.
33. K. Ishiguro, H. Tajiri, **S. Anandan**, K. Niwa, Y. Ikuma, "Study of surface structure of rutile TiO_2," Ceramic Fiesta in Kanagawa, 12th December, 2009.
34. **S. Anandan**, K. Niwa and Y. Ikuma, "Enhanced production of hydrogen using highly active Pt-deposited mesoporous N-doped TiO_2 photocatalyst," The 19th Academic Symposium of Materials Research Society of Japan, Yokohama, Japan, 9th December, 2009.
35. Y. Miyauchi, H. Fukushima, **S. Anandan**, K. Niwa, Y. Ikuma, "Synthesis and characterization of mesoporous TiO_2," The 19th Academic Symposium of Materials Research Society of Japan, Yokohama, Japan, 9th December, 2009.
36. Y. Yanagida, K. Tamura, **S. Anandan**, K. Niwa, Y. Ikuma, "Formation of hydrogen by mesoporous TiO_2," The 25th Ceramic Research Conference of Kanto Branch, The Ceramic Society of Japan, Minakami, Japan, 31st July, 2009.
37. K. Ishiguro, H. Tajiri, **S. Anandan**, K. Niwa, Y. Ikuma, "Measurement of surface structure of TiO_2 by surface x-ray diffraction," The 25th Ceramic Research Conference of Kanto Branch, The Ceramic Society of Japan, Minakami, Japan, 31st July, 2009.
38. Y. Miyauchi, H. Fukushima, **S. Anandan**, K. Niwa, Y. Ikuma, "Fabrication and characterization of mesoporous TiO2," The 25th Ceramic Research Conference of Kanto Branch, The Ceramic Society of Japan, Minakami, Japan, 31st July, 2009.
39. Koichi Niwa, Kouichi Tamura, **Srinivasan Anandan** and Yasuro Ikuma, "Hydrogen Production by Mesoporous Titanium Oxide," Energy: Environmentally Friendly Solutions (Research Workshop), Campbelltown, Sydney, Australia, 27th March, 2009.
40. **S. Anandan** and Y. Ikuma" Fabrication of crystalline mesoporous N-doped TiO2 and its photocatalytic applications under visible light" Materials for Advanced Metallization MAM 2009, Grenoble, France, 9-11March, 2009
41. K. Tamura, **S. Anandan**, K. Niwa, and Y. Ikuma "Photocatalytic activity of N-doped mesoporous titanium dioxide" Ceramic Fiesta in Kanagawa, 20th December, 2008

42. H. Fukushima, **S. Anandan**, K. Niwa and Y. Ikuma "Synthesis and characterization of nitrogen doped mesoporous titanium dioxide" Ceramic Fiesta in Kanagawa, 20th December, 2008
43. **S. Anandan**, Y. Ikuma, K. Niwa and T. Takamura Enya" Photocatalytic and anti-bacterial activity of mesoporous nitrogen doped TiO_2 nanocatalyst under visible light irradiation" The IUMRS International Conference in Asia 2008, The Material Research Society of Japan, Japan, 9-13 December, 2008
44. Y. Ikuma, **S. Anandan**, K. Niwa, H. Tajiri, O. Sakata and K. Nakata" Effect of water and UV light on surface structure of Single crystal TiO_2" The IUMRS International Conference in Asia 2008, The Material Research Society of Japan, Japan, 9-13 December, 2008
45. **S. Anandan**, Y. Ikuma and T.Takamura Enya" Anti-bacterial activity of mesoporous nitrogen doped TiO_2 under eco-friendly sunlight" The 24th Ceramics Research Conference of Kanto Branch, Ceramic Society of Japan, Japan, 24-25 July, 2008.
46. H. Fukushima, **S. Anandan**, Y. Ikuma and K. Niwa" Synthesis and characterization of nitrogen doped mesoporous TiO_2" The 24th Ceramics Research Conference of Kanto Branch, Ceramic Society of Japan, Japan, 24-25 July, 2008.
47. K.Tamura, **S. Anandan**, Y. Ikuma and K. Niwa" Photocatalytic activities of nitrogen (N) doped mesoporous TiO_2 under visible light" The 24th Ceramics Research Conference of Kanto Branch, Ceramic Society of Japan, Japan, 24-25 July, 2008.
48. **S. Anandan**, Y. Ikuma and Takeji-Takamura Enya" Highly crystalline cubic mesoporous N-doped TiO_2 for photocatalytic applications" 9th International Hydrocolloids Conference 2008, Singapore, 15-19 June, 2008.
49. **S. Anandan**, Y. Ikuma, K. Kakinuma and K. Niwa" Synthesis and characterization of highly crystalline novel mesoporous C&N-co-doped TiO_2 nanophotocatalyst" International Symposium on Nanotechnology in Environmental Protection and Pollution, Fort Lauderdale, FL, USA, 11-13 December, 2007
50. **S. Anandan** and Y. Ikuma" Synthesis and characterization of anionic doped TiO_2 nanophotocatalyst with enhanced photocatalytic activity" The 18th symposium of the Materials Research Society of Japan, Nihon University, Japan, 7-9 December, 2007.
51. **S. Anandan**, Y. Ikuma, and V. Murugesan " Enhanced activity of IO_3^- modifed ZnO for the degradation of 2,4,6-trichlorophenol in aqueous suspension" 10th IUMRS International Conference on Advanced Materials, Bangalore, India, 8-13 October, 2007.

52. **S. Anandan**, Y. Ikuma, T.Kudoh, Y. Ogita and V. Murugesan " Nano size lanthanum doped semiconductors: Synthesis, characterization and their photocatalytic activity" 4th International Conference on Materials for Advanced Technologies 2007, Suntec Singapore International Convention and Exhibition Center, Singapore, 1-6 July, 2007.
53. **S. Anandan**, A. Vinu, T. Mori and K. Ariga " Synthesis of graphitic nitrogen-doped three dimensional cage type mesoporous carbon" The 17th symposium of the Materials Research Society of Japan, Nihon University, Japan, 8-10 December, 2006.
54. **S. Anandan**, A. Vinu, T. Mori and K. Ariga " Synthesis of Novel Three Dimensional Cage Type Mesoporous Carbon Nitride with Very High Surface Area and Pore Volume" Eighth International Conference on Nanostructured Materials, Indian Institute of Science, Bangalore, India, 20-25 August, 2006.
55. **S. Anandan**, N. Venkatachalam, M. Mahalakshmi, Banumathi Arabindoo and V. Murugesan, Photocatalytic mineralisation of phenol in water and industrial effluent with aqueous TiO_2 suspension' International Conference on Environment, Ecology & Pollution, Arunai Engineering College, Tiruvannamalai, India, 6-7 January, 2005.
56. N. Venkatachalam, **S. Anandan,** Banumathi Arabindoo and V. Murugesan ´Photocatalytic mineralisation of non-biodegradable herbicide in the aqueous medium. International Conference on Energy, Ecology and Pollution, Arunai Engineering College, Tiruvannamalai, India. 4-5 January, 2005.
57. M. Mahalakshmi, **S. Anandan,** N. Venkatachalam, Banumathi Arabindoo and V. Murugesan, "Photocatalytic degradation of carbofuran on degussa P-25 TiO_2" International Conference on Environment, Ecology & Pollution, Arunai Engineering College, Tiruvannamalai, India, 6-7 January, 2005.
58. **S. Anandan**, N. Venkatachalam, M.V. Shankar, Banumathi Arabindoo and V. Murugesan, Comparison of Photocatalytic activity of ZnO impregnated Hβ and ZnO + Hβ zeolite combinate for the photocatalytic degradation of monocrotophos in aqueous solution' 17th National Symposium on Catalysis, Central Salt & Marine Chemicals Research Institute, Bhavnagar, India, 18-20 January, 2005.
59. N. Venkatachalam, **S. Anandan**, M.V. Shankar, Banumathi Arabindoo and V. Murugesan ´Low cost adsorbents for enhanced photocatalytic mineralisation of non-biodegradable pesticides in the aqueous medium'. 17th National Symposium on Catalysis, CSMCRI, Bhavnagar, India, 18-20 January, 2005.
60. M. Mahalakshmi, **S. Anandan,** N. Venkatachalam, Banumathi Arabindoo and V. Murugesan, "Photo catalytic degradation of monocrotophos over ZnO using

slurry and thin-film fixed bed reactor" 17th national Symposium on Catalysis, CSMCRI, Bhavnagar, India, 18-20 January, 2005.

61. **S. Anandan**, N. Venkatachalam, M. Mahalakshmi, Banumathi Arabindoo and V. Murugesan, 'Solar photocatalytic degradation of diary wastewater' National Conference on Pollution Abatement Through Technology Development, Department of Chemistry, Anna University, Chennai, India, 18-19 March, 2005.
62. N. Venkatachalam, **S. Anandan,** Banumathi Arabindoo and V. Murugesan, 'Visible light active photocatalytic degradation of bisphenol-A in an aqueous medium using nitrogen doped TiO_2' National Conference on Pollution Abatement Through Technology Development, Department of Chemistry, Anna University, Chennai, India, 18-19 March, 2005.
63. M. Mahalakshmi**, S. Anandan,** N. Venkatachalam, Banumathi Arabindoo and V. Murugesan, "Photocatalytic degradation of carbofuran on semiconductor oxides" National Conference on Pollution Abatement Through Technology Development, Anna University, Chennai, India, 18-19 March, 2005.
64. **S. Anandan**, N. Venkatachalam, M.V. Shankar, Banumathi Arabindoo and V. Murugesan 'Determination of pesticides in aqueous medium: an improved photocatalytic activity of titania hybridised with different low cost adsorbents' National workshop on Advances in catalysis, Loyola College, Chennai, India, 6-7 January, 2004.
65. N. Venkatachalam, **S. Anandan**, M.V. Shankar, Banumathi Arabindoo and V. Murugesan 'Titania-Zeolite composite for enhanced photocatalytic degradation of 2,4-D in aqueous medium' National workshop on Advances in catalysis, Loyola College, Chennai, India, 6-7 January, 2004.