

Bio-data



Name : **Dr. D. GOPI, M.Sc., Ph.D.**

Father's Name : C. Dhanaraj

Designation : Professor of Chemistry &
Additional Coordinator
Centre for Nanoscience and Nanotechnology

Official address : Department of Chemistry
Periyar University,
Salem-636 011
Email: dhanaraj_gopi@yahoo.com
Mob. No.: +91-9865538787

Field of Specialization : Nanobiomaterials, Analytical Chemistry,
Material Science and Corrosion

Research Areas

- Development of bio-ceramic coatings for orthopedic applications
- Development of magnetic iron nanoparticles for biomedical applications
- Development of anticorrosive polymer coatings
- Development of inhibitor bath comprising corrosion, scaling and biocidal inhibitors for application in cooling water systems

Education

- * Ph.D., Analytical Chemistry (2002), University of Madras, Chennai, India
- * M.Sc., Analytical Chemistry (1997), University of Madras, Chennai, India

Experience

- * Professor of Chemistry, Periyar University, Salem, August 2013 – Present
- * Additional Co-ordinator, Centre for Nanoscience and Nanotechnology, Periyar University, Salem, September 2011 – Present
- * Assistant Professor in Chemistry, Periyar University, Salem, 2004 –2013
- * Invited Scientist, Korea Electrotechnology Research Institute (KERI), South Korea, 2002 –2004

S. No.	ACADEMIC CREDENTIALS	
	No. of papers published in reputed journals	104 (Cumulative Impact Factor = 179.128)
	No. of papers published in conference proceedings	34
2	Patent Filed	02
3	No. of papers presented in conferences	National 113
		International 67
4	Conferences/ Seminars conducted	In the capacity of Convener: 03
		In the capacity of Organizing Secretary: 05
5	Research guidance	Ph.D., Degree Awarded : 09
		Thesis Submitted : 03
		Presently guiding : 07
6	No. of M.Phil., scholars	Awarded : 30
		Guiding : 04
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8	i-10 index	24

Project Details

S. No.	Title & Ref. No	Status	Cost (₹. in lakhs)	Agency
1.	Development of carbon nanotubes reinforced hydroxyapatite coatings for orthopedic applications (SB/EMEQ-185/2013)	On going	39.00	DST
2.	Development of novel conducting copolymer coating for anti corrosive applications (Ref. No. ERIP/ER/1103949/M/01)	On going	15.65	DRDO
3.	Synthesis and coating optimization of carboxymethyl chitosan/ carbon nanotubes/ strontium substituted hydroxyapatite composite coating on surgical grade stainless steel for biomedical applications	On going	31.64	UGC
4.	Fabrication of mineralized nanobioceramic coatings for orthopedic applications (Ref. No. 01 (2547)/11/EMR-II)	Completed	14.00	CSIR
5.	Development of hybrid bioceramic coatings on surface treated titanium alloy for implant applications (Ref. No. DST/TSG/NTS/2011/73)	Completed	23.80	DST
6.	A new class of triazole derivatives as effective and eco-friendly pitting corrosion inhibitors for low nickel stainless steel (Ref. No. 40-64/2011 (SR))	Completed	9.38	UGC
7.	A facile and versatile approach for the development of hybrid nanohydroxyapatite synthesis, structure refinement and its coatings for biomedical applications (IRIS ID No. 2010-08660, Ref. No. 5/20/11(Bio)/10-NCD-I)	Completed	28.80	ICMR

8.	A cost effective approach of protection against scaling and corrosion (F.No. 32-206/2006 (SR))	Completed	4.464	UGC
9.	Development of nanohydroxyapatite coatings for biomedical applications (TNSCST/S&T Projects/VR/MS/2008-2009/915)	Completed	1.61	TNSCST
10.	Development of Nanohydroxyapatite coatings for orthopedic applications (D.O. No. SR/FTP/ETA-04/2009)	Completed	6.15	DST
COLLABORATIVE PROJECT DETAILS				
1.	Coating of Strontium substituted hydroxyapatite on surgical grade 316 L SS by electrodeposition method for biomedical applications (SR/WOS-A/PS26/2012)	On going	18.40	DST
2.	Carbon Nanotube Modified electrodes for enhanced voltammetric sensing of organic pollutants (SR/S1/PC-16/2005)	Completed	33.00	DST

Total Grant Mobilized : 2.25 Crores

Awards

1. Awarded **UGC Research Award in Chemistry** for the year 2012-2014 by University Grants Commission, New Delhi, India.
2. Awarded the prestigious **Sir C. V. Raman Award (A Scientific Innovator Award)** for the commendable contributions in Scientific Research during the year 2011, Instituted by Periyar University at a function presided over by the Former President of India Hon'ble **Dr. A. P. J. Abdul Kalam** on 12 January, 2013, India.
3. **"Best Paper Award"** awarded for the paper presented at National seminar on Recent Trends in Biomaterials for Tissue Engineering (RTBTE'12), held at Velammal Institute of Technology, Chennai 27-28 July 2012.

4. **“Best Paper Award”** awarded for the paper presented at National seminar on Current status and future prospects of plant therapeutics and phyto medicine (PTPM2012), held at Periyar University, Salem, 13-14 February 2012.
5. Awarded **“Young Scientist Fellowship”** by Department of Science and Technology (DST), New Delhi, India, 2009.
6. **“Young Achiever award”** by MARQUIS WHO’S WHO - by American Biographical institute for the year 2009, USA.
7. **“Best Paper Award”** awarded for the paper presented in the National Conference on Recent Advances on Metallorganic Chemistry (RAMC-2008), Salem, 16-17 October 2008.
8. Awarded **“Gyoungnam fellowship”** by Korea Electrotechnology Research Institute (KERI), Changwon, South Korea during the year 2002.
9. **“Senior Research Fellowship Award”** (SRF) by Council of Scientific and Industrial Research (CSIR), New Delhi, India, November –2000.
10. **“Best Paper Award”** awarded for the paper presented at Second International Seminar on Analytical Techniques in Monitoring the Environment, held at Tirupati, India, December 18-20, 2000.
11. **“Young scientist award”** from Indian Council of Chemists, New Delhi, India, 26 November, 1998.
12. **“Junior Research Fellowship Award”** (JRF) by University Grants Commission (UGC), New Delhi, India, 1997.

Professional Affiliations

- ❖ Life member of Indian Society of Analytical Scientists (ISAS), India.
- ❖ Life member of Chemical Research Society of India (CRSI), India.
- ❖ Active member of Society for the Advancement of Electrochemical Science and Technology (SAEST), India.
- ❖ Active member of Indian Council of Chemists (ICC), India.
- ❖ Member, PG-board of studies, Periyar University, Salem.
- ❖ Additional Co-ordinator, Centre for Nanoscience and Nanotechnology, Periyar University, Salem.
- ❖ Member, Academic Council, K.S.R College of Arts and Science, Namakkal.

- ❖ Acted as a member in technical committee for the purchase of equipments in Thiruvalluvar University, Vellore.
- ❖ Acted as a member in expert committee panel to frame the common curricular development for Universities in Tamilnadu as suggested by the Department of Higher Education, Tamilnadu.
- ❖ Member, Research Advisory Committee in Periyar University, Salem.

Research collaborations

- ❖ Research collaboration with Prof. J.M.F. Ferreira, Centre for research in ceramic and composite materials (CICECO), University of Aveiro, Portugal
- ❖ Research collaboration with Prof. J.D. Scantlebury, Corrosion and Protection Centre, University of Manchester Institute of Science and Technology (UMIST), UK.
- ❖ Research collaboration with Prof. Dae-Kyeong Kim, Underground systems group, Korea Electrotechnology Research Institute Changwon, South Korea.
- ❖ Research collaboration with Prof. U. Kamachi Mudali, Corrosion Science and Technology Division, Indira Gandhi Centre for Atomic Research, Kalpakkam, India.
- ❖ Research collaboration with Dr. L. Kavitha, Department of Physics, Periyar University, Salem, Tamilnadu, India.
- ❖ Research collaboration with Dr. Pramod Radhesyam and Dr. Jishnu Divedi, Raja Ramana Centre for Advanced Technology, Indore, India.
- ❖ Research collaboration with Prof. Dr. T.S. Sampath Kumar, Department of Metallurgical and Materials Engineering, Indian Institute of Technology, Chennai, India.
- ❖ Research collaboration with Dr. Alain LARGETEAU, Head-Crystal growth, High Pressure and Sintering Lab, Institut de chimie de la matiere condensee de Bordeaux

(I.C.M.C.B.-C.N.R.S.), 87, avenue du Dr. A. Schweitzer 33 608, Pessac Cedex, France.

- ❖ Research collaboration with Dr. Syed ElSherif, Professor, Center of Excellence for Research in Engineering Materials, College of Engineering, King Saud University, Al-Riyadh, Saudi Arabia.

Active Reviewer for the following journals

- ❖ Industrial & Engineering Chemistry Research (ACS publishers)
- ❖ Journal of Applied Electrochemistry (Springer publishers)
- ❖ Chemical Engineering Science (Elsevier publishers)
- ❖ Surface Coatings and Technology (Elsevier publishers)
- ❖ Corrosion Science (Elsevier publishers)
- ❖ Materials Science and Engineering C (Elsevier publishers)
- ❖ International Journal of Biological Macromolecules (Elsevier publishers)
- ❖ Chemical Papers (Springer publishers)
- ❖ Journal of Analytical and Applied Pyrolysis (Elsevier publishers)
- ❖ Corrosion Engineering Science and Technology (Maney publishers)
- ❖ Journal of Industrial and Engineering Chemistry (Elsevier publishers)
- ❖ Solid State Sciences (Elsevier Publishers)
- ❖ Chinese Chemical Letters (Elsevier Publishers)
- ❖ Applied Surface Science (Elsevier Publishers)
- ❖ Applied Materials & Interface (ACS Publishers)
- ❖ Journal of Materials Science (Springer publishers)
- ❖ The Korean Journal of Chemical Engineering (Springer publishers)

Selected Publications

1. **D. Gopi**, N. Murugan, S. Ramya, L. Kavitha, Electrodeposition of porous strontium substituted hydroxyapatite/zinc oxide duplex-layer on AZ91 magnesium alloy for orthopedic applications, *Journal of Materials Chemistry B* **2** (2014) 5531-5540, **Impact factor: 6.626**; Publisher: Royal Society of Chemistry.
2. **D. Gopi**, S. Ramya, D. Rajeswari, M. Surendiran and L. Kavitha, Development of strontium and magnesium substituted porous hydroxyapatite/ poly (3,4-ethylenedioxythiophene) coating on surgical grade stainless steel and its bioactivity on osteoblast cells, *Colloids and surfaces B: Biointerfaces*, **114** (2014) 234-240, **Impact factor: 4.287**; Publisher: Elsevier.
3. **D. Gopi**, S. Ramya, D. Rajeswari and L. Kavitha, Corrosion protection performance of porous strontium hydroxyapatite coating on polypyrrole coated 316L stainless steel, *Colloids and surfaces B: Biointerfaces*, **107** (2013) 130-136, **Impact factor: 4.287**; Publisher: Elsevier.
4. **D. Gopi**, A. Karthika, D. Rajeswari, L. Kavitha, R. Pramod, Jishnu Dwivedi, Investigation on corrosion and mechanical performances of minerals substituted hydroxyapatite coating on HELCDEB treated titanium using pulsed electrodeposition method, *RSC Advances*, **4** (2014) 34751-34759, **Impact factor: 3.708**; Publisher: Royal Society of Chemistry.
5. **D. Gopi**, E. Shinyjoy, M. Sekar, M. Surendiran, L. Kavitha and T.S. Sampath Kumar, Development of carbon nanotubes reinforced hydroxapatite composite coatings on titanium by electrodeposition method, *Corrosion Science*, **73** (2013) 321-330, **Impact factor: 3.686**; Publisher: Elsevier.
6. **D. Gopi**, V. Collins Arun Prakash, L. Kavitha, S. Kannan, P.R. Bhalaji, E. Shinyjoy and J.M.F. Ferreira, A facile electrodeposition of hydroxyapatite onto borate passivated surgical grade stainless steel, *Corrosion Science*, **53** (2011) 2328-2334, **Impact factor: 3.686**; Publisher: Elsevier.
7. **D. Gopi**, K.M. Govindaraju, V. Collins Arun Prakash, D.M. Angeline Sakila and L. Kavitha, A study on new benzotriazole derivatives as inhibitors on copper corrosion in ground water, *Corrosions Science*, **51** (2009) 2259-2265, **Impact factor: 3.686**; Publisher: Elsevier.
8. **D. Gopi**, El-Sayed Sherif, M. Surendiran, P. Manivannan, and L. Kavitha, Corrosion and corrosion inhibition of mild steel in ground water at different temperatures by newly synthesized benzotriazole and phosphono derivatives, *Industrial & Engineering Chemistry Research*, **53** (2014) 4286–4294, **Impact factor: 2.235**; Publisher: ACS.
9. **D. Gopi**, S. Nithiya, E. Shinyjoy, L. Kavitha, Carbon Nanotubes/Carboxymethyl Chitosan/Minerals substituted hydroxyapatite composite coating on Ti-6Al-4V alloy for improved mechanical and biological properties, *Industrial & Engineering Chemistry Research*, **53** (2014) 7660–7669, **Impact factor: 2.235**; Publisher: ACS.

List of Publications

10. D. Rajeswari, **D. Gopi**, S. Ramya and L. Kavitha, Investigation of anticorrosive, antibacterial and in-vitro biological properties of sulphonated poly(etheretherketone)/strontium, cerium co-substituted hydroxyapatite composite coating developed on surface treated surgical grade stainless steel for orthopedic applications, RSC Advances, (Accepted for publication), **Impact factor: 3.708**; Publisher: Royal Society of Chemistry.
11. **D. Gopi**, E. Shinyjoy and L. Kavitha, Influence of ionic substitution in improving the biological property of carbon nanotubes reinforced hydroxyapatite composite coating on titanium for orthopedic applications, Materials Chemistry and Physics, (Under revision, 2014), **Impact factor: 2.129**; Publisher: Elsevier.
12. **D. Gopi**, El-Sayed M. Sherif, M. Surendiran, D. M. Angeline Sakila and L. Kavitha, Corrosion inhibition by benzotriazole derivatives and sodium dodecyl sulphate as corrosion inhibitors for copper in ground water at different temperatures, Surface and interface analysis (Under revision, 2014), **Impact factor: 1.393**; Publisher: Wiley.
13. **D. Gopi**, N. Bhuvaneshwari and L. Kavitha, Novel malic acid mediated green route for the synthesis of hydroxyapatite particles and their spectral characterization, Ceramic International (Under revision, 2014), **Impact factor: 2.086**; Publisher: Elsevier.
14. **D. Gopi**, A. Karthika, S. Ramya and L. Kavitha, Development of orderly oriented strontium substituted hydroxyapatite nano rods on titanium by electrodeposition method, Spectrochimica Acta part A: Molecular and Biomolecular Spectroscopy, (Accepted for publication, 2014) **Impact factor: 2.129**; Publisher: Elsevier
15. **D. Gopi**, S. Sathishkumar, A. Karthika and L. Kavitha, Development of Ce³⁺/Eu³⁺ dual substituted hydroxyapatite coating on surgical grade stainless steel for improved antimicrobial and bioactive properties, Industrial & Engineering Chemistry Research, (Accepted for publications, 2014), **Impact factor: 2.235**; Publisher: ACS.
16. **D. Gopi**, K. Kanimozhi, L. Kavitha, *Opuntia ficus indica* peel derived pectin mediated green route for the synthesis of hydroxyapatite nanoparticles for enhanced antibacterial activity, Spectrochimica Acta part A: Molecular and Biomolecular Spectroscopy, (Accepted for publication, 2014) **Impact factor: 2.129**; Publisher: Elsevier.
17. El-Sayed M. Sherif, Adel Taha Abbas, **D. Gopi** and Ashraf M. Elshamy, Corrosion and corrosion inhibition of high strength low alloy steel in 2.0 M sulfuric acid solutions by 3-amino-1,2,3-triazole as a corrosion inhibitor, Journal of Chemistry, Volume 2014 (2014), Article ID 538794, 8 pages, <http://dx.doi.org/10.1155/2014/538794>, **Impact factor: 0.622**, Publisher: Hindawi.

18. **D. Gopi**, P.R. Bhalaji, L. Kavitha, Evaluation of biodegradability of surface treated AZ91 magnesium alloy in SBF solution, *Journal of Industrial and Engineering Chemistry*, (Accepted for publication, 2014), **Impact factor: 2.063**; Publisher: Elsevier.
19. **D. Gopi**, El-Sayed M. Sherif, D. Rajeshwari, L. Kavitha, R. Pramod, Jishnu Dwivedi, S.R. Polaki, Evaluation of the mechanical and corrosion protection performances of electrodeposited hydroxyapatite on the high energy electron beam treated titanium alloy, *Journal of alloys and compounds*, **616** (2014) 498-504, **Impact factor: 2.726**; Publisher: Elsevier.
20. **D. Gopi**, El-Sayed M. Sherif, M. Surendiran, M. Jothi, P. Kumaradhas, L. Kavitha, Experimental and theoretical investigations on the inhibition of mild steel corrosion in the ground water medium using newly synthesised bipodal and tripodal imidazole derivatives, *Materials Chemistry and Physics*, **147** (2014) 572-582, **Impact factor: 2.129**; Publisher: Elsevier.
21. **D. Gopi**, S. Ramya, D. Rajeswari, L. Kavitha, Strontium and cerium co-substituted hydroxyapatite nanoparticles: synthesis, characterization, antibacterial activity towards prokaryotic strains and in vitro studies, *Colloids and surfaces A: Physicochemical and Engineering Aspects*, **451** (2014) 172–180, **Impact factor: 2.354**; Publisher: Elsevier.
22. D. Rajeswari, S. Ramya, **D. Gopi** and L. Kavitha, Coating of strontium substituted hydroxyapatite on surface treated surgical grade stainless steel by electrodeposition for biomedical applications, *International journal of Scientific and Engineering Research*, **5** (3) (2014) 141-143, **Impact Factor: 3.2**.
23. K. Kanimozhi, **D. Gopi** and L. Kavitha, Synthesis and characterization of banana peel derived biopolymer/hydroxyapatite nanocomposite for biomedical applications, *International journal of Scientific and Engineering Research*, **5** (3) (2014) 138-140, **Impact Factor: 3.2**.
24. **D. Gopi**, E. Shinyjoy, L. Kavitha, Synthesis and spectral characterization of silver/magnesium co-substituted hydroxyapatite for biomedical applications, *Spectrochimica Acta part A: Molecular and Biomolecular Spectroscopy*, **127** (2014) 286–291, **Impact factor: 2.129**; Publisher: Elsevier.
25. D. Thirumoolan, S.S. Mohammed, **D. Gopi** and K. Anver Basha, Corrosion protection behavior of poly(N-(p-bromophenyl)-2-methacrylamide-co-ethyl methacrylate) coatings on low nickel stainless steel, *International Journal of Polymeric Materials and Polymeric Biomaterials*, **63** (2014) 820-830, **Impact factor: 2.784**; Publisher: Taylor & Francis.
26. **D. Gopi**, A. Karthika, S. Nithiya and L. Kavitha, *In vitro* biological performance of minerals substituted hydroxyapatite coating by pulsed electrodeposition method, *Materials Chemistry and Physics*, **144** (2014) 75-85, **Impact factor: 2.129**; Publisher: Elsevier.

27. **D. Gopi**, K. Kanimozhi, N. Bhuvaneshwari, J. Indira, L. Kavitha, Novel banana peel pectin mediated green route for the synthesis of hydroxyapatite nanoparticles and their spectral characterization, *Spectrochimica Acta part A: Molecular and Biomolecular Spectroscopy*, **118** (2014) 589-597, **Impact factor: 2.129**; Publisher: Elsevier.
28. **D. Gopi**, D. Rajeswari, S. Ramya, M. Sekar, R. Pramod, Jishnu Dwivedi, L. Kavitha, R. Ramaseshan, Enhanced corrosion resistance of strontium hydroxyapatite coating on electron beam treated surgical grade stainless steel, *Applied Surface Sciences*, **286** (2013) 83-90, **Impact factor: 2.538**; Publisher: Elsevier.
29. **D. Gopi**, A. Karthika, M. Sekar, L. Kavitha, R. Pramod, Jishnu Dwivedi, Development of lotus-like hydroxyapatite coating on HELCDEB treated titanium by pulsed electrodeposition, *Materials letters*, **105** (2013) 216-219, **Impact factor: 2.269**; Publisher: Elsevier.
30. **D. Gopi**, N. Bhuvaneshwari, J. Indira, K. Kanimozhi and L. Kavitha, A novel green template assisted synthesis of hydroxyapatite nanorods and their spectral characterizations. *Spectrochimica Acta part A: Molecular and Biomolecular Spectroscopy*, **107** (2013) 196–202, **Impact factor: 2.129**; Publisher: Elsevier.
31. **D. Gopi**, R. Saraswathy and L. Kavitha, Electrochemical synthesis and anticorrosive performance of poly (indole-co-thiophene) on low nickel stainless steel in 0.5 M H₂SO₄, *Polymer International*, **63** (2014) 280–289, **Impact factor: 2.247**; Publisher: Wiley.
32. **D. Gopi**, N. Bhuvaneshwari, J. Indira, L. Kavitha, Synthesis and spectroscopic investigations of hydroxyapatite using a green chelating agent as template, *Spectrochimica Acta part A: Molecular and Biomolecular Spectroscopy*, **104** (2012) 292-299, **Impact factor: 2.129**; Publisher: Elsevier.
33. **D. Gopi**, J. Indira and L. Kavitha, Hydroxyapatite coating on selectively passivated and sensitively polymer protected surgical grade stainless steel, *Journal of Applied Electrochemistry*, **43** (2013) 331-345, **Impact factor: 2.147**; Publisher: Springer.
34. **D. Gopi**, M. Surendiran, N. Sudha, R. Saraswathy, R. Madhammal and L. Kavitha, Adsorption and inhibition properties of mild steel corrosion in ground water medium by 1-(4-methoxy benzyl)-1H-imidazole: Experimental and theoretical investigations, *Surface and interface analysis* **45**, (2013) 823–829, **Impact factor: 1.393**; Publisher: Wiley.
35. **D. Gopi**, J. Indira, S. Nithiya, L. Kavitha, U. Kamachi mudali and K. Kanimozhi, Influence of surfactant concentration on nanohydroxyapatite growth, *Bulletin of material science*, **36** (2013) 799–805, **Impact factor: 0.88**, Publisher: Springer.
36. V. Manivannan, **D. Gopi** and L. Kavitha, Electrochemical and surface characterization of new triazole derivatives on mild steel, *Asian Journal of Chemistry*, **24**, No. 12 (2012), **Impact Factor: 0.27**.

37. **D. Gopi**, R. Saraswathy, G. Athithya, L. Kavitha, Jeong-Heo Bae and Dae-kyeong kim, Corrosion protection performance of ceria-copolymer bilayer coating on low nickel stainless steel in 0.5M H₂SO₄ medium, Surface and interface analysis, **44** (2012) 1331-1337, **Impact factor: 1.393**; Publisher: Wiley.
38. **D. Gopi**, S. Nithiya, E. Shinyjoy and L. Kavitha, Spectroscopic investigation on formation and growth of bioactive porous mineralized nanohydroxyapatite for bone tissue engineering applications, Spectrochimica Acta Part A: Molecular and Biomolecular spectroscopy, **92** (2012) 194-200, **Impact factor: 2.129**; Publisher: Elsevier.
39. **D. Gopi**, J. Indira, L. Kavitha, M. Sekar and U. Kamachi Mudali, Synthesis of hydroxyapatite nanoparticles by a novel ultrasonic assisted with mixed hollow sphere template method, Spectrochimica Acta Part A: Molecular and Biomolecular spectroscopy, **93** (2012) 245- 250, **Impact factor: 2.129**; Publisher: Elsevier.
40. **D. Gopi**, M. Thameem Ansari, E. Shinyjoy, L. Kavitha, Synthesis and characterization of magnetic hydroxyapatite nanocomposite using ultrasonic irradiation, Spectrochimica Acta Part A: Molecular & Biomolecular Spectroscopy, **87** (2012) 245-250, **Impact factor: 2.129**; Publisher: Elsevier.
41. **D. Gopi**, S. Nithiya, L. Kavitha and J.M.F. Ferreira, Amino acid-assisted synthesis of strontium hydroxyapatite bone cement by a soft solution freezing method, Bulletin of Material Science, **35**, No. 7 (2012) 1195-1199, **Impact factor: 0.88**; Publisher: Springer.
42. **D. Gopi**, J. Indira, L. Kavitha, A comparative study on the direct and pulsed current electrodeposition of hydroxyapatite coatings on surgical grade stainless steel, Surface and Coatings Technology, **206** (2012) 2859–2869, **Impact factor: 2.199**; Publisher: Elsevier.
43. **D. Gopi**, M. Thameem Ansari, L. Kavitha, Electrochemical synthesis of magnetite nanoparticle in aqueous ferrous perchlorate medium, Arabian Journal of Chemistry, Article in press-doi:10.1016/j.arabjc.2011.08.005, **Impact factor: 2.684**; Publisher: Elsevier.
44. S. M. Safiullah, D. Thirumoolan, K. Anver Basha, K. M. Govindaraju, **D. Gopi**, Tapan Kanai, A. B. Samui, synthesis, characterization and corrosion protection properties of polyN-(p-bromophenyl)-2-methacrylamide-co-glycidyl methacrylate on low nickel stainless steel, Journal of Polymer Engineering, 2011, **31**, 199–204, **Impact factor: 0.5**; Publisher: Walter de Gruyter.
45. **D. Gopi**, K.M. Govindaraju, L. Kavitha and K. Anver Basha, Synthesis, characterization and corrosion protection properties of poly(N-vinyl carbazole-co-glycidyl methacrylate) coatings on low nickel stainless steel, Progress in Organic Coatings, **71** (2011)11-18, **Impact factor: 2.302**; Publisher: Elsevier.

46. **D. Gopi**, P.R. Bhalaji, V.C.A. Prakash, A.K. Ramasamy, L. Kavitha and J.M.F. Ferreira, An effective and facile synthesis of hydroxyapatite powders using oxalic acid-ethylene glycol mixture, *Current Applied Physics* **11** (2010) 590-593; **Impact factor: 2.026**; Publisher: Elsevier.
47. **D. Gopi**, J. Indira, L. Kavitha, S. Kannan and J.M.F. Ferreira, Spectroscopic characterization of nanohydroxyapatite synthesized by molten salt method, *Spectrochimica Acta Part A: Molecular & Biomolecular Spectroscopy*, **77** (2010) 545-547, **Impact factor: 2.129**; Publisher: Elsevier.
48. **D. Gopi**, K.M. Govindaraju and L. Kavitha, Investigation of triazole derived schiff bases as corrosion inhibitors for mild steel in hydrochloric acid medium, *Journal of Applied Electrochemistry*, **40** (2010) 1349-1355, **Impact factor: 2.147**; Publishers: Springer
49. **D. Gopi**, J. Indira, V. Collins Arun Prakash and L. Kavitha, Spectroscopic characterization of porous nanohydroxyapatite synthesized by a novel amino acid soft solution freezing method, *Spectrochimica Acta A: Molecular & Biomolecular Spectroscopy* **74** (2009) 282-284, **Impact factor; 2.129**, Publishers: Elsevier.
50. K.M. Govindaraju, **D. Gopi** and L. Kavitha, Inhibiting effects of 4-amino antipyrine based schiff base derivatives on the corrosion of mild steel in hydrochloric acid, *Journal of Applied Electrochemistry*, **39** (2009) 2345-2352, **Impact factor: 2.147**; Publishers: Springer.
51. **D. Gopi**, K. M. Govindaraju, V. Collins Arun Prakash, V. Manivannan and L. Kavitha, Inhibition of mild steel corrosion in groundwater medium by pyrrole and thienylcarbonyl benzotriazoles, *Journal of Applied Electrochemistry* **39** (2009) 269-276, **Impact factor: 2.147**; Publishers: Springer, USA.
52. **D. Gopi**, V. Collins Arun Prakash and L. Kavitha, Evaluation of hydroxyapatite coatings on borate passivated 316L SS in Ringer's solution, *Materials Science and Engineering-C* **29** (2009) 955-958, **Impact factor: 2.736**; Publisher: Elsevier.
53. **D. Gopi**, K.M. Govindaraju, Collins Arun Prakash Victor, L. Kavitha and N. Rajendran, Spectroscopic investigations of nanohydroxyapatite powders synthesized by conventional and ultrasonic coupled sol-gel routes, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy* **70** (2008) 1243-1245, **Impact factor:2.129**; Publisher: Elsevier.
54. **D. Gopi**, K.M. Govindaraju, S. Manimozhi, S. Ramesh and S. Rajeswari, Inhibitors with biocidal functionalities to mitigate corrosion on mild steel in natural aqueous environment, *Journal of Applied Electrochemistry* **37** (2007) 681-689, **Impact factor: 2.147**; Publishers: Springer.
55. **D. Gopi**, S. Manimozhi K. M. Govindaraju P. Manisankar and S. Rajeswari, Surface and Electrochemical Characterization of pitting corrosion behavior of 304 stainless in

- groundwater media, *Journal of Applied Electrochemistry* **37** (2007) 439-449, **Impact factor: 2.147**; Publishers: Springer.
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124. L. Kavitha, C. Elavarasi, E. Preethi and **D. Gopi**, Synthesis and characterization of strontium substituted nanohydroxyapatite by hydrothermal method, National conference on Advanced Nanomaterials (ANM 2012), Periyar University, Salem, 6-7 February 2012.
125. R. Saraswathy, L. Kavitha and **D. Gopi**, Anti corrosive performance of an electrochemically synthesized poly(indole-co-thiophene) coating on low nickel stainless steel in 0.5M, National conference on Advanced Nanomaterials (ANM 2012), Periyar University, Salem, 6-7 February 2012.
126. J. Indira, **D. Gopi** and L. Kavitha, Development and performance of novel conducting polymer coating on surgical grade stainless steel for biomedical applications, National seminar on Current status and future prospects of plant therapeutics and phyto medicine (PTPM2012), Periyar University, Salem, 13-14 February 2012.
127. R. Saraswathy, **D. Gopi**, L. Kavitha and R. Praveen, Anti-corrosion performance of cathodically electrodeposited ceria coating on low nickel stainless steel in 0.5 M H₂SO₄ medium, National Conference on Food Technological Interventions for Health and Nutrition Security Nutrifood-2012, Periyar University, Salem, 15-16 March 2012.
128. M. Venkatesh, S. Dhamayanthi, L. Kavitha and **D. Gopi**, Soliton like molecular orientation in a system of coupled nematic and smectic liquid crystals, 7th National conference on nonlinear systems and dynamics, Pune, 12-15 July 2012.
129. L. Kavitha, E. Parasuraman and **D. Gopi**, Modulational instability and localized modes in ferromagnetic spin chain with DM (Dzialoshinski-Moriya) and dipole-dipole interaction, 7th National conference on nonlinear systems and dynamics, Pune, July 12-15 2012.
130. A. Muniyappan, L. Kavitha, S. Zdravkovic, M.V. Sataric and **D. Gopi**, Soliton excitations in microtubules by using Sine-Gordon equation, 7th National conference on nonlinear systems and dynamics, Pune, July 12-15 2012.
131. S. Bhuvaneshwari, L. Kavitha and **D. Gopi**, Switching Soliton solutions of (2+1) dimensional Landau-Lifshitz equations, 7th National conference on nonlinear systems and dynamics, Pune, July 12-15 2012.
132. N. Akila, L. Kavitha and **D. Gopi**, Modulational instability analysis and shape changing soliton dynamics with weak dispersive magnetic interactions, 7th National conference on nonlinear systems and dynamics, Pune, July 12-15 2012.
133. K. Kanimozhi, E. Shinyjoy, **D. Gopi** and L. Kavitha, An electrodeposition method of hydroxyapatite coating on titanium for orthopedic applications, National Conference

on Recent Trends in Biomaterials for Tissue Engineering (RTBTE'12), Velammal Institute of Technology, Chennai, 27-28 July 2012.

134. A. Karthika, M. Sekar, S. Ramya, **D. Gopi** and L. Kavitha, Electrodeposition of strontium substituted hydroxyapatite on titanium alloy for biomedical applications, National Conference on Recent Trends in Biomaterials for Tissue Engineering (RTBTE'12), Velammal Institute of Technology, Chennai, 27-28 July 2012.
135. R. uk;ah kw;Wk; **j. Nfhgp**> clw;\$W khw;W æç;irfhd nraw;if Kiwapy; jahupf;fg;gl;l];l;uhd;rpak; nrwpT+l;lg;gl;l fhy;rpak; gh];Ngl;bd; Kf;fpa gg;F> 12-k; jkpof mwptpay; Nguit> nghpahh; gy;fiyf;fofk;> Nryk;> 23-25 Mf];L> 2012.
136. ,uh. ru];tjp> Â. ftpjh kw;Wk; **j. Nfhgp**> ,izg;gyg;gbj;jhd nghUs;fspd; G+r;Rfs; %ykhf mNyhfi;jpd; mhpkhdk; jLj;jy; gw;wpa Ma;T> 12-k; jkpof mwptpay; Nguit> nghpahh; gy;fiyf;fofk;> Nryk;> 23-25 Mf];L> 2012.
137. kh. Nrfh;> Â. ftpjh kw;Wk; **j. Nfhgp**> fph;T nra;ag;gl;l ill;lhdpak; cNyhff;fyit Gwg;gug;gpd; kPJ kpd;Kidfth;r;rp Kiwapy; vYk;gpd; gz;gpid xj;j Nrh;kj;ij xl;lr; nra;jYk; kw;Wk; mjd; Cf;Ftpf;fg;gl;l gad;ghLfSk;> 12-k; jkpof mwptpay; Nguit> nghpahh; gy;fiyf;fofk;> Nryk;> 23-25 Mf];L> 2012.
138. R. epj;jpah kw;Wk; **j. Nfhgp**> Vio vsa kf;fSf;F gad;gLk; tifapy; vsa Kiwapy; gy; kUj;Jtr;rpfr;irapy; gad;gLk; Nrh;kf;fyitiaj; jahupj;jy;> 12-k; jkpof mwptpay; Nguit> nghpahh; gy;fiyf;fofk;> Nryk;> 23-25 Mf];L> 2012.
139. J. uhN[];thp> Â. ftpjh kw;Wk; **j. Nfhgp**> vYk;G khw;W mWit rpfpr;irf;F cfe;j caph; kUj;Jt cs;itg;ghdpd; mjetPd Nkw;gug;G epiykhw;W Kiw> 12-k; jkpof mwptpay; Nguit> nghpahh; gy;fiyf;fofk;> Nryk;> 23-25 Mf];L> 2012.
140. ., irdp[ha; kw;Wk; **j. Nfhgp**> vYk;G Gw;WNeHa; rpfpr;irf;fhd etPd fhe;jk; fye;j fhy;rpak; gh];Ngl; NeNdhJfs;fspd; jahupg;G> 12-k; jkpof mwptpay; Nguit> nghpahh; gy;fiyf;fofk;> Nryk;> 23-25 Mf];L> 2012.
141. f. fdpnkhop kw;Wk; **j. Nfhgp**> gy; kUj;Jtj; Jiwapy; epug;gpahf gad;gLj;jg;gLk; caph;nghUs;fs; jahupj;jy;> 12-k; jkpof mwptpay; Nguit> nghpahh; gy;fiyf;fofk;> Nryk;> 23-25 Mf];L> 2012.
142. n[. ,e;jpuh> kw;Wk; **j. Nfhgp**> etPd Af;jpiaf; nfhz;L fhy;rpak; gh];Ngl;lhy; jahhpf;fg;gl;l nraw;if %l;L;> 12-k; jkpof mwptpay; Nguit> nghpahh; gy;fiyf;fofk;> Nryk;> 23-25 Mf];L> 2012.
143. Nkh. RNue;jpud;> **j. Nfhgp** kw;Wk; Â. ftpjh> GJtifahd Fiwe;j msT ep;fy; nfhz;l v/F-d; Nkw;gug;G khw;wk; kw;Wk; mjd; mhpkh ghJfhg;G nray;jpowd;fspd;; gad;ghLfSk;>12-k; jkpof mwptpay; Nguit> nghpahh; gy;fiyf;fofk;> Nryk;> 23-25 Mf];L> 2012.
144. N. Bhuvaneshwari, **D. Gopi** and L. Kavitha, Synthesis of hydroxyapatite using aspartic acid as template and its biomedical applications, 3rd International

Conference on Natural Polymers (ICNP-2012), Mahathma Gandhi University, Kottayam, Kerala, 26-28 October 2012.

145. J. Indira, **D. Gopi** and L. Kavitha, A versatile cathodic pulsed electrodeposition method for the coating of hydroxyapatite on surgical grade 316L stainless steel for biomedical applications, 3rd International Conference on Natural Polymers (ICNP -2012), Mahathma Gandhi University, Kottayam, Kerala, 26-28 October 2012.
146. S. Nithiya, E. Shinyjoy, **D. Gopi** and L. Kavitha, *In vitro* bioactivity of multisubstituted nanohydroxyapatite for bone tissue engineering applications, 3rd International Conference on Natural Polymers (ICNP -2012), Mahathma Gandhi University, Kottayam, Kerala, 26-28 October 2012.
147. E. Shinyjoy, **D. Gopi** and L. Kavitha, Preparation and characterization of silver substituted hydroxyapatite for wound healing applications, 3rd International Conference on Natural Polymers (ICNP -2012), Mahathma Gandhi University, Kottayam, Kerala, 26-28 October 2012.
148. L. Kavitha, C. Lavanya and **D. Gopi**, Explicit Backlund transformation and soliton-like solution for a Nonlinear Schrodinger equation governing the dynamics of magnetized plasma, Workshop on Atmospheric Plasma Processing, Bharathiyar University, Coimbatore, October 31-November 3 (2012).
149. D. Rajeshwari, S. Ramya, M. Sekar, **D. Gopi** and L. Kavitha, Strontium substituted hydroxyapatite coating on surface treated surgical grade stainless steel for biomedical applications, National Conference on Recent Advances in Surface Science (RASS-2013), Gandhigram Rural University, Gandhigram, Dindigul, 14-15 February 2013.
150. D. Rajeswari, A. Karthika, M. Sekar, **D. Gopi** and L. Kavitha, Bioceramic coating on novel surface modified titanium for biomedical applications, International Conference on Biological Inorganic Chemistry (ICBIC-2013), Periyar University, Salem, 20-22 February 2013.
151. S. Nithiya, **D. Gopi** and L. Kavitha, Synthesis and characterization of strontium substituted hydroxyapatite for tissue engineering applications, International Conference on Biological Inorganic Chemistry (ICBIC-2013), Periyar University, Salem, 20-22 February 2013.
152. S. Ramya, D. Rajeswari, **D. Gopi** and L. Kavitha, Electrodeposition of strontium substituted hydroxyapatite coating on sulphuric acid treated 316L stainless steel for biomedical applications, International Conference on Biological Inorganic Chemistry (ICBIC-2013), Periyar University, Salem, 20-22 February 2013.
153. N. Bhuvaneshwari, **D. Gopi** and L. Kavitha, Synthesis of hydroxyapatite nanoparticles facilitated by the presence of malt-dextrin, International Conference on Biological Inorganic Chemistry (ICBIC-2013), Periyar University, Salem, 20-22 February 2013.

154. A. Karthika, **D. Gopi** and L. Kavitha, Pulsed electrodeposition of strontium substituted hydroxyapatite on Ti6Al4V alloy for biomedical applications, 1st International Corrosion Prevention Symposium for Research Scholars (CORSYM-2013), Chennai, India, 28th February – 2nd March 2013.
155. R. Saraswathy, **D. Gopi**, M. Surendiran and L. Kavitha, Experimental and theoretical investigations on the anticorrosive performance of a newly synthesized 1,4-bis(N-imidazolylmethyl)-2,5-dimethoxybenzene towards the mild steel corrosion in ground water medium, 1st International Corrosion Prevention Symposium for Research Scholars (CORSYM-2013), Chennai, India, 28th February – 2nd March 2013.
156. M. Sekar, **D. Gopi**, L. Kavitha, Evaluation of the mechanical and anticorrosive performance of electrophoretically deposited hydroxyapatite on surface treated ti alloy for biomedical applications, 1st International Corrosion Prevention Symposium for Research Scholars (CORSYM-2013), Chennai, India, 28th February – 2nd March 2013.
157. M. Venkatesh, L. Kavitha and **D. Gopi**, Director orientation in the form of perturbed solitons in a nematic liquid crystal media, Perspectives in Nonlinear Dynamics (PNLD)-2013, University of Hyderabad, July 15-18, 2013.
158. L. Kavitha, R. Ravichandran and **D. Gopi**, Modified extended tanh-function method and nonlinear dynamics of arterial deformation in blood flow, Perspectives in Nonlinear Dynamics (PNLD)-2013, University of Hyderabad, July 15-18, 2013.
159. L. Kavitha, E. Parasuraman and **D. Gopi**, Breather like periodic soliton in single wall carbon nanotubes (SWCNT) by using discrete extended tanh function method (DETFM), Perspectives in Nonlinear Dynamics (PNLD)-2013, University of Hyderabad, July 15-18, 2013.
160. S. Nithiya, **D. Gopi**, L. Kavitha, Microwave assisted synthesis of mineralized hydroxyapatite for biomedical applications, Third Euro-India International Conferences on Nanomedicine and Tissue Engineering (ICNT-2013), Kottayam, Kerala, 9-11 August 2013.
161. S. Nithiya, **D. Gopi** and L. Kavitha, Synthesis of strontium substituted Hydroxyapatite bone cement by microwave irradiation method for biomedical applications, National Syposiym on nanosciences and technology (NSNN-2013), Karunya University, 30th September and 1st October 2013.
162. S. Nithiya, **D. Gopi** and L. Kavitha, Preparation and characterization of magnesium substituted hydroxyapatite powders for biomedical applications, International conference on emering trends in chemical sciences (IETC 2013), Vellore Institute of Tcehnology, Vellore, 5th – 7th December 2013.
163. S. Ramya, **D. Gopi** and L. Kavitha, Development of poly(3,4-ethylenedioxythiophene) coatings on surgical grade stainless steel for biomedical applications, International conference on emering trends in chemical sciences (IETC 2013), Vellore Institute of Tcehnology, Vellore, 5th – 7th December 2013.

164. E. Shinyjoy, **D. Gopi** and L. Kavitha, Ultrasonic assisted synthesis, characterization and biological performance of silver/strontium substituted hydroxyapatite powder, A National Symposium on Science of Nano (SciNo'13), Bharathiar University, Coimbatore, 6-7 December 2013.
165. A. Karthika, **D. Gopi** and L. Kavitha, Synthesis and characterization of strontium/magnesium substituted hydroxyapatite powder for biomedical applications, A National Symposium on Science of Nano (SciNo'13), Bharathiar University, Coimbatore, 6-7 December 2013.
166. A. Muniyappan, L. Kavitha, S. Zdravkovic and **D. Gopi**, Nano breathers and modulational instability in tubulin lattices, 8th conference on Nonlinear Systems and Dynamics (CNSD), IIT, Indore, 11-14 December 2013.
167. R. Ravichandran, L. Kavitha, A. Muniyappan, S. Zdravkovic and **D. Gopi**, Perturbed soliton excitations and soliton collisions in a DNA molecule, 8th conference on Nonlinear Systems and Dynamics (CNSD), IIT, Indore, 11-14 December 2013.
168. K. Kanimozhi, **D. Gopi** and L. Kavitha, Banana peel mediated green synthesis of hydroxyapatite nano particles for biomedical application, International conference on chemistry in synergy with materials and biology (ICMB-2014), Bishop Heber College (Autonomous), Tiruchirappalli, 10-11 January 2014.
169. S. Ramya, D. Rajeswari, A. Karthika, **D. Gopi** and L. Kavitha, Magnesium substituted hydroxyapatite coating on the acid treated surgical grade stainless steel for biomedical applications, International conference on chemistry in synergy with materials and biology (ICMB-2014), Bishop Heber College (Autonomous), Tiruchirappalli, 10-11 January 2014.
170. E. Shinyjoy, M. Surendiran, **D. Gopi** and L. Kavitha, Development of silver/strontium substituted hydroxyapatite coating on titanium for orthopedic applications, International conference on chemistry in synergy with materials and biology (ICMB-2014), Bishop Heber College (Autonomous), Tiruchirappalli, 10-11 January 2014.
171. L. Kavitha, R. Ravichandran and **D. Gopi**, Nonlinear dynamics of blood pressure waves in large elastic tubes, International seminar on current trends in Quantum Gases, BEC and solitons, Panjab University, Chandigarh, 3-6 March, 2014.
172. L. Kavitha, E. Parasuraman and **D. Gopi**, Excitations of Localized modes via modulational instability in carbon nanotubes (CNT) with present and absent of electron-phonon interaction, International seminar on current trends in Quantum Gases, BEC and solitons, Panjab University, Chandigarh, 3-6 March, 2014.
173. S. Ramya, L. Kavitha and **D. Gopi**, Development of magnesium substituted hydroxyapatite/polypyrrole coating on surgical grade stainless steel for biomedical applications, International Conference on Electrochemical Science and Technology (ICONEST-2014), IISc-Campus, Bengaluru, 7-9 August, 2014.

174. A. Karthika, L. Kavitha and **D Gopi**, Electrodeposition of zinc substituted hydroxyapatite on surface treated titanium for orthopedic applications, International Conference on Electrochemical Science and Technology (ICONEST-2014), IISc-Campus, Bengaluru, 7-9 August, 2014.
175. N. Murugan, E. Shinyjoy, L. Kavitha and **D Gopi**, Corrosion and biodegradability evaluation of strontium substituted hydroxyapatite coating on surface treated AZ91 Mg alloy for orthopedic applications, International Conference on Electrochemical Science and Technology (ICONEST-2014), IISc-Campus, Bengaluru, 7-9 August, 2014.
176. D. Rajeswari, S. Ramya, L. Kavitha and **D Gopi**, Development of poly(etherether ketone)/strontium, cerium co- substituted hydroxyapatite coating on surface treated surgical grade stainless steel for biomedical applications, National conference on Advancement in Materials Science (AMS 2014), Coimbatore Institute of Technology, Coimbatore, 26-27 September, 2014.
177. A. Karthika, S. Sathishkumar, A. Prasannambigai, L. Kavitha and **D. Gopi**, A surfactant assisted microwave synthesis and spectroscopic investigations of strontium substituted hydroxyapatite nanoparticles, International conference on physiology and medicine, 15-17 October, 2014.
178. P. Karthikeyan, M. Surendiran, L. Kavitha and **D. Gopi**, Fabrication and characterization of strontium substituted hydroxyapatite/vitamin C nano composite using sol-gel method for orthopedic applications, International conference on physiology and medicine, 15-17 October, 2014.
179. E. Shinyjoy, N. Murugan, L. Kavitha and **D. Gopi**, Novel polycaprolactone biocomposites reinforced with carbon nanotubes and bioceramics for bone replacement, International conference on physiology and medicine, 15-17 October, 2014.
180. S. Ramya, D. Rajeswari, L. Kavitha and **D. Gopi**, Electrodeposition of strontium, magnesium substituted hydroxyapatite coating on surgical grade stainless steel for biomedical applications,

Workshops/ Special Seminars Attended

1. DST sponsored national workshop on “Green Chemistry” held on July 15 & 16, 2005, at Madurai Kamaraj University, Madurai, India.
2. Electro chemical instrumentation and its applications by Dr. Timoer Frelink, Netherlands, on 18th November 2005 at Hotel Park Sheraton & Towers, Chennai, India.

3. National workshop on advanced techniques for corrosion studies, 5-7 January, 2006 at Alagappa University, Karaikudi, India.
4. National workshop on Geosciences, Georesources and IPR Regime: Familiarization and Practice (GEO-IPR'2006), held on 5th & 6th October, 2006 at Periyar University, Salem, India.
5. Indo-US workshop on Ceramics for Medical Applications (CMA-2007) held on 10-12th December 2007 at Chennai, India.
6. International Conference on Emerging Trends in Chemical Sciences (IETC 2013) held on 5th – 7th December 2013 at Vellore Institute of Technology, Vellore.
7. International Conference on Recent Advances in Physics for Interdisciplinary Development held on 23-24, January 2014 at Sathyabama University, Chennai.

Conferences conducted

1. Actively took part in Organizing a National Level Seminar on Nano Chemistry held on 27 & 28th September 2005.
2. Conducted as an Organizing secretary in a National Conference on Recent Advances in Chemistry held on 1 & 2nd March 2007.
3. Conducted as an Organizing secretary in a National Conference on Advances in surface and interface analysis, held on 13 & 14th December 2007.
4. Conducted as an Organizing secretary in a National Conference on Recent Advances in Metallorganic Chemistry, held on 16 & 17th October 2008.
5. Conducted as an Organizing secretary in a National Conference on Frontiers in Organic Synthesis and Medicinal Chemistry, held on 17 & 18th February 2011.
6. Conducted as a Convener in a National Conference on Advanced Nanomaterials, held on 6 & 7th February 2012.
7. Conducted as a Convener in a UGC sponsored National Seminar on Recent Trends in Chemistry, held on 20th March 2012.
8. Conducted as a Workshop Coordinator in a National Academies' Lecture workshop on "Modern Trends in Chemistry", held on 13 & 14th August 2012.
9. Conducted as an Organizing secretary in an International Conference on "Biological Inorganic Chemistry (ICBIC-2013)", Periyar University, Salem, held on 20-22 February 2013.

Details of completed Ph.D., scholars

S. No.	Name	Thesis Title & Dates Awarded	Current Position
1	Dr. S. Manimozhi	The effect of elements on the corrosion behaviour of austenitic steel in chloroide media (19 th Feb 2011)	The Principal, Government Arts College, Attur
2	Dr. V. Manivannan	Evaluation of corrosion and scale inhibitors for mild steel in aqueous media by electrochemical and surface characterization studies (10 th Feb 2011)	The Professor and Head, Department of Chemistry, Paavai College of Engineering, Namakkal-18
3	Dr. D.M. Angeline Sakila	New benzotriazole derivatives as corrosion inhibitors for copper in aqueous media by electroanalytical and surface characterization studies (19 th Feb 2011)	Assistant Professor, CSI Polytechnique College, Salem
4	Dr. V. Collins Arun Prakash University Research Fellow (2006-2008), Senior Research Fellow (2008-2011)	Synthesis and analytical characterization of nanohydroxyapatite and its coatings on borate passivated surgical grade stainless steel for biomedical applications (04 th Feb 2011)	Assistant Professor , Sacret Heart College, Thiruppur
5	Dr. K.M. Govindaraju UGC Research Fellow (2007-2008) Jawaharlal Nehru Memorial Fellow (2009-2011)	Anti-corrosive behaviour of methacrylate based organic copolymer coating on the corrosion of austenitic low nickel stainless steel by Electroanalytical studies (10 th Feb 2011)	Assistant Professor, Mahendra Engineering College, Namakkal- 503
6	Dr. P.R. Bhalaji (UGC- Teacher Research Fellow)	Synthesis and analytical characterization of hydroxyapatite and its coatings on hydrogen peroxide treated AZ91 magnesium alloy for biomedical applications (08 th March 2013)	Head & Associate Professor, PG Department of Chemistry, Government Arts College for Men, Krishnagiri
7	Dr. J. Indira (UGC-Project Fellow) (2009-2010) CSIR-Senior Research	Synthesis and coating optimization of hydroxyapatite on selectively passivated and sensitively polymer protected	Assistant Professor, Department of Chemistry, Vellalar College for Women (Autonomous),

	Fellow (2011-2013)	316L stainless steel for biomedical applications (25 th March 2013)	Erode-12
8	Dr. M. Thameem Ansari (UGC Project Fellow under networking scheme 2010-2011)	Magnetic nanoparticle: synthesis, characterization and functionalization with bioceramic material (24 th May 2013)	Assistant Professor, Department of Chemistry, M.A.M. College of Engineering and Technology, Trichy-105
9	S. Nithiya (ICMR – Senior Research Fellow) (2011-2014)	Investigation on formation and growth of mineralized bioceramics for bone and tissue engineering applications (27 th May 2014)	Assistant Professor, Arignar Anna College (Arts and Science), Krishnagiri
10	M. Surendiran (UGC Project Fellow) (2011-2014)	Experimental and theoretical investigations on the inhibition of mild steel corrosion using newly synthesized imidazole derivatives	Thesis submitted
11	N. Bhuvanewari	Synthesis and spectroscopic characterization of hydroxyapatite using green chelating agents as a template	Thesis submitted (Assistant Professor, Department of Chemistry, Chikkaiah Naicker College, Erode 638 004)
12	E. Shinyjoy (URF- Centre for Nanoscience and Nanotechnology) (2012-2014),	Development of carbon nanotubes reinforced bioceramic composite coatings in titanium for biomedical applications	Thesis submitted DRDO- Senior Research Fellow (2014-2016)

List of Ph.D., scholars and their fellowship details

S. No.	Name of the Ph.D Scholars	Date of Registration	Scheme
1.	K. Kanimozhi (CSIR – Senior Research Fellow 2012-2014)	26-09-2011	Full time (ongoing)
2.	A. Karthika (DST Project Fellow) (2011-2014)	14.03.2012	Full time (ongoing)
3.	S. Ramya (DST Project Fellow) (2011-2014)	04.08.2012	Full time (ongoing)
4.	N. Murugan (DST Project Fellow) (2013-2017)	27.09.2013	Full time (ongoing)
5.	S. Sathishkumar	30.10.2013	Full time (ongoing)
6.	P. Karthikeyan (URF-Chemistry, 2014-2016)	09.04.2014	Full time (ongoing)
7.	R. Radhamani	Registration in process	Full time (ongoing)

List of completed M.Phil.,

S. No.	Name of the M.Phil., Scholars	Thesis Title	Year of Registration
1	K.M. Govindaraju	Evaluation of scale and corrosion characteristics of groundwater in north west salem	2005 – 2006
2	R. Madeswari	Synthesis and spectroscopic characterization of hydroxyapatite nano composite by hydrothermal process	2006 – 2007
3	A. Manimegalai	Sol-gel synthesis and characterization of nano structured hydroxyapatite powder for bio-medical applications	2006 – 2007
4	P. Dhakshinamoorthy	A comparative study on the inhibitive effect of some triazole derivatives towards corrosion of copper in ground water environment	2006 – 2007
5	A. Balasundaram	The inhibition of mild steel corrosion in aqueous environment by amine-blocked poly isocyanate	2006 – 2007
6	K. Venkatesan	Passivity breakdown and pitting corrosion behaviour of 300 serious stainless steel in chloride medium	2006 – 2007
7	B. Kavitha	Corrosion inhibition of copper in natural aqueous environment by new benzotriazole derivative	2006- 2007
8	V. Kalpana	Microwave coupled hydrothermal synthesis of nano sized hydroxyapatite powders with high osteoconductive properties	2006 – 2007
9	S. Priya	Ofloxacin as a microbial corrosion inhibitor for mild steel in natural aqueous environment	2006 – 2007
10	R. Brindarani	Ultrasonic coupled sol-gel synthesis and characterization of nanohydroxyapatite powders	2006 – 2007
11	V. Kalyanasundaram	A study on benzotriazole derivatives as pitting corrosion inhibitor on 304 SS in sodium chloride medium	2006 – 2007
12	M. Senthil Kumar	Effect of biocide on corrosion control of mild steel in natural aqueous environment	2006 – 2007
13	C. Subhashini	Synthesis and electrochemical characterization of bioactive ceramics with hydroxyapatite for orthopedic applications	2006 – 2007
14	S.R. Bavaji	Electrochemical evaluation of biomedical implants with nano composites	2006 – 2007

15	S. Valarmathi	Effect of bacterial biofilm on corrosion of copper in natural aqueous environment	2007 – 2008
16	T. Arthi	Electrochemical and surface investigation of biocoatings on 316L stainless steel substrates	2007 – 2008
17	J. Indira	A study on critical micelle concentration and temperature on surfactant-assisted synthesis of nano-bioceramics	2007 – 2008
18	P. Amudha	Synthesis of nanohydroxyapatite by a self-propagating combustion synthesis for biomedical applications	2008 – 2009
19	V. Vijayalaxmi	Preparation and characterization of biocompatible magnetite nanofibres for therapeutic applications	2008 – 2009
20	S. Malarkodi	A study on the effect of fuel addition on the synthesis of nanohydroxyapatite powders for biomedical applications	2008 – 2009
21	G. Athithya	Corrosion protection behavior of electrochemically synthesized poly(Indole-co-pyrrole) and poly(Indole-co-thiophene)Coatings on low nickel stainless steel	2009 – 2010
22	G. Santhoshi	Surface electrochemical and <i>in vitro</i> evaluation of hydrogen peroxide treated 316L SS for orthopedic applications	2009 – 2010
23	G. Priyadharshinicka	Synthesis and characterization of nano bioceramics by an ultrasonic assisted template direct method	2010-2011
24	K. Vanmathi	Enhancement of bioresistivity of mg alloy through dicalcium phosphate dehydrate coating for biomedical applications	2010-2011
25	N. Pusphalakshmi	Electrochemical synthesis of indole/thiophene bipolymer coating and their anticorrosive performance on LNSS in sulphuric acid	2011-2012
26	S. Ramya	Synthesis and characterization of strontium nanohydroxyapatite using trisodium citrate as template	2011-2012
27	V. Govindaraju	Synthesis of the substituted hydroxyapatite by microwave irradiation method for biomedical applications	2012-2013

28	P. Karthikeyan	Development of bioceramic coating on hydrogen peroxide treated surgical grade stainless steel for biomedical applications	2012-2013
29	A. Saranya	Synthesis and characterization of magnesium substituted nanohydroxyapatite using ethylene diamine tetra acetic acid as template	2013-2014
30	C. Sridevi	Preparation and characterization of hydroxyapatite derived from chicken bone waste for Biomedical applications	2013-2014
31	A. Prasannambigai	Synthesis of multi substituted hydroxyapatite/polymer composite for improved biomedical applications	2014-2015
32	M. Palanisamy	Investigation of polymer assisted substituted hydroxyapatite bilayer coatings on surgical grade stainless steel for orthopedic applications	2014-2015
33	V. Madhammal	Development of minerals substituted hydroxyapatite/polymer composite coating for biomedical applications	2014-2015
34	K. Punitha	Preparation and evaluation of collagen/mineralized hydroxyapatite nanocomposite for bone tissue engineering	2014-2015

Lectures delivered at other institutions on invitation

1. Delivered a Lecture on “Corrosion Inhibitors” on 2nd August 2002 at Korea Electrotechnology Research Institute (KERI), Chang won, South Korea.
2. Delivered an Invited talk on “Corrosion of Stainless Steels” in the National Conference on “Stainless steel in manufacturing industry” on 26th October 2007 organized by Indian institute of metal in association with salem steel plant held at Salem Steel Plant, Salem, Tamilnadu, India.
3. Delivered a Lecture on “Micro scale manipulation in Analytical Chemistry” on 1st November 2007 at the Sengunthar Arts and Science College, Tiruchengode, Salem, India.
4. Delivered a special lecture on “Corrosion and its Prevention”, in the UGC sponsored students (PG) seminar on Recent Facets of Chemistry held on 14th December 2009, at Sri Saradha College for Women, Salem, India.
5. Delivered a special Lecture on “Recent Developments in Nanobiomaterials” in the National Seminar on Recent Developments in Material Science held on 24th January 2014 at Padmavani Arts and Science College for Women, Salem, India.

6. Delivered special Lectures on “Synthesis of nanobioceramic materials for various biomedical applications” and “Optimization of bioceramic coating for orthopedic applications” in the Refresher Course on Frontiers in Chemistry-2014 held on 11th February 2014 at Bharathidasan University, Tiruchirapalli, India.

Refresher Course/Orientation Course attended:

1. Attended Orientation course conducted by Academic Staff College, Pondicherry University during 9th January – 5th February 2009.
2. Attended Orientation course conducted by Academic Staff College, Pondicherry University during 3rd March– 23rd March 2010.