Dr. P.MANISANKAR

Vice-Chancellor

Academic Qualifications

Sl. No.	Degree	Name of College / University	Month & Year of passing	Discipline/ Major Subject	Class / Grade/ Marks %
1.	B.Sc.	St. Xavier's College Palayamkottai	1977	Chemistry	First Class
2.	M.Sc.	V.O.C.College, Tuticorin	1979	Chemistry	First Class
3.	Ph.D	Madurai Kamaraj University, Madurai	1985	Chemistry	Commended

Teaching and Research Experience: 33 Years 1month

No.	Designation	Name of College / University	Area of Specialization	Date of Joining	Date of Leaving	Duration
1	Assistant Professor	S. N. College, Madurai	Organic Chemistry	07.11.84	03.02.87	2Y 2 M
2	Lecturer	Alagappa University, Karaikudi	Organic Chemistry Electrochemistry Polymer Chemistry	04.02.87	05. 11.89	2Y 9M
3	Senior Lecturer	Alagappa University, Karaikudi	Organic Chemistry Electrochemistry Polymer Chemistry	06.11.89	26.07.98	8Y 8M
4	Reader	Alagappa University, Karaikudi	Organic Chemistry Electrochemistry Polymer Chemistry	27.07.98	30.11.2004	6Y 4M
5	Professor	Periyar University, Salem	Organic Chemistry Electrochemistry Polymer Chemistry	01.12.2004	31.08.2006	1Y 9M
6	Professor	Alagappa University, Karaikudi	Organic Chemistry Electrochemistry Polymer Chemistry	01.09.2006	30.06.2017	10Y 10M
7	UGC BSR Faculty Fellow	Alagappa University, Karaikudi	Electrochemistry Polymer Chemistry	01.07.2017	31.12.2018	6Y 0M

Academic/Administrative/Honorary Positions held

- Coordinator (i/c), Dept. of Biotechnology - 19.07.01 to 31.12.01
- Director (i/c), Nano centre - 08.06.07 to 22.07.08
- Warden, Alagappa University Hostel for men - 09.05.07 to 27.11.07
- Director, DDE - 01.04.2011 to
- Dean (Industry & Consultancy) - 25.07.2008 to
- Dean, Research - 20.02.14 to 15.06.16
- Syndicate Member, Alagappa University - 08.07.13 to 07.07.16
- Dean, Faculty of Science - 09.05.2016 to 30.06.2017
- Member, Finance Committee, Alagappa University
- Member, Planning Board, Alagappa University
- Senate member, Alagappa University, Karaikudi
- Member, Standing committee for academic affairs, Alagappa University, Karaikudi
- Chairman, Research Advisory Committee
- Member of IQAC advisory committee
- Member of Syndicate subcommittee for Purchase
- Member, DDE subcommittee
- Chairperson, School of Chemical Sciences
- HOD, Department of Industrial Chemistry
- Chairman, BOS for Chemistry programmes in Alagappa University
- Chairman, BOS for Chemistry programmes in Periyar University for 1Y9M
- Member, BOS of many institutions
- Member, Collaborative programme sub-committee
- Convener of University Calendar committee and committees constituted for finalizing gardener, security and daily wages contracts.
- Member of squad for DDE examinations
- Member of inspection committee for assessing the facilities available for sanctioning DDE learning centers and collaborative centers
- Member of selection committees in various Universities
- Coordinator for DST PURSE programme
- Convener, Departmental Research Committee (DRC)
- Convener, Departmental purchase committee and other committees

Experience in Academics

Dr. P. Manisankar has a versatile experience for over 30 years at University level and 2 years at College level teaching. He has teaching experience in the fields of Organic Chemistry, Green Chemistry, Electroanalytical Chemistry and polymer Chemistry. After his career at college, he joined Alagappa University in the year 1987 as Assistant professor. He joined as Professor and Head, Department of Chemistry, Periyar University, Salem on December 2004. After completing 1 year 9 months lien period, he came back to Alagappa University and rose to the position of the Professor and Head, Department of Industrial Chemistry in the year 2007. After serving as Head of the Department of Industrial Chemistry for more than 10 years, he retired from service on 30th June 2017. Then he was UGC BSR Faculty Fellow in the same department for six months.

Contribution to Research

Research Experience

Dr.P.Manisankar has 33 years of research experience after Ph.D. His major research interest includes synthesis of novel nano conducting polymers, copolymers and composites, development of highly sensitive sensors for pollutants, biosensors for antioxidants, preparation of electrochromic materials, membranes for fuel cells, development of dye sensitized solar cell, effluent and wastewater treatments and green synthesis of biologically important organic compounds. He has completed 12 major research projects funded by DST, New Delhi, AICTE, New Delhi, UGC, New Delhi, UGC-UKIERI and AURF to the tune of Rs. 190 lakhs. He is currently a UGC BSR Faculty fellow and Rs.33 lakhs was sanctioned towards fellowship and research grant. He is also a mentor for UGC PDF to whom Rs.31.16 lakhs was sanctioned towards fellowship and research grant. He was coordinator for DST FIST and UGC SAP for the Department of Industrial Chemistry to tune of Rs.125 lakhs and DST PURSE for the University to the tune of Rs.700 lakhs. He was also department coordinator for DST PURSE programme first phase and got Rs.200 lakhs and purchased HR SEM. He has completed 6 consultancy projects for M/s BHEL, Trichy. DRDL, Hyderabad and TNRSP, Chennai and brought around Rs.30 lakhs. He has supervised many Masters and M.Phil. dissertations. He has guided 32 Ph.D. scholars and currently he is guiding 4 Ph.D. scholars. He is also a committed and dedicated teacher cum researcher. He has published 234 research articles in international and national journals. He has presented 226 papers in International and National Conferences. He has very good citation index for his publications and his present h-index is 32. He has authored two chapters in books and edited 4 books. His work for the treatment of distillery effluent was cited in Science Base. He has developed a method to identify the certain important components in the primer which is now used by the quality control section In the BHEL plant at Trichy and plenty of money and time is saved by the plant. He has already established excellent research links with Universities and Institutes within India and also established International research collaboration in UK and Korea. His International standing as a Scientist is evidenced by his publication record and extensive collaborations with overseas scientists. His contribution in the field of environmental and polymer chemistry is substantial and the contribution is significant in the context of present day affairs and need. He has traveled widely across the globe in connection with International Conferences and discussions (China, Hungary, Netherland, Japan, UAE & Thailand. He has organized several National and International Conferences, seminars and workshops. He is serving as reviewer of prestigious international SCI journals. He has been awarded INSA Fellowship, Tamil Nadu Scientist Award (TANSA) 2009, UGC BSR one time grant award and UGC-UKIERI thematic partnership for his excellent contribution in Chemical Sciences and Technology. He is also a first recipient of Alagappa Excellence award in Research. He was now awarded UGC BSR Faculty Fellowship. He is life member of ICS, ICS, SAEST, ISEAC and Swedeshi Science movement.

Significant Contribution to Science and Technology

One of the most pressing tasks for mankind during the scientific and technical revolution, in addition to efforts to preserve peace, is the protection of the environment. It is thus imperative that modern societies find means of limiting pollution. A great variety of branches of science participate actively in the solution of environmental problems. One of the most important branches in this participation is electrochemistry. Electrochemistry is used in the determination and monitoring of pollutants and in the removal of toxic substances. Electrochemical principle was employed for the development of analytical determination method for organic pollutants and treatment of various effluents.

Basic electrochemical behavior and redox properties were investigated for many organic pollutants. Their redox mechanism was proposed. Employing bare and modified electrodes developed highly sensitive electroanalytical procedure for the determination of organic pollutants such as pesticides, dyes and carcinogenic phenolic compounds. Conducting polymers were deposited on glassy carbon electrode and used as the electrochemical sensor for organic pollutants. Trace quantities down to ppb level of these pollutants in the real samples can be determined by employing these procedures. These

methods are highly selective and sensitive and can be used for field analysis. These methods can very well be very well be adopted by the pollution control boards.

Employing cheaper electrode materials like graphite anodes developed electrochemical treatment methods for dye, distillery, pesticide and pharmaceutical effluents. Complete decolourisation of dye and distillery effluents was achieved. By adopting this method complete removal of organic substances in the effluents were achieved. The COD and BOD were reduced considerably. The characteristics of untreated and treated effluent were found out and the suitability of the treated effluent was ascertained. The treated effluent was found to have suitability for recycling. Excellent results were arrived in the laboratory scale studies and the patent preparation is under progress. The above studies led to good number of international publications. Hence the contribution of the applicant in the field of industrial and polymer chemistry is substantial and the contribution is significant in the context of present day affairs and need. The output of the contributions can very well be used to solve the problems in environment and industry.

Summary of the Most Significant Contribution

The summary of significant contributions of the applicant is listed below:

- Development of electrochemical stripping procedure for the determination of organic pollutants such as pesticides, carcinogenic dyes and phenolic compounds and electrochemical treatment method for effluents are the significant contributions. The most significant contribution of the nominee has direct relevance to the present day pollution problems.
- Electrochemical degradation procedure was developed for distillery and dye effluents
- Development of indigenous conducting polymer based paint for the application on steel structures used in defence purposes assumes significance because of higher corrosion protection with lower cost and by this providing indigenous technology for our nation's security.
- The difficulty in the assessment of quality of the paint sample used in larger quantities in industries has been addressed successfully by the development of simple, effective and quick determination by FTIR technique. This procedure is followed in BHEL, Tiruchi and they saved lot of money and time as well as man power.
- Nano conducting polymer based paints for boiler structures were developed and the technology is under consolidation. It will be supplied to BHEL, Tiruchi and definitely this will lead to landmark in the corrosion protection of the boiler structures.
- Efficient dye sensitized solar cells were fabricated and tested
- Highly sensitive biosensor for antioxidants was developed
- New organic compounds having potential antibacterial, antifungal and antitumor properties were synthesised
- Novel electrochromic materials were synthesised and their properties were studied
- New membranes were prepared and used for fuel cell applications.

Citation in science base (Ref: 2734)

Cleaning up distillation

The waste water produced by distillery processes is a highly pigmented effluent that taints rivers and waterways. Now, a relatively simple, safe and efficient procedure for removing the main colorant, the dark brown pigment, melanoidin, has been devised by chemists in India.

P. Manisankar, S. Viswanathan and C. Rani of the Department of Industrial Chemistry, at Alagappa University, in Tamilnadu point out in a forthcoming issue of Green Chemistry that while electrochemical treatment of industrial effluent provides a valuable contribution to waste water clean-up, completely removing the colour from distillery effluent remains a difficult task. Now, Manisankar and his colleagues have designed an electrochemical reactor that uses either a planar graphite (Gr) anode or titanium substrate insoluble anode (TSIA) to completely decolourise distillery

effluent. Molasses is the raw material used by distilleries in India for the commercial production of ethanol. It is readily available and inexpenseive. However, its use comes at a price. Each day an estimated 0.2 million litres of waste water from molasses distillation is produced. 13 to 15 litres of waste water are produced for every litre of bioethanol manufactured. This effluent contains almost 2% of a dark brown pigment, melanoidin. Melanoidin – $C_{17\text{-}18}H_{26\text{-}27}O_{10}N$ is a product of non-enzymatic (Maillard) reactions between carbohydrates and amino acids in the distillation process. Its molecular weight ranges from 5000 to 40000, it is acidic, polymeric and composed of highly dispersed colloids, explains Manisankar. These colloids are negatively charged because of the dissociation of carboxylic acids and phenolic groups. Colour does not sound initially like too much of a problem. However, highly pigmented waste water can cause major problems for the environment. It reduces sunlight penetration in rivers, lakes and other waters, so decreases photosynthetic activity and dissolved oxygen, which ultimately harms aquatic life. Disposal on the land has a negative impact too in reducing soil alkalinity and inhibiting seed germination. Biological methods to break down this pigment have been partially successful, while oxidative processes involving ozone or hydrogen peroxide are not economically viable. Electrochemical degradation, the researchers believe, provides the most appropriate alternative.

Reference: Green Chem., P. Manisankar, S. Viswanathan and C. Rani.

Electrochemical treatment of distillery effluent using catalytic anodes. 2003, 5, DOI: 10.1039/b208424b

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Research Supervision / Guidance

Program of Study		Completed	Ongoing
Research	**Ph.D.**	**32**	**03**
	M.Phil.	**54**	**--**
Project	**PG**	**42**	**02**
	UG /Others	**--**	**--**

Ph.D.s Awarded Under Dr.P.Manisankar's Direct Supervision

S. No.	Name of the student	Year of admission	Year of award	Title of the Thesis	No. of papers with the student
1	R. Hariharaputhiran	1990	1995	Voltammetric and Corrosion inhibition studies on N-(Arylidene)phenylamine N-Oxides..	3
2	A. Baskar	1990	1996	Spectral and Electrochemical studies on some carbonyl compounds and their derivatives.	1
3	H.Gurumallesh Prabu	1991	1996	Electroanalysis of organic pollutants	3
4	S.Venkateswaran	1995	2001	Electrochemical studies of organosulphur compounds	--
5	A.Mercy Pusphalatha	1997	2003	Electroanalytical redox and catalytic behaviourof naphthaquinones	2
6	M.Abdul Kadhir	1997	2003	Electrochemical studies of organics colourants	2
7	G.Selvanathan	1997	2003	Electrochemical studies of organic pollutants	17
8	C.Rani	1998	2003	Electrochemical studies and electrochemical treatment of dyes	5
9	S.Viswanathan	1998	2004	Electrochemical studies of toxic compounds	12
10	Rm.Somasundaram	1997	2004	Electrochemical studies of some fine chemicals and dyes	1
11	D.Chidambaram	1998	2004	Solventinducedmodificationsin poly(ethyleneterephthalate) structure,propertiesanddyeability	4
12	D.Jestin Roy	1999	2005	Investigationsonthe analysisof pesticides	1
13	A.Gomathi	1999	2005	Investigation on Electrocatalytic reductionofmolecularoxygenwith 9,10-Anthraquinone modifiers	8
14	C.Vedhi	2001	2006	Electrochemical studies of modified systems	15
15	V.Sreeja	2002	2008	Spectral and electrochemical studies of dyes	1
16	S.Srinivasan	2004	2011	Synthesis of newer heterocyclic compounds and process development for organic intermediates	5
17	PL.Abirama Sundari	2006	2011	Development of newer electrochemical sensors	6
18	SP. Palaniappan	2006	2011	Studies on the synthesis, characterisation and applications of conducting polymers	15
19	V.S.Vidhya	2007	2012	Preparation and characterization of semiconductorthinfilmfordevices	2

20	A.Mohamed Sikkandar	2005	2011	Electroanalysis of pollutants	2
21	S. Valarselvan	2006	2012	Studies on the electrocatalytic behaviour of newer systems	2
22	V.Ravichandran	2002	2013	Studies on the effect of chemical reagents on beneficiation of natural graphite	3
23	S.Sankari	2005	2014	Synthesis, characterization and study of biological activity of newer heterocyclic compounds	6
24	M.Valarmathi	2005	2013	Electroanalysis of organic pollutants	2
25	S. Chitra	2006	2012	Synthesis, characterization and biological studies of heterocyclic compounds	8
26	D. Ilangeswaran	2006	2013	Investigation on the development of modified electrodes	2
27	J. Anandha Raj	2007	2012	Development of Inorganic Nanoparticle–Conducting Polymer Nanocomposites	2
28	R.Sasikumar	2007	2012	Synthesis, Characterization and Applications of Newer Carbon Nanotube-Conducting Polymer Composites	7
29	V.Rajasekaran	2007	2014	Studies on the analysis of paint and cured films	2
30	M.Sethupathy	2010	2014	Development of pvdf based electrospun polymer Electrolyte membranes for high performance Dye sensitized solar cells	6
31	V. Sethuraman	2011	2016	Investigation on the development of nanostructured conducting polymer-enzyme based biosensors for polyphenol antioxidants	5
32	P. Muthuraja	2012	2018	Studies on the synthesis of the novel indole carbinol based heterocyclic compounds and their biomedical applications	14

Ongoing Ph.D.s under P.Manisankar's Direct Supervision

S No	Name	Year of admission	Title of the thesis	No. of papers with the student
1	M. Senthil Kumar	2012 (Reg.No.538 & date 23.07.2012)	Studies on the synthsis, Characterization and photosensor applications of conducting polymer-rare earth metal oxide nanocomposites.	--
2	P. Sathiaseelan	2015 (Reg.no. 1183 & date 18.08.15)	Green synthesis of newer heterocyclic compounds and their biological evaluation	--
3	V.Veeramani	2015 (Reg.No.1254 & date 04.11.15)	Synthesis of novel heterocyclic compounds and their biological evaluations	02

Publications

International		National		Others
Journals	Conferences	Journals	Conferences	Books / Chapters
180	72	54	154	06

h-index	:	32
i10 index	:	100
Total Citations	:	3455

Selected Recent Publications

1. *Structure-activity relationship of pyrazolo pyrimidine derivatives as inhibitors of mitotic kinesin Eg5 and anticancer agents*, Muthuraja, P.; Veeramani, V.; Prakash, S.; Himesh, M.; Venkatsubramanian, U.; Manisankar, P., Bioorganic Chemistry, 84, 2019, 493-504. (Impact factor: 3.929)
2. *Dihydroactinidiolide, a natural product against Aβ25-35 induced toxicity in Neuro 2a cells: Synthesis, in silico and in vitro studies*, M Das, M.; Prakash, S.; Nayak, C.; Thangavel, N.; Manisankar, P,; Singh, S.K., Bioorganic Chemistry, 81, 2019, 340-349. (Impact factor: 3.929)
3. *Poly (ethylene glycol) stabilized synthesis of Inorganic Cesium lead iodide Polycrystalline light-absorber for Perovskite Solar Cell*, Velu, K.S.; Raj, J.A.; Sathappan, P.; Bharathi, B.S.; Doss, S.M.; Selvam, S.; Manisankar, P.; Stalin, T., Materials Letter, 240, 2019, 132-135. (Impact factor: 2.684)
4. *Synthesis of N-(1-(6-acetamido-5-phenylpyrimidin-4-yl) piperidin-3-yl) amide derivatives as potential inhibitors for mitotic kinesin spindle protein*, Muthuraja, P.; Veeramani, V.; Prakash, S.; Himesh, M.; Venkatsubramanian, U.; Manisankar, P., European J of Medicinal Chemistry, 148, 2018, 106-115. (Impact factor: 4.816)
5. *Environmentally Benign niobium chloride catalyst one-pot multicomponent synthesis of spiro[indoline-3,4'-pyrano[2,3-c]pyrazole*, Veeramani, V.; Muthuraja, P.; Prakash, S.; Manisankar, P., Chemistry Select, 3, 2018, 10027– 10031. (Impact factor: 1.55)
6. *Porous cobalt metal-organic framework with ultracapacitor activity*, Muthuraja, P.; Prakash, S.; Raj, J.A.; Manisankar, P., Materials Letter, 222, 2018, 8-11. (Impact factor: 2.684)
7. *Stable nanofibrous poly (aryl sulfone ether benzimidazole) membrane with high conductivity for high temperature PEM fuel cells*, Muthuraja, P.; Prakash, S.; Shanmugam, V.M.; Manisankar, P., Solid state ionics, 318, 2018, 201-209. (Impact factor: 2.751)

8. *Potential membranes derived from poly (aryl hexafluoro sulfone benzimidazole) and poly (aryl hexafluoro ethoxy benzimidazole) for high-temperature PEM fuel cells*, Muthuraja, P.; Prakash, S.; Susaimanickam, A.; Manisankar, P., International J of hydrogen energy, 43(47), 2018, 21732-21741. (Impact factor: 4.229)

9. *Novel perovskite structured calcium titanate-PBI composite membranes for high-temperature PEM fuel cells: Synthesis and characterizations*, Muthuraja, P.; Prakash, S.; Shanmugam, V.M.; Manisankar, P., International J of hydrogen energy, 43(9), 2018, 4763-4772. (Impact factor: 4.229)

10. *Improved conductivity and antibacterial activity of poly (2-aminothiophenol)-silver nanocomposite against human pathogens*, Boomi, P.; Anandha Raj, J.; Palaniappan, SP.; Poorani, G.; Selvam, S.; Manisankar, P. Gurumallesh Prabu, H.; Jeyakanthan, J.; Langeswaran, VK., Journal of Photochemistry and Photobiology B: Biology, 187, 2018, 323-329. (Impact factor: 3.165)

11. *Synthesis of rhodamine based organic nanorods for efficient chemosensor probe for Al (III) ions and its biological applications*, Maniyazagan, M.; Mariadasse, R.; Jeyakanthan, J.; Lokanath, N.K.; Naveen, S.; Premkumar, K.; Muthuraja, P.; Manisankar, P. ; Stalin, T. Sensors and Actuators B: Chemical, 254, 2018, 795-804. (Impact factor: 5.5)

12. *Synthesis, physicochemical properties, thermal analysis and biological application of phosphorescent cationic iridium (III) complexes*, Thamilarasan, V.; Sethuraman, V.; Karunakaran, M.; Sethupathi, M.; Manisankar, P.; Selvaraju, C.; Sengottuvelan, N. Inorganica Chimica Acta, Available online 1 August 2017. (https://doi.org/10.1016/j.ica.2017.07.061)

13. *Easy synthesis of microporous/mesoporous cobalt organic framework as binder less lithium-ion battery electrode*, Prakash, S.; Chandrasekar, P.; Muthuraja, P.; Manisankar, P. Journal of Alloys and Compounds, 714 (2017) 603-609. (Impact Factor: 3.13)

14. *Environmentally Benign Copper Triflate-Mediated Multicomponent One-Pot Synthesis of Novel Benzo [g] chromenes Possess Potent Anticancer Activity*, Muthuraja, P.; Prakash, S.; Sethuraman, V.; Manisankar, P. ChemistrySelect, 2, 2017, 5068–5072

15. *Rhodamine based "turn–on" molecular switch FRET–sensor for cadmium and sulfide ions and live cell imaging study*, Maniyazagan, M.; Mariadasse, R.; Jeyakanthan, J.; Lokanath, N.K.; Naveen, S.; Premkumar, K.; Muthuraja, P.; Manisankar, P. ; Stalin, T. Sensors and Actuators B: Chemical, 238, 2016, 565-577. (Impact factor: 5.5)

16. *A highly sensitive electrochemical biosensor for catechol using conducting polymer reduced graphene oxide–metal oxide enzyme modified electrode*, Sethuraman, V.; Muthuraja, P.; Raj, JA.; Manisankar, P. Biosensors and Bioelectronics 84, 2016, 112-119. (Impact factor: 7.474)

17. Utilization of sodium montmorillonite clay for enhanced electrochemical sensing of amlodipine, Sikkander, M.; Vedhi, C.; Manisankar, P. Ind. J. Chem 55, 2016, 571-575. (Impact factor: 0.729)
18. *Nanomaterials for Electrochemical Sensing and Decontamination of Pesticides, Viswanathan, S.; Manisankar, P.* Journal of Nanoscience and Nanotechnology, 15 (9), 2015, 6914-6923. (Impact factor: 1.440)
19. *Electrochemical detection of mercury using biosynthesized hydroxyapatite nanoparticles modified glassy carbon electrodes without preconcentration,* Kanchana, P.; Sudhan, N.; Anandhakumar, S.; Mathiyarasu, J.; Manisankar, P.; Sekar, C., RSC Advances, 5, 2015, 68587-68594. (Impact factor: 3.270)
20. *In situ electrochemical synthesis of a poly (o-anisidine) counter electrode for a dye-sensitized solar cell.* Menaka, C.; Manisankar, P.; Stalin, T. Journal of Applied Polymer Science. 2015, 132(23), 42041. (Impact factor: 1.920)
21. *Preparation and characterization of poly (o-anisidine) with the influence of surfactants on stainless steel by electrochemical polymerization as a counter electrode for dye-sensitized solar cells.* Menaka, C.; Manisankar, P.; Stalin, T. Journal of Applied Polymer Science. 2015, 132(31), 42310. (Impact factor: 1.920)
22. *Photovoltaic performance of dyesensitized solar cells fabricated with polyvinylidene fluoride–polyacrylonitrile–silicondioxide hybrid composite membrane.* Sethupathy, M.; Pandey, P.; Manisankar, P. Materials Chemistry and Physics. 2014, 143(3), 1191. (Impact factor: 2.129)
23. *Evaluation of photovoltaic efficiency of dye-sensitized solar cells fabricated with electrospun PVDF-PAN-Fe_2O_3 composite membrane.* Sethupathy, M.; Pandey, P.; Manisankar, P. Journal of Applied Polymer Science. 2014, 131(22), 41107. (Impact factor: 1.920)
24. *Development of Biosensor for Catechol Using Electrosynthesized Poly (3-methylthiophene) and Incorporation of LAC Simultaneously.* Sethuraman, V.; Muthuraja, P.; Sethupathy, M.; Manisankar, P. Electroanalysis. 2014, 26(9), 1958. (Impact factor: 2.471)
25. *Development of quasi-solid-state dye-sensitized solar cell based on an electrospun polyvinylidene fluoride–polyacrylonitrile membrane electrolyte.* Sethupathy, M.; Pandey, P.; Manisankar, P. Journal of Applied Polymer Science. 2014, 131(6), 40022. (Impact factor: 1.920)
26. *Preparation of PVdF-PAN-V_2O_5 Hybrid Composite Membrane by Electrospinning and Fabrication of DyeSensitized Solar Cells.* Sethupathy, M.; Ravichandran, S.; Manisankar, P. International Journal of Electrochemical Science. 2014, 9, 3166. (Impact factor: 1.956)
27. *Study on antibacterial activity of chemically synthesized PANI-Ag-Au nanocomposite.* Boomi, P.; Gurumallesh Prabu, H.; Manisankar, P.; Ravikumar, S. Applied Surface Science. 2014, 300, 6672. (Impact factor: 3.150)

28. *Synthesis of mononuclear copper (II) complexes of acyclic Schiff's base ligands: spectral, structural, electrochemical, antibacterial, DNA binding and cleavage activity.* Jayamani, A.; Thamilarasan, V.; Sengottuvelan, N.; Manisankar, P.; Kang, S.K. Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy. 2014, 122, 365. (Imapct factor: 2.653)
29. *Preparation and Electrochemical Performances of Samarium Substituted* $LiSm_{1-x}Ni_xO_2$ *(0.00> x> 0.20) Cathode Materials for Rechargeable Lithium Ion Batteries.* Mohan, P.; Paruthimal Kalaignan, G.; Manisankar, P. Science of Advanced Materials. 2013, 5(2), 143. (Impact factor: 2.908)
30. *Electrochemical Evaluation of Anticorrosive Performance of Organic Acid Doped Polyaniline Based Coatings.* Rajasekharan,V.; Stalin, T.; Viswanathan, S.; Manisankar, P. International Journal of Electrochemical Science. 2013, 8, 11327. (Impact factor: 1.956)
31. *Electrochemical Synthesis, Characterization and Electrochomic Behaviour of Poly(4-amino diphenylamine-co-4,4'–diaminophenyl sulfone).* Ilangeswaran, D.; Manisankar, P. Electrochimica Acta. 2013, 87, 895. (Impact Factor: 4.803)
32. *Evaluation of the individuality of white rot macro fungus for the decolorization of synthetic dye.* Priyanka Pandey; Ram Prakash Singh; Kailash Nath Singh; Paramasivam Manisankar. Environmental Science and Pollution Research. 2013, 20(1), 238. (Impact Factor: 2.757)
33. Fabrication of an efficient polyaniline–polyphenol oxidase based biosensor for catechol. Sethuraman, V.; Muthuraja,P.; Manisankar, P. Analytical Methods. 2013, 5(22), 6523. (Impact factor: 1.938)
34. *Green emitting phosphorescent iridium (III) complex: Structural, photophysical and electrochemical properties*. Thamilarasan, V.; Jayamani, A.; Manisankar, P..; Kim, Y.I.; Sengottuvelan, N. Inorganica Chimica Acta. 2013, 408, 2405. (Impact factor: 2.041)
35. *A kinetic study on the formation of poly(4 aminodiphenylamine)/copper nanocomposite using UV-visible spectroscopy*. Starlet Thanjam, I.; Francklin Philips, M.; Manisankar, P.; Lee, K.-P.; Gopalan, A.I. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy. 2013, 116, 321. (Impact factor: 2.653)
36. *Enhanced sensing of anthraquinone dyes using multiwalled carbon nanotubes modified electrode.* Valarmathi, M.; Gomathi, A.; Manisankar, P. International Journal of Environmental Analytical Chemistry. 2013, 93(3), 349. (Impact Factor: 1.321)
37. *Gas dispersion characteristics of flotation reagents.* Ravichandran, V.; Eswaraiah, C.; Sakthivel, R.; Biswal, S.K.; Manisankar, P. Powder Technology. 2013, 235, 329. (Impact Factor: 2.759)
38. *Facile One-Pot Synthesis of Poly(4-Aminodiphenylamine)/Copper Nanocomposite and Electrocatalytic Oxidation of Ascorbic Acid*. Starlet Thanjam; Francklin Philips, M.; Manisankar, P.; Kwang-Pill Lee; Anantha-Iyengar Gopalan. Journal of Nanoelectronics and Optoelectronics. 2013, 8(6), 545. (Impact factor: 0.369)

39. *Conductivity, structural and electrochemical behaviour of plasticized polymer electrolytes for dye-sensitized solar cell*. Menaka, C.; Sakthi Velu, K.; Manisankar, P.; Stalin, T. Indian Journal of Chemistry A, 2013, 52A, 467. (Impact factor: 0.728)
40. *Electrocatalytic properties of glassy carbon electrodes modified with hydroxy derivatives of 9,10-anthraquinone for oxygen reduction reaction*. Manisankar, P.; Valarselvan, S. Ionics. 2012, 18(7), 679. (Impact Factor: 2.119)
41. *Solvent based selectivity in the synthesis of di(2-aryl-1H-3-indolyl) sulfides and 1- aryl-2-[(2-aryl-1H-3-indolyl)sulfanyl]-1-ethanones.* Chitra, S.; Nitin Paul; Muthusubramanian, S.; Manisankar, P. RSC Advances. 2012, 2, 1432. (Impact Factor: 3.289)
42. *Mechanochemical synthesis and characterization of poly(2,5-dimethoxy aniline) salts*. Palaniappan, SP.; Chang, Y.-T.; Liu, C.-M.; Manisankar, P. Journal of Applied Polymer Science. 2012, 124(5), 4281. (Impact Factor:1.920)
43. *Influence of medium on the nanostructure and properties of poly(4-aminodiphenylamine)-silver nanocomposites.* Thanjam, I.S.; Philips, M.F.; Komathi, S.; Manisankar, P.; Gopalan, A.I.; Lee, K.-P. Polymer International. 2012, 61(4), 539. (Impact Factor: 2.414)
44. *Determination of three analgesics in pharmaceutical and urine sample on nano poly (3, 4-ethylenedioxythiophene) modified electrode.* Gopu, G.; Muralidharan, B.; Vedhi, C.; Manisankar, P. Ionics. 2012, 18(1-2), 231. (Impact Factor: 2.119)
45. *Newer dynamic electrochromic nanorods of poly(o-anisidine-co-ethyl 4-aminobenozate)synthesized by electrochemical polymerization*. Sasikumar, R.; Manisankar, P. Electrochimica Acta. 2012, 59, 558 (Impact Factor: 4.803)
46. *A facile, water mediated, microwave-assisted synthesis of 4,6-diaryl-2,3,3a,4-tetrahydro-1H-pyrido[3,2,1-jk] carbazoles by domino Fischer indole reaction-intramolecular cyclization sequence*. Chitra, S.; Nitin Paul; Manisankar, P.; Muthusubramanian, S. Green Chemistry. 2011, 13, 2777. (Impact Factor: 8.506)
47. *Photoluminescent studies on porous silicon/tin oxide heterostructures*. Vidhya, V.S.; Murali, K.R.; Subramanian, B.; Manisankar, P.; Sanjeeviraja, C.; Jayachandran, M. Journal of Alloys and Compounds. 2011, 509(6), 2842. (Impact Factor: 3.014)
48. *Modeling of nonlinear boundary value problems in enzyme-catalyzed reaction diffusion processes*. Rahamathunissa, G.; Manisankar. P.; Rajendran, L.; Venugopal, K. Journal of Mathematical Chemistry. 2011, 49, 457. (Impact Factor: 1.056).
49. *Study of inclusion complex of β-cyclodextrin and ortho-anisidine; photophysical and electrochemical behaviors*. Srinivasan, K.; Vaheethabanu, J.; Manisankar, P.; Stalin, T. Journal of Molecular Structure. 2011, 987(1-3), 214. (Impact Factor: 1.780).
50. *Development of ultrasensitive surfactants doped poly(3,4-ethylenedioxythiophene)/multiwalled carbon nanotube sensor for the detection of pyrethroids and an organochlorine pesticide.* Abirama Sundari, P.; Manisankar, P. Journal of Applied Electrochemistry. 2011, 41(1), 29. (Impact Factor: 2.223)

51. *Large Scale Preparation of Polyaniline Nanospheres Anchored with Thiol Stabilized Gold Nanoparticles.* Komathi, S.; Palaniappan, SP.; Manisankar, P.; Gopalan, A.I.; Lee, K-P. Journal of Nanoscience and Nanotechnology. 2011, 11(1), 358. (Impact Factor: 1.440)
52. *Development of porous silicon matrix and characteristics of porous silicon/tin oxide structures*. Vidhya, V.S.; Padmavathy, P.; Murali, K.R.; Sanjeeviraja, C.; Manisankar, P.; Jayachandran, M. Journal of Non-Crystalline Solids. 2011, 357, 1522. (Impact Factor: 1.825)
53. *Stripping voltammetric determination of analgesics in their pharmaceuticals using nano riboflavin modified glassy carbon electrode.* Gopu, G.; Manisankar, P.; Muralidharan, B.; Vedhi, C. International Journal of Electrochemistry. 2011, 2011, Article ID 269452, 11 pages. (Impact factor: 1.956)
54. *Influence of medium on the nanostructure and properties of poly(4-aminodiphenylaminme)-silver nanocomposite*. Komathi, S.; Manisankar, P.; Gopalan, A.I.; Lee, K-P. Polymer International. 2011, 61, 539. (Impact Factor: 2.414)
55. *Electrochemically synthesized nano size copolymer, poly (aniline-co-ethyl 4-aminobenzoate) and its spectroelectrochemical studies*. Sasikumar, R.; Manisankar, P. Polymer. 2011, 52(17), 3710. (Impact Factor: 3.586)
56. *A facile synthesis of carbocycle-fused mono and bis-1,2,3-selenadiazoles and their antimicrobial and antimycobacterial studies*. Selvam Chitra; Nidhin Paul; Shanmugam Muthusubramanian; Paramasivam Manisankar; Perumal Yogeeswari; Dharmarajan Sriram. European Journal of Medicinal Chemistry. 2011, 46(11), 5465. (Impact Factor:3.904)
57. *Synthesis of 3-heteroarylthioquinoline derivatives and their in vitro antituberculosis and cytotoxicity studies.* Selvam Chitra; Nidhin Paul; Shanmugam Muthusubramanian; Paramasivam Manisankar; Perumal Yogeeswari; Dharmarajan Sriram. European Journal of Medicinal Chemistry. 2011, 46, 4897. (Impact Factor: 3.904)
58. *Biofilm formation by Streptococcus pyogenes: Modulation of exopolysaccharide by fluoroquinolone derivatives*. Shafreen, R.M.B.; Srinivasan, S.; Manisankar, P.; Pandian, S.K. Journal of Bioscience and Bioengineering. 2011, 112(4), 345. (Impact Factor: 1.964)
59. *Preparation of a functional nanofibrous polymer membrane incorporated with poly(2-aminothio phenol) stabilized gold nanoparticles*. Komathi Shanmugasundaram; Palaniappan Subramanian; Manisankar Paramasivam; Gopalan Anantha Iyengar; Kwang-Pill Lee. Gold Bull. 2011, 44, 37. (Impact Factor: 2.323)
60. *Uncatalyzed hydrogen-transfer reductions of aryl ketones*. Srinivasan, S.; Manisankar, P. Synthetic Communications. 2011, 41,1338. (Impact Factor: 1.065)

61. *Mechanochemical synthesis of poly(2,5-dimethoxy aniline) nanobelts and its electrochemical performance in hybrid supercapacitors.* Palaniappan, SP.; Richard Prabhu Gnanakan, S.; Lee, Y.S.; Manisankar, P. Ionics. 2011, 17(7), 603. (Impact Factor: 2.119)
62. *Development of nano poly(3-methyl thiophene)/multiwalled carbon nanotubes sensor for the efficient detection of some pesticides.* Sundari, P.A.; Manisankar, P. Journal of the Brazilian Chemical Society. 2011, 22, 746. (Impact Factor: 1.096)
63. *Course of poly(4-aminodiphenylamine)/Ag nanocomposite formation through UV-vis spectroscopy*. Thanjam, S.; Philips, M.F.; Komathi, S.; Manisankar, P.; Sivakumar, C.; Gopalan, A.; Lee, K-P. Spectrochimica Acta – Part A Molecular and Biomolecular Spectroscopy. 2011, 79, 1256. (Impact Factor: 2.653)
64. *Template-free mechanochemical route to prepare crystalline and electroactive polydiphenylamine nanostructures*. Palaniappan, SP.; Chang, Y.-T.; Liu, C.-M.; Manisankar, P. Materials Chemistry and Physics. 2011,129, 948. (Impact Factor: 2.101)
65. *Mechanochemical preparation of polydiphenylamine and its electrochemical performance in hybrid supercapacitors.* Palaniappan, SP.; Manisankar, P. Electrochimica Acta. 2011, 56, 6123 (Impact Factor: 4.805)
66. *Electrocatalytic reduction of oxygen at glassy carbon electrode modified by polypyrrole/ anthraquinones composite film in various pH media.* Valarselvan, S.; Manisankar, P. Electrochimica Acta. 2011, 56, 6945. (Impact Factor: 4.805)
67. *Electrochemical synthesis and characterization of poly (aniline-co-1-amino-9,10-anthraquinone), a nanosized conducting copolymer*. Palaniappan, SP.; Manisankar, P. Journal of Polymer Research. 2011, 18, 311. (Impact Factor: 1.969)

Funded Research Projects

Completed Projects

S. No	Agency	Period		Project Title	Budget (Rs. In lakhs)
		From	To		
1	AICTE, New Delhi	1996-97	1997-98	Development of treatment process for Dye house effluent by electrochemical method	7.30
2	AICTE, New Delhi	1997-98	1998-99	Development of electrochemical effluent treatment and recycling of water	5.60
3	AICTE, New Delhi	1998-99	1999-2000	Development of treatment process for distillery effluent by electrochemical route	5.00

4	UGC, New Delhi	1997-98	1999-2000	Development of a new method for the analysis and removal of pollutants	4.30
5	DST, New Delhi	1997-98	1999-2000	Development of stripping procedure using modified electrodes for trace determinations	13.7
6	DST, New Delhi	2004-05	2007-08	Development of nano sized cathode materials for lithium battery applications	22.37
7	DST (Nano mission) New Delhi	2005-06	2008-09	Investigation on the synthesis and characterization of functional/ multicomponent nanostructureed (nanotube / nanorod / nanoribbon / nanocables) polyaniline based materials	40.45
8	DST, New Delhi	2006-07	2009-10	Carbon nanotube modified electrode for enhanced voltammetric sensing of organic pollutants	32.43
9	Alagappa University Research Fund (AURF)	2009-10	2011-12	Development of electrospun nanofibrous polymerelectrolytemembranesforhigh performance dye sensitized solar cells.	4.00
10	UGC BSR One time grant	2011-12	2012-15	One-step co-electropolymerized nano Conducting polymer–enzyme composite film biosensor for sensitive determinationofpolyphenolantioxidants	7.00
11	DST New Delhi	2011-12	2014-16	One-step co-electropolymerized nano Conducting polymer–enzyme composite film biosensor for sensitive determinationofpolyphenolantioxidants	20.09
12	UK-India Education and Research Initiative (UGC-UKIERI)	2013-14	2014-16	Metal Organic Redox Frameworks (MoFs) for Photochemical Textile Processes	13.57 (UGC) **£ 14600** (UK)

Other Projects

S. No	Agency	Period		Project Title	Budget (Rs. In lakhs)
		From	To		
1	UGC PDF	2015	2020	Design of a Li and Na-ion full cell battery using high capacity anode material for portable electronic devices Dr. S.Prakash Mentor: Dr. P. Manisankar (Mentorship transferred to Dr.Paruthimal Kalaignan)	31.16

2	UGC BSR	2017	2020	Interdigitatedelectrodearrayfor Label-free detection of salmonella typhimurium (Discontinued from 01.01.18)	33.00

Consultancy Projects

S. No	Agency	Period		Project Title	Budget (Rs. In lakhs)
		From	To		
1	Salem-Dharmapuri Chamber of Commerce	2005	2006	WealthfromWaste:Productionof Bioethanol from the solid waste (Thippi) of Sago Industries	1.25
2	DRDL, Hydrabad	2006	2008	Development and evaluation of alternatives chromate based primers onaluminiumaerospace alloys.	9.79
3	BHEL, Trichy	2008	2009	Development and Application of AnalyticalMethodsForEvaluation of Paints Using FTIR Spectroscopy	1.98
4	TNRSP, Chennal	2006	2010	Environmental monitoring project (for Tamilnaduroadsectorproject in upgrading road from Ramanathapuram toTuticorin)	10.31
5	BHEL, Trichy	2009	2010	Development and Performance EvaluationofConductingPolymer Based Primer Paints for Boiler Structures	3.80
6	TCPL, Kovilur	2016	2017	Ground water analysis in and aroundTCPLfactory,Kovilur	5.00*

* Principal consultant for six months in this consultancy and handed over the same to the next HOD due to superannuation.

Other PI/Coordinator positions held

1. Coordinator for UGC SAP, DST FIST, DST PURSE & RUSA (Project coordinator)

Distinctive Achievements / Awards

1. CSIR JRF and SRF (1980-1984)
2. INSA visiting fellowship to carry out advanced research with Prof. A. Q. Contractor at IITB, Mumbai (1980-1984)
3. Research board of advisors, American Biographical institute (2001)
4. Consulting editor of The Contemporary WHO'S WHO, American Biographical institute (2002)
5. Certificate of achievement and cash award for the academic performances, AlagappaUniversity, Karaikudi (2007)
6. Tamil Nadu Scientist Award (TANSA) for Chemical Sciences, Tamil Nadu State Council for Science and Technology, Chennai (2009)

7. BSR One time grant in Chemistry by UGC, New Delhi (2013-14)
8. Alagappa Excellence Award in Research 2015-16, Alagappa University, Karaikudi (2016)
9. UGC BSR Faculty Fellowship by UGC, New Delhi (2017)

Events organized in leading roles

Number of Seminars / Conferences / Workshops / Events organized: 30

1. National Seminar on Advances in Electrochemical Science and Technology at Alagappa University, Karaikudi during April 1991.
2. National Seminar on Advances in Electrochemical Science at Alagappa University, Karaikudi on 23 Dec. 1994.
3. National Seminar on Advances in on Emerging Trends in Electrochemical, Textile and Polymer Industries at Alagappa University, Karaikudi during 22- 23 April, 1996.
4. National Seminar on Recent Trends in Material Science at Alagappa University, Karaikudi on 3 May, 1996
5. National Seminar on Recent advances in Nano Science and Technology (RANSAT 2005) at Periyar University, Salem during 29-30 September, 2005
6. National Seminar on Recent advances in textile and electrochemical sciences (RATES 2007) at Alagappa University, Karaikudi during 1-2 June, 2007
7. National Workshop on GREEN CHEMISTRY at Alagappa University, Karaikudi on 3 March, 1996
8. National Seminar on Recent advances in textile and electrochemical sciences (RATES 2008) at Alagappa University, Karaikudi during 19-20 June, 2008
9. National Workshop on Green Process Techniques for Industrial Applications (GREPTIA-2009) at Alagappa University, Karaikudi during 20-21 March, 2009
10. Tamilaga Ariviyal Peravai Ninth Seminar at Alagappa University, Karaikudi during 11-13 September, 2009
11. Two days National Conference on Recent advances in textile and electrochemical sciences (RATES 2009) at Alagappa University, Karaikudi during 4-5 December, 2009
12. National Workshop on Electroanalytical Techniques 2010 at Alagappa University, Karaikudi during 11-13 October, 2010
13. International Year of Chemistry 2011 (IYC2011) – Seminar on Chemistry Our Life, Our Future at Alagappa University, Karaikudi on 28 February, 2011
14. Celebration of World Water day and One day seminar at Alagappa University, Karaikudi on 22 March, 2011
15. Two days National Conference on Recent Trends in Green Synthesis (RTGS- 2011) at Alagappa University, Karaikudi during 5-6 August, 2011
16. Two days UGC Sponsored Workshop on "Chemistry-Our Environment, Our Life and Our Future" at Alagappa University, Karaikudi during 22-23 December, 2011
17. National Conference on Recent advances in textile and electrochemical sciences (RATES 2012) and World Water day at Alagappa University, Karaikudi during 22-23 March, 2012

18. International Conference on Recent advances in textile and electrochemical sciences (RATES 2013) at Alagappa University, Karaikudi during 21-23 March, 2013
19. Technical Entrepreneur Development Programme -2013 at Alagappa University, Karaikudi during 22 Feb - 28 March, 2013
20. INSPIRE program for +1 students at Alagappa University, Karaikudi during 06-10 September, 2013
21. Science Academies sponsored Lecture Workshop "Advances in Chemistry" at Alagappa University, Karaikudi during 20-21 September, 2013
22. International workshop on "Frontier Areas in Chemical Technologies" (FACTs) at Alagappa University, Karaikudi during 21-22 February, 2014
23. National workshop on "Frontier Areas in Chemical Technologies 2015" (FACTs - 2015) at Alagappa University, Karaikudi during 6-7, March 2015
24. Alagappa Celebrates Themed Nobel Excellence Talk 2015 (ACT NE*x*T 2015) at Alagappa University, Karaikudi on 27 March 2015
25. International Conference on "Frontier Areas in Chemical Technologies 2016" (FACTs-2016) at Alagappa University on 21-23 March 2016
26. Celebration and Seminar on World Water Day at Alagappa University, Karaikudi on 23 March 2016
27. Alagappa Celebrates Themed Nobel Excellence Talk 2015 **(**ACT NExT 2015) at Alagappa University, Karaikudi on 30 March 2016
28. National Workshop on Materials for Future Industrial Development (MATCH FIND 2017) at Alagappa University during 6-7, January 2017
29. Alagappa Celebrates Themed Nobel Excellence Talk 2016 **(**ACT NExT 2016) at Alagappa University, Karaikudi on 27 April 2017
30. International Conference on "Frontier Areas in Chemical Technologies 2017" (FACTs-2017) at Alagappa University on 6-8 July 2017.

Overseas Exposure / Visits

1. Countries visited- China, Hungary, Netherland, Japan, UAE & Thailand

Invited Talks/Inaugural address/Valedictory address in National Seminars/ Conferences (From 2000 onwards)

1	IPC-2000–National seminar on industrial pollution & its control	Banaras Hindu University, Varanasi	18-19 Feb, 2000
2	Workshop cum Seminar on Electroanalytical Chemistry and Allied topics – ELAC 2000	BARC, Mumbai	27 November – 1 December, 2000
3	National seminar on recent trends in physical organic chemistry	V.H.N.S.N. College, Virudhunagar	29 March, 2001
4	National Seminar on Hydro (Solvo) thermal synthesis and applications	M.S.University, Tirunelveli	24-25 Jan, 2002
5	National symposium on Recent developments in Organometallic Chemistry - REDOM-2003	M.S.University, Tirunelveli	27-28 Mar, 2003

6	National seminar on role of chemistry in the emerging areas of applied sciences - RCEAS-2004	S.V.University, Tirupati	15-17 March, 2004
7	National Seminar on recent trends in isolation, characterisation, syntheiss and biological studies of organic compounds - NATSEM 2004	Gandigram rural University , Gandhigram	5-6 March, 2004
8	Recent advances in Nano science and Technology (RANSAT 2005)	Peryar University, Salem	29-30 Sep, 2005
9	Recent advances in textile and electrochemical sciences (RATES 2007)	Alagappa University, Karaikudi	1-2 June, 2007
10	National Workshop on GREEN CHEMISTRY	Alagappa University, Karaikudi	March 31, 2008
11	Recent advances in textile and electrochemical sciences (RATES 2008)	Alagappa University, Karaikudi	December 19-20, 2008
12	Green Process Techniques for Industrial Applications (GREPTIA-2009)	Alagappa University, Karaikudi	March 20-21, 2009
13	National Review and Coordination Meeting (DST-Nano Mission)	Vedic Village, Kolkata	12-14 March, 2009
14	National seminar on Advances in Bioelectronics and biosensors	Alagappa University, Karaikudi	19-20 March, 2009
15	Recent Advances In Materials Science – 2009 RAMS '09	SSA College, Devakottai	21-22 August, 2009
16	National Seminar on New Frontiers in Chemistry NSNFC-2010	Annamalai University, Annamalai Nagar, Chidambaram	15-16 March, 2010
17.	Workshop on Electroanalytical Techniques	Alagappa University & SINSIL	11-13 Oct,2010
18.	National Workshop on Recent trends in Electrochemistry	SEAST, CECRI, Karaikudi	28 Apr, 2011
19.	DST Inspire	VOC College, Tuticorin	25-29 July, 2011
20.	UGC Sponsored National Seminar on Emerging Trends in Chemistry	VHNSN, Virudhunagar	28 - 29 July, 2011
21.	ISE sponsored International Workshop on the Electrochemistry of Electroactive Materials	University of Szeged, Hungary	3-8 June, 2012
22.	DST INSPIRE Internship – 2012	VHNSN College, Virudhunagar	1-5 Sep, 2012 Mentor
23.	TEQIP Sponsored Faculty Development Programme on Advances in Engineering Materials	Alagappa Chettiar College of Engg & Tech, Karaikudi	24 Nov, 2012
24.	DST – INSPIRE Internship programme –II	Devanga Arts College, Aruppukottai	30 Nov, 2012 Mentor
25.	DRDO Workshop on Advanced Manufacturing Technology – 2013	DRDO, Hyderabad	4 Jan, 2013

26.	Refresher course Electroanalytical Techniques I and II	Madurai Kamaraj University, Madurai	16 December, 2013
27.	National seminar on Modern Trends in Chemistry(MTC-2013)	Anna University, Tiruchi	17-18 December, 2013
28.	National Workshop on Synthesis and Characterization of Nanomaterials (NWSCN-14)	VOC college, Tuticorin	25-26 February, 2014
29.	National conference on Open source software Valedictory address	Alagappa University	30 January, 2014
30.	Graduation day address	Madurai Sivakasi Nadar Pioneer Meenakshi Women's College, Poovanthi	March 06, 2014
31.	College day address	Koviloor Andavar Arts & Science college, Koviloor	15 March, 2014
32.	Graduation day address	SA College,Pallathur	4 April, 2014
33.	Industrial Consultancy meet - Valedictory address	Alagappa University	28 April, 2014
34.	National conference on Modern trends in Chemical Sciences	Virudhunagar Hindu Nadar's Senthikumara Nadar College, Virudhunagar,	18-19 July, 2014.
35	Motivation to Researchers	Dr.Umayal Ramanathan College for Women, Karaikudi	1-2 August, 2014.
36	INSPIRE – Mentor	Virudhunagar Hindu Nadar's Senthikumara Nadar College, Virudhunagar	2-6 August, 2014.
37	National Seminar on Emerging Trends in Chemistry	Cardamom Planter's Association college, Bodi.	19-20 September, 2014.
38	UGC Sponsored One Day State Level Seminar on Modern Trends in Chemistry (MCT – 2014) Valedictory address	Ayya Nadar Janaki Ammal College, Sivakasi	1-2 October, 2014.
39	INSPIRE - Mentor	Devanga Arts College, Arupukottai,	10-14 October, 2014.
40	Emerging Trends In Bio-Inorganic Chemistry (ETBIC-2015)	Virudhunagar Hindu Nadar's Senthikumara Nadar College, Virudhunagar	23-24 January, 2015.
41	National workshop on Advanced Characterization Techniques	Periyar University, Salem.	29-30 January 2015.
42	Inaugurated the Chemistry Association	Jahir Hussain College, Ilayankudi	1 February, 2015.
43	Inaugurated the National Seminar on Current trends in Chemistry	APC Mahalakshmi College, Tuticorin	4 February, 2015
44	UGC sponsored National Conference: Recent Developments in Chemistry-2015	Saiva Bhanu Kshatriya College, Aruppukottai	13-14 February 15

45	AdvancedPolymericMaterials (APM-2015)	Organised by CIPET at Indian Institute of Science, Bangalore	20-22 February, 2015.
46	National SEMINAR on Advanced nanomaterials for functional application SANFA – 2015)	Kandasamy Kandar college, P.Velur,	12-13 March, 2015.
47	Delivered ConvocationAddress	Mount Zion Engineering College, Pudukottai	22 March, 2015.
48	Analytical Techniques for Research in Chemistry (ATRC 2015)	Abdur Rahman University, Chennai.	21-22 April, 2015.
49	Science Camp under INSPIRE Internship Program	VHNSN College, Virudhunagar	5 August, 2015
50	Prafulla Chandra Ray Memorial Lecture	CECRI, Karaikudi	7, August, 2015
51	8th Asia-Pacific Symposium on Ion Analysis	Chiba, Japan	2, September, 2015
52	ICAR sponsored Short course on Nanotechnologyand Plant disease management	TNAU, Coimbatore	26, November, 2015
53	National Seminar on Modern Trends in Chemistry (MTC 22)	Vivekananda College, Thiruvedagam	28, March, 2016
54	Orientation programme organizedforthefreshfaculty members	at Alagappa University	29, March, 2016
55	Special talk on Environmental Awareness and Protection	Department of Corporate Secretaryship	16 August, 2016
56	Keynote address in National seminar on Molecular Physiology, Therapeutics and Experimental Medicines	Department of Animal Health and Management, Alagappa Univeristy	06 September, 2016
57	State Level Intercollegiate Students esource person	Thiagarajar College, Madurai	12 September, 2016
58	National Conference on Data Science and Analytics - Felicitation address	Department of Computer Science	27 September, 2016
59	INSPIRE programme	Devangar Arts and Science college	5 October 2016
60	Valedictory address – One day workshop on Climate is Changing, Food and Agriculture too	Department of Economics and Rural Development, Alagappa University	21 October 2016
61	Refresher Course	Academic Staff College, Madurai Kamaraj University, Madurai	15 November, 2016
62	Special address in the valedictory function of the National Conference on Emerging Strategies in Green Textiles and Sustainable Fashion	Skill Development Centre, Alagappa Univeristy	11 Jan, 2017
63	Business Training Programme on Textiles and Batteries	Alagappa Univeristy	7-8 February, 2017

64	Refresher course – Valedictory address	CECRI and Umayal Ramanathan College, Karaikudi	8 July 2017
65	National Conference on Emerging Trends And Future Challenges in Chemical Sciences-2017	PSGR Krishnammal College for Women, Coimbatore	10 August 2017

Invited Talks/Lectures in International Seminars and Conferences

S.No	Title	Institution and Event Name	Period
1	1st Triennial International Conference on Electro analytical Chemistry and Applied Topics (ELAC 2004)	International Centre, Goa	18-23 January, 2004
2	2nd Triennial International Conference on Electro analytical Chemistry and Applied Topics (ELAC 2007)	ISAC, Shimla	10-15 March, 2007
3	Discussion meet on Electroanalytical Techniques and their applications 2008 (DM-ELANTE-2008)	ISEAC, Munnar, Kerala	25-28 Feb., 2008
4	2009 International symposium on environmental science and technology (ISEST)	Dohngua University, Shanghai,China	June 2—5, 2009
5	International conference on materials for the millennium (MATCON 2010)	Cochin University,Kerala	11-13, Jan2010
6	4th Triennial International Conference on Electro analytical Chemistry and Applied Topics (ELAC 2010)	ISEAC, Puri, Orissa	16-18, March 2010
7	Indian Institute of Technology Delhi, New Delhi	Indian Institute of Technology Delhi, New Delhi	Delhi ,Feb 25-27, 2011
8	International Conference of Indian Council of Chemists	Indian Council of Chemists, Bangkok, Thailand	11-15 June 2011
9	ISE sponsored International Workshop on the Electrochemistry of Electroactive Materials	Szeged, Hungary	3-8 June 2012
10	Optics 14 - International conference on light	NIT, Calicut	19-21 March,2014
11	International Conference on Advances In Recent Analytical Sciences	ISAS and IIT-BHU, Varanasi	27-29 Mar, 2014
12	International Conference of Indian Council of Chemists - Chemistry for Sustainable energy	Abu Dubai, Dubai	10-14 June 2014
13	8th Asia Pacific Symposium on Ion Analysis	Gunma University, Chiba, Japan	Japan Sep1-4 2015

Membership in

Professional Bodies

Life Member in

1. ISEAC, Mumbai
2. ISAC, Mumbai
3. ICS, Kolkata
4. ICC, Agra
5. SAEST, Karaikudi
6. Indian Science Congress Association
7. Swadeshi Science Movement, Kundrakudi

Editorial Board

1. Chief Editor, Alagappa University Journal of Chemical Sciences published by Alagappa University.

Academic Bodies (such as Board of Studies etc.)

1. Member, BOS/Question setting board/Valuation board of Chemistry/Industrial Chemistry of Mangalore University, Annamalai University, Manonmanium Sundranar University, Bharathidasan University etc
2. Chairman, BOS of Chemistry, Periyar University, Salem for one year nine months
3. Chairman, Question setting and valuation board of M.Sc. Industrial Chemistry and Management, University of Madras
4. Chairman, BOS of M.Sc. Industrial Chemistry, M.Sc. Chemistry and M.Sc. Chemistry (DDE), Alagappa University, Karaikudi

Resource persons in various capacities

Number of Invited / Special Lectures delivered: 65

Others

1. Products developed : 3
2. No. of PhD Thesis evaluated : More than 50
3. No. of PhD Public Viva Voce Examination conducted : More than 100
4. Reviewer for more than 20 international journals

Administrative Experience

Dr.P.Manisankar has good administrative experience and he has served in many administrative positions in the University. In many positions, he has made landmarks and introduced many new and novel concepts.

Contribution as Director i/c, Directorate of Distance Education, Alagappa University

- Introduced the concept of Self Learning Method (SLM) to MBA programmes and books were printed in the format with the size.
- A total of Rs.60 lakhs was received from Distance Education Council, New Delhi towards development grant.
- New block was constructed and the directorate was shifted to the new venue within short period of time.
- All facilities were created in the new campus of DDE.
- A separate library for students, big class rooms for the conduct of personal conduct programmes, a separate student amenity room with xerox facility and a separate internet lab for students were created for the first time in the new building for DDE students.
- Books were purchased to the tune of Rs.4.0 lakhs and kept in the DDE library.
- Steps were taken to allocate separate laboratories for science faculties to carry out research work in the science block and achieved.
- Online admissions were introduced for all DDE programmes. Separate software was developed for this purpose.
- Two Identity Card (ID) printers were purchased and student's identity cards were printed in the DDE and supplied to students.
- Four new MBA programmes were introduced.

Contribution as Dean (Industry & Consultancy)

- University-Industry cell (UII cell) was created with the aim to establish successful collaborations with various industrial sectors.
- An executive committee comprising all Deans and Special Officer (Planning and Development) was constituted.
- A 16 member advisory council was constituted to provide guidance to UII cell.
- Functions of UII cell and Consultancy Rules of Alagappa University were framed in the year 2011. Printed booklets of this were distributed to all faculty members.
- Consultancy Potentials of all the faculty members of the University were collected, compiled and a book was prepared.
- This book was sent to various industries and agencies with an invitation to utilise the consultancy potential of faculty members.
- Workshops were conducted to motivate the faculty members to involve in consultancies.
- Consultancies were established with Water and Power Consultancy Services (WAPCOS), New Delhi, DRDL, Hydrabad, CSIR, New Delhi, Tamil Nadu Fisheries Development Corporation, Tamil Nadu Road Sector and BHEL, Tiruchi and funds to the tune of Rs.146 lakhs were generated from this head.

Contribution as Dean (Research)

- Introduced D.Sc. and D.Litt. in Alagappa University
- Ph.D. registration procedure was simplified and Department Research Committee's (DRC) recommendation was made compulsory for registration.
- Course work (Three papers) was made compulsory.
- Confirmation of Ph.D. registration was made only on the basis of pass in the written examination of three course work papers and in the oral examination conducted by the Doctoral committee.

- Systematic reminders were sent to the examiners and hence the viva-voce examination of almost all scholars was arranged within 6 months from the date of submission.
- Made plagiarism check compulsory for the Ph.D. thesis submitted. Urkund plagiarism check report was made as a mandatory one along with the Ph.D. thesis submission.
- Interdisciplinary research works were encouraged. Faculty members were given guideship for two scholars in the additional discipline in which they had obtained their Ph.D.
- Research Advisory committee meetings were arranged regularly.
- Scholars can enter their registration number and check the progress of the evaluation of their Ph.D. thesis in the University website.
- Orientation programmes to new faculty members were organised in association with IQAC
- Alagappa University Research Fund (AURF) scheme was restored and new schemes such as fellowships to toppers of Pre-Ph.D. entrance examination, partial support for Ph.D. thesis submission, Start up research grants for faculty, partial support for paper publications and Alagappa Excellence award were provided

Contribution as Dean (Faculty of Science)

- Coordinated all the 14 science departments in the University and works allocated by the authorities were executed in the Faculty of Science
- Email communications of all the circulars related to fellowships, schemes, awards etc. Were sent to all the HODs of science departments
- Convened regular bimonthly meetings of HODs of science departments
- Monthly faculty performance reports were evaluated and consolidated
- Scholars and students meet was convened and their grievances were collected and presented to authorities for redressal
- Counselling for admissions to various science departments were arranged for the first time in Alagappa University. Student's strength increased every year through counselling.
- Motivated the HODs of science departments to apply for UGC SAP and DST FIST programmes
- Science day celebration cum Open Day for the students of colleges and schools were organised

Contribution as Head of the Department of Industrial Chemistry

- Introduced M.Sc. Chemistry (CBCS) programme
- Introduced Comprehensive Chemistry course in the fourth semester for M.Sc. Chemistry programme
- Student's strength was increased to 40 for M.Sc. Chemistry programme
- Building and student infrastructure were increased. First floor in the Annexe building, Boys & Girls Toilets and Two wheeler stand were constructed
- All the faculty members were provided with independent research laboratory
- Entire building was tiled
- Seminar Hall was made as a modernised state of the art hall accommodting more than 100 participants
- Three smart classrooms were provided for PG and M.Phil. programmes
- Created NET lab with more than 50 latest computers
- Department Library was equipped with more 2000 books, 15 journals and magazines

- Multiple Internet LAN connections were provided in all the rooms
- Wifi facility for the entire building was provided
- Hi-tech equipments like HRSEM, UV-VIS, FTIR, Elemental Analyser etc were purchased and installed in the department.
- One UGC Assistant professor and one DST INSPIRE faculty were appointed for the department
- One Master Technician and one more Lab assistant were appointed
- Every year Industrial visits for all the students were arranged
- International conferences and workshops were organised for the first time in the department
- ACT Next programme in Chemistry theme was organised every year to highlight the achievements of Chemistry Noble prize winners of the year and motivate the youngsters
- Departmental meetings like Purchase committee, Research committee etc were organised systematically
- Celebrations like Teachers day, Pongal, Saraswathi Pooja, Dhothi day etc were arranged every year
- Advance Materials Research Lab proposal was submitted to RUSA and it sanctioned Rs.220 lakhs for the construction of the building for the lab
- UGC SAP DRS II level and DST FIST I second level were attained
- Finalized rate contracts for the purchase of chemicals and glassware for many years

Contributions to the Society

A. Extension work / Community Services

(a) Short account of contribution to Community work such as National Integration, secularism, democracy, socialism, humanism, peace, scientific temper, flood or draught relief, small family norms etc.

- Participated in all the community works organized by the University at various times
- Established scientific temper by doing projects related to Environmental sciences
- Participated in the National Literacy mission rallies
- Actively engaged in the activities of Swdeshi Science Movement
- Participated in the activities of Tamilaga Ariviyal Peravai

(b) Positions held / leadership role played in organizations linked with Extension work and National Service Scheme (NSS) or NCC or any other similar activity

- Acted as NSS coordination committee member
- Member, NSS advisory committee

B. Participation in Corporate Life:

(a) Contribution to College / University

- Serving as Planning Board member of the University
- Serving as Dean (Industry and Consultancy) of the University
- Served as Dean (Research) and Dean (Faculty of Science) of the University
- Served as a convocation committee member
- Served as an organizing committee member for the report to be submitted for National Accreditation and Assessment Council (Two times)

- Looked after the third criteria in the NAAC assessment 2017
- Served as a Cultural programs coordination committee member
- Convened counseling for the first time for PG admissions for Science programmes
- Organized Alumni meet, Parent-Teacher meet, Batch meet, Orientation to fresher

(b) Co-curricular Activities

- Organized National Seminars in the field of Electrochemistry
- Organized Ninth Tamilaga Ariviyal Peravai Conference at Alagappa University, Karaikudi
- Involved in the training programs to P.G. teachers of Higher Secondary schools
- Involved in the coaching programs for +2 students for professional course entrance examinations
- Organized coaching for slow learners
- Organized Pongal celebration, Dhothi day, Saraswathi Pooja etc.
- Organized Village Placement Programme every year for II PG students in the third semester

(c) Enrichment of Campus Life

- Actively involved in the Cultural programs organized for students
- Actively involved in planting of tree saplings in the University campus

(d) Students Welfare and Discipline

- Motivated the students for higher learning and to write the competitive examinations
- Advised the students for their good conduct and characters
- Served as warden PG Men's hostel

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