Dr. S. VISWANATHAN
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Academic Qualifications: M.Sc., B.Ed., Ph.D.

Teaching and Research Experience:

Assistant Professor
Alagappa University, Karaikudi, India
25/05/2012 – Current

Auxiliary Investigator
REQUIMTE, Instituto Superior de Engenharia do Porto, Porto, Portugal
03/09/2009 – 31/08/2012

Post-doctoral research fellow
National Taiwan University, Taipei, Taiwan
01/01/2009 – 31/05/2009

Senior Lecturer
Institute of animal reproduction and food research of the polish academy of sciences,
Olsztyn, Poland
16/09/2008 – 31/12/2008

Marie Curie Postdoctoral fellow
Polish academy of sciences, Olsztyn, Poland
16/09/2007 – 15/09/2008

Post doctoral research associate, Hsinchu, Taiwan
National Tsing Hua University
28/04/2005 – 30/04/2007

Lecturer in chemistry
SASTRA University, Karaikudi, India
23/06/2004 – 20/04/2005

Areas of Research

Electrochemistry, Analytical chemistry, Biochemistry, Biosensor

Research Supervision / Guidance

Program of Study		Completed	Ongoing
Research	Ph.D.	-	2
	M.Phil.	8	-
Project	PG	37	-

Publications

International		National		Others
Journals	Conferences	Journals	Conferences	Books / Chapters / Monographs / Manuals
44	15	1	30	4

Cumulative Impact Factor (as per JCR) : 139
h-index : 26
i10 index : 34
Total Citations : 2298

Funded Research Projects

On-going Research Projects

S. No	Agency	Period		Project Title	Budget
		From	To		
1	DBT, India	2018	2021	Molecularly imprinted polymer sensor for Mycotoxin detection in plants *Role. P.I*	₹ 36.4 L
2	ICMR, India	2019	2022	Smart lab on a chip biosensor integrated with protein imprinted polymer electrodes for rapid detection of HIV infection. *Role. P.I*	₹ 23.5 L
3	DST, India	2019	2022	Molecularly imprinted Polymer based biosensor for tuberculosis detection, *Role. P.I*	₹ 17.75 L

Completed Projects

S.No	Agency	Period		Project Title	Budget
		From	To		
1	FCT, Portugal	2011	2014	Nano-electrode arrays Biosensor for Earlyand Decentralized Breast-Cancer Diagnosis. *Role. P.I*	€112547
2	FCT, Portugal	2010	2013	Cephalopods-Benefits and risks of consumption: Evaluation of biomarkers responses to organic pollution. *Role. Co.P.I*	€153796

Consultancy Projects: 1

S. No	Agency	Period		Project Title	Budget (Rs. In lakhs)
		From	To		
1	TNCPL. Karaikudi	2016	2017	Ground water analysis	5.0

Distinctive Achievements / Awards

1. Extended senior research fellow- Council of industrial research and development, India-2003.
2. Marie Curie Postdoctoral fellow- European Union Marie Curie Actions - Transfer of Knowledge- 2007.

Events organized in leading roles

Number of Seminars / Conferences / Workshops / Events organized: 03

1. International conference on Frontier Areas in Chemical Technologies – 2016
2. International workshop on Frontier Areas in Chemical Technologies – 2014
3. International conference on recent advances in textile and electrochemical sciences, 2013

Events Participated

International Conferences:

1. 5th International Conference on electroanalysis 11-15 June 2014, Sweden.
2. VI Workshop on Analytical Nanoscience and Nanoechnology (VINyNA2013), 8&9 July 2013, Universidad de Alcala, Madrid, Spain.

3. 63rd Annual Meeting of the International Society of Electrochemistry, Prague, Czech Republic. 19-24 August, 2012
4. NanotechItaly2010, October 21-23, National Research Council (CNR) and Veneto nanotech, Venice, Italy.
5. Biosensors 2012, Cancun, Mexico, May, 15-18, 2012.
6. XX Congresso da Sociedade Iberoamericana de Electroquímica, Fortaleza, Brasil, pp. 137, 25-30 March, 2012.
7. 1st symposium on subsoil characterization and remediation SSCR, 4 June, 2012, University of Porto, Porto, Portugal.
8. NanotechItaly2010, October 21-23, National Research Council (CNR) and Veneto nanotech, Venice, Italy.
9. The 61st annual meeting of the international society of electrochemistry, ISE, September 26th - October 1st, 2010, Nice, France.
10. 13th International conference on electroanalysis, European Society of electro-analytical chemistry, June 20-24, 2010, Gijon, Spain.
11. Analytical chemistry IETCAQ, University of Minho, 07-May-2010, Minho, Portugal.
12. Application of multimolecular layers in chemical and biochemical sensors. Summer School II Polish Academy of Sciences, Lansk, Poland.
13. The 234th ACS National Meeting, Boston, MA, USA. August 19-23, 2007.
14. International conference on chemical and bioprocess engineering. 27-29 August 2003, University of Malaysia, Malaysia.

Other Training Programs

1. Summer School I Polish Academy of Sciences, Olsztyn, Poland. September 16-28, 2007
2. Summer School II Polish Academy of Sciences, Olsztyn, Poland. September 14-24, 2008
3. Orientation Programme, Curriculum Development Cell, Alagappa University, Karaikudi Date: August 24-31, 2012
4. UGC-Orientation programme, UGC-Academic Staff College, Bharathidasan University, Trichy, Date 28.01.2015 to 24.02.2015
5. UGC-Refresher Course in Chemistry, UGC-Human Resource Development Centre, Bharathiar University, Coimbatore – 46, Date: 15.07.2016 to 04.08.2016

Overseas Exposure / Visits

Taiwan, Poland, Portugal, Italy, France, Spain, Germany

Membership in

Professional Bodies: Member - International Society of Electrochemistry
Editorial Board: Guest Editor, Nanoscale Advances, RSC

Advisory Board: GRAQ, ISEP-Porto, Portugal

Academic Bodies

1. Department Board of Studies
2. Department Research council

Resource persons in various capacities

Number of Invited / Special Lectures delivered: 10

Others

1. Articles published in Newspapers / Magazines: 1
2. No. of PhD Thesis evaluated: 1
3. No. of PhD Public Viva Voce Examination conducted: 1

Publications

44. P Karthika, S Shanmuganathan, **S Viswanathan**, C Delerue-Matos Molecularly Imprinted Polymer-Based Electrochemical Sensor for the Determination of Endocrine Disruptor Bisphenol-A in Bovine Milk, **Food Chemistry**, **2021**, 130287 (SCI) IF= 6.3

43. J Jose, V Subramanian, S Shaji, PB Sreeja, An electrochemical sensor for nanomolar detection of caffeine based on nicotinic acid hydrazide anchored on graphene oxide (NAHGO**), Scientific reports** 11 (1),**2021**, 1-11 (SCI) IF= 4.576

42. P Thangasamy, S Shanmuganathan, **V Subramanian**, A NiCo-MOF nanosheet array based electrocatalyst for the oxygen evolution reaction, **Nanoscale Advances** 2 (5), **2020**, 2073-2079. IF=4.38

41. **S.Viswanathan**, C. Delerue-Matos, Label-free voltametric immunosensor for prostate specific antigen detection, **Electroanalysis** 30 (11), 2018, 2604-26112. (SCI) IF= 2.87

40. RCB Marques, E Costa-Rama, **S. Viswanathan**, Henri PA Nouws, A. Costa-García, C. Delerue-Matos, M B. González-García, Voltammetric immunosensor for the simultaneous analysis of the breast cancer biomarkers CA 15-3 and HER2-ECD, **Sensors and Actuators B: Chemical** 2018 Vol. 255, 918- 925 (SCI) IF= 7.34

39. H da Silva, J Pacheco, J Silva, **S. Viswanathan**, C Delerue-Matos, Molecularly imprinted sensor for voltammetric detection of norfloxacin, **Sensors and Actuators B: Chemical** 2015 Vol. 219, 301-307 (SCI) IF= 7.34

38. **S. Viswanathan** and P. Manisankar, Nanomaterials for Electrochemical Sensing and Decontamination of pesticides, **Journal of Nanoscience and Nanotechnology**, 2014 Vol. 15 (9), 6914-6923 (SCI) IF= 1.149.

37. R.C.B. Marques, **S. Viswanathan**, H.P.A. Nouws, C. Delerue-Matos, M. B. González-García, Electrochemical immunosensor for the analysis of the breast cancer biomarker HER2 ECD, **Talanta**, 2014, Vol.129, 594-599. (SCI) IF= 5.76.

36. Ribeiro, F.W.P., Barroso, M.F., Morais, S., **Viswanathan, S.**, de Lima-Neto, P., Correia, A.N., Oliveira, M.B.P.P.,

Delerue-Matos, C. Simple laccase-based biosensor for formetanate hydrochloride quantification in fruits **Bioelectrochemistry**, 2014, Vol.95 , 7 - 14 (3.947)

35. **S. Viswanathan**, Electrochemical biosensors for food-borne pathogens In Microbial Food Safety and Preservation Techniques Eds. V Ravishankar Rai, Jamuna A. Bai. 2014, CRC Press, Taylor& Francis Group, FL, USA.in press. (Book Chapter)

34. H.Silva, J.P. Grosso, **S. Viswanathan**,* C. Delerue-Matos, MIP-graphene-modified glassy carbon electrode for the determination of trimethoprim, **Biosensors and Bioelectronics**, 2014, Vol 52, 56-61 (SCI) IF= 10.257

33. M. Freitas, **S. Viswanathan**,* H.P.A. Nouws, M.B.P.P. Oliveira, C. Delerue-Matos, Iron oxide/gold core/shell nanomagnetic probes and CdS biolabels for amplified electrochemical immunosensing of Salmonella typhimurium, **Biosensors and Bioelectronics**, 2014, Vol 51, 195-200 (SCI) IF= 10.257

32. V. Rajasekharan, T. Stalin, **S. Viswanathan** and P. Manisankar, Electrochemical Evaluation of Anticorrosive Performance of Organic Acid Doped Polyaniline Based Coatings **Int. J. Electrochem. Sci**., 2013, 8, 11327 - 11336 (SCI) IF= 1.76

31. Túlio I.S. Oliveira, Marcela Oliveira, **Subramanian Viswanathan**, M. Fátima Barroso, Luísa Barreiros, Olga C. Nunes, José A. Rodrigues, Pedro de Lima-Neto, Selma E. Mazzetto, Simone Morais, Cristina Delerue-Matos, Molinate quantification in environmental waters by a Glutathione-S-transferase based biosensor, **Talanta**, 2013, 106, 249–254. (SCI) IF= 5.76

30. **S. Viswanathan**, C.Rani, J.A. Ho. Electrochemical immunosensor for multiplexed detection of food-borne pathogens using nanocrystal bioconjugates and MWCNT screen-printed electrode. **Talanta,** 2012, Vol. 94, 315-319. (SCI) IF= 5.76

29. Virgínia C. Fernandes, **Viswanathan S**, Nuno Mateus, Valentina F. Domingues, Cristina Delerue-Matos, Determination of organochlorine pesticides in complex matrices by single-drop microextraction coupled to gas chromatography–tandem mass spectrometry, **Microchimica acta**, Vol. 178 (1-2), 2012, 195-202. IF= 6.23

28. **S. Viswanathan**, C. Rani, C. Delerue-Matos,Ultrasensitive detection of ovarian cancer marker using immunoliposomes and gold nanoelectrodes, **Anal. Chim. Acta**. Vol.726, 2012 79-84. IF= 6.27

27. M. Oliveira, **S. Viswanathan**, S .Morais, C. Delerue-Matos, Development of Polyaniline Microarray Electrodes for Cadmium Analysis, **Chemical Papers**, Vol. 66 (10) (2012) 891-898**.** IF= 1.96

26. **S. Viswanathan**, C. Rani, S. Ribeiro, C. Delerue-Matos, Molecular imprinted nanoelectrodes for ultra sensitive detection of ovarian cancer marker, **Biosensors and Bioelectronics** Vol.33 (1), 2012, 179-183. (SCI) IF= 10.257

25. Ana Pinho, **S. Viswanathan**, S. Ribeiro, M. B. P. P. Oliveira, C. Delerue-Matos, Electroanalysis of urinary L-dopa using tyrosinase immobilized on gold nanoelectrode ensembles, **Journal of Applied Electrochemistry** Vol. 42 (3), 2012, 131-137. (SCI) IF= 2.61

24. **S.Viswanathan**, Nanomaterials in soil and food analysis. In Encyclopedia of Agrophysics. Glinski, Jan; Horabik, Józef; Lipiec, Jerzy (Eds.) Springer, ISBN: 978-90-481-3585-1

23. P. Manisankar, **S. Viswanathan**, C.Vedhi. Analysis of pesticide residue Using electro analytical techniques: In ***Handbook of Pesticides: Methods of Pesticide Residues Analysis,*** Eds. Leo M. L. Nollet, Hamir S. Rathore. 2010, CRC Press, Taylor& Francis Group, FL, USA. pp165-186. (Book Chapter)

22**. S. Viswanathan,** H.Radecka, J. Radecki, Y. Z. Voloshin, Single molecular switch based on dodecanethiol- tethered iron(II) clathrochelate on gold. **Electrochimica Acta**, Vol.54, 2009, 5431-5438. (SCI) IF= 6.61

21**. S. Viswanathan,** Hanna Radecka, Jerzy Radecki, Electrochemical biosensor for food analysis. ***Monatshefte fu¨r Chemie Chemical monthly,*** Vol. 140, 2009, 891–899. (SCI) IF= 1.356

20. Y. Z. Voloshin, A.S. Belov, O.A. Varzatskii, A.V.Vologzhanina, **S. Viswanathan**, J. Radecki, Y.N. Bubnov , Synthesis, structure and electron-mediator properties of macrobicyclic iron(II) tris-dioximates with mono- and difunctionalizing ribbed spacer substituents with a terminal mercapto group. ***Inorganica Chimica Acta***, Vol. 362, 2009, 2982–2988. (SCI) IF=2.44

19. **S. Viswanathan**, Hanna Radecka, Jerzy Radecki, Electrochemical biosensors for pesticides based on acetylcholinesterase and self assembled ssDNA wrapped carbon nanotubes. ***Biosensors and Bioelectronics***, Vol.24, 2009, 2772–2777. (SCI) IF= 10.257

18. **S. Viswanathan**, C.Rani, A.Vijay Anand, J.A. Ho. Electrochemical immunosensor for carcinoembryonic antigen using ferrocene liposomes and MWCNT screen-printed electrode.***Biosensors and Bioelectronics***, Vol. 24, 2009, 1984–1989. (SCI) IF= 10.257

17. M. Wąsowicz, **S. Viswanathan**, A. Dvornyk, K.Grzelak, B. Kłudkiewicz, H.Radecka, Comparison of electrochemical immunosensors based on gold nanomaterials and immunoblot techniqus for detection of Histidine

tagged proteins in culture medium. ***Biosensors and Bioelectronics,*** Vol. 24. 2008, 284-289. (SCI) IF=10.257

16. **S.Viswanathan**, Jerzy Radecki, Nanomaterials in electrochemical biosensors for food analysis- a review. ***Polish Journal of Food and Nutrition Sciences,*** Vol.58.2008, 157-164.

15. **S. Viswanathan**, W.-C. Liao, C.-C. Huang, W.-L. Hsu, J.-a.A.Ho, Rapid analysis of L-dopa in urine samples using gold nanoelectrode ensembles, ***Talanta***, Vol. 74, 2007, 229-234. (SCI) IF= 5.76

14. **S. Viswanathan**, Ja-an Annie Ho, Dual electrochemical determination of insulin and glucose using enzyme and ferrocene microcapsules. ***Biosensors and Bioelectronics,*** Vol.22, 2007, 1147-1153. (SCI) IF= 10.257

13. **S.Viswanathan**, Li-chen Wu, Ming-Ray Huang, Ja-an Annie Ho, Electrochemical Immunosensor for cholera toxin using liposomes and poly(3,4-ethylenedioxythio-phene) - coated carbon nanotubes. ***Analytical chemistry,*** 78 (2006) 1115-1121. (SCI) IF= 6.66

12. P. Manisankar, **S. Viswanathan**, A. Mercy Pushpalatha, C.Rani, Electrochemical studies and square wave stripping voltammetry of five common pesticides on poly 3, 4-ethylenedioxythiophene modified wall jet electrode. ***Analytica Chimica Acta*** Vol. 528, 2005, 157-163. (SCI) IF= 6.27

11. P.Manisankar, C.Rani, **S. Viswanathan**, Effects of halides on the electrochemical oxidation of distillery effluent. ***Chemosphere***, Vol. 57(8), 2004, 961-966. (SCI) IF= 7.04

10. P. Manisankar, A. Mercy Pushpalatha, S. Vasanthakumar, A.Gomathi. **S.Viswanathan,** Riboflavin as an electron mediator catalyzing the electrochemical reduction of dioxygen with 1,4-napthoquinones. ***Journal of Electroanalytical Chemistry***, Vol. 571(1) 43-50, 2004. (SCI) IF= 4.28

9. P. Manisankar, **S. Viswanathan**, H.G. Prabu, Determination of direct orange – 8 in effluent using a polypyrrole modified electrode. ***International Journal of Environmental Analytical chemistry***, Vol.84, No.5, 2004, 389-397. (SCI) IF= 1.76

8. P.Manisankar, C.Vedhi, **S.Viswanathan**, H.G.Prabu, Investigation of the usage of clay modified electrode for the electrochemical determination of some pollutants. ***Journal of Environmental Science and Health-Part B,*** Vol.B39, No.1, 2004,89-100. (SCI) IF= 1.91

7. N. Raman, A. Kulandaisamy, C. Thangaraja, P.Manisankar, **S.Viswanathan**, C.Vedhi. Synthesis, structural characterization and electrochemical and antibacterial studies of Schiff base copper complexes . ***Transition Metal Chemistry***, Vol.29 (2) 2004 129-135. (SCI) IF= 1.48

6. P.Manisankar, **S.Viswanathan**, C. Rani, Electrochemical treatment of distillery effluent Using catalytic anodes. ***Green Chemistry***, Vol. 5, 2003, 270-274. (SCI) IF= 9.71

5. P. Manisankar, G.Selvanathan, **S.Viswanathan**, H. Gurumallesh Prabu, Electrochemical Determination of Some Organic Pollutants Using Wall Jet Electrode. ***Electroanalysis***, Vol. 14 (24), 2002, 1722-1727. (SCI) IF= 2.87

4. P. Manisankar, **S. Viswanathan**, H.G. Prabu, Electroanalysis of endosulfan and o-chlorophenol in polypyrrole coated glassy carbon electrode. ***International Journal of Environmental Analytical chemistry***, Vol. 82(5), 2002,331-340. (SCI) IF= 1.76

3. P.Manisankar, C.Rani, **S.Viswanathan**, Electroanalytical studies of Dicofol an Organochlorine Acaricide (Article published in book), ***Analytical Techniques in Environmental Monitoring*** Ed.S. Jayarama Reddy, ISBN 81-7800-026-1 Article No I -11,2002.

2. P.Manisankar, Sarpudeen, **S.Viswanathan,** Electroanalysis of Dapsone, An Anti-leprotic Drug. ***Journal of Pharmaceutical and Biomedical Analysis.*** Vol. 26(5-6), 2001, 873-881. (SCI) IF= 3.78

1. P.Manisankar, C.Rani, **S.Viswanathan**, Electrochemical destruction of Disperse red-17 dye effluent in a batch reactor. ***Journal of Indian Association for Environmental Management***, Vol. 27, 2000, 304-308.