CURRICULUM VITAE

Prof. S. Vasudevan, Ph.D, D.Sc (*h.c*), FRSC, CChem, FASC
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Google Scholar : https://scholar.google.co.in/citations?user=og1A28UAAAAJ&hl=en
Researcher ID : O-5124-2014
VIDWAN ID : 66847 (https://vidwan.inflibnet.ac.in)

Educational Qualifications

- B. Sc. 1986, Madurai Kamaraj University, Madurai
- M.Sc. 1988, Alagappa University, Karaikudi
- Ph.D. 1995, Alagappa University, Karaikudi

Positions held

- 1988 - Graduate Trainee, CSIR-Central Electrochemical Research Institute, Karaikudi
- 1988-1991 - Junior Research Fellow, CSIR-Central Electrochemical Research Institute, Karaikudi
- 1991-1994 - Senior Research Fellow, CSIR-Central Electrochemical Research Institute, Karaikudi
- 1995-1997 - Research Associate, CSIR-Central Electrochemical Research Institute, Karaikudi
- 1997-2000 - Junior Scientist/Assistant Professor, CSIR-Central Electrochemical Research Institute, Karaikudi
- 2001-2005 - Scientist/Assistant Professor, CSIR-Central Electrochemical Research Institute, Karaikudi
- 2006-2009 - Senior Scientist/Assistant Professor, CSIR-Central Electrochemical Research Institute, Karaikudi
- 2010-2014 - Principal Scientist/Associate Professor, CSIR-Central Electrochemical Research Institute, Karaikudi
- 2015- - Senior Principal Scientist/Professor, CSIR-Central Electrochemical Research Institute, Karaikudi

Fields of Research Interest:

I am working in diverse areas of electrochemistry for the past 30 years. My research primarily focussed on the areas of chemical and electrochemical treatment of potable water, electrochemical and photo-electrochemical methods for generation of hydrogen, synthesis of electro-inorganic chemicals, electrochemical waste management, electro-catalysis, electrochemical method of preparation of anti-oxidant water and magnesium batteries.

Presently involved in,

- ⇒ Treatment of drinking water containing inorganic and organic and persistent organic contaminants by electrocoagulation
- ⇒ Treatment of drinking water containing persistent organic pollutants (POPs) by advanced electrochemical oxidation (anodic oxidation, electro-Fenton) process
- ⇒ Production and reactions of the oxygenated radicals
- ⇒ Electrochemical synthesis of hypochlorite and hydrogen peroxide.
- ⇒ Electrochemical ozone generation based on PEM technology
- ⇒ Development of catalysts / membrane for Proton Exchange Membrane (PEM) based water electrolyser for hydrogen generation.
- ⇒ Development of materials for photo-electrochemical generation of hydrogen
- ⇒ Electrochemical preparation of anti-oxidant water

Awards and Honors

Awards

- 2018, International Achievement Award by EET CRS 7th Science & Technology Award
- 2017, Award for Excellence in Research by EET CRS 2nd Academic Brand Awards
- 2016, Bharat Shiksha Ratan Award by Global Society for Health & Educational Growth
- 2016, Outstanding Faculty of the Year Award by EET CRS 4th Faculty Branding Awards
- 2016, Best Scientist Award by EET CRS 4th Science & Technology Award -2016
- 2016, Indira Gandhi Sadbhavana Award by International Business Council, New Delhi
- 2016, MRSI Medal by Materials Society of India
- 2015, Distinguished Scientist Award by Vinous International Foundation, Chennai
- 2014, International Highest Publication Award by Inter. Science community Association
- 2013, ISEAC Eminent Scientist Award by Indian Society for ElectroAnalytical Chemistry
- 2012, International Best Researcher Award by International Science Community Association
- 2010, ISEAC Journal Publications Award by Indian Society for ElectroAnalytical Chemistry
- 2004, Third prize for Per Capita ECF Award by CSIR- CECRI
- 2004, Best Import Substitution by All India Industrial Exhibition Society

Honors

- 2018, Doctor of Science (Honoris Causa) degree conferred by the LINGAYA'S Vidyapeeth, Faridabad (Haryana) Republic of India

- 2017, Chartered Chemist (CChem) by Royal Society of Chemistry, UK
- 2017 -- PSG Distinguished Visiting Professor
- 2017, Outstanding Reviewer by Chemical Engineering Journal, Elsevier
- 2017, Outstanding Reviewer by Chemosphere, Elsevier
- 2017, Outstanding Reviewer by Environmental Pollution, Elsevier
- 2017, Outstanding Reviewer by Environmental Technology & Innovation, Elsevier
- 2017, Outstanding Reviewer by Hydrometallurgy, Elsevier
- 2017, Outstanding Reviewer by Journal of Environmental Chemical Engineering, Elsevier
- 2017, Outstanding Reviewer by Journal of Hazardous Materials, Elsevier
- 2017, Outstanding Reviewer by Process Safety and Environmental Protection , Elsevier
- 2017, Outstanding Reviewer by Separation and Purification Technology, Elsevier
- 2016, Outstanding Reviewer by Journal of Environmental Management, Elsevier
- 2016, Excellence Reviewer by Chemosphere, Elsevier
- 2016 -- Editorial Board Member, Scientific Reports (Nature)
- 2016 -- Editorial Board Member, Nanotechnology for Environmental Engineering (Springer)
- 2016-2019, Member, PG Board of Studies in Chemistry, Pondicherry University, Puducherry
- 2016 -- Guest Research Professor, Akita University, Japan
- 2015, Outstanding Reviewer by J. Environmental Chemical Engineering, Elsevier
- 2015, Outstanding Reviewer by Journal of Hazardous Materials, Elsevier
- 2015 -- Visiting Professor, King Saud University, Riyadh, Saudi Arabia
- 2015, Excellence Reviewer by Chemical Engineering & Processing, Elsevier
- 2015 – 2018, Member, UG Board of Studies in Chemistry, Pondicherry University, Puducherry
- 2014, Excellence in Reviewer by Desalination, Elsevier
- 2014, First Indian authors contributed to the WILEY's prestigious "*ULLMANN'S'* Series
- 2014 -- Associate Editor, Environmental Chemistry Letters (Springer)
- 2014 -- Associate Editor, Frontiers in Environmental Science
- 2012, Invited Professor, University of Paris-Est Marne-La-Vallee. France

Academy Fellowships / Recognitions

- Fellow, The Royal Society of Chemistry (FRSC), UK
- Fellow of Australian Institute of High Energetic Materials (FAIHEM), Australia
- Fellow, Academy of Sciences, Chennai (FASC)
- Fellow, National Environmental Science Academy (FNESA)
- Fellow, Society for Advancement of Electrochemical Science and Technology (FSAEST)
- Fellow, International Congress of Chemistry and Environment (FICCE)
- Fellow, International Science Congress Association (FISCA)

Membership in Professional Bodies

- Member, International Society of Electrochemistry (ISE)
- Member, The Electrochemical Society (ECS)
- Life Member Vijnanabharati - VIBHA (Swadeshi Science Movement)
- Life Member, Materials Research Society of India

- Life Member, Chemical Research Society of India
- Life Member, Indian Carbon Society
- Life Member, Indian Institute of Metals
- Life Member, Indian Society for ElectroAnalytical Chemistry
- Life Member, Indian Desalination Association
- Life Member, Association of Global Groundwater Scientists
- Life Member FASHOD
- Life Member, Society of Environmental Chemistry and Allied Sciences
- Life Fellow Member National Environmental Science Academy
- Life Member, Kerala Academy of Science
- Fellow Member, International Congress of Chemistry and Environment
- Fellow Member, International Science Congress Association
- Fellow Member, Society for Advancement of Electrochemical Science and Technology

Technology transferred and developed

- Electrochemical de-flouridator (6 industries)
- Electrochemical hydrogen compressor (1 industry)
- Activated electrodes for hydrogen generation plant (1 industry)
- PEM based hydrogen generator (1 industry)
- Electrochemical technology for the production of anti-oxidant enriched water
- Electrochemical de-nitrator for removal of nitrate from drinking water
- Electrochemical dearsenator for the removal of arsenic from drinking water
- Electrochemical hypochlorinator (I industry)
- Electrochemical ozone generator
- Electrochemical muti-pollutant removal
- Electrochemical technology on removal of herbicides from drinking water

Editorial Activities

Guest Editor - Graphene, Green and Sustainable Chemistry and Journal of Chemistry
Editorial Board Member for Research Journal of Chemical Sciences, Chemical Science Transactions, Journal of Basic & Applied Sciences, Graphene, Com. Water, Energy, Environ. Engineering, Int. Journal of Chemical Engineering Research, Int. Journal of Chemistry and Applications, Int. Journal of Chemistry and Chemical Engineering, Int. Journal of Nanotechnology and Applications, Int. Journal of Nanoscience and Nanotechnology, Int. Journal of Water Resources, Chemical Science Communications, Int. J. Water and Wastewater Treatment, Journal of Materials and Environmental Science, Universal Journal of Environmental Research and Technology, Journal of Industrial and Environmental Chemistry, Carbon – Science and Technology

Projects Involved
National projects - Completed

- Development of Solid Polymer Electrolyte Water Electrolyser
  (Ministry of Agriculture, New Delhi)
- Feasibility study on the electrolytic production of iron free aluminum nitrate
  (Anoband (P) Ltd, Chennai)
- Development of 400W Hydrogen Generator based on PEM Water Electrolyser
  (Ministry of New and Renewable Energy, New Delhi)
- Electrochemical Technology for the Removal of Arsenic from Drinking Water
  (Department of Science and Technology, New Delhi)
- Hydrogen Energy Initiative: overcoming materials challenges for the generation, storage and conversion of hydrogen using fuel cells.
  (Council of Scientific and Industrial Research, New Delhi)
- Development of Electrochemical Technologies for drinking water up-gradation in North-East Region (Council of Scientific and Industrial Research, New Delhi)
- Generation, Storage and distribution of solar hydrogen.
  (Department of Science and Technology, New Delhi)
- Improvement in or relating to an Electrochemical preparation of ammonium, sodium and potassium persulphates
  (Posh Chemicals Private Limited, Hyderabad)
- Design and development 0.5 Nm^3/hr capacity PEM based electrolyser stack for the generation of hydrogen
  (Easterm Electrolyser Limited, New Delhi)
- Electrochemical characterization of catalyst for water splitting by PEM electrolyser
  (NATCO Pharma Limited, Hyderabad)
- Development of Electrochemcial Compressor
  (Easterm Electrolyser Limited, New Delhi)
- Studies on development of high surface area nickel electrode for alkaline water electrolysis
  (Easterm Electrolyser Limited, New Delhi)
- Development of materials for electrochemical and photo electrochemical processes in the removal of multi-pollutants from drinking water
  (Council of Scientific and Industrial Research, New Delhi)
- Design and development of electrodes and electrolytes for water electrolysis to generate hydrogen and hydrogen peroxide for sustainable energy and public hygiene.
  (Council of Scientific and Industrial Research, New Delhi)
- Solar to Chemical Conversion Systems and Devices (S2F)
  (Council of Scientific and Industrial Research, New Delhi)
- Removal of herbicides from drinking water by enhanced electro-oxidation processes.
  (Department of Science and Technology, New Delhi)
- Design and development of 5 Numbers of, higher pressure, 0.5 Nm3 / h capacity PEM based water electrolyser stack for the generation of hydrogen
  (Easterm Electrolyser Limited, New Delhi)
- Feasibility studies on hydrogen generation using hydraulic shock process
  (ACT Plast Paints Pvt Lts., Chennai)

International projects – Completed

- Enhanced processes for the removal of nitrate from water.
  (Indo-French Collaborative Project)

Other Major Responsibilities

- Secretary – SAEST Karaikudi Chapter during 2004-2006
- Joint Secretary – SAEST, Karaikudi during 2005-2007
- Organizing committee member for 13th National Convention of Electrochemists (NCE-13)
- Organizing committee member for 7th International Symposium on Advances in Electrochemical Science and Technology (ISAEST-9) 2007
- Treasurer – SAEST, Karaikudi during 2008-2010
- Organizing committee member for 15th National Convention of Electrochemists (NCE-15) 2010
- Organizing committee member for 9th International Symposium on Advances in Electrochemical Science and Technology (ISAEST-9) 2010
- Member in CSIR-CECRI Management Council for 2 years (2010 & 2011)
- Head Horticulture Section from 2008 onwards
- Warden for CFE Hostels (2007 – 2009)
- Sectional president for chemical science section for ISC-2012
- Treasurer – ECS (USA) India Section from 2012 -2016
- Chairman for CFE hostels since 2013 onwards
- Chair Person for water quality section for NGWC-2013
- Apex committee member for ISC-2013
- Sectional President for Chemical Science Section for ISC-2013
- Advisory Committee Members for National Conference on Recent Advances in Water and Waste Water Treatment (RAWWT – 2014)
- Expert Committee for Renewable Energy Technology for Sustainable Environment (RETSE 2014)
- National Scientific Advisory Committee for IGWC-2015
- Member - Management of Affairs for Centre for Education at CSIR-CECRI
- International Advisory Board - Euro-mediterranean Hydrogen Technologies conference (EmHyTeC2014), Italy
- Organizing Secretary – Indo-French Workshop on Sustainable Water Purification Technologies (2015)
- Member, Board of Studies for UG in Chemistry Department of Pondicherry University (2015-2018)
- Member, Board of Studies for PG in Chemistry Department of Pondicherry University (2016-2019)
- Organized a special course on “Skill cum technology up-gradation training programme on chlorates” for industrial and scientific community
- Member BIS Utensils, Cutlery & Domestic Hardware Sectional Committee MED 33
- Member for patent renewal committee 2017-present
- Member for patent committee (2012-2014)

- Technical Program Committee Member for 2017th International Conference on Electrochemistry and Energy Storage held at China during Dec. 1-3, 2017.
- Organizing Committee Member for International Conference on Climate Change and Sustainable Development to be held at Madurai (India) during 14-15 Dec. 2017
- National Advisory Committee for 3rd National Seminar on Advanced Oxidation Processes (AOP'17) to be held at Tiruchirappalli during 17-19 Dec. 2017
- Program Committee Member for Advanced Energy Materials Congress 2018, to be held at Sweden during 25-28 March 2018
- Organizing Committee Member for 4thInternational Conference on Pollution Control and Sustainable Environment, to be held at Rome Italy during 26-28 July 2018
- Nominated as one of the ISEAC (Indian Society for Electroanalytical Chemistry) managing committee member (2016-2019)
- National Scientific Advisory Committee Member for International Conference on Advanced Materials for Technological Applications" during 3rd – 5th January, 2018.
- International Advisory Committee Member for "11th International Conference on Sustainable Energy and Environmental Protection (SEEP 2018)" during 8-11 May 2018 at University of the West of Scotland
- Secretary, ECS India Section (2017 onwards)
- International Advisory Board for 11th International Conference on the "Challenges in Environmental Science and Engineering" (CESE-2018) to be held during 4-8 November 2018 at Bangkok, Thailand
- Organising Committee Member for 4th GoGreen Submit to be held at Holiday Inn Express, Kuala Lumpur, Malaysia on December 29th & 30th, 2018

Involving publications, co-operation projects and academic exchanges:

Canada	: Prof. Rolf Wu Thrich, Prof. Jana d. Abou Ziki, Prof. Raissa El-Haddad
Denmark	: Prof. Yifeng Zhang, Ioannis Fotidis
Finland	: Prof. Tanja Kallio
France	: Dr.Florence Epron, Prof. M.A.Oturan, Prof. P.Millet Prof. Francois Lapicque
Germany	: Prof. H. Vogt, Dr. Lothar Schaefer; Dr. Jan Balej, Dr. Saeed Akbar Sheikh, Prof. Gerhard Kreysa
Hungary	: Dr. Csaba Janáky
Italy	: Prof. Arico, Dr. Patrizio Gallone
Japan	: Prof. Dr. Atsushi Shibayama
Portugal	: Prof. Maria Cristina Fialho Oliveira
Saudi Arabia	: Mu. Naushad, Moonis Ali Khan
Singapore	: Prof. M.S.H.Chan, Prof. Lin Jianyi
Spain	: Prof. Manuel Andrés Rodrigo Rodrigo
Sweden	: Dr. Kalle Pelin
Switzerland	: Prof. Michael Graetzel, Dr. Peter Wintzer
UK	: Prof. Upul Wijayantha, Dr. Robert Potter (JM)
USA	: Prof. Virender K. Sharma (Texas A&M University), Dr. John E. Bennett, Tyler LeBaron (Molecular Hydrogen Foundation)

Industrial Collaborations

- Eastern Electrolyser (P) Ltd., New Delhi
- Shrinathji Kayakalp (P) Ltd, Bhopal
- Speciality Products (P) Ltd Raipur
- Nagpur Aquatech (P) Ltd., Nagpur
- Sandur Fluid Controls (P) Ltd, Bangalore
- Johnson Matthey (P) Ltd, UK
- Enviro Care India Pvt. Ltd, Madurai
- Devey Products, Chennai
- Surya International, Brahmapur-760001, Odisha
- ACT Plast Paints Pvt. Ltd., Chennai
- Greenvironment, Chennai

Scientific Production and its Impact

Books and monographs	: 07	Editorials in journals	: 11
Research papers in journals: 90		Reviews in journals	: 08
Citations (up-to May 2018)	: 1836	h-index	: 26 (*Web of Science)*
	: 2534	h-index	: 31 *(Google Scholar)*
		i10-index	: 61 *(Google Scholar)*
Invited lectures	: 47		

Keynote/ Presidential/Award/Invited Lectures

47. Challenges and Opportunities of Electrochemical Processes for Next Generation Technologies for the Treatment of Contaminated Water
e – Invited Talk (Skype), International Workshop and Symposium on Green Chemistry & Technology held during 15 – 17 October 2018 at Government Dungar College, Bikaner, Rajasthan

46. Electrode Materials for Energy and Environmental Applications
Invited Talk, Indo-UK International workshop on Advanced Nanomaterials for Energy, Environment and Healthcare Applications held during 31 August to 1 September, 2018 at KSR Institution, Tiruchengode

45. Water resources and water quality monitoring
Special lecture, JIGYASA held at CSIR-CECRI, Karaikudi, during 23 – 27 April, 2018

44. Hydrogen on the Rise
Invited lecture, International conference on advanced materials for technological Applications held at PSGR Krishnammal College for Women during 3-5th Jan. 2018

43. Electrochemical Processes: Emerging Applications for Greater Sustainability
Plenary Lecture, 5th national seminar on advance oxidation process (AOP 2017) held at Anna University Trichy during 17-19th Dec 2017

42. Electrochemical Alternatives: Emerging Applications for Improved Sustainability
Plenary Lecture, International conference on climate change and sustainable development with a special references to Indian context held at Annai Fathima College of arts and science, Madurai during 14-15th Dec. 2017

41. Electrochemical process for the sustainable water treatment process (Direct oxidation – indirect oxidation – electrodes)
Invited Lecture, Refresher course on Wastewater Treatment at CECRI, Karaikudi on 05.12.2017

40. Electrochemistry based water treatment technologies
Invited Lecture, Skill Development Programme at CECRI, Karaikudi on 30.11.2017

39. (Electro) Chemistry for Tomorrow's World
Inaugural Address, International Conference on Materials, Emerging Devices and Energy Efficient Technologies at St. Xavier's Catholic College of Engineering, Nagercoil during 5 to 6th October 2017.

38. Electrochemistry and Water
Water Day Guest Lecture, World Water Day Calibration at Jayamgonda Vinayagar High School, Nachiapuram on 22nd March 2017

37. Can Electrochemistry Make the Worlds Water Clean?
Plenary Presentation, Faculty improvement programme held at Umayal Ramanathan College for Women, Karaikudi on 07, March 2017.

36. Role of Electrochemistry in Clean Energy and Clean Water
Guest lecture, Workshop on Future Perspectives on Clean Energy and Clean Water held at NIT, Tiruchirappalli during 16-18, February 2017.

35. Hydrogen on the Rise – Materials Challenge
Invited Talk, International Conference on Advances in Functional Materials held at Anna University, Chennai during 6th to 8th January 2017.

34. Electrochemical Processes: An Attractive Alternate for Water Purification
Plenary Presentation, First Indian National Groundwater Conference on Sustainable Development and Management of Groundwater Resources in Arid and Semi-arid Regions held at Jawaharlal Nehru Technological University, Hyderabad during 5-7th October 2016.

33. Electrochemical Processes: Emerging Applications for Better Sustainability
Keynote Lecture, Short Term Course on Challenges, Emerging Trends and Recent Initiatives in Environmental Engineering held at National Institute of Technology, Trichy during 29th August to 3rd September, 2016.

32. Electrochemical Alternatives: Emerging Applications for Better Sustainability
MRSI Medal Lecture, Materials Research Society of India (MRSI) Symposium on Advanced Materials for Sustainable Applications held at CSIR-North East Institute of Science & Technology, Jorhat during 18-21 February, 2016

31. Electrochemical Alternatives for Drinking Water Purification
Keynote Lecture, Sixth International Groundwater Conference (IGWC 2015) held at SRM University, Chennai during 11-13 February, 2016.

30. Electrochemical Processes: Emerging Applications for Better Sustainability
Fellowship Award Lecture, National Conference on Monitoring and Management of Drinking Water Quality (NCMMDWQ)-2015 held at UCOST Campus, Dehradun during 21-23 December, 2015

29. Electrochemical alternatives for water contamination by agricultural activities
Plenary Presentation, All India Seminar on Cost Effective Effluent Treatment Systems held at National Institute of Technology, Trichy by IEI during Nov. 20-21, 015

28. Electrochemical Processes: Emerging Applications for Greater Sustainability
Keynote Presentation, International Seminar on Water and Sustainable Development held at Periyar Maniammai University, Vallam (Thanjavur) during 23-24 March 2015

27. Electrochemical Alternatives for Drinking Water Purification
S. Vasudevan
Invited Speaker, Trombay Symposium on Desalination and Water Reuse (TSDWR 2015) held at BARC, Mumbai during January 22 – 23, 2015

26. Electrochemical remediation technologies for water contamination by agricultural Activities
Award Lecture, 4th International Science Congress (ISC 2014) held at Pacific University, Udaipur, Rajasthan during December 8 – 9, 2014

25. Electrochemical remediation technologies for water contamination by agricultural activities
Keynote Lecture, Recent Advances in Water and Wastewater Treatment (RAWWT) – 2014 at Gandhigram Rural Institute (GRI), Gandhigram during 21-22 March, 2014

24. Energy and Environment
Presidential Address, National Science Day Address at Yadava College, Madurai on 28.02.2014

23. Water Electrolysis – A Green Process for Hydrogen Generation
Invited Speaker, International Conference on Non conventional Energy (ICONEC 2014) at JIS College of Engineering, Kalyani, India during January 16 – 17, 2014.

22. Electrochemistry for Tomorrow's World
Invited Speaker, Third International Science Congress (ISC-2013) held at Karunya University, Coimbatore during December 8-9, 2013

21. Electrochemical Remediation Technologies for Water Contaminated by Agricultural Activities
Keynote Presentation, National Ground Water Conference (NGWC-2013) on Problems, Challenges and Management of Groundwater in Agriculture held at Water Technology Centre, Tamilnadu Agricultural University, Coimbatore during December 9-11, 2013

20. Electrochemical Processes for Environmental Applications – An overview
Invited Speaker, Workshop on "Cleaner Technologies for Water and Wastewater" National Institute of Technology, Tiruchirappalli during 12-13 Nov.2013

19. New Catalysts for Removal of Nitrate from Ground Water for Agricultural Purpose.
Invited Speaker, India-France Technology submit & Technology Platform held at Hotel Lalit, New Delhi during 23-24 October 2013

18. Electrolysis - Inevitable Energy Transformer in a World of Sustainable Energy
Keynote Presentation, International Conference on Energy Efficient Technologies for Sustainability (ICEETS'13) held at St. Xavier's Catholic College of Engineering, Chunkankadai, Nagercoil during 10-12 April 2013

17. Electrochemical Processes for Clean Environment
Invited Speaker, International Conference on Recent Advances in Textile and Electrochemical Sciences – 2013 (RATES-2013) held at Alagappa University, Karaikudi during 21-23 March 2013

16. Fluoride Management in Drinking Water
Invited Speaker, Technology Entrepreneurship Development Programme (TEDP), held at Alagappa University, Karaikudi during 22.2.13 to 28.03.13

15. Water Resources, Pollution and Electrochemical Technologies for Water Purification.
Award Lecture, Fifth ISEAC Triennial International Conference on Advances and Recent Trends in Electrochemistry (ELAC-2013) held at Hotal Sitara, Ramoji Film City, Hyderabad during 16-20 January 2013.

14. Electrochemical Processes for Environmental Applications - Special Emphasize on CECRI Technologies
Invited Speaker, Fifth International Groundwater Conference (IGWC-2012) during 18-21 December 2012 at Maulana Azad College of Arts, Science & Commerce, Aurangabad, India

13. Water Resources, Pollution and Treatment Technologies
Award Lecture, Second International Science Congress (ISC-2012) during 8-9 Dec. 2012 at Vrindavan

12. Electro-oxidation Process for Water Treatment Technologies
Invited Lecture, Second International Conference on Advanced Oxidation Processes (AOP 2012) during 5-8 October 2012 at MG University, Kottayam

11. Water Resources, Pollution and Treatment Technologies
Invited Lecture, Recent Advances in Inorganic Chemistry during 22-24, March, 2012 at Bharathidasan University, Tiruchirappalli – 620 024

10. Electrochemical Processes for Environmental Applications
Invited Lecture, INDO-UK Workshop on Current Development of Wastewater Treatment - Advanced Separation Processes (2011) during 29th to 31st August 2011, held at NIT, Trichy.

9. Adsorption Isotherms, Kinetics and Thermodynamic Studies on the Removal of Chromium by Electrocoagulation
Invited Seminar, ICCE – 11 during 27 – 29 May 2011 at Malaysia

8. Transition to Hydrogen Economy: The Hydrogen and Fuel Cell Technology.
Invited Seminar, Institute of Chemical and Engineering Science, A* STAR, Singapore during 6-8, Sep. 2010

7. Perchlorates – An Overview
Invited Seminar, Energetics Research Institute, Nanyang Technological Institute, Singapore during 6-8, Sep. 2010

6. Transition to Hydrogen Economy: The Hydrogen and Fuel Cell Technology.
Invited Seminar, Energetics Research Institute, Nanyang Technological Institute, Singapore during 6-8, Sep. 2010

5. Electrodes for electrosynthesis.
Invited Seminar, Energetics Research Institute, Nanyang Technological Institute, Singapore during 6-8, Sep. 2010

4. Chlorine Oxides and Chlorine Oxygen Acids.
Invited Seminar, Energetics Research Institute, Nanyang Technological Institute, Singapore during 6-8, Sep. 2010

3. Hydrogen Generation – by Water Electorlysis
Award Lecture, ELAC-2010 during 16 – 18 March 2010 at Puri, India

2. Enhanced Processes for the Removal of Nitrate from Water
Invited Seminar, Laboratory of Catalysis and Organic Chemistry**,** University of

Poitiers, Poitiers, France on 15th June 2008

1. Electrolytic Production of Hydrogen
   Invited Seminar, WHTC-2005 during 2-5 Oct. 2005 at Singapore

LIST OF PUBLICATIONS

Since I am working in diverse areas of electrochemistry, my publications are categorized viz., Water Treatment and Waste Management, Hydrogen Energy, Synthesis of Electro-inorganic Chemicals, Batteries, Reviews, Editorials, Papers in Proceedings and Book Chapters.

A. Water Treatment and Waste Management

57. OPAC (Orange Peel Activated Carbon) derived from waste orange peel for the adsorption of Chlorophenoxyacetic acid herbicides from water: Adsorption isotherm, kinetic modelling and thermodynamic studies.
P. Aarthi, R. Kamaraj, V.Sudharshan, S. Vasudevan*
Bioresource Technology 261 (2018) 329 – 341

56. Facile one-pot electrosynthesis of zinc hydroxide for the adsorption of hazardous 2-(2-methyl-4-chlorophenoxy) propionic acid (MCPP) from water and its modelling studies
R. Kamaraj, P. Aarthi, V.Sudharshan, S. Vasudevan
Journal of Environmental Chemical Engineering 6 (2018) 2017 – 2016

55. Synthesis of Cu-Cr diketo, sublimable, eutectic composite complex, rod crystals from LDH as suitable MOCVD precursor of $CuCr_2O_4$ catalysts upon ceramic preforms for N_2O decomposition
Pinky Saikia, S. Vasudevan, Rupam J. Sarma, Rajib Lochan Goswamee
Materials Today Chemistry 7 (2018) 40-52

54. Enhanced removal of Cephalosporins Based Antibiotics (CBA) from water by one-pot electrosynthesed $Mg(OH)_2$: A combined theoretical and experimental study to pilot scale.
P. Aarthi, R. Kamaraj, S. Vasudevan*
New Journal of Chemistry 41 (2017) 4518 – 4530

53. Dodecyl sulfate chain anchored bio-char to sequester triaryl methane dyes: Equilibrium, kinetics, and adsorption mechanism
S. Mohammad Wabaidur, M.Ali Khan, S.Vasudevan M. RazaSiddiqui, Z. Abdullah Alothman, M. Saad Al-Ghamdi, I.H. Al-Sohami
Desalination and Water Treatment 67 (2017) 357-370

52. Eco-friendly and easily prepared graphene nanosheets for safe drinking water: Removal of chlorophenoxyacetic acid herbicides
R. Kamaraj, P. Aarthi, M. Rajiv Gandhi, A. Shibayama, S. Vasudevan*
Chemistry Select 2 (2017) 342-355

51. Eco-friendly and facile integrated biological-cum-photo assisted electrooxidation process for degradation of textile wastewater
A. Priyadharshini, S. Vasudevan, Sergio Ferro, G. Rajagopal
Water Research 93 (2016) 230-241

50. Facile one-pot synthesis of nano-zinc hydroxide by electro-dissolution of zinc sacrificial anode and their application towards adsorption of Th^{4+}, U^{4+} and Ce^{4+} from aqueous solution
R. Kamaraj and S.Vasudevan*
Research on Chemical Intermediates 42 (2016) 4077-4095

49. Facile one-pot electrosynthesis of $Al(OH)_3$ - kinetics and equilibrium modeling for adsorption of 2,4,5-trichlorophenoxyacetic acid from aqueous solution.
R. Kamaraj and S. Vasudevan*
New Journal of Chemistry 40 (2016) 2249 – 2258

48. Adsorption kinetics, isotherms and thermodynamic studies for Hg^{2+} adsorption from aqueous medium using alizarin red-S loaded amberlite IRA-400 resin
Mu. Naushad, S. Vasudevan , G. Sharma, A. Kumar, Z.A. ALOthman
Desalination and Water Treatment 57 (2016) 18551–18559

47. Kinetics, thermodynamics and isotherm modeling for removal of nitrate from liquids by facile one-pot electrosynthesized nano zinc hydroxide
R. Kamaraj, P. Aarthi, S. Jayakiruba, Mu. Naushad and S. Vasudevan
Journal of Molecular Liquids 215 (2016) 204–211

46. Adsorption of herbicide 2-(2,4-dichlorophenoxy) propanic acid by electrochemically generated aluminum hydroxide: an alternate to chemical dosing.
R. Kamaraj, D.J. Davidson, G.Sozhan and S.Vasudevan*
RSC Advances 5 (2015) 39799 – 39809

45. Decontamination of selenate from aqueous solution by oxidized multi-walled carbon nanotubes
R. Kamaraj and S.Vasudevan*
Powder Technology 274 (2015) 268 – 275

44. Evaluation of electrocoagulation process for the removal of strontium and cesium from aqueous solution.
R.Kamaraj and S.Vasudevan*
Chemical Engineering Research and Design 93 (2015) 522-530

43. Removal of lead from aqueous solutions by electrocoagulation: Isotherm, kinetics and thermodynamic studies
R. Kamaraj, P. Ganesan, S.Vasudevan*
International Journal of Environmental Science and Technology 12 (2015) 683 - 692

42. Use of hydrous titanium dioxide as potential sorbent for the removal of manganese from water
R. Kamaraj, P.Ganesan and S.Vasudevan*
Journal of Electrochemical Science and Engineering 4 (2014) 187 - 201

41. Adsorption of 2,4-dichlorophenoxyacetic acid (2,4-D) from water by in situ generated metal hydroxides using sacrificial anodes
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44. Photoelectrochemical generation of hydrogen using p-type $CaFe_2O_4$ photocathodes
R.Venkatkarthick, C. Krithiga Devi, L. John Berchmans, S.Vasudevan,
D. Jones Davidson, G. Sozhan, S. Ravichandran
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43. Sulfonated Polystyrene-Block-(Ethylene-Ran-Butylene)-Block-Polystyrene (SPSEBS) /SiO_2 Composite Membrane for Water Electrolysis to Generate Hydrogen
S. Parveen J, S. Elamathi, D. Sangeetha, J. Lakshmi, A. Sankari, S. Vasudevan,
D. Davidson, G. Sozhan, and S. Ravichandran
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Short Biography - Dr. S. Vasudevan

Prof. Vasudevan Subramanyan is the Senior Principal Scientist of CSIR-Central Electrochemcial Research Institute, Karaikudi. He was conferred the degree of Doctor of Science (D.Sc), honoris causa by LINGAYA'S Vidyapeeth in recognition of his research contribution in the field of electrochemical sciences. He is internationally recognised by many prestigious awards, fellowships and honours for his seminal contribution to education, research and innovation in materials electrochemistry, electrochemical water treatment, hydrogen generation, synthesis of electro-inorganic chemicals, electrochemical waste management, electro-catalysis, magnesium batteries, anti-oxidant water and development of clean technologies. His passion for Tamil, Telugu, Literature, Badminton, Cricket, Hockey and Football stands him apart. He has earned his M.Sc and Ph.D in Electrochemistry from School of Chemistry, Alagappa University, Karaikudi (Tamilnadu), India.

His research productivity is phenomenal; supervision of large number of doctoral and master's thesis, over 100 original research papers, 12 national and PCT patents, 7 book chapters, over 100 invited lectures, keynote address in India & abroad, h-index of 31 and i_{10} index of 61; 2500+ citations and transferred technologies to different industries that had great societal values. He is first Indian author who contributed two chapters to the WILEY's prestigious *ULLMANN'S Encyclopedia of Industrial Chemistry* (7^{th} edition).

His recent research is developed a novel technology on preparation of *Antioxidant -rich drinking water"* based on simple electrochemical process. This water can cause multiple effects in cells and tissues, including anti-apoptosis, anti-inflammation, anti-allergic, anti-aging and metabolic effects, in most cases by reducing oxidative stress and excess amounts of ROS/RNS.

He is a Fellow of Royal Society of Chemistry, UK (FRSC), Fellow of Australian Institute of High Energetic Materials (FAIHEM), Chartered Chemist (CChem) by Royal Society of Chemistry, UK, Fellow of National Environmental Science Academy (FNESA), Fellow of International Science Congress Association (FISCA), Fellow of International Congress of Chemistry and Environment (FICCE), Fellow of Society for Advancement of Electrochemical Science and Technology (FSAEST) and Fellow of The Academy of Sciences Chennai (FASC).

He is one of the Associate Editor and Editorial Board Member of many prestigious journals like Scientific Reports (nature), Environmental Chemistry Letters (Springer Nature), etc. He is an Invited Professor at University of Paris (East), France, Guest Research Professor, Akita University, Japan, Visiting Professor, King Saud University, Riyadh, Saudi Arabia and PSG distinguished visiting professor, Coimbatore (India)

He has received innumerable professional awards such as Best Paper Award, Best Import Substitution Award, Best Technology Award, Per Capita ECF Award, International Best Researcher Award, Eminent Scientist Award, International Highest Publication Award, Distinguished Scientist Award, MRSI Medal Award, Indira Gandhi Sadbhavana Award, Bharat Shiksha Ratan Award, Outstanding Faculty of the Year Award, Best Scientist Award, Excellence in Review Award and Outstanding Reviewer Award from different journals. He has been a member of several committees like GITA, DST, CSIR-HRDG, etc.