



DR. V. DHARUMAN
ASSISTANT PROFESSOR

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Academic Qualifications: M.A./M.Sc./M.Phil./Ph.D./

S.No	Degree	College and University	Year	Subject	Percentage
1	B.Sc	University of Madras	1989	Chemistry	62.7
2	M.Sc	University of Madras	1991	Chemistry	58.7
3	B.Ed	University of Madras	1992	Physical Sciences	
3	Ph.D	University of Madras	2002	Chemistry	

Teaching Experience: 9 Years

Designation and Research Institution	From	To	Duties and Responsibilities
Assistant Professor	2008	Till date	Teaching and research in the field of Bioelectronics and Biosensors

Research Experience: 15 Years

Designation	Research Institution	From	To
Post-doctoral Research Scientist	Fraunhofer Institute for Silicon Technology, GERMANY	17 th Sep. 2001	30 th Nov. 2004 (3 y 2 months)
Post-doctoral Research Scientist	Pohang University of Science and Technology SOUTH KOREA	13 th Dec. 2004	10 th Oct. 2006 (1 y 10 months)
Research Scientist	Advanced Institute of Industrial Science and Technology (AIST), JAPAN	16 th Oct 2006	31 st March. 2007 (6 months)
Post-doctoral Research Scientist	Pohang University of Science and Technology SOUTH KOREA	8 th Aug. 2007	15 th June 2008 (11 Months)

Additional Responsibilities

1. Deputy Director for University Scientific Instrumentation Centre
2. Dept. NAAC coordinator
3. Dept. Cultural club coordinator

Areas of Research

Chemistry/Electrochemistry/ Diabetic, cancer biosensors development using, DNA, antibody (immunosensors) and neurological disorder sensors

Research Supervision / Guidance

Program of Study		Completed	Ongoing
Research	Ph.D.	4	3
	M.Phil.	2	---
	PDF		1
	Project Fellow		1
Project	PG	21	---
	UG / Others	1	---

Research Group:

Post Doctoral Fellow

1. K. Mahendraprabhu, DST National Post Doctoral Fellow

PhD scholars

1. P. N. Manikandan, DST INSPIRE Fellow
2. H. Imran, UGC Project Fellow
3. K.P. Divya, DST INSPIRE Fellow

Project Fellow

1. A. Anancia Grace, DST Project Fellow

Publications

International		National		Others
Journals	Conferences	Journals	Conferences	Books Chapters
33	53	3	51	3

Cumulative Impact Factor (as per JCR) :	146.77
h-index	14
i10 index	16
Total Citations	611

Funded Research Projects

Completed Projects

S. No	Agency	Period		Project Title	Budget (Rs. In lakhs)
		From	To		
1	UGC	2009	2011	Multi Component Thiol alkane Diluent - DNA Mixed Monolayers for Efficient Label Free Electrochemical Detection of Cancer DNA-P53 Protein interactions	9.8
2	DST	2010	2013	Liposome mediated cancer DNA sensing of electrochemical and pizeo electric techniques and DNA transfection studies	25.44
3	CSIR	2010	2013	Development of Electrochemical immunosensors for simultaneous detections and discriminations of different food pathogenic bacterial microbes on microgold arrays	18.16

4	AURF	2010	2011	Electrochemical Detection of Antibody Prostate Specific Antigen Interactions Using Gold Transducers	0.64
5	ICMR	2013	2016	Development of Simple, Reagentless, Renewable Glucose Sensors Using Nano Ruthenium oxide- nono pore Polymer – Nano Au Composite Films	32.79

Ongoing Projects

S. No	Agency	Period		Project Title	Budget (Rs. In lakhs)
		From	To		
1	DST	2015	2018	Studies on membrane proteins interactions on liposome-DNA-gold nanoparticle composite tethered on gold transducer for biosensing	44.7
2	UGC	2015	2018	Development of novel graphene and metal nano composite films and characterization for label free electrochemical DNA-protein sensing	14.65

Distinctive Achievements / Awards

1. Best poster award, National Conference on Futuristic Materials (NCFM-2017), March 27 & 28th, 2017 Alagappa University, Karaikudi-630 003
2. Best poster award, International conference on recent advance in materials and chemical sciences (ICRAMCS-2015), Dec.14-15, 2015, Gandhigram Rural Institute
3. Alagappa Excellence Award for Research 2015-2016
4. Best poster award, Indo-Japan workshop on Biomolecular Electronics & Organic Nanotechnology for Environment Preservation (IJWBME 2013), 13-15th December 2013, Delhi Technological University, Delhi, India
5. Young Biomedical scientist Research Fellowship by Indian Council of Medical Research, India, for the year 2012-2013
6. Article Gold nano particle decorated graphene core first generation PAMAM dendrimer for label free electrochemical DNA hybridization sensing, Biosens. Bioelectr., 31 (2012) 406-412 . Ranked 16th on the TOP 25 articles in the Journal of Biosensors and Bioelectronics, March 2012
7. Research Scientist , AIST, Japan, Oct.2006 – March 2007

8. Brain Korea Post doctoral research fellowship, Decmber 2004
9. Fraunhofer Research Acheivment Award, from Fraunhofer Gesellschaft, Leonrodstrasse 54, D 80636 München, Germany, 2002
10. Fraunhofer Research Scientist Fellowship September 2001 – Nov. 2004
11. Senior Research Fellow, UGC, India April. 1998-March. 2000
12. Junior Research Fellow, UGC, New Delhi, India, April. 1995-March. 1997
13. Graduate Aptitude Test in Engineering (GATE'93) with 94.12 percentile. Conducted jointly by Indian Institute of Technology (IIT) and Indian Institute of Science (IISc) 1993

Events organized in leading roles

Number of Seminars / Conferences / Workshops / Events organized: 4

1. Organizing secretary in National Seminar on Advancements in Bioelectronics and Biosensors, 19th & 20th March, 2009, Alagappa University, Karaikudi 630 003, India
2. National Seminar on Frontiers in Nanomaterials and Biosensors 4th & 5th March, 2010, Alagappa University, Karaikudi 630 003, India
3. National conference on Recent Advancements in Nanomaterials for Sensor Applications (NANOSE-12), 8th & 9th March, 2012, Alagappa University, Karaikudi 630 003, India
4. Organized one day workshop on Metrohm Autolab Electrochemical Instruments for biosensor, energy and corrosion applications , 16-02-2015, Alagappa University, Karaikudi
5. Workshop on Biosensor in Agricultural, Environmental and Medical Sciences 13-14, March 2017, Alagappa University, Karaikudi

Other Training Programs

1. Interdisciplinary course: Nanoscience and Technology, organized by University of Madras from 11.11.2009 to 01.12.2009.
2. Orientation course : organized by Madurai Kamaraj University, from 30.05.2013 to 26.06.2013
3. Interdisciplinary course : Life sciences , organized by Bharathidasan University, Trichy , 03.03.2016 to 23.03.2016.

Overseas Exposure / Visits

1. South Korea, Department of Chemistry, Biotech Center, Pohang University of Science and Technology, Oct. 2012 - May 2013 (Immunosensors for estrogen detection) & August 2007 – June 2008, Dec. 2004-Oct. 2006 (Postdoctoral Research – Development of label free DNA sensing by electrochemical methods)
2. Japan, Diamond Research Centre, Advanced Institute of Industrial Science and Technology, Tsukuba October 2006 – March 2007 (Research Scientist Staff – Diamond electrode based DNA sensors).
3. Germany, Department of Biotechnical Micro systems, Fraunhofer Institute of Silicon Technology, Sept.2001- Nov.2004 (Postdoctoral Research Scientist worked on label free DNA sensing)

Membership in

Professional Bodies

1. Life Member: Indian Science Congress
2. Life Member: Nanoscience and Technology Society of India, South chapter
3. Regular Member: American Chemical society (ACS), USA

Academic Bodies (such as Board of Studies etc.,)

1. Board of studies Member in Bielectronics and Biosensor (PG)
2. Board of studies Member in Bielectronics (PG)
3. Board of studies Member in Electronics for UG, OPG and M.Phil

Resource persons in various capacities

Number of Invited / Special Lectures delivered: 30

Recent Publications

No	Authors/Title of the paper/Journal Particulars	Impact Factor
1.	E Preedia Babu, A Subastri, A Suyavaran, K Premkumar, V Sujatha, B Aristatile, Ghedeir M Alshammari, V Dharuman, C Thirunavukkarasu, Size Dependent Uptake and Hemolytic Effect of Zinc Oxide Nanoparticles on Erythrocytes and Biomedical Potential of ZnO-Ferulic acid Conjugates, (2017), <i>Scientific Reports</i>	4.25

2.	K. P. Divya, V. Dharuman, Supported binary liposome vesicle-gold nanoparticle for enhanced label free DNA and protein sensing, (2017), Biosensors and Bioelectronics, 95, 168-173.	7.47
3.	P. N. Manikandan, V. Dharuman, Electrochemical Simultaneous Sensing of Melatonin, Dopamine and Acetaminophen at Platinum Doped and Decorated Alpha Iron Oxide (2017) Electroanalysis 29, 1 - 9.	2.47
4.	K. P. Ganesan, N. Anandhan, V. Dharuman, P. Sami, R. Panneerselvam, T. Marimuthu Electrochemically modified crystal orientation, surface morphology and optical properties using CTAB on Cu ₂ O thin films (2017), Results in Physics, 7, 82.	1.3
5.	P. N. Manikandan, H. Imran, V. Dharuman, Direct glucose sensing and biocompatible properties of zinc oxide- multiwalled carbon nanotube - poly (vinyl chloride) ternary composite (2016), Anal. Methods, 8, 2691-2697.	1.9
6.	M. Bhuvana, V. Dharuman Inchain lengths and head groups on tethering of liposome-gold nanoparticle on gold surface for electrochemical DNA sensing and gene delivery (2016) Sensors and Actuators B: Chemica, 223, 157-165.	5.4
7.	H. Imran, P. N. Manikandan, V. Dharuman Facile and green synthesis of graphene oxide by electrical exfoliation of pencil graphite and gold nanoparticle for non-enzymatic simultaneous sensing of ascorbic acid, dopamine and uric acid (2015) RSC Advances, 5, 63513-63520.	3.2
8.	V. Dharuman, C. Anjalidevi, P. N. Manikandan , H. Imran, Gold nanoparticles supported on zirconium, tin and ruthenium oxides for reagentless electrochemical sensing of hydrogen peroxide (2015) Anal. Methods, 7, 3454-3460.	1.9
9.	G. Vijayaprasath, R. Murugan, J. Shankara Narayanan, V. Dharuman, G. Ravi, Y. Hayakawa, Glucose sensing behavior of cobalt doped ZnO nanoparticles synthesized by co-precipitation method (2015) Journal of Materials Science: Materials in Electronics 7, 4446-4450.	2.01
10.	M. Bhuvana, V. Dharuman, Construction of Spherical Liposome on Solid Transducers for Electro chemical DNA Sensing and Transfection (2014), Appl Biochem Biotechnol 174, 1137-1150.	1.9
11.	M. Bhuvana, V. Dharuman, Tethering of spherical DOTAP liposome gold nanoparticles on cysteamine monolayer for sensitive label free electrochemical detection of DNA and transfection (2014), Analyst	4.01

	139, 2467-2475.	
12.	J. Shankara Narayanan, M. Bhuvana, V. Dharuman, Sandwiching spherical 1, 2-dioleoyltrimethyl ammoniumpropane liposome in gold nano particle on solid transducer for electrochemical ultrasensitive DNA detection and transfection (2014), Biosensors and Bioelectronics, 58, 326-332.	7.47
13.	S. Radhakrishnan, C. Sumathi, Ahmad Umar, Sang Jae Kim, J. Wilson, V. Dharuman, Polypyrrole- poly(3,4-ethylenedioxythiophene)-Ag (PPy-PEDOT-Ag) nanocomposite films for label-free electrochemical DNA sensing (2013) Biosensors and Bioelectronics, 47, 133-140.	7.47
14.	V. Dharuman, J. H. Hahn, K. Jayakumar and W. Teng, Electrochemically reduced graphene-gold nano particle composite on indium tin oxide for label free immuno sensing of estradiol (2013) Electrochimica Acta, 114, 590- 597.	4.79
15.	C. Anjalidevi, V. Dharuman, J. Shankara Narayanan, Non enzymatic hydrogen peroxide detection at Ruthenium oxide-gold nano particle-Nafion modified electrode (2013) Sensors and Actuators B Chemical 182, 256- 263.	5.4
16.	S. Radhakrishnan, C. Sumathi, V. Dharuman, J. Wilson, Polypyrrole nanotubes-polyaniline composite for DNA detection using methylene blue as intercalator (2013) Analytical Methods, 5, 1010-1015.	1.9
17.	S. Radhakrishnan, C. Sumathi, V. Dharuman, J. Wilson, Gold nanoparticles functionalized poly(3,4- ethylenedioxythiophene) thin film for highly sensitive label free DNA detection (2013) Analytical Methods, 5, 684-689.	1.9
18.	J. Shankara Narayanan, C. Anjalidevi, V. Dharuman, Nonenzymatic glucose sensing at ruthenium dioxide-poly(vinyl chloride)-Nafion composite electrode (2013) Journal of Solid State Electrochemistry 17, 937-947.	2.31
19.	M. Bhuvana, J. Shankara Naryanan, V. Dharuman, W. Teng, J. H. Hahn, K. Jayakumar, Gold Surface Supported Spherical Liposome - Gold Nano Particle Nano Composite for Label Free DNA Sensing (2013) Biosensors and Bioelectronics 41, 802-808.	7.4
20.	J. Wilson, S. Radhakrishnan, C.Sumathi, V. Dharuman, Polypyrrole-Polyaniline - Au (PPy-PANi-Au) nano composite films for label free electrochemical DNA sensing (2012) Sensors and Actuators B	5.4

	Chemical 171, 216-222.	
21.	K. Jayakumar, R. Rajesh ,V. Dharuman, R. Venkatasan, J. H. Hahn, S. Karutha Pandian, Gold nano particle decorated graphene core first generation PAMAM dendrimer for label free electrochemical DNA hybridization sensing (2012) Biosensors and Bioelectronics, 31, 406-412.	7.4
22.	V. Dharuman, K. Vijayaraj, S. Radhakrishnan, T. Dinakaran, J. Shankara Narayanan, M. Bhuvana, J.Wilson, Sensitive label-free electrochemical DNA hybridization detection in the presence of 11-mercaptopundecanoic acid on the thiolated single strand DNA and mercaptohexanol binary mixed monolayer surface (2011) Electrochimica Acta, 56, 8147- 8155.	4.79
23.	V. Dharuman, B. Y. Chang, S. M. Park, J. H. Hahn, Ternary Mixed Monolayers for Simultaneous DNA Orientation Control and Surface Passivation for Label Free DNA Hybridization Electrochemical Sensing (2010) Biosensors and Bioelectronics, 25, 2129-2134.	7.4
24.	V. Dharuman, J. H. Hahn, Label free electrochemical DNA hybridization discrimination effects at the binary and ternary mixed monolayers of single stranded DNA/diluent/s in presence of cationic intercalators (2008) Biosensors and Bioelectronics, 23, 1250-1258.	7.4
25.	V. Dharuman, J.H.Hahn, Effect of short chain alkane diluents on the label free electrochemical DNA hybridization discrimination at the HS-ssDNA/diluent binary mixed monolayer in presence of cationic intercalators (2007) Sensors and Actuators B Chemical, 127 536-544.	5.4
26.	V. Dharuman, E. Nebling, T. Grunwald, B. Elsholz, J. Albers, L. Blohm, R. Wörl, R. Hintsche, DNA hybridization detection on Electrical Micro Arrays using Coulostatic Pulse Technique (2006) Biosensors and Bioelectronics, 22, 744-751.	7.4
27.	V. Dharuman, K.Chandrasekara Pillai, RuO ₂ electrode surface effects on electrocatalytic oxidation of glucose (2006) Journal of Solid state Electrochemistry, 10, 967-979.	2.31
28.	V. Dharuman, T. Grunwald, E. Nebling, J. Albers, L.Blohm, R. Hintsche, Labelfree impedance detection of oligonucleotide hybridization on interdigitated ultramicroelectrodes using electrochemical redox probes (2005) Biosensors and Bioelectronics, 21, 645-654.	7.4

29.	J. M. Zen, H. F. Wang, A. Senthil Kumar, H. Y. Yang, V. Dharuman , Preconcentration and electroanalysis of copper(II) in ammoniacal medium on nontronite/cellulose acetate modified electrodes (2002) <i>Electroanalysis</i> , 14 , 99.	2.81
30.	J. M. Zen, D. M. Tsai, A. Senthil Kumar, V. Dharuman, Amperometric determination of ascorbic acid at a ferricyanide-doped tosflex-modified electrode (2000) <i>Electrochemical Communication</i> 2 , 782-785.	1.38
31.	V. Dharuman, K. Chandrasekara Pillai, Oxidation of D-glucose at RuO ₂ -PVC paste electrode in 1M NaOH-Dependence of oxide preparation temperature (1999) <i>Bulletin of Electrochemistry</i> 15 , 476.	0.24
32.	V. Dharuman, K. Chandrasekara Pillai, Glucose oxidation at Pt/PVC-bonded RuO ₂ composite electrode (1997) <i>Indian Journal of Chemical Technology</i> , 4 , 25.	0.58
33.	K. Chandrasekara Pillai, A. Senthilkumar, V. Dharuman, Adsorption of ruthenium(II) bipyridyl at the MnO ₂ /solution interphase (1996) <i>Bulletine of Electrochemistry</i> 12 , 432.	0.24

Contribution in book chapters

1. R. Hintsche, B. Eisholz, G. Piechotta, R. Woerl, C. G. J. Schabmueller, J. Albers, V. Dharuman, E. Nebling, A. Hanisch, L. Blohm, F. Hofmann, B. Holzapfl, A. Frey, C. Paulus, M. Schienle, R. Thewas, (2006), 'Fully Electrical Microarrays', in *Perspectives in Bioanalysis*, Ed. Paesche, Palecek, Elsevier, 246-277, ISBN: 978-0-444-52223-8
2. V. Dharuman, J. H. Hahn, (2012), "Label free Electrochemical sensing of DNA hybridization for Cancer Analysis" in *Biosensors and Molecular Technologies for Cancer Diagnostics*, Keith E. Herold, Avraham Rasooly CRC press, Taylor & Francis Group. 671-692
3. K. Jayakumar, R. Rajesh, V. Dharuman, R. Venkatesan, (2013) "Graphene -PAMAM Dendrimer -Gold nano particle composite for electrochemical DNA hybridization Detection", in *Nucleic Acid detection Methods and Protocols*, Ed. Dimitry M. Kolpashchikov and Yulia V. Gerasimova, Humana Press, USA, PP 201-220, ISBN, 978-1-62703-534-7

Conferences

1. P. N. Manikandan, H. Imran, V. Dharuman, (2016) Zinc Oxide - Multiwalled Carbon Nanotube-poly(vinyl Chloride) Film for Biocompatible Glucose Sensing, International Conference on Frontier Areas in Chemical Technologies - 2017 (FACTs-2017) 6-8th July 2017 Alagappa University, Karaikudi
2. H. Imran, V. Dharuman, (2016) Zinc Oxide - Multiwalled Carbon Nanotube-poly(vinyl Chloride) Film for Biocompatible Glucose Sensing, International Conference on Frontier Areas in Chemical Technologies - 2017 (FACTs-2017) 6-8th

- July 2017 Alagappa University, Karaikudi
3. K.P. Divya, V. Dharuman, (2016) Binary liposome (DOTAP-DOPE) vesicle-gold nanoparticle for enhanced label free DNA and protein sensing, International Conference on Frontier Areas in Chemical Technologies – 2017 (FACTS-2017) 6-8th July 2017 Alagappa University, Karaikudi
 4. P. N. Manikandan, V. Dharuman, Simultaneous sensing of Melatonin, Dopamine and Acetaminophen at Iron oxide- Platinum nanoparticles modified electrode, International conference on renewable energy science and technology -2017 (ICREST-2017), march 10-11, Alagappa University, Karaikudi-630 003
 5. H. Imran, V. Dharuman, Green synthesis of graphene oxide by electrical exfoliation of pencil graphite and gold nanoparticles for simultaneous sensing of ascorbic acid, uric acid and dopamine, International conference on renewable energy science and technology -2017 (ICREST-2017), march 10-11, Alagappa University, Karaikudi-630 003
 6. K.P. Divya, V. Dharuman, Liposome-gold nanoparticle on gold surface for electrochemical DNA sensing, International conference on renewable energy science and technology -2017 (ICREST-2017), march 10-11, Alagappa University, Karaikudi-630 003
 7. K.P. Divya, V. Dharuman, Binary lipid vesicle-gold nanoparticle on gold surface for enhanced DNA and protein sensing, International conference on biosensors, biomarkers and diagnostics; From research to commercialization, May 25-26, (2017) SelectBio Bengaluru
 8. H. Imran, V. Dharuman, The Direct Attachment of Graphene Oxide on Gold Electrode with Influence of Organic Solvents For Electrochemical Sensing of Acetaminophen National Conference on Futuristic Materials (NCFM-2017), March 27 & 28th, 2017 Department of Physics, Alagappa University, Karaikudi-630 003
 9. P. N. Manikandan, V. Dharuman, (2017) Simultaneous Sensing of Dopamine, Acetaminophen and Melatonin at Platinum Doped Iron Oxide Modified Electrode, National Conference on Futuristic Materials (NCFM-2017), March 27 & 28th, 2017 Department of Physics, Alagappa University, Karaikudi-630 003
 10. K.P. Divya, V. Dharuman, (2017) Ruthenium oxide -Graphene oxide -Single walled Carbon Nanotube composite for glucose sensing, National Conference on Futuristic Materials (NCFM-2017), March 27 & 28th, 2017 Department of Physics, Alagappa University, Karaikudi-630 003
 11. A. Sharmila Devi, N. Anandhan, R. Panneer Selvam, K.P. Ganesan, V. Dharuman, Synthesis and Characterization of Cobalt and zinc doped hydroxyapatite nanopowder by co-precipitation method, National Conference on Futuristic Materials (NCFM-2017), March 27 & 28th, 2017 Department of Physics, Alagappa University, Karaikudi-630 003
 12. A. Amali Roselin, N. Anandhan, K. Karthikeyana, V. Dharuman, Role of spin coating rate on the structural, luminescent and optical properties of bismuth titanium oxide thin film, National Conference on Futuristic Materials (NCFM-2017), March 27 & 28th, 2017 Department of Physics, Alagappa University, Karaikudi-630 003
 13. K. Karthikeyana, N. Anandhan, A. Amali Roselin, V. Dharuman, Phase transformation analysis of nano structure TiO₂ thin films synthesized by electrodeposition technique, National Conference on Futuristic Materials (NCFM-2017), March 27 & 28th, 2017 Department of Physics, Alagappa University, Karaikudi-630 003
 14. R. Priyatharshini, N. Anandhan, A. Amali Roselin, K. Karthikeyana, V. Dharuman, Alkali earth metal doped bismuth silicate ferroelectric thin film, National Conference on Futuristic Materials (NCFM-2017), March 27 & 28th, 2017 Department of Physics, Alagappa University, Karaikudi-630 003
 15. S. Fathimathaslin, A. Amali Roselin, N. Anandhan, K. Karthikeyana, V. Dharuman, Influence of annealing temperature on structural and optical properties of bismuth

- silicate thin film, National Conference on Futuristic Materials (NCFM-2017), March 27 & 28th, 2017 Department of Physics, Alagappa University, Karaikudi-630 003
16. P. N. Manikandan, H. Imran, V. Dharuman, (2016) "Biocompatible Zinc oxide-Multiwalled carbon nanotube-poly(vinyl chloride) composite for glucose sensing", International Conference on Recent trends in Microbiology-2016, Alagappa University,
 17. M. Karthikeyan, N. Anandhan, A. Amali Roselin, V. Shanmugapriya, G. Gopu, V. Dharuman, G. Ravi, (2016) "Growth and characterization of chemical bath deposited plumbous oxide thin films", International conference on Materials Science & Technology, University of Delhi, Delhi
 18. A. Amali Roselin, N. Anandhan, M. Karthikeyan, P. Rajapandi, G. Gopu, V. Dharuman, G. Ravi, (2016), "Effects of precipitating agents on surface texture and magnetic properties of Dy₂O₃ nanopowder". International conference on Materials Science & Technology, University of Delhi, Delhi
 19. K. P. Divya, V. Dharuman, (2016) "Studies of self-assembled binary mixed monolayer for label free DNA hybridization electrochemical sensing on liposome-gold nanoparticle composite tethered on gold transducer" International conference on Frontier Areas in Chemical Technologies, Alagappa University
 20. N. Dhanalakshmi, V. Dharuman, (2016), "The behavior of binary lipid on different chain length thiol monolayer modified gold electrode" International conference on Frontier Areas in Chemical Technologies, Alagappa University
 21. P.N. Manikandan, V. Dharuman, (2016), "Dynamic sensing of L-dopa using zinc oxide-reduced graphene oxide film", International conference on Frontier Areas in Chemical Technologies, Alagappa University
 22. H. Imran, V. Dharuman, (2016), "Dynamic sensing of ascorbic acid, dopamine and uric acid at electrochemically exfoliated graphene oxide-gold nanoparticle by electrochemical methods" International conference on Frontier Areas in Chemical Technologies, Alagappa University
 23. M. Karthikeyan, N. Anandhan, V. Dharuman, G. Gopu, A. Amali Roselin, S. Viswanathan, (2016), "Temperature dependant anatase titanium dioxide thin film prepared by electrodeposition technique", International conference on Frontier Areas in Chemical Technologies, Alagappa University
 24. C. Suganya, N. Anandhan, M. Karthikeyan, V. Dharuman, G. Gopu, A. Amali Roselin, S. Viswanathan, (2016), "A novel cobalt doped Dy₂O₃ nanoparticle synthesized by co-precipitation method." International conference on Frontier Areas in Chemical Technologies, Alagappa University
 25. J. Umadevi, N. Anandhan, V. Dharuman, G. Gopu, M. Karthikeyan, A. Amali Roselin, C. Suganya, (2016), "Structural and morphological properties of polypyrrol doped Sb₂S₃ thin film" International conference on Frontier Areas in Chemical Technologies, Alagappa University
 26. D. Janani, N. Anandhan, V. Dharuman, G. Gopu, M. Karthikeyan, A. Amali Roselin, K. P. Ganesan, (2016), "Influence of Sm on structural and optical properties of Bi₂S₃ thin using SILAR method." International conference on Frontier Areas in Chemical Technologies, Alagappa University
 27. K. Rajeswari, N. Anandhan, V. Dharuman, A. Amali Roselin, M. Karthikeyan, G. Gopu, (2016), "The roles of portic solvents on CdS thin films prepared by chemical bath deposition technique" International conference on Frontier Areas in Chemical Technologies, Alagappa University
 28. K. P. Divya, V. Dharuman (2015) "Effect of binary lipid and gold nanoparticle anchored on thiol monolayer on gold electrode", International conference on recent advance in materials and chemical sciences (ICRAMCS-2015), Gandhigram Rural Institute, Dindugal
 29. P. N. Manikandan, V. Dharuman, (2015), "L-Dopa detection at zinc oxide- reduced graphene oxide modified electrode", International conference on recent advance in materials and chemical sciences (ICRAMCS-2015), Gandhigram Rural Institute, Dindugal
 30. H. Imran, V. Dharuman, (2015), "Simultaneous sensing of ascorbic acid, dopamine

- and uric acid at electrochemically exfoliated graphene oxide-gold nanoparticles”, International conference on recent advance in materials and chemical sciences (ICRAMCS-2015), Gandhigram Rural Institute, Dindugal
31. T. Marimuthu, N. Anandhan, M. Mummoorthi, V. Dharuman, (2015), “Synthesis and Characterization of Porous Structured ZnO Thin Film for Dye Sensitized” 60th DAE-Solid State Physics Symposium Department of Atomic Energy Solar Cell Applications, Amity University, Noida.
 32. P. N. Manikandan, V. Dharuman (2015), “Fabrication of non-enzymatic glucose sensing using zinc oxide-multiwalled carbon nanotube-poly vinyl chloride composite electrode” National Conference On Recent Advances In Chemical Sciences, Gandhigram Rural Institute, Dindugal
 33. H. Imran, V. Dharuman (2015), “Simultaneous determination of ascorbic acid, uric acid and dopamine at 13rapheme layers-gold nanoparticle film electrode”, National Conference On Recent Advances In Chemical Sciences, Gandhigram Rural Institute, Dindugal.
 34. P. N. Manikandan, V. Dharuman, (2015), “Development of nonenzymatic glucose sensing using zinc oxide-multiwalled carbon nanotube-poly (vinyl chloride) composite on glassy carbon transducer”, National seminar on frontier areas in chemical technologies – 2015 (FACTs-2015), Alagappa University, Karaikudi
 35. H. Imran, V. Dharuman, (2015), “Simultaneous sensing of ascorbic acid, uric acid and dopamine at 13rapheme layers-gold nanoparticle film on glassy carbon electrode, National seminar on frontier areas in chemical technologies – 2015 (FACTs-2015), Alagappa University, Karaikudi
 36. P.N. Manikandan, V.Dharuman, (2015)“Zinc oxide- 13rapheme oxide modified electrode for L-dopa sensing”, National Seminar on Recent Advances in Chemistry, Department of Chemistry, Kandaswami Kandar’s College, Velur
 37. H. Imran, V.Dharuman, (2015), “Influence of organic solvents on the direct attachment of 13rapheme oxide on gold electrode for electrochemical sensing of acetaminophen”, National Seminar on Recent Advances in Chemistry, Department of Chemistry, Kandaswami Kandar’s College, Velur
 38. M. Bhuvana, V. Dharuman, (2014) “Liposome Modified Electrode For DNA Sensing”, National Conference on Recent Advances in Nanomaterials for Sensor Applications (NANOSE-2014), Alagappa University, Karaikudi
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