



**Dr. V. DHARUMAN**  
**ASSOCIATE PROFESSOR**

### Contact

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

S.No	Degree	College and University	Year	Subject	Percentage
1	Ph.D.,	University of Madras	2002	Chemistry	Awarded
2	M.Sc.,	University of Madras	1991	Chemistry	II class
3	B.Sc.,	University of Madras	1989	Chemistry	I Class

### Teaching Experience: 15 Years

Designation and Research Institution	Period		Duties and Responsibilities
Associate Professor	2020	Till date	Teaching and research in the field of Bioelectronics and Biosensors/Material Science
Assistant Professor	2008	2020	Teaching and research in the field of Bioelectronics and Biosensors/Material Science

## Research Experience: 21 Years

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

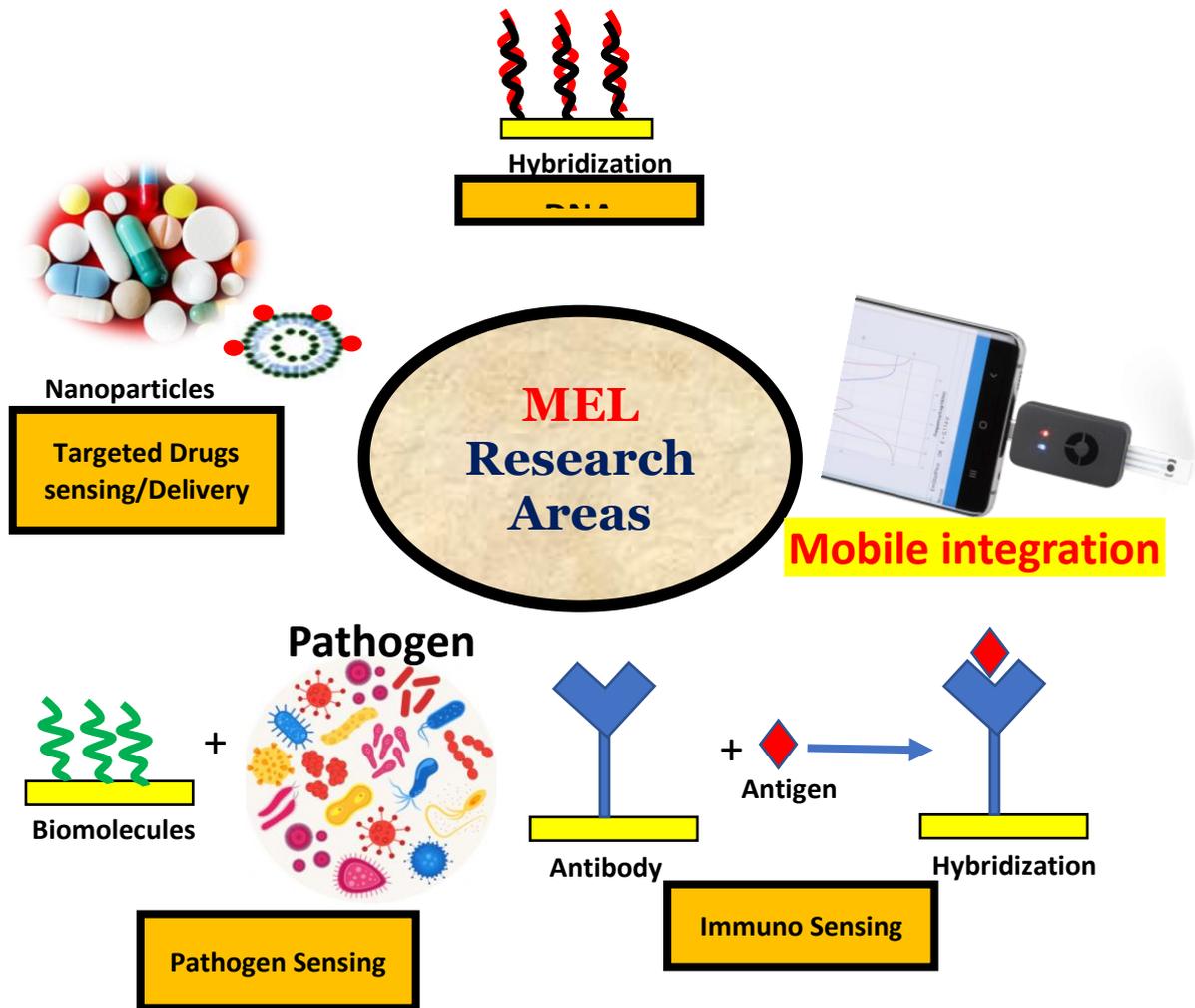
## Additional Responsibilities

S.No	College and University	Year
1	Dept. NAAC coordinator	2014
2	NIRF Coordinator	2017
3	Dept. Cultural club coordinator	2016
4	Deputy Director for University Scientific Instrumentation Centre	2017
5	Deputy Coordinator (STRIDE CELL)	2018
6	Deputy Coordinator (Innovation and Incubation cell)	2022

## Areas of Research

- Biosensor /chemical sensors/ mobile integration
  - Glucose sensors for diabetic monitoring
  - DNA, antibody (immune) sensors for cancer diagnosis
  - Bacterial and viral (Pathogen) and neurological disorders
  - Electrochemical theragnostic devices for drug delivery and sensing
  - Molecular Self-assembly for electronics
  - Transducer materials development lipid nanoparticles, metal oxides, polymer composites, graphene,

nanocarbon (nanotube, sheets, nanodots)



### Research Supervision / Guidance

Program of Study		Completed	Ong oing
Researc h	Ph.D.	8	2
	M.Phil.	2	-
			-
	PDF		2
	Project Fellow		1
Project	PG	37	7

### Research Group:

**Post Doctoral Fellow**

1. Dr. V. Sudha, D. S. Kothari Post Doctoral Fellow, 2022-2024
2. Dr. K. Duraimurugan, RUSA Post Doctoral Fellow, 2020 – 2021
3. Dr. Mahendra Prabhu, D. S. Kothari Post Doctoral Fellow, 2016-2017

**PhD scholars**

1. Y. Allwin Richard, ICMR Fellow
2. S. Aniu Lincy Project Fellow

**Ph.D's Guided**

3. S. Aniu Lincy , Project Fellow

S. No.	Name of the Candidate	Year	Title of Thesis
1	Dr. K. Jayakumar	2014	Construction And Characterization Of Graphene Core-Lower Generation poly(Amidoamine) Dendrimer Gold Nanoparticle Composite For Electrochemical DNA Sensing
2	Dr. J. Shankaranarayanan	2014	Non-Enzymatic Glucose Sensing at Ruthenium Oxide-Polymer-Nano Carbon Composites
3	Dr. M. Bhuvana	2014	Thered Spherical Liposome-Gold Nanoparticles On Thiol Monolayer Modified Gold Transducer For DNA Sensing
4	Dr. C. Anjalidevi	2014	Non-Enzymatic Hydrogen Peroxide Sensing At Metal (Ruthenium, Tin, And Zirconium) Oxide Supported Gold Nanoparticles
5	Dr. P. Manikandan	2019	Non-enzymatic Diagnosis of Diabetes Jaundice and Neurological Diseases Using Metal Oxide Polymer Hybrid Electrodes
6	Dr. H. Imran	2019	Graphene –Gold Nanoparticle – Liposome Composite for Label Free Electrochemical DNA and Dopamine Sensing.
7	Dr. K. P. Divya	2019	Label Free DNA and Protein Sensing at Lipid Bilayer- Nanoparticle Tethered on Thiol Monolayers
8	Dr. A. Anancia Grace	2022	Titanium Dioxide –Medal (Mn,W, Sn,Gd) Oxide –Graphene Composite Modified Electrodes for Electrochemical Sensing of Neuro and Pharmaceutical Chemicals.

International		National		Other
Journals	Conferences	Journals	Conferences	Books Chapters
61	72	3	66	4

**Cumulative Impact Factor (as per JCR) : 396.12**  
**h-index : 26**

**i10 index** : **46**  
**Total Citations** : **1733**

### Ph. D Thesis Evaluated / Viva voce Examiner

**Thesis Evaluated** : **13**  
**Viva voce Examiner** : **4**

### Funded Research Projects

#### Ongoing Projects

S. No	Agency	Period	Project Title	Budget (Rs. In Lakhs)
1	RUSA EIR	2023	Cost effective renewable diabetic sensor for home and personal care	3.55
2	RUSA 2.0	2018	Advanced materials for sustainable energy and sensor applications	33.00

#### Completed Projects

S.No	Agency	Period	Project Title	Budget (Rs. In lakhs)
1	DST	2015-2018	Development of novel graphene and metal nano composite films and characterization for label free electrochemical DNA-protein sensing	44.7
2	UGC	2015-2018	Studies on membrane proteins interactions on liposome-DNA-gold nanoparticle composite tethered on goldtransducer for biosensing	14.65
3	ICMR	2013-2016	Development of Simple, Reagent less, Renewable Glucose Sensors Using NanoRuthenium oxide-nano pore Polymer – Nano Au Composite Films	32.79

4	AURF	2010-2011	Electrochemical Detection of Antibody Prostate Specific Antigen Interactions Using Gold Transducers	0.64
5	DST	2010-2013	Liposome mediated cancer DNA sensing of electrochemical and piezo electric techniques and DNA transfection studies	25.44
6	CSIR	2010-2013	Development of Electrochemical immunosensors for simultaneous detections and discriminations of different food pathogenic bacterial microbes on micro gold arrays	18.16
7	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

### Distinctive Achievements / Awards

S.No	Award	Year
1.	Best poster award, One Day Workshop on Poster Exhibition of Innovative Ideas and Display of Prototype Device Innovation Ambassador Linkage	2022
2.	Best oral award, National Conference on advances in functional materials, SSN college of engineering, Chennai	2019
3.	Best poster award, Nano/Biotechnology	2019
4.	Best poster award, National Conference on Futuristic Materials (NCFM)	2017
5.	Best poster award, International conference on recent advance in materials and chemical sciences (ICRAMCS)	2015
6.	Alagappa Excellence Award for Research	2016
7.	Best poster award, Indo-Japan workshop on Biomolecular Electronics & Organic Nanotechnology for Environment Preservation (IJWBME)	2013
8.	Young Biomedical Scientist Research Fellowship by Indian Council of Medical Research	2013
9.	Article Gold nano particle decorated graphene core first generation PAMAM dendrimer for label free electrochemical DNA hybridization sensing, Biosens.	2012

	Bioelectr., 31 (2012) 406-412. Ranked 16th on the TOP 25 articles in the Journal of Biosensors and Bioelectronics,	
<b>10.</b>	Fraunhofer Research Achievement Award, from Fraunhofer Gesellschaft, Leonrodstrasse 54, D 80636 München, Germany	2002
<b>11.</b>	Fraunhofer Research Scientist Fellowship	2001-2004
<b>12.</b>	Senior Research Fellow, UGC, India	1998-2000
<b>13.</b>	Junior Research Fellow, UGC, New Delhi, India	1995-1997
<b>14.</b>	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

**Number of Seminars / Conferences / Workshops / Events organized:****Events organized in leading roles**

<b>Position</b>	<b>Programme</b>	<b>Duration</b>	<b>Institution</b>
Organizer	International (Indo-Poland) Workshop on Functional Materials for Sensor and Energy Applications (FMSEA)	10-11 <sup>th</sup> November 2022	Alagappa University, Karaikudi.
Organizer	International Conference Nanomaterials Driven Advances in Chemical and Biosensors	23 <sup>rd</sup> – 25 <sup>th</sup> March 2022	Alagappa University, Karaikudi.
Organizer	National Workshop on Advanced Nanomaterials for Sustainable Energy and Sensors Applications	04-06 <sup>th</sup> March 2020	Alagappa University, Karaikudi.
Organizer	International Conference Nanomaterials Driven Advances in Chemical and Biosensors	27-29 <sup>th</sup> November 2019	Alagappa University, Karaikudi
Organizer	Workshop on Nano-Bio-Sensors: Present Status and Future Perspectives	08-09 <sup>th</sup> March 2018	Alagappa University, Karaikudi
Organizer	Workshop on Biosensors in Agricultural, Environmental and Medical Sciences	13 <sup>th</sup> March 2017	Alagappa University, Karaikudi
Organizer	Conference on Exploring Commercialization of Biosensors	14 <sup>th</sup> March 2017	Alagappa University, Karaikudi
Organizer	National Conference on Recent Advances in Nanomaterials for Sensor Applications	06-07 <sup>th</sup> March 2014	Alagappa University, Karaikudi
Organizer	National Conference on Recent Advances in Nanomaterials for Sensor Applications	08-09 <sup>th</sup> March 2012	Alagappa University, Karaikudi
Organizer	National Conference on Recent Advances in in Biosensors	03-04 <sup>th</sup> March, 2011	Alagappa University, Karaikudi
Organizer	National Seminar on Frontiers in Nanomaterials and Biosensors	4 <sup>th</sup> & 5 <sup>th</sup> March, 2010,	Alagappa University, Karaikudi
Organizer	National Seminar on Advancements in Bioelectronics and Biosensors,	19 <sup>th</sup> & 20 <sup>th</sup> March, 2009	Alagappa University, Karaikudi
Organizer	one day workshop on Metrohm Autolab Electrochemical Instruments for biosensor, energy and corrosion applications	16-02-2015	Alagappa University, Karaikudi

## Other Training Programs

- Interdisciplinary course on Nanoscience and Technology, organized by University of Madras from 11.11.2009 to 01.12.2009.
- Orientation course in organized by Madurai Kamaraj University, from 30.05.2013 to 26.06.2013.
- Interdisciplinary course in Life sciences, organized by Bharathidasan University, Trichy, 03.03.2016 to 23.03.2016.

## Overseas Exposure / Visits

S.No.	Country visited	Position	Period
1	South Korea, Department of Chemistry, Biotech Center, Pohang University of Science and Technology,	Postdoctoral Research – Development of label free DNA sensing by electrochemical methods Immunosensors for estrogen detection)	August 2007 – June 2008, Dec. 2004- Oct. 2006 Oct. 2012 - May 2013
2	Japan, Diamond Research Centre, Advanced Institute of Industrial Science and Technology, Tsukuba	Research Scientist Staff – Diamond electrode-based DNA sensors.	October 2006 – March 2007
3	Germany, Department of Biotechnical Micro systems, Fraunhofer Institute of Silicon Technology,	Postdoctoral Research Scientist worked on label free DNA sensing	Sept.2001- Nov.2004
4	Taiwan, National Tai Chung University, Taisung	Research Exchange Visit Electrochemical Sensors development	September 2000 to December 2000

## Membership in Professional Bodies

S.No	Membership/ Society	Year
1	Life Member: Indian Science Congress, L 14698,	2009
2	Life Member: Nanoscience and Technology Society of India, South chapter, NN105,	2015
3	Regular Member: American Chemical society (ACS), USA	2016
4	Member, Biosensor Society, India	2018
5	Life member: Indian Society for Electroanalytical Chemistry (ISEAC) LM-321,	2022
6	Active Member, The Society for Advancement of Electrochemical Science and Technology, Karaikudi, A1369,	1996

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

1. Board of studies – M.Sc., Bioelectronics and Biosensor – Member - 2008
2. Board of studies – M.Sc., Bioelectronics - Member - 2013
3. Board of studies – M.Sc., Physics (Specialization in Biosensors) - Member - 2016
4. Board of studies – B.Sc., Electronics - Chairman 2021
5. Board of studies – M.Sc., Electronics - Member 2021
6. Ph.D., Doctoral Committee – Member - 2009

### Recent Publications

SNo	Title of the paper, with Journal's name, Year of Publication, Vol. No., Page Nos., etc.	Impact Factor, if any*
1	Yesurajan Allwin Richard, Sebastinbaskar Aniu Lincy, Shakkthivel Piraman and Venkataraman <b>Dharuman</b> , Ca-MOF-Polymer Modified Thin-Film Electrode for Detection of Toxic Cadmium (Cd <sup>2+</sup> ) in Biofluid and Environmental Fluid, <i>Electrochem. Soc.</i> 171, 027517.	3.9
2	S Elakkiya, V. Sudha, G Sathya Priyadarshini, G Selvi, <b>V. Dharuman</b> <u>Tripodal Schiff base Tris [4-(4-nitrophenyl)-3-aza-3-butenyl] amine nanorod for selective detection of uric acid</u> , <i>Inorganic Chemistry Communications</i> , 156, 2023, 111235.	3.8
3	V. Sudha, V. Duraisamy, N. Arumugam, A. I. Almansour, T. Xiaoteng Liu, <b>V. Dharuman</b> , S.M. Senthil Kumar <u>Ultrasensitive Dopamine Detection at Co<sub>3</sub>O<sub>4</sub>-Anchored N-Doped Hollow Mesoporous Carbon Nanospheres</u> , <i>ACS Applied Nano Materials</i> , 6(14), 2023, 13013-13026.	5.9
4	H. Imran, J. An, K. Jang, A. Alam, <b>V. Dharuman</b> , M. Ko, S. Lim, Highly selective and real-time detection of 5-hydroxymethylcytosine in genomic DNA using a carbon nitride-modified gold transducer-based electrochemical sensor, <i>Journal of Alloys and Compounds</i> , 948, 2023, 169715	6.2
5	Y. Allwin Richard, S. Aniu Lincy, P. Shakkthivel, <b>V. Dharuman</b> , Label-free	5.0

	electrochemical detection of cancer biomarkers DNA and anti-p53 at tin oxide quantum dot-gold-DNA nanoparticle modified electrode, <b>Bioelectrochemistry</b> , <b>150</b> , <b>2023</b> , <b>108371</b>	
6	V. Duraisamy, V. Sudha, <b>V. Dharuman</b> , S. Murugesan, S. Kumar, Highly Efficient Electrochemical Sensing of Acetaminophen by Cobalt Oxide-Embedded Nitrogen-Doped Hollow Carbon Spheres, <b>ACS Biomaterials Science &amp; Engineering</b> , <b>2023</b>	<b>5.8</b>
7	Y. Allwin Richard, S. Aniu Lincy, Ramachandran Saravanakumar, R. Maheswaran, <b>V. Dharuman</b> , Sensitive detection of acetaminophen in body fluids, pharmaceuticals and herbal medicines at un-doped mesoporous carbon nitride film electrode, <b>Microchemical Journal</b> , <b>184</b> , <b>2023</b> , <b>108175</b>	<b>4.8</b>
8	S. Aniu Lincy, Y. Allwin Richard, T. Vinitha, K. Balamurugan, <b>V. Dharuman</b> , Streptavidin Fe <sub>2</sub> O <sub>3</sub> -gold nanoparticles functionalized theragnostic liposome for antibiotic resistant bacteria and biotin sensing, <b>Biosensors and Bioelectronics</b> , <b>219</b> , <b>2023</b> , <b>114849</b>	<b>12.6</b>
9	H. Imran, A. Alam, <b>V. Dharuman</b> , S. Lim, Fabrication of Enzyme-Free and Rapid Electrochemical Detection of Glucose Sensor Based on ZnO Rod and Ru Doped Carbon Nitride Modified Gold Transducer, <b>Nanomaterials</b> , <b>12(10)</b> , <b>2022</b> , <b>1778</b> .	<b>5.3</b>
10	S. Aniu Lincy, <b>V. Dharuman</b> , P. Kumar Ultrasensitive and direct detection of DNA and whole E. coli cell at cholesterol gold nanoparticle composite film electrode, <b>Ionics</b> , <b>28(4)</b> , <b>2022</b> , <b>1973-1983</b> .	<b>2.8</b>
11	Y. Allwin Richard, <b>V. Dharuman</b> , Electrochemical ultrasensitive label free Escherichia Coli DNA detection at Gold decorated tungsten oxide nanoparticles modified electrode surface <b>J. Electrochemical Society</b> , 2021,	<b>3.9</b>
12	<b>A. Anancia Grace</b> , V. Dharuman, <b>J. H. Hahn</b> , GdTiO <sub>3</sub> perovskite modified graphene composite for electrochemical simultaneous sensing of Acetaminophen and Dopamine. <i>J. Alloys and Compounds</i> , 886 (2021) 161256	<b>6.2</b>
13	<b>K. P. Divya</b> , V. Dharuman, <b>Electrochemical label free sensing of human IgG - Protein A interaction</b> , <i>J. Food Chemistry</i> 339 (2021) 127991339, (2021), 127881	<b>8.8</b>
14	Habibulla Imran, <b>Venkataraman Dharuman</b> Highly selective and rapid non-enzymatic glucose sensing at ultrathin layered Nb doped C3N4 for extended linearity range, <b>Microchemical Journal</b> 160 (2021) 105774	<b>4.8</b>
15	S. Sivasakthi, H. Imran, G. Karuppasamy, S. Sagadevan, F.Mohammad, <b>V. Dharuman</b> , Green synthesis of porous carbon nanocubes accumulated microspheres for the simultaneous non-enzymatic sensing of uric acid and dopamine in the presence of ascorbic acid, <b>Synthetic Metals</b> <b>270</b> , (2020), <b>116598</b>	<b>4.4</b>
16	<b>A. Anancia Grace</b> , <b>S. Thillaiarasi</b> , <b>V. Dharuman</b> <b>Binary Metal oxide Adsorbed Graphene modified Glassy carbon electrode for Detection of riboflavin</b> , <i>Electroanalysis</i> , 33 (2021) 993-1006	<b>3.223</b>
17	<b>DM Kandhasamy</b> , <b>C Selvaraju</b> , V Dharuman, Structure and Dynamics of Poly(methacrylic acid) and Its Interpolymer Complex Probed by Covalently Bound Rhodamine-123, <i>Spectrochimica Acta</i> , 248 (2020), 119166	<b>4.4</b>
18	H. Imran, K. Vaishali, S. Antony Francy , P. N. Manikandan , <b>V. Dharuman</b> Platinum and zinc oxide modified carbon nitride electrode as non-enzymatic highly selective and reusable electrochemical diabetic sensor in human blood, <b>Bioelectrochemistry</b> <b>137</b> (2021) <b>107645</b>	<b>5.0</b>
19	G. Vijayaprasath, H. Imran, <b>V. Dharuman</b> , S. Balasubramanian, R. Ganesan Fabrication of Gd2O3 Nanosheet-Modified Glassy Carbon Electrode for Nonenzymatic Highly Selective Electrochemical Detection of Vitamin B2 <b>ACS Omega</b> <b>2020</b> , <b>5</b> , <b>17892–17899</b>	<b>4.1</b>
20	K. P. Divya, R. Karthikeyan, B. Sinduja, A. Anancia Grace, S. Abraham John, J. H. Hahn, <b>V. Dharuman</b> , Carbon dots stabilized silver–lipid nano hybrids for sensitive label free DNA detection, <b>Biosensors and Bioelectronics</b> , 133, (2019) 48-54.	<b>12.6</b>
21	P. N. Manikandan, H. Imran, <b>V. Dharuman</b> , Self-powered polymer metal oxide hybrid solar cell for non-enzymatic potentiometric sensing of bilirubin, ( <b>Medical Devices &amp; Sensors</b> , (2019) e10031.	
22	H. Imran, P. N. Mainkandan, D. Prabhu, <b>V. Dharuman</b> , J. Jeyakanthan, Ultra selective	<b>5.3</b>

	label free electrochemical detection of cancer prognostic p53-antibody at DNA functionalized graphene, <b>Sensing and Bio-Sensing Research</b> , <b>23</b> , (2019) 100261.	
23	A. J. Anancia Grace, K. P. Divya, <b>V. Dharuman</b> , J. H. Hahn, Single step sol-gel synthesized Mn <sub>2</sub> O <sub>3</sub> -TiO <sub>2</sub> decorated graphene for the rapid and selective ultra sensitive electrochemical sensing of dopamine, <b>Electrochimica Acta</b> , <b>302</b> , (2019) 291-300	<b>6.6</b>
24	H. Imran, P. N. Manikandan, <b>V. Dharuman</b> , Ultra-sensitive and selective label free electrochemical DNA detection at layer-by-layer self-assembled graphene oxide and vesicle liposome nano-architecture, <b>Journal of Electroanalytical Chemistry</b> <b>835</b> , (2019) 10-21.	<b>4.4</b>
25	K.P. Divya, A.J. Anancia Grace, <b>V. Dharuman</b> , Rapid and sensitive electrochemical label free ion channel, membrane protein and DNA sensing on surface supported liposome-gold nanoparticle platform, <b>Journal of Electroanalytical Chemistry</b> <b>834</b> , (2019) 56-63.	<b>4.4</b>
26	K. Jayakumar, M. B. Camarada, R. Rajesh, R. Venkatesan, H. Ju, <b>V. Dharuman</b> , Y. Wen, Layer-by-layer assembled gold nanoparticles/lower-generation (Gn≤3) polyamidoamine dendrimers-grafted reduced graphene oxide nanohybrids with 3D fractal architecture for fast, ultra-trace, and label-free electrochemical gene nano biosensors,) <b>Biosensors and Bioelectronics</b> <b>120</b> , (2018)55-63.	<b>12.6</b>
27	A. Subastri, V. Arun, P. Sharma, A. Suyavaran, S. Nithyananthan, G. M. Alshammari, B. Aristatile, <b>V. Dharuman</b> , C. Thirunavukkarasu, Synthesis and characterisation of arsenic nanoparticles and its interaction with DNA and cytotoxic potential on breast cancer cells <b>Chemico-Biological Interactions</b> <b>295</b> , , (2018) 73-83.	<b>5.1</b>
28	A Amali Roselin, N Anandhan, <b>V Dharuman</b> , Deposition of transition metal Mn doped BTO thin films by sol-gel technique, <b>Journal of Materials Science: Materials in Electronics</b> , <b>29</b> , (2018) 12036-12044.	<b>2.8</b>
29	V. Govindan, H. Imran, <b>V. Dharuman</b> , K Sankaranarayanan, Microwave assisted synthesis of Ce-doped SnS <sub>2</sub> nano-flowers with enhanced vitamin-B sensing and photocatalytic activity, <b>Journal of Materials Science: Materials in Electronics</b> <b>29</b> , (2018) 17670-17680	<b>2.8</b>
30	K. Jayakumar, M. B. Camarada, <b>V. Dharuman</b> , R. Rajesh, R. Venkatesan, H. Ju, M. Maniraj, A. Rai, S. R. Barman, Y. Wen, Layer-by-Layer-Assembled AuNPs-Decorated First-Generation Poly(amidoamine) Dendrimer with Reduced Graphene Oxide Core as Highly Sensitive Biosensing Platform with Controllable 3D Nanoarchitecture for Rapid Voltammetric Analysis of Ultratrace DNA Hybridization, <b>ACS Appl. Mater. Interfaces</b> , <b>10</b> , (2018) 21541–21555.	<b>9.5</b>
31	H. Imran, P. N. Manikandan, <b>V. Dharuman</b> , Graphene oxide supported liposomes for efficient label free electrochemical DNA biosensing, <b>Sensors and Actuators B: Chemical</b> <b>260</b> , (2018) 841-851.	<b>8.4</b>
32	K. Jayakumar, M. B. Camarada, <b>V. Dharuman</b> , H. Ju, R. S. Dey, Y. Wen, One-step electrodeposition-assisted layer-by-layer assembly of gold nanoparticles and reduced graphene oxide and its self-healing three-dimensional nanohybrid for an ultrasensitive DNA sensor, <b>Nanoscale</b> , <b>10</b> , (2018) 2658-2658.	<b>6.7</b>
33	E Preedia Babu, A Subastri, A Suyavaran, K Premkumar, V Sujatha, B Aristatile, Ghedeir M Alshammari, <b>V Dharuman</b> , C Thirunavukkarasu, Size Dependent Uptake and Hemolytic Effect of Zinc Oxide Nanoparticles on Erythrocytes and Biomedical Potential of ZnO-Ferulic acid Conjugates, , <b>Scientific Reports</b> <b>7</b> . (2017)908	<b>4.6</b>
34	K. P. Divya, <b>V. Dharuman</b> , Supported binary liposome vesicle-gold nanoparticle for enhanced label free DNA and protein sensing, <b>Biosensors and Bioelectronics</b> , <b>95</b> , (2017), 168-173.	<b>12.6</b>
35	P. N. Manikandan, <b>V. Dharuman</b> , Electrochemical Simultaneous Sensing of Melatonin, Dopamine and Acetaminophen at Platinum Doped and Decorated Alpha Iron Oxide <b>Electroanalysis</b> <b>29</b> , (2017) 1 – 9.	<b>3.223</b>
36	K. P. Ganesan, N. Anandhan, <b>V. Dharuman</b> , P. Sami, R. Panneerselvam, T. Marimuthu	<b>5.3</b>

	Electrochemically modified crystal orientation, surface morphology and optical properties using CTAB on Cu <sub>2</sub> O thin films, <b>Results in Physics</b> , 7, (2017)82.	
37	P. N. Manikandan, H. Imran, <b>V. Dharuman</b> , Direct glucose sensing and biocompatible properties of zinc oxide- multiwalled carbon nanotube - poly (vinyl chloride) ternary composite <b>Anal. Methods</b> , 8, (2016), 2691-2697.	3.1
38	M. Bhuvana, <b>V. Dharuman</b> Inchain lengths and head groups on tethering of liposome-gold nanoparticle on gold surface for electrochemical DNA sensing and gene delivery <b>Sensors and Actuators B: Chemica</b> , 223, (2016) 157–165.	8.4
39	H. Imran, P. N. Manikandan, <b>V. Dharuman</b> 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 <b>RSC Advances</b> , 5 (2015) 63513-63520.	3.9
40	<b>V. Dharuman</b> , C. Anjalidevi, P. N. Manikandan , H. Imran, Gold nanoparticles supported on zirconium, tin and ruthenium oxides for reagentless electrochemical sensing of hydrogen peroxide <b>Anal. Methods</b> , 7, (2015) 3454-3460.	3.1
41	G. Vijayaprasath, R. Murugan, J. Shankara Narayanan, <b>V. Dharuman</b> , G. Ravi, Y. Hayakawa, Glucose sensing behavior of cobalt doped ZnO nanoparticles synthesized by co-precipitation method <b>Journal of Materials Science: Materials in Electronics</b> 7, (2015) 4446-4450.	2.8
42	M. Bhuvana, <b>V. Dharuman</b> , Construction of Spherical Liposome on Solid Transducers for Electro chemical DNA Sensing and Transfection <b>Appl Biochem Biotechnol</b> 174, (2014), 1137-1150.	3.0
43	M. Bhuvana, <b>V. Dharuman</b> , Tethering of spherical DOTAP liposome gold nanoparticles on cysteamine monolayer for sensitive label free electrochemical detection of DNA and transfection, <b>Analyst</b> 139, (2014) 2467-2475.	4.2
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50	J. Shankara Narayanan, C. Anjalidevi, <b>V. Dharuman</b> , Nonenzymatic glucose sensing at ruthenium dioxide–poly(vinyl chloride)–Nafion composite electrode <b>Journal of Solid State Electrochemistry</b> 17, (2013) 937–947.	2.5
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64	<b>V. Dharuman</b> K. Chandrasekara Pillai, Glucose oxidation at Pt/PVC-bonded RuO <sub>2</sub> composite electrode, <b>Indian Journal of Chemical Technology</b> <b>4</b> , (1997), 25.	0.76
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### Contribution in book chapters

S.No	Title	Author's Name	Publisher	Year of Publication
1.	Fully Electrical Microarrays', in Perspectives in Bioanalysis,	R. Hintsche, B. Eisholz, G. Piechotta, R. Woerl, C. G. J. Schabmueller, J. Albers, <b>V. Dharuman</b> , E. Nebling, A. Hanisch, L. Blohm, F. Hofmann, B. Holzapfl, A. Frey, C. Paulus, M. Schienle, R. Thewas,	Ed.Paesche, Palecek, Elsevier, 246-277, ISBN: 978-0-444-52223-8	2006
2.	Label free Electrochemical sensing of DNA hybridization for Cancer Analysis" in Biosensors and Molecular Technologies for Cancer Diagnostics, Keith	<b>V. Dharuman</b> , J. H. Hahn	E. Herold, Avraham Rasooly CRC press, Taylor & Francis Group. 671-692	2012
3.	Graphene -PAMAM Dendrimer - Gold nano particle composite for electrochemical DNA hybridization Detection",	K. Jayakumar, R. Rajesh, <b>V. Dharuman</b> , R. Venkatesan,	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	2013
4	"Carbon Nanodots Based Electrodes in Biomolecular Screening and Analysis'	<b>V. Dharuman</b>	Handbook of Nanobioelectrochemistry, Springer, Singapore	2023

## Resource persons in various capacities

### Conferences /invited lectures/papers presented

Number of Invited	: 33
Special Lectures delivered	: 33
Papers presented	: 72

S.No	Title of the Invited Lecture/Paper presented	Title of Conference/ Seminar date etc.	Organized by
1	Quantum dot based biosensing	ACT NEXt, 29.02.2024	Dept of Industrial Chemistry, Alagappa University, Karaikudi
2	Electrochemical detection of DNA biomarker at modified electrodes	International Conference on Electrochemistry for Industry, Health and Environment (EIHE-2024), 08– 10 <sup>th</sup> , February, 2024	CO2 Research and Green Technologies Centre, Vellore Institute of Technology, Vellore-632 014, India

3	Streptavidin Fe <sub>2</sub> O <sub>3</sub> -gold nanoparticles Functionalized theranostic liposome for Antibiotic Resistant Bacteria and Biotin sensing	International conference on electrochemistry in industry, Health and Environment, 7 <sup>th</sup> to 11 <sup>th</sup> February, 2023	BARC, Mumbai
4	Lipids on graphene nano structures and DNA sensing	International online Conference on Nano materials ( ICN-2021), 09 <sup>th</sup> -11 <sup>th</sup> April 2021	Mahatma Gandhi University, P.D Hills P.O, Kottayam, Kerala, India & Wroclaw University of Technology, Wroclaw, Poland & Gdansk University of technology, Poland & Wuhan University, China
5	Nanomaterials for Biosensing	One-day seminar, CHEM-FEST, 18.03.2022	Sacred Heart College, Thiruppattur
6	Neuro Biosensing at Metal Oxide modified Carbon transducers	6 <sup>th</sup> International Conference on Recent Advances in Material Chemistry (ICRAMC-2022), 17 <sup>th</sup> -19 <sup>th</sup> February 2022	Department of Chemistry, SRM Institute of Science and Technology
7	Recent advances in Biosensor	Short term training course on Recent trends in thin film development and their applications in biomedical and biosensor devices, 28 <sup>th</sup> March 2018	Nanoscience and nanotechnology at Sathyabama Institute of Science and Technology, Chennai
8	Molecular sensing signal amplification strategies for point of care development for early disease diagnosis	Emerging Materials for Diagnostic and Therapeutic” (EMDT-2022), 27 <sup>th</sup> and 28 <sup>th</sup> January, 2022	Center for Nanoscience and Nanotechnology, Sathyabama Institute of Science and Technology, Chennai.
9	Liposome platforms for electrochemical Biosensing	International Conference on Electrochemistry for Industry, Health and Environment, 21-25, January 2020	BARC, ISEAC Mumbai
10	Spherical liposomes and metal nanoparticles in Biosensing	International conference on advances in chemistry with Specific reference to catalysis, sensors, drug delivery and Energy materials, 9-10, January 2020	University of Madras
11	Spherical liposomes and metal nanoparticles in biosensor	Nano/Biotechnology 2019, 19 <sup>th</sup> to 21 <sup>th</sup> December, 2019	Jawaharlal Nehru University, New Delhi
12	Recent advancements in diabetics and DNA sensing	National Workshop on Emerging Sensor Technologies, 7 <sup>th</sup> – 8 <sup>th</sup>	Bharathiar University

		January 2019	
13	Label free DNA sensing Signal Amplification strategies for tools development for early disease diagnosis	Biomarkers from research to commercialization, May, 24-25, 2018	Select bio Bangalore
14	Advances in Biosensor sor	International symposium on crystallography and advanced materials, 26 & 27th March 2018	Organized by University of Madras, Chennai
15	Anchoring of lipid gold nanoparticle on gold transducer applications	International conference on recent trends in Analytical Chemistry, 15-17, March 2018	organized by University of Madras, Chennai
16	Biosensors and applications	One day seminar on recent developments in DNA barcoding RET species of peninsular India, 3 <sup>rd</sup> August 2017	Alagappa University
17	A session Chaired	Two day international conference on Renewable energy science and technology (ICREST-2017), 10 & 11 <sup>th</sup> March 2017	Alagappa University,
18	Recent Advances in Biosensing Resource person	sponsored short term training course on Recent trends in thin film development and their applications in biomedical and biosensor devices, 12th to 28th March, 2018	organized by Sathyabama Institute of Science and Technology, Chennai
19	Biosensors and their applications	One day National seminar on Modern Trends in Chemistry – 2018, 21st, February 2018	S, Vellaichamy Nadar College, Madurai,
20	Assembling liposome – gold nanoparticles on solid surfaces for enhanced DNA sensing	Euro-India International conference on experimental and clinical medicine (ICECM-2017), Nov. 10-12, 2017	Organized by International and Inter University centre for Nanoscience and Nanotechnology, Mahatma Gandhi University, Kerala.
21	A session Chaired	Euro-India International conference on experimental and clinical medicine (ICECM-2017), Nov. 10-12, 2017	Organized by International and Inter University centre for Nanoscience and Nanotechnology, Mahatma Gandhi University, Kerala.
22	Interfacing material nanostructures with molecules for sensing	National Conference on Futuristic Materials (NCFM- 2017), March 27 & 28th, 2017	Alagappa University, Karaikudi
23	Electrochemical DNA sensing on graphene oxide – gold	Recent Advances in Chemistry, Aug 13-14, 2015	Department of Chemistry, Kandaswami Kandar's

	nanoparticle transducer		College, Velur
24	Anchoring of Lipid-Gold Nanoparticles on Gold Transducers for Sensing Applications, BiTERM-2015,	Biomaterials Tissue Engineering, Drug Delivery System & Regenerative Medicine, 5-7th February 2015	Anna University, Chennai
25	Electrochemical biosensing	Faculty Development programme on Frontiers Research in Applied Sciences (FRAS 15), 3-16, June 2015	Anna University Bharathidasan Institute of Technology, Trichy
26	Behaviour of liposome-gold nanoparticle complex on solid transducer- Electrochemical studies	International conference on Nanostructured Materials and Nanocomposites (ICNM 2014), 19-21 December, 2014	Mahatma Gandhi University, Kerala
27	Designing And Characterization Of Transducers For Electrochemical Dna Sensing	Recent Advances in Nanomaterials for Sensor Applications (NANOSE-2014), 6-7, March 2014	Alagappa University, Karaikudi
28	Electrochemical DNA sensing in presence of inorganic metal complexes and organic dyes	Indo-French Seminar on Bio-inorganic approaches to current health problems, 24-28 March 2014	Pondicherry University and Indo French center for promotion of Advanced research
29	Construction of Spherical Liposome on solid transducers for electrochemical DNA Sensing and transfection	Indo-Japan workshop on Biomolecular Electronics & Organic Nanotechnology for Environment Preservation (IJWBME 2013), 13 -15 December 2013	Delhi Technological University, Delhi, India
30	Surface Designing Transducers and Characterization for Efficient and Reliable Label Free Electrochemical DNA Hybridization Sensing	International conferences on Emerging Trends in Chemical Sciences (IETC 2013), 5-7 December 2013	Vellore Institute of Technology, Vellore
31	DNA sensing on graphene transducers	National Conference on Recent Advancements in Nanomaterials for Sensor Applications (NANOSE-12), 8-9 March 2012	Alagappa University, karaikudi
32	Label free Electrochemical Sensing of DNA Hybridization on Gold Transducers	Biomaterials Implant devices and Tissue Engineering BIDTE-2012, 6-8 January 2012	Rajalakshmi Institutions, Chennai
33	Enzyme label free electrochemical DNA hybridization detection at Ternary layers	International Symposium Cum workshop on Electrochemistry, 7-10, December 2011	Indian Society for Electroanalytical Chemistry BARC, Mumbai, India
34	Evolution of Microarrays in Biotechnological Research – Overview	Current trends in Genomics and Proteomics-2011	Pondicherry University
35	Electrochemical DNA hybridization detection – overview	National symposium on renaissance in chemistry (NSRC-2011), 30, March 2011	Pondicherry University

36	Electronic Microarrays in Medical Field	Aquatic Biotoxins-2011, 14-16, September 2011	Annamalai University
37	Electronic DNA microarrays in Biomedical Sciences	Biomedical applications of Nanotechnology -2011, 11-12, Aug. 2011	Rajalaksmi Engineering College, Chennai
38	Amperometry and Differential Pulse Voltammetry Basics	National workshop on Electrochemical Techniques, 11-13 October 2010	Alagappa University
39	Ternary monolayers for efficient electrochemical sensing of DNA hybridization	Recent Advances in Nanotechnology and Biosensors (NCNB)-2011, 3-4, March 2011	Alagappa University
40	Efficient and Reliable electrochemical DNA sensing based on ternary monolayers pattern	National conference on nanoscience and nanotechnology, 25-27, August 2011	National centre for Nanoscience and nanotechnology, University of Madras
41	Overview of gold thiol self-assembled monolayer approach	National conference on Nanotechnology: Current Approaches and Applications (Environ Nano-2010), 5-6, February, 2010	Manonmaniam Sundranar University
42	DNA biosensors	Short term Training course Perspectives in nanoscience and Nanobiotechnology (KU PNSNBT, 2010), 2 Nov to 10 Dec 2010	Karunya University
43	Integration of transducers in nanobiosensors, Advancements in Bioelectronics and Biosensors	Nanobiosensors in Biomedical Engineering, 17-18 February 2010	Institute of Road Transport and Technology-2010 Erode, India
44	Electronic Detection of DNA – Overview of gold thiol self-assembled monolayer approach	National Seminar on Frontiers in Nanomaterials and Biosensors, NSFNMB-2010, 4-5 March 2010	Alagappa University
45	Amperometry	National workshop on Electroanalytical Techniques, 11-13 October 2010	Sinsil international CH instruments, USA Alagappa University
46	Miniaturization of biomolecular sensing analytical devices - Perspectives and Challenges	Perspectives in Nano Science and Nanobiotechnology-2009, 4-5, March 2009	Karunya University, Coimbatore
47	Thiol-gold Self assembled monolayers for Electrical and electrochemical biomolecular sensing and applications	Indo-Japan Biomolecular electronics & Organic Nanotechnology for Environment Preservation-2009, 17-20 December 2009	National Physical Laboratory, New Delhi
48	Nanodevices and its application as Biosensors	Frontiers in Nanotechnology-2009	Lady Doak College, Madurai
49	Label Free Electrochemical DNA sensors – Impacts of Miniaturization Developments and	Advancements in Bioelectronics and Biosensors- 2009, 19-20, March 2009	Alagappa University

	Challenges		
50	Electrochemical DNA Hybridization Sensing on gold surfaces	National conference on Nanobiotechnology, (Genomera, -2008), 24-25 July 2008	Periyar Maniyammai University
51	Zinc Oxide Supported Ruthenium Doped Graphitic Carbon Nitride for Selective Non-enzymatic Glucose Sensing In Physiological Buffer	Nanomaterials Driven Advances in Chemical and Biosensors (NANOSE 2019), 27-29 November 2019	Alagappa University, Karaikudi
52	Electrochemical study of bi metal oxide decorated Graphene /Graphene oxide Nano composite for selective Dopamine sensing	Nanomaterials Driven Advances in Chemical and Biosensors (NANOSE 2019), 27-29 November 2019	Alagappa University, Karaikudi
53	Study of lipid interaction with metal oxide for DNA biosensing	Nanomaterials Driven Advances in Chemical and Biosensors (NANOSE 2019), 27-29 November 2019	Alagappa University, Karaikudi
54	Behavior of DOTAP/DOPE Liposome on Mixed Monolayer and its application to Electrochemical DNA sensing	Nanomaterials Driven Advances in Chemical and Biosensors (NANOSE 2019), 27-29 November 2019	Alagappa University, Karaikudi
55	Electrochemical behaviour of bi metal Oxide- Graphene/Graphene oxide nanocomposite for ultrasensitive detection of Dopamine	Nano/Biotechnology 2019, 19-21 December 2019	Jawaharlal Nehru University, New Delhi
56	Electrochemical study of DOTAP/DOPE Liposome on mixed monolayer and its application in DNA sensing	Nano/Biotechnology 2019, 19-21 December 2019	Jawaharlal Nehru University, New Delhi
57	Fabrication of MnO <sub>2</sub> -TiO <sub>2</sub> – Graphene nano structured glassy carbon electrode for selective sensing of dopamine	Two days 3rd International Conference On Applied Nanoscience And Nanotechnology(Icann-2019), March 18-19,2019	Alagappa University, Karaikudi
58	Development of enzyme free selective glucose sensing at metal doped carbon nitride	Two days 3rd International Conference On Applied Nanoscience And Nanotechnology(Icann-2019), March 18-19,2019	Alagappa University, Karaikudi
59	Development of Mn <sub>2</sub> O <sub>3</sub> – TiO <sub>2</sub> -Graphene nanostructured electrods for selective sensing of dopamine	International Conference On Nanomedicine (Icon-2019), Febraury 25-26, 2019	Madurai Kamaraj University, Madurai-21
60	Single step electrical exfoliation of pencil graphite and gold nanoparticle for label free selective DNA-p53 interaction	International Conference On Nanomedicine (Icon-2019), Febraury 25-26, 2019	Madurai Kamaraj University, Madurai-21
61	Glycinated graphene and gold	India-UK Second	Bishop Heber College

	nanoparticle nano hybrids for label free Selective sensing of lung cancer DNA-anti p53 antibody binding	International Conference on, 04-06, February 2019 Energy, Environment and Healthcare Applications (ANEH-2019)	
62	Non-enzymatic glucose sensing at graphitic carbon nitrite modified electrode	India-UK Second International Conference on Energy, Environment and Healthcare Applications (ANEH-2019), 04-06, February 2019	Bishop Heber College
63	Impact of Organic Solvents on the Direct Attachment of Graphene Oxide on Gold Electrode for Electrochemical Sensing of Paracetamol	India-UK Second International Conference on Energy, Environment and Healthcare Applications (ANEH-2019), 04-06, February 2019	Bishop Heber College
64	Carbon dot capped silver nanoparticle-lipid based electrochemical DNA sensor	69th Annual Meeting of the International Society of Electrochemistry (ISE), Bologna, Italy, 2-7th September 2018.	the International Society of Electrochemistry
65	Electrochemical behavior of hydrophilic thiol monolayer anchored lipid-gold nanoparticles functionalized protein and DNA.	69th Annual Meeting of the International Society of Electrochemistry (ISE), Bologna, Italy, 2-7th September 2018.	the International Society of Electrochemistry
66	Preparation and characterization of Bimetal oxide-Graphene nanocomposites for selective dopamine sensing	National conference on Advances in Functional materials-NCAFM'19, 21 st - 22 nd March 2019	SSN college of engineering ,Chennai
67	Control of liposome vesicle structure on reduced graphene oxide transducers for sensitive label free DNA biosensing	Two Days International Conference on ADVANCED NANOMATERIALS (ICAN-2018), 26 & 27 February, 2018	Alagappa University, Karaikudi
68	Synthesis of poly (ethylene glycol) assisted $\alpha$ -Fe <sub>2</sub> O <sub>3</sub> for Melatonin sensing	Two Days International Conference on ADVANCED NANOMATERIALS (ICAN-2018), 26 & 27 February, 2018	Alagappa University, Karaikudi
69	Liposome-gold nanoparticle on different alkane modified gold surface and their application in electrochemical DNA sensing	Two Days International Conference on ADVANCED NANOMATERIALS (ICAN-2018), 26 & 27 February, 2018	Alagappa University, Karaikudi
70	Zinc oxide-multiwalled carbon nanotube-poly(vinyl chlorite) film for Biocompatible glucose sensing.	International Conference on Frontier Areas in Chemical Technologies, 6-8th July 2017	Alagappa University, Karaikudi
71	Stabilization of graphene oxide films on gold electrode with influence of volatile	International Conference on Frontier Areas in Chemical Technologies, 6-8th July	Alagappa University Karaikudi

	solvents for electrochemical sensing of acetaminopen	2017	
72	Binary liposome (DOTAP-DOPE) vesicle-gold nanoparticles for enhanced label free DNA and protein sensing	International Conference on Frontier Areas in Chemical Technologies, 6-8th July 2017	Alagappa University, Karaikudi
73	Simultaneous sensing of Melatonin, Dopamine and Acetaminophen at Iron oxide- Platinum nanoparticles modified electrode	International conference on renewable energy science and technology, 10-11March, 2017	Alagappa University Karaikudi
74	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, 10-11, March 2017	Alagappa University Karaikudi
75	Liposome-gold nanoparticle on gold surface for electrochemical DNA sensing	International conference on renewable energy science and technology, 10-11, March, 2017	Alagappa University Karaikudi
76	Ruthenium oxide - Graphene oxide -Single walled Carbon Nanotube composite for glucose sensing	National Conference on Futuristic Materials (NCFM-2017), 27 - 28, March 2017	Alagappa University Karaikudi
77	Synthesis and Characterization of Cobalt and zinc doped hydroxyapatite nanopowder by co-precipitation method	National Conference on Futuristic Materials (NCFM-2017), 27 - 28, March 2017	Alagappa University Karaikudi-630 003
78	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), 27 - 28, March, 2017	Alagappa University Karaikudi-630 003
79	Phase transformation analysis of nano structure TiO <sub>2</sub> thin films synthesized by electrodeposition technique	National Conference on Futuristic Materials (NCFM-2017), 27 - 28, March 2017	Alagappa University Karaikudi-630 003
80	Alkali earth metal doped bismuth silicate ferroelectric thin film	National Conference on Futuristic Materials (NCFM-2017), 27 - 28, March 2017	Alagappa University Karaikudi-630 003
81	Influence of annealing temperature on structural and optical properties of bismuth silicate thin film	National Conference on Futuristic Materials (NCFM-2017), 27 - 28, March 2017	Alagappa University Karaikudi-630 003
82	Biocompatible Zinc oxide-Multiwalled carbon	International Conference on Recent trends in	Alagappa University Karaikudi-630 003

	nanotube-poly(vinyl chloride) composite for glucose sensing	Microbiology, 01-04, Mar-2016	
83	Growth and characterization of chemical bath deposited plumbous oxide thin films	International conference on Materials Science & Technology, 01-04, Mar-2016	University of Delhi, Delhi
84	Effects of precipitating agents on surface texture and magnetic properties of Dy <sub>2</sub> O <sub>3</sub> nano powder	International conference on Materials Science & Technology, 01-04, Mar-2016	University of Delhi, Delhi
85	Studies of self-assembled binary mixed monolayer for label free DNA hybridization electrochemical sensing on liposome-gold nanoparticle composite tethered on gold transducer	Frontier Areas in Chemical Technologies, 21-23, March 2016	Alagappa University Karaikudi
86	The behavior of binary lipid on different chain length thiol monolayer modified gold electrode.	Frontier Areas in Chemical Technologies, 21-23, March 2016	Alagappa University Karaikudi
87	Dynamic sensing of L-dopa using zinc oxide-reduced graphene oxide film.	Frontier Areas in Chemical Technologies, 21-23, March 2016	Alagappa University Karaikudi
88	Dynamic sensing of ascorbic acid, dopamine and uric acid at electrochemically exfoliated graphene oxide-gold nanoparticle by electrochemical methods	Frontier Areas in Chemical Technologies, 21-23, March 2016	Alagappa University, Karaikudi
89	Temperature dependant anatase titanium dioxide thin film prepared by electrodeposition technique.	Frontier Areas in Chemical Technologies, 21-23, March 2016	Alagappa University Karaikudi
90	A novel cobalt doped Dy <sub>2</sub> O <sub>3</sub> nanoparticle synthesized by co-precipitation method.	Frontier Areas in Chemical Technologies, 21-23, March 2016	Alagappa University, Karaikudi
91	Structural and morphological properties of polypyrrol doped Sb <sub>2</sub> S <sub>3</sub> thin film.	Frontier Areas in Chemical Technologies, 21-23, March 2016	Alagappa University, Karaikudi
92	Influence of Sm on structural and optical properties of Bi <sub>2</sub> S <sub>3</sub> thin using SILAR method.	Frontier Areas in Chemical Technologies, 21-23, March 2016	Alagappa University, Karaikudi
93	The roles of portic solvents on CdS thin films prepared by chemical bath deposition technique	Frontier Areas in Chemical Technologies, 21-23, March 2016	Alagappa University, Karaikudi
94	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), 14-15, Dec. 2015	Gandhigram Rural Institute, Dindugal
95	L-Dopa detection at zinc	International conference on	Gandhigram Rural

	oxide- reduced graphene oxide modified electrode	recent advance in materials and chemical sciences (ICRAMCS-2015), 14-15, Dec. 2015	Institute, Dindugal
96	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), 14-15, Dec. 2015	Gandhigram Rural Institute, Dindugal
97	Synthesis and Characterization of Porous Structured ZnO Thin Film for Dye Sensitized Solar Cell Applications	60th DAE-Solid State Physics Symposium Department of Atomic Energy, 21-25 Dec-2015	Amity University, Noida
98	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 (RACS-2015), 5 – 6, MARCH 2015	Gandhigram Rural Institute, Dindugal
99	Simultaneous determination of ascorbic acid, uric acid and dopamine at 24rapheme layers-gold nanoparticle film electrode	National Conference On Recent Advances In Chemical Sciences (RACS-2015), 5 – 6, MARCH 2015	Gandhigram Rural Institute, Dindugal
100	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 –(FACTS-2015), 6-7, March 2015	Alagappa University, Karaikudi
101	Simultaneous sensing of ascorbic acid, uric acid and dopamine at 24rapheme layers-gold nanoparticle film on glassy carbon electrode	National seminar on frontier areas in chemical technologies –(FACTS-2015), 6-7 March 2015	Alagappa University, Karaikudi
102	Zinc oxide- 24rapheme oxide modified electrode for L-dopa sensing	National Seminar on Recent Advances in Chemistry, 13-14, Aug 2015	Department of Chemistry, Kandaswami Kandar's College, Velur
103	Influence of organic solvents on the direct attachment of 24rapheme oxide on gold electrode for electrochemical sensing of acetaminophen	National Seminar on Recent Advances in Chemistry, 13-14, Aug 2015	Department of Chemistry, Kandaswami Kandar's College, Velur
104	Effect of gold 24rapheme24cles on lipid structure control on gold	Indo-Australian Conference on "Biomaterials Tissue Engineering, Drug Delivery System & Regenerative Medicine, 5-7. February 2015	Anna University, Chennai
105	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), 14 & 15th December 2015,	Gandhigram Rural Institute

106	L-Dopa detection at zinc oxide- reduced graphene oxide modified electrode	International Conference on Recent advance in materials and chemical sciences (ICRAMCS-2015), 14 & 15th December 2015,	Gandhigram Rural Institute
107	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), 14 & 15th December 2015	Gandhigram Rural Institute
108	Investigation of neutral and cationic liposome interaction with gold nanoparticle on gold transducer for DNA sensing	Second International conference on Nanostructured Materials and Nanocomposites (ICNM 2014), 19-21 Dec, 2014	Mahatma Gandhi University, Kerala
109	Electrochemical DNA sensing in presence of inorganic metal complexes and organic dyes	Indo-French seminar on Bioinorganic approaches to current health problems, 24-28, March 2014	Pondicherry University
110	Liposome gold nano composite for electrochemical DNA sensing	Indo-French seminar on Bioinorganic approaches to current health problems, 24-28, March 2014	Pondicherry University
111	Hydrogen Peroxide Sensing Ruthenium oxide– gold nano modified electrode	Recent Advances in Surface Sciences (RASS-2013), 14-15, February 2013	Gandhigram Rural Institute
112	Selective Oxidation of Glucose at Ruthenium oxide Graphene oxide Nano Complex	Indo-Japan workshop on Biomolecular Electronics & Organic Nanotechnology for Environment Preservation (IJWBME 2013), 13 -15 Dec. 2013	Delhi Technological University, Delhi, India
113	Novel Liposome-gold Transducer for Electrochemical DNA Sensing	International Conference on “Recent Advances in Textile and Electrochemical Sciences (RATES-2013), 20 -21, September 2013	Alagappa University Karaikudi
114	An enzymatic glucose sensing at polypyrrole-ruthenium oxideglucose oxidase composite	International Conference on “Recent Advances in Textile and Electrochemical Sciences (RATES-2013, 20 -21, September 2013	Alagappa University Karaikudi
115	Label free DNA Sensing at Liposome-AuNP nano composite	Second International Workshop on Advanced Function Nanomaterials (SIWAN-2013), 28-30, January 2013	Anna University, Chennai
116	Liposome and AuNP nano composite for Label free DNA Sensing	International Conference on Recent Advances in Textile and Electrochemical Sciences (RATES-2013), 28-	Alagappa University Karaikudi

		30, January 2013	
117	Liposome preparation and DNA Sensing	National Conference on Recent Advancements in Nanomaterials for Sensor, Applications (NANOSE-12), 8 - 9 March 2012	Alagappa University Karaikudi
118	Glucose Sensing at Graphene Oxide – ZrO using Glassy Carbon Nano Composite Modified Electrode	International Conference on Recent Advances in Textile and Electrochemical Sciences (RATES-2013), 21-23, March 2013	Alagappa University Karaikudi
119	The formation of CdZnS thin film and its Characterization	Recent Advances in Textile and Electrochemical sciences, 21-23, March 2013	Alagappa University Karaikudi
120	Electrochemical DNA detection using liposome-gold transducer	17th National Convention of Electrochemist (NCE-17), 14 -15, September 2012	CECRI, B.S Abdur Rahman University, Chennai
121	Ruthenium oxide-gold/graphene film for the direct electrochemical hydrogen peroxide sensing: Effect of ruthenium oxide annealing temperature	Indo-Japan workshop on Biomolecular Electronics & Organic Nanotechnology for Environment Preservation (IJWBME 2013), 13 -15, Dec. 2013	Delhi Technological University, Delhi, India
122	Fabrication of Graphene Oxide Gold nano sheets and characterization for glucose	International Conference on Recent Advances in Textile and Electrochemical Sciences (RATES-2013), 21-23, March 2013	Alagappa University Karaikudi
123	Electrochemical synthesis of graphene gold nano films for DNA sensing	International Conference on Emerging Technologies Micro to Nano, 23- 24, February	BITS, Pilani-K.K. Birla GOA Campus, India
124	Selective glucose sensor based on Ruthenium dioxide-Poly(vinyl chloride)-Nafion composite	Recent Advances in Surface Sciences (RASS-2013), 14-15, Feb. 2013	Gandhigram Rural Institute
125	Electrochemical sensing of DNA at DOTAP-DOPE-AuNP nano composite platform	Recent Advances in Surface Sciences (RASS-2013), 14-15, Feb. 2013	Gandhigram Rural Institute
126	DNA hybridization Electrochemical Biosensor using a Functionalized Polypyrrole	Sixteenth National Convention of Electrochemists (NCE-16), 15-16, Dec. 2011	Central Electrochemical Research Institute, karaikudi and P.S.G.R. Krishnammal College for women, Coimbatore
127	Hydrogen Peroxide sensor using Ruthenium Oxide-Nafion films	National Conference on Recent Advancements in Nanomaterials for Sensor Applications (NANOSE-12), 8-9, March 2012	Alagappa University
128	RuO <sub>2</sub> -PVC film for glucose sensing in neutral and alkali	National Conference on Recent Advancements in	Alagappa University

	media	Nanomaterials for Sensor Applications (NANOSE-12), 8-9, March 2012	
129.	Synthesis and Characterization of grapheme core poly Amido amine (PAMAM) dendrimer	National Conference on Recent Advancements in Nanomaterials for Sensor Applications (NANOSE-12), 8-9, March 2012	Alagappa University
130	Graphene core G2PAMAM dendrimer gold nanofilms for label free DNA sensing	9th International Workshop on Nanomechanical Sensing-2012	IIT Bombay, Mumbai
131	Electrochemical sensing of DNA and Liposomes	Sixteenth National Convention of Electrochemists (NCE-16)-2012, 15-16, Dece. 2011	Society for Advancement of Electrochemical science and Technology (SAEST) Karaikudi
132	RuO <sub>2</sub> -PVC-Nafion ionomer composites for selective and sensitive glucose sensing in neutal and alkaline solutions	Sixteenth National Convention of Electrochemists (NCE-16)-2012, 15-16, Dece. 2011	Society for Advancement of Electrochemical science and Technology (SAEST) Karaikudi
133	Electrochemical Dopamine sensing in the presence of ascorbic acid and Uric acid at RuO <sub>2</sub> -Nafion modified GC electrodes	Sixteenth National Convention of Electrochemists (NCE-16)-2012, 15-16, Dece. 2011	Society for Advancement of Electrochemical science and Technology (SAEST) Karaikudi
134	Ruthenium oxide Nafion gold nano particle composite for enzyme free hydrogen peroxide sensor	Sixteenth National Convention of Electrochemists (NCE-16)-2012, 15-16, Dece. 2011	Society for Advancement of Electrochemical science and Technology (SAEST) Karaikudi
135	Efficient and reliable electrochemical sensing of DNA hybridization at ternary layers	National Conference on Nanoscience and Nanotechnology-2011, 25-27, Aug. 2011	University of Madras
136	Construction of Ternary Mixed Monolayers for the Effective Label Free Electrochemical DNA Sensing	National Seminar on Advancements in Bioelectronics and Biosensors (NSABB'09)-2009.	Alagappa University, Karaikudi
137	Method of Improving Target Hybridization Efficiency at the Single Stranded DNA-Thiol Diluent Binary mixed monolayers for Effective Label Free Electrochemical method	National Seminar on Advancements in Bioelectronics and Biosensors (NSABB'09)-2009.	Alagappa University, Karaikudi
138	Label free Detection of DNA hybridisation on electrical micro arrays by charge injection technique	8th World Congress on Biosensors-2004	Granada, Spain,