




# Bharathiar University

State University | "A++" Grade by NAAC | 26<sup>th</sup> Rank in MoE-NIRF  
Maruthamalai Road, Coimbatore, Tamil Nadu - 641 046.

<b>Dr N PONPANDIAN</b> Professor and Head Department of Nanoscience and Technology  Bharathiar University Coimbatore, 641046 Tamil Nadu <b>E-mail:</b> ponpandian@buc.edu.in <b>Phone:</b> 9443552271 <b>Office Number:</b> 04222428421	
<b>Research Area</b> <ul style="list-style-type: none"><li>• Water Splitting</li><li>• Supercapacitors</li><li>• Sensors</li><li>• Solar Cells</li></ul>	<b>Courses Teaching</b> <ul style="list-style-type: none"><li>• Physics of Nanomaterials</li><li>• Nanoelectronics and Nanophotonics</li><li>• Environmental Sustainability of Nanomaterials</li><li>• Nanomagnetism</li><li>• Fundamentals of Nanoscience and Technology</li><li>• Nanobiotechnology</li><li>• Medical Devices</li></ul>
<b>Research Experience:</b> 25	<b>Teaching Experience:</b> 17
<b>Research Credentials</b> (as on July 2025 – Source: Google scholar) H-index: 64                      Citations: 13708                      i10-index: 207	
<b>Patents :</b> Granted: 3 Filed: 4	
<b>Publications</b> International Journals: 242                      Books/Chapters: 23                      National Journals: 8 Publication Database: 8                      Conferences: 2	
<b>Career</b> <b>Other Institutes</b> <ol style="list-style-type: none"><li><b>1. Designation : Post Doctoral Fellow</b> Institution Name : University of Neraska, Lincoln, USA Period : October 2007 - February 2008</li><li><b>2. Designation : Post Doctoral Fellow</b> Institution Name : University of Madras, Chennai Period : November 1996 - March 1999</li><li><b>3. Designation : Post Doctoral Fellow</b> Institution Name : Free University of Berlin, Germany Period : May 2003 - December 2006</li><li><b>4. Designation : Post Doctoral Fellow</b> Institution Name : University of Rostock, Germany Period : January 2007 - September 2007</li><li><b>5. Designation : Post Doctoral Fellow</b> Institution Name : Indian Institute of Science, Bangalore Period : August 2002 - April 2003</li><li><b>6. Designation : Post Doctoral Fellow</b> Institution Name : University of Madras, Chennai Period : April 1999 - March 2002</li></ol> <b>At Bharathiar University</b>	



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Dr N PONPANDIAN , Professor and Head , Department of Nanoscience and Technology

## 1. Designation : Professor

Period : March 2014 - Till Date

## 2. Designation : Associate Professor

Period : March 2011 - February 2014

## 3. Designation : Reader

Period : February 2008 - February 2011

## Education

### D.Sc

Subject : Physical Science

Institution : Alagappa University

Affiliated University : Alagappa University, Karaikudi

Year of Award : September 2024

### Ph. D.

Subject : Physics

Institution : Department of Nuclear Physics

Affiliated University : University of Madras, Chennai

Year of Award : February 2003

### M. Phil.

Subject : Physics

Institution : Ayya Nadar Janaki Ammal College, Sivakasi

Affiliated University : Madurai Kamaraj University, Madurai

Year of Award : April 1996

### M. Sc.

Subject : Physics

Institution : Ayya Nadar Janaki Ammal College, Sivakasi

Affiliated University : Madurai Kamaraj University, Madurai

Year of Award : April 1995

### B. Sc.

Subject : Physics

Institution : Vivekananda College, Agasteeswaram

Affiliated University : Madurai Kamaraj University, Madurai

Year of Award : April 1992

## Projects

### National Level

Ongoing - 3    completed - 13

## Research Guidance

### Completed

Ph.D. - 17 Post-Doc - 3

### On Going

Ph.D. - 5 Post-Doc - 1

## Institutional Responsibilities

### Director, IQAC

Period : Jul 2016 - Sep 2023

Nature of Responsibility :

### Controller of Examinations

Period : Jul 2023 to Till date

Nature of Responsibility :



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## **Senate Member**

Period :Jul 2015 to Till date

Nature of Responsibility :

## **Standing Committee on Academic Affairs Member**

Period :Jul 2015 to Till date

Nature of Responsibility :

## **International Rankings Coordinator**

Period :Jan 2018 to Till date

Nature of Responsibility :

## **AISHE – Coordinator**

Period :Jan 2018 to Till date

Nature of Responsibility :

## **Head of the Department**

Period :Jul 2015 to Till date

Nature of Responsibility :

## **Innovation and Incubation Centre**

Period :Jul 2018 - Aug 2024

Nature of Responsibility :

## **Institution Innovation Council – President**

Period :Jul 2019 - Aug 2023

Nature of Responsibility :

## **RUSA - Board of Governor**

Period :Apr 2018 to Till date

Nature of Responsibility :

## **DST – FIST - Coordinator**

Period :Apr 2014 to Till date

Nature of Responsibility :

## **UGC – SAP - Coordinator**

Period :Apr 2016 to Till date

Nature of Responsibility :

## **DST – PURSE - Member**

Period :Apr 2011 - Mar 2015

Nature of Responsibility :

## **National Institutional Ranking Framework (NIRF) - Nodal Officer**

Period :Jan 2016 - Dec 2017

Nature of Responsibility :

## **Study-in-India (SII), MHRD - Coordinator**

Period :Jan 2018 - Dec 2020

Nature of Responsibility :

## **UGC- Project Execution Group**

Period :Jan 2019 to Till date

Nature of Responsibility :

## **University Grants Commission - Nodal Officer**

Period :Jan 2019 to Till date

Nature of Responsibility :

## **DRDO PHASE – I Projects, Project Investigator**

Period :Jul 2008 to Till date

Nature of Responsibility :



## DRDO PHASE – I Projects (Physics Division), Project Director (i/c)

Period :Jan 2009 to Till date

Nature of Responsibility :

### Visits

1. Visiting Scientist, Institute of Experimental Physics, Free University of Berlin, Berlin, Germany ( 2006-12-31 - 2003-05-01 )

### Collaborations

1. Collaborative Research Project throughh UGC-DAE CSR ( 2010-01-01 - 2025-01-17 )
2. Dr M. Manivel Raja, Scientist "E", Defence Metallurgical Research Laboratory (DMRL), Hyderabad - 2010-01-01 )
3. Dr S. Amirthapandian, Scientiic Oficer "E", Indira Gandhi Centre for Atomic ResearchE" - 2009-06-01 )
4. Dr T. Thangadurai, Professor, Centre for Nanoscience and Technology, Pondicherry University, Puducherry - 2010-07-01 )
5. Dr V. Ganesh, Principal Scientist, Central Electrochemical Research Institute (CECRI), Karaikudi` - 2011-08-01 )
6. Dr A. Stephen, Professor, Department of Nuclear Physics, University of Madaras, Guindy Campus, Chennai - 2008-10-01 )
7. Prof. Dr Kamanio Chattopadhyay, Department of Materials Engineering, Indian Institute of Science, Bengaluru - 2008-04-01 )

### Programs organized

1. International Seminar ( 2012-01-09 - 2009-01-09 )
2. Workshop ( 2009-03-19 - 2009-03-21 )
3. National Conference ( 2010-02-05 - 2010-02-04 )
4. National Conference (Second) ( 2011-03-25 - 2011-03-26 )
5. Refresher Course ( 2011-12-21 - 2011-01-01 )
6. National Conference (Third) ( 2013-03-26 - 2013-03-25 )
7. National Symposium ( 2013-12-06 - 2013-12-05 )
8. National Seminar ( 2014-02-28 - 2014-02-28 )
9. DBT Sponsored Short Term Course ( 2014-10-01 - 2014-09-08 )
10. Practical Training Programme ( 2014-12-05 - 2014-12-04 )
11. Workshop ( 2015-09-11 - 2015-09-10 )
12. National Conference ( 2016-10-21 - 2016-10-19 )
13. Workshop ( 2016-10-20 - 2016-10-20 )
14. Workshop ( 2018-02-03 - 2018-02-03 )
15. Workshop ( 2018-04-12 - 2018-04-12 )
16. Workshop ( 2018-08-27 - 2018-08-27 )
17. Workshop ( 2018-10-27 - 2018-10-26 )
18. Summer Training Program ( 2020-07-30 - 2020-07-15 )
19. AICTE – ATAL Academy Faculty Development Program ( 2020-10-09 - 2020-10-05 )
20. Worksho ( 2020-10-15 - 2020-10-15 )
21. Refresher Course ( 2021-02-15 - 2021-02-02 )



22. Summer Training Program ( 2021-08-07 - 2021-07-20 )

## Patents

### Granted - 3

1. Method for simultaneous detection, quantification and degradation of cigarette wastewater and its by-products using photoelectrochemical (PEC) oxidation. 09-2023 453005 Dr. C. Viswanathan,H. Amir,Dr. N. Ponpandian
2. Method for Simultaneous Detection and Degradation of Smokeless Tobacco Wastewater and Its By-Product 08-2023 442144 Dr. C. Viswanathan,H. Amir,Dr. N. Ponpandian
3. Bifunctional cost-effective electrocatalyst for catalyzing hydrogen and oxygen evolution reaction 02-2022 543506 Dr. N. Ponpandian,Dr. A. Rebekah,R. Murugan

### Filed - 4

1. Biosensor Device for Detection of BRCA1 Gene Mutation 05-2022 202241029462 Dr. K. P. Divya,Ms. S. Keerthana,Dr. N. Ponpandian
2. Pioglitazone nanoparticles functionalized with RGD and P3 peptides and compositions thereof for adipocyte specific drug delivery 01-1970 202241017503 N. Ponpandian
3. Statin Nanofibers Coated With Silver Nanoparticles For Diabetic Wound Healing Associated With Inf. 01-1970 202341050930 KRISHNAMURTHY, Praveen Thaggikuppe, GARIKAPATI, Kusuma Kumari, AMMU, Veera Venkata Vajra Ravi Kiran, BABU, Basuvan, PONPANDIAN, Nagamony
4. Water-Splitting Reactor for Generating Hydrogen Fuel by Enhancing a Photoelectrochemical Water Splitting Process using Nanomaterials 07-2024 202441051274 Dr. N. Ponpandian, Dr. R. Rajalakshmi

## Selected Publications

### 1. The intriguing bifunctional effect of strong metal support interaction (SMSI) and hydrogen spillover effect (HSPE) for effective hydrogen evolution reaction

Applied Catalysis B: Environmental 339, 123089 (2023). (December 2023)  
R. Rajalakshmi, G. Srividhya, C.Viswanathan, N. Ponpandian

### 2. A nanocomposite of NiFe<sub>2</sub>O<sub>4</sub>-PANI as a duo active electrocatalyst toward the sensitive colorimetric and electrochemical sensing of ascorbic acid

Nanoscale Advances 2, 3481 – 3493 (2020) (January 2020)  
D Navadeepthy, M Thangapandian, C Viswanathan, N Ponpandian