#### Dr.K.Gurunathan

## **Areas of Research/Specialization:**

- ➤ Hydrogen Energy
- Photocatalysis and Photoelectrochemistry
- ➤ Nano ( Quantum dots &Core-Shell Solar cells), Flexible (Plastic) Solar cells
- Nanomaterials for Electronics and Power sources Dr.K.Gurunathan
- Conducting Polymers and their r-GO-MO-Nanocomposites
  Professor & Head
- ➤ Nano Magnetism (Core-Shell Magnetic materials for MRI)
- ➤ Nano Toxicology & Phytochemical synthesis of Nanomaterials

# Achievements made in Teaching/Research/Extension

No. of Research Publications	:	70
No. of papers presented in Conferences	:	168
h-index	:	10
i-10 index	:	12
Total Citations	:	966
Patents Granted/Filed	:	1

1. Conducting Polymer/ Transparent Oxide composite for Rechargeable Battery.

### **Awards and Recognitions**

- 1. Awardee of BOYSCAST Fellowship (DST, New Delhi) for the year 1999-2000. The work was carried out in University of Texas at Austin, Austin, TX, USA during March 2000-March 2001 in Lithium battery, Supercapacitor and cathode materials for Solid oxide fuel cell.
- 2. Awardee of Brain Pool scientist by Brain Pool program of KOFTS, South Korea, during July 2005-June 2006 in "Development of Efficient Visible photocatalysts for Hydrogen Generation" The work was carried out in Korea Research Institute of Chemical technology (KRICT), Daejon, S. Korea.
- 3. Awardee of First prize for Poster Presentation of our paper presented in two days National seminar on Recent advance in Nanoscience (RANS-2008) held at Sub-Center at Osmanabad of Marathwada University (Feb 23 &24, 2008).
- 4. Awardee of Best Poster presentation of our paper presented in Ist International conference on Functional materials for Defence -2012 (ICFMD-2012), organised by DIAT, during May 18-20, 2012, Pune.
- 5. Awardee of "Rastriya Nirman Rattan" by Economic Growth Society of India, Delhi awarded during the National seminar on "Individual achievements for Economic & Social Development" on 26<sup>th</sup> August, 2012 at Delhi.
- 6. Awardee of "National Health leadership Award" by Health and Education Development Association, Delhi, 2012 for Outstanding Individual achievement & distinguished services to the nation during December 23, 2012.



- 7. Awardee of "Asia-Pacific Global Award", Global Achievers Foundation for Individual contribution for International Integration during Indo-Thailand seminar on "Global Achievers Summit" on 4<sup>th</sup> January, 2013 in Bankak, Thailand.
- 8. Listed in Marquis Who's who in Science and Engineering published by Marquis, USA, 2006-2007 and Who's Who in the World published by the same on upcoming 2009(26<sup>th</sup> Edn.)
- 9. Awardee Institute –RA in CECRI, Karaikudi, (1995-1997).
- 10. Direct CSIR-SRF from CSIR, India, 1991-1993
- 11. Awardee of Student Membership from Electronic Division of Electrochemical Soc, Inc, USA, 1991-1994

#### **Research Group Members**

- R.Kalyani
- S.Sivasakthi
- A.J.Heiner
- T.M.Amarnath

#### **Past Members**

- T.Sadhasivam, South Korea
- A.Rajesh, IGCAR, Kalpakkam, Chennai
- K.Dhanabalan, Chonnom University, South Korea