



Dr. V. GUNASEKARAN completed his PhD (Specialization: Materials Science and Nanotechnology) from Jeju National University, Jeju City South Korea. He received his Master's degree in Materials Science from PSG College of Technology, Coimbatore. He worked as Senior Assistant Professor in the Department of Nanosciences and Technology, Karunya University, Coimbatore for 5 years. He received a most prestigious JSPS Post-doctoral fellowship from Japan Society for Promotion of Science, Japan; subsequently he worked in Solid State Electronics Lab, Research Institute of Electrical Communication (RIEC), Tohoku University, Japan for 2 years. Previously he worked as Senior Technical Engineer at M/s Lakshmi Machine Works Ltd, Coimbatore for 9 years. He has vast experience in the research areas such as two-dimensional (2D) nanomaterials, Graphene/Graphene-oxide, MEMS/NEMS device fabrication, Super-capacitors, Electrical transport studies, Solar cells, and photocatalysis for industrial waste-water treatment.

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Research areas: 2D Nanomaterials: Synthesis and Applications, Photocatalysis for waste water treatment, Fabrication of Nano devices, Graphene, Graphene-oxide, Thinfilms, Supercapacitors, Solar cells, Low-dimensional Electron-transport /low-temperature transport studies.

Educational details:

Degree	Specialization	University/Institution
Ph.D.*	Materials Science and Nanotechnology	Jeju National University Republic of Korea
M.Phil. Physics	Materials Science	Manonmanium Sundaranar University, Trinelveili, India
M.Sc. (Faculty of Engineering)	Materials Science	PSG College of Technology, Bharathiar University, Coimbatore
B.Sc.	Physics	Madurai Kamaraj University, Madurai, India

* Recipient of *Best Ph.D. Thesis award*

Additional Educational Qualifications

Degree	Specialization	College/University
M.B.A.	Production Management	Madurai Kamaraj University Madurai, India
Diploma in Materials Management	Materials Management	National Institute of Labor Education and Research, Adayar, Chennai-600 020

Past Experiences:

- **Assistant Professor (AGP: 8000) – 5 years** at Karunya University, Coimbatore, Tamil Nadu,
- **JSPS Post-Doctoral Research Fellow – 2 years** at Solid State Electronics Lab, Research Institute of Electrical Communication (RIEC), **Tohoku University**, Japan.
- **Senior Technical Engineer - 9 years** at Department of Materials and Quality, M/s Lakshmi Machine Works Limited, Coimbatore, Tamil Nadu, India.

Top 5 selected publications: (Most Significant)

(*-Corresponding author)

1. **V. Gunasekaran***, and Sang-Jae. Kim, Fabrication of nanoscale three-dimensional graphite stacked-junctions by focused-ion-beam and observation of anomalous transport characteristics, *Carbon*, 49, 8, 2766-2772 (2011). **Impact Factor: 6.189**
2. T. Sakthivel, R. Nivea, K. Govindan, S.J. Kim, **V. Gunasekaran***, “Graphene oxide (GO)-Fe³⁺ hybrid nanosheets with effective sonocatalytic degradation of Reactive Red 120 and study of their kinetic mechanism”, *Ultrasonics Sonochemistry*, 24, 123-131 (2015). **Impact Factor: 6.012**
3. **V. Gunasekaran***, T. Sakthivel, K. Karthikeyan, K. Velmurugan, R. Nandhakumar, Sang-Jae Kim, “Graphdiyne-ZnO nanohybrids as an advanced photocatalytic material”, *J. Phys. Chem. C., (ACS)*, 119 (38), 22057-22065 [2015]. **Impact Factor: 4.77**
4. K. Karthikeyan, T. Sakthivel, C.V. Jipsa, S. Nandhakumar, S. J. Kim, **V. Gunasekaran***, “Graphdiyne nanostructures as a new electrode material for electrochemical supercapacitors”, *International Journal of Hydrogen Energy*, 41, 1672-1678 [2016]. **Impact Factor – 4.229**
5. R. Nivea, T. Sakthivel, S. Yuvaraj, **V. Gunasekaran***, “Investigation of photocatalytic performances of sulfur based reduced graphene-oxide-TiO₂ nanohybrids”, *Applied Surface Science*, 449, 712-718 (2018). **Impact Factor : 4.3**

Awards and Recognitions:

- **Young Scientist – DST- Early Career Research Award** (2017), SERB, GOI, New Delhi
- **JSPS Post Doctoral Fellowship**, at Tohoku University, Sendai, Japan
- **Best Achievers’ Award (2014)**, Karunya University, Coimbatore, India.
- **Young Scientist Award (2013)** for the project worth of Rs 21.4 Lakhs sanctioned from Department of Science and Technology (DST), Government of India, New Delhi.

- **Best Teacher Award (2012)**, Karunya University, Coimbatore, India.
- **Best Researcher Award (2013)**, Karunya University, Coimbatore, India.
- **Best Researcher Award (2012)**, Karunya University, Coimbatore, India.
- **Best Research Paper Award (2012)**, Karunya University, Coimbatore, India.
- **Best Ph.D. Thesis –The Honorable Mention Research Achievement Award** given by the President, Jeju National University for the best research performances in PhD program.
- **Best Student Award (2011)**, Nanomaterials Lab, Jeju National University, Korea
- **Best Poster Award (2010)** in 10th ACPST and 23rd SPSM conference, Jeju, Korea
- **Brain Korea-21 (BK-21) Fellowship** – from Korean Research Foundation (KRF) for doctoral research.

Externally Funded Research Projects: (ongoing)

- *Development of Novel, Efficient and low-cost process for water treatment using Graphene-oxide nanoparticles with Real time Zero-discharge effluent technique* -Funded by Department of Science and Technology (DST), New Delhi, India (Project No: ECR/2016/001798 dated 29th Dec.2016).
Amount Sanctioned: Rs. 39.57 Lakhs.
- *Design and Development of a Novel Graphene-based Nano-hybrid photocatalyst for effective sonocatalytic degradation of industrial dye effluent pollutants.* Funded by UGC (BSR)-New Delhi, India (Project No: F.30-396/2017(BSR) dated 06.10.2017). **Amount Sanctioned: Rs.10 Lakhs**

OTHER ACADEMIC RESPONSIBILITIES:

- **NSS Programme Officer**, Central University of Tamil Nadu, since Dec 2017 – till date
- **IQAC (Internal Quality Assessment Cell) Member** , Central University of Tamil Nadu, since July 2017- till date
- **Board of Studies (BOS) Member**, Department of Materials Science, Central University of Tamil Nadu, since July 2017- till date
- **NAAC (National Assessment and Accreditation Council) Coordinator** , Department of Nanotechnology, Karunya University, Coimbatore, India (2012-2014)
- **Board of Studies (BOS) Member**, Department of Nanotechnology, Karunya University, Coimbatore, India (2012-2014) (for Course Development)

Experience in Research Supervision:

PhD Guided: 2 awarded and 1 (on-going)

Masters' Thesis Guided: 19 (18 M.Tech level + 1 M.Sc)

PUBLICATION AND CITATION INDEX (as on July 2018)

International journals	:	55	International conferences	:	50
Book Chapters	:	6	i10 index	:	17
Total number of citations	:	723	<i>h</i> index	:	14

RECOGNIZED REVIEWER IN THE FOLLOWING JOURNALS:

1. Nature (Materials) [IF 36.425]
2. Nature (Scientific Reports) (IF 5.578)
3. Carbon [IF 6.16]
4. ACS Applied Materials and Interfaces [IF 5.9]
5. Journal of Nanoscience and Nanotechnology – ASP Publishers [IF 1.3]
6. Journal of Materials Science [IF 2.3]
7. Science of Advanced Materials [IF 2.9]
8. Materials Chemistry and Physics - Elsevier [IF 2.05]
9. Materials Science in Semiconductor Processing – Elsevier [IF 1.7]
10. Spectrochimica Acta – Elsevier [IF 2.12]
11. Journal of Alloys and Compounds (Elsevier) [IF 1.5]
12. Materials Express – ASP Publishers [IF 1.3]
13. Advanced Science Engineering and Medicine – ASP Publishers
14. Journal of Hazardous Materials (Elsevier) [IF 5.1]
15. Material Characterization (Elsevier) [IF 1.925]
16. Journal of Industrial and Engineering Chemistry (Elsevier) [IF 2.1]

Links to:

Facebook: www.facebook.com/gunasekaran_venugopal

Google Scholar:

https://scholar.google.co.in/citations?hl=en&user=xEEVIGMAAAAJ&view_op=list_works&sortby=pubdate