<table>
<tr><td>Name of the Faculty</td><td colspan="3">Dr. V. GUNASEKARAN</td><td rowspan="4">  </td></tr>
<tr><td>Designation</td><td colspan="3">Assistant Professor</td></tr>
<tr><td>Department</td><td colspan="3">Materials Science, School of Technology</td></tr>
<tr><td>Date of Joining at CUTN</td><td colspan="3">29th August 2016</td></tr>
<tr><td rowspan="2">Qualifications with Class/Grade</td><td>UG</td><td>PG</td><td>Ph.D.</td></tr>
<tr><td>B.Sc. (Physics)
Madurai Kamaraj University, Madurai

First Class with Distinction
(84.54 %)</td><td>M.Sc. Material Science (Faculty of Engineering).
PSG College of Tech, Bharathiar University, Coimbatore.

First Class with Distinction (80.2%)

M.Phil. Physics
M.S. University, Tirunelveli.
First Class

M.B.A.,
Madurai Kamaraj University, Madurai.</td><td>Ph.D. (Mech. Engg)
Jeju National University, Republic of Korea.

Best Ph.D. Thesis award and Best outgoing student award from Jeju National University, Republic of Korea.

<u>Ph.D. Thesis Title</u>:
Development of Nanoscale Graphitic Devices and the Transport Characterization</td></tr>
<tr><td>Area of Specialization</td><td colspan="3">✓ MEMS/NEMS device fabrication and their transport studies.
✓ Electronic transport of 2D materials such as Graphene,MoS_2 etc.,
✓ Nanolithography/photolithography/Focused Ion Beam
✓ Nano-hybrids and Nanocomposites for waste-water treatment.
✓ Energy storage devices- Electrochemical Supercapacitors.</td></tr>
<tr><td rowspan="2">Subjects Teaching</td><td colspan="2">UG</td><td>PG</td></tr>
<tr><td colspan="2">Materials Physics
Nanotechnology</td><td>1. Materials Science Engineering
2. Nanostructured Materials.
3. Nanocomposite Materials
4. Thermodynamics and Quantum Mech.</td></tr>
<tr><td rowspan="2">Total Experience in Years</td><td>Teaching</td><td>Industry</td><td>Research</td></tr>
<tr><td>4 years (Full Time)</td><td>9 years (Full time)</td><td>9 years</td></tr>
<tr><td>Papers Published</td><td colspan="2">National: 4</td><td>International: 44</td></tr>
<tr><td>Papers Presented in Conferences</td><td colspan="2">National: 10</td><td>International: 34</td></tr>
<tr><td>Conferences Participated</td><td colspan="2">National: 15</td><td>International: 31</td></tr>
<tr><td>Ph.D/Projects Guided</td><td colspan="3">Guided 17 M.Tech students and 2 M.Sc. Students for their final projects.
2 PhD students – ongoing (one PhD student submitted synopsis already)</td></tr>
<tr><td>Books Chapters Published</td><td colspan="3">2 (International) + 4 (National)</td></tr>
<tr><td>Professional Memberships</td><td colspan="3">1. Life Member in Materials Research Society of India
2. Member in Korean Physical Society
3. Member in Korean Society of Mechanical Engineering
4. Institute of Physics, London, UK.</td></tr>
<tr><td>Awards</td><td colspan="3">1. JSPS Post-Doc Fellowship, Tohoku University, Japan (2 years).
2. Best Teacher Award from Karunya University, Coimbatore.
3. Best Researcher Award (2 consecutive years) from Karunya University.
4. Best Research Paper Award from Karunya University.
5. Best Achievers' Award from Karunya University, Coimbatore
6. Best Ph.D. Thesis award from Jeju National University,</td></tr>
</table>

	Republic of Korea. 7. **Best Ph.D. Student Award** from Department of Mechanical Engineering Dept, Jeju National University, Republic of Korea 8. **Best Outgoing Cadet Award** from NCC (National Cadet Corps), Ministry of Defense, India. 9. **Best Poster Presentation Award** from "10th Asia-Pacific conference on Plasma Science and Technology (APCPST)" and 23rd Symposium on Plasma Science for Materials (SPSM)" held at Lotte Hotel, Jeju, Korea (July 4-8, 2010). 10. **Brain Korea -21** (BK-21) Fellowship by Korean Government.
Grants Fetched	Project Proposal titled "*Design and Development of Cost Effective, Novel process for efficient waste water treatment using Graphene-oxide nanoparticles*" has been approved and sanctioned by Department of Science and Technology (DST) under the Young Scientist Scheme, Government of India, New Delhi (Project cost Rs. 22.8 Lakhs).
Interaction with Professional Institutions	1. Jeju National University, Jeju, South Korea. 2. Tohoku University, Japan. 3. B.S. Abdul Rahman University, Chennai, India. 4. PSG College of Technology, Anna University, Coimbatore.
International Journal Publications ***-corresponding author** **(Only selected papers are shown here).**	1. **Gunasekaran Venugopal,** Ryota Suto, Keiichiro Sashimi, Naoka Nagamura, Koji Horiba, Maki Suemitsu, Masaharu Oshima and Hirokazu Fukidome, "Observation of nanoscopic charge-transfer region at metal/MoS_2 interface*"*, ***Material Research Express (IOP)***, 3 (7), 075004, [2016]. 2. **Gunasekaran Venugopal***, C.V. Jipsa, R. Nivea, Varu Singh, Ashwini Kumar, Azhagurajan Mukkannan, "Nano-dynamic mechanical and thermal responses of single-walled carbon nanotubes reinforced polymer nanocomposite thinfilms", ***J. Alloys and Compounds,*** *688, 454-459* [2016]. 3. **V. Gunasekaran***, G.H. Park, K.S. Kim, M. Suemitsu, Hirukazu Fukidome, "Observation of insulating and metallic-type behavior in Bi_2Se_3 transistor at room temperature", ***Nanosystems: Physics, Chemistry, Mathematics,*** 7 (3), 565-568 [2016]. 4. **Gunasekaran Venugopal et al***, "Graphdiyne nanostructures as a new electrode material for electrochemical supercapacitors", **International Journal of hydrogen Energy,** 41 (3), 1672-1678 [2016]. 5. **Gunasekaran Venugopal et al*, "**Graphdiyne-ZnO nanohybrids as an advanced photocatalytic material", **J. Phys. Chem. C., (ACS),** 119 (38), 22057-22065 [2015]. 6. **V. Gunasekaran***, "Graphene oxide (GO)-Fe^{3+} hybrid nanosheets with effective sonocatalytic degradation of Reactive Red 120 and study of their kinetic mechanism", ***Ultrasonics Sonochemistry,*** 24, 123-131 (2015). 7. **Gunasekaran Venugopal***, "Removal of heavy metal ions from pharma-effluents using graphene-oxide nanosorbents and study of their adsorption kinetics", ***J. Indus. Engg. Chem.*** 30, 14-19 (2015). 8. **Gunasekaran Venugopal et al***, "Enhanced photocatalytic efficacy of organic dyes using beta-tin tungstate-reduced graphene-oxide nanocomposites" ***Materials Chemistry and Physics,*** Vol. 145, 108-115(2014). 9. **Gunasekaran Venugopal**, Sang-Jae Kim, "Fabrication of nanoscale three-dimensional graphite stacked-junctions by focused-ion-beam and observation of anomalous transport characteristics" ***Carbon*** Vol. 49, 8, 2766-2772, (2011). . 10. **Gunasekaran Venugopal et al***, "Understanding the Adsorption Property of Graphene-oxide with Different Degrees of Oxidation Levels" ***Powder Technology,*** Vol. 257, 141-148 (2014) . 11. **V. Gunasekaran et al*, "**Study on inorganic oxidants assisted sonocatalytic degradation of resazurin dye in presence of β-$SnWO_4$ nanoparticles", ***Materials Science in Semiconductor Processing***, Accepted inpress (2014). . 12. **V. Gunasekaran et al***, "Effect of oxygenated functional groups on Photoluminescence properties of graphene-oxide nanosheets" ***Materials***

	Science in Semiconductor Processing, Vol. 19, 174-178 (2014). . 13. **Gunasekaran Venugopal***, K. Karthikeyan, S.-J. Kim, "An investigation on high-temperature electrical transport properties of graphene-oxide nano-thinfilms", ***Applied Surface Science***, Vol. 280, 903-908 (2013). . 14. **V. Gunasekaran** et al, "Phenylhydrazones of Piperidin-4-ones as AND, OR, NOR, NAND, and INH Molecular Logic Gates, ***Applied Spectroscopy***, Vol. 67, 9, 1042-1048 (2013). 15. **Gunasekaran Venugopal***, K. Karthikeyan, R. Mohan, Sang-Jae Kim, "An Investigation of electrical transport characterization of Graphene oxide Thinfilms" ***Materials Chemistry and Physics***" Vol. 132, 29-33, 2012. . 16. **Gunasekaran Venugopal***, Sang-Jae Kim, "Investigation of Transfer characteristics of High performance Graphene Flakes" "***Journal of Nanoscience and Nanotechnology***", *13, 3515-3518 (2013).* 17. **Gunasekaran Venugopal*, S-J. Kim,** "Temperature dependent transfer characteristics of graphene field effect transistors fabricated using photolithography" ***Current Applied Physics,*** Vol. 11, S381-S384, (2011). 18. **Gunasekaran Venugopal***, S-J. Kim, "Investigation of electrical transport characteristics of nano-scale stacks fabricated on thin graphite layer" ***Thin Solid Films,*** Vol. 519, (2011) 7095-7099. 19. **Gunasekaran Venugopal**, Sang-Jae Kim, "Fabrication and Characteristics of Nanoscale stacked-tunneling-junctions of thin graphite flake," ***Japanese Journal of Applied Physics***, Vol. 50, (2011) 06GE06. 20. **Gunasekaran Venugopal**, S-J. Kim, "Nanoscale stack fabrication approach towards three dimensional stack of graphene sheets using focused ion beam", ***Journal of Nanoscience and Nanotechnology***. (2011) (in Press).
Conferences Attended	➢ **International:** More than **30 Papers presented** in International Conferences held in various countries (Including Korea, Japan, USA). ➢ **National :** More than **15 papers** in India. ➢ **Invited Talks:** **10** (delivered in India, Korea, and Japan)
Contact Details	**Dr. V. Gunasekaran** Assistant Professor Department of Materials Science School of Technology **Central University of Tamil Nadu,** Neelakkudi, Kangalancherry (Po) Thiruvarur- 610 005, Tamil Nadu, India **Mobile No.+91-98947 89648** Email : gunasekaran@cutn.ac.in