

DR. HIMANSHU GUPTA

DESIGNATION- ASSISTANT PROFESSOR

ADDRESS- Department of Physics, Gurukula Kangri Vishwavidyalaya, Haridwar-249
404, India

Mob. –7300761189, 9410322675

E-mail: himanshugkv4@gmail.com, himanshu.gupta@gkv.ac.in

EDUCATIONAL QUALIFICATIONS –

M.Sc. Ph.D.

CAREER PROFILE-

- (i) Assistant Professor at the Department of Physics, Gurukula Kangri Vishwavidyalaya, Haridwar since March 2011.

ADMINISTRATIVE ASSIGNMENTS – NO

AREAS OF SPECIALISTAION/INTEREST- CONDENSED MATTER PHYSICS

SUBJECTS TAUGHT-

1. Thermal Physics, Electricity, Magnetism and EM theory , Waves and Optics (UG level),
2. Numerical Analysis, Advanced Quantum Mechanics, Digital Electronics, (PG level).

RESEARCH GUIDANCE- YES

CONFERENCE PARTICIPATION/PRESENTATIONS- (2011-2012)

1. “Electrical Properties of Se/S- Doped Hydrogenated Amorphous Silicon thin films under annealing temperatures”

Himanshu Gupta, L.P. Purohit, R. Kumar & R.M. Mehra, National Seminar on recent trends in Micro Macro Physics(NSKTMMP-2011+), Govt. PG College Gopeshwar, chamoli, Uttarakhand, from 12-10-2011 to 13-10-2011.

2. “Study of thermal equilibrium in a-Si:H”

Himanshu Gupta, L.P. Purohit, R. Kumar & R.M. Mehra, World Congress for Man & Nature, Global Climate change & Biodiversity Conservation, held on 11, 12, 13, Nov.2011 GKV Haridwar,.

3. “Electronic Conduction under Annealing in Chalcogen doped a-Si:H”

Himanshu Gupta, Pankaj Kumar Pal, L.P. Purohit, R. Kumar & R.M. Mehra, International Conference on “Green Technologies for Environmental Rehabilitation (GTER-2012), GKV, Haridwar, from 11-02-2012 to 13-02-2012.

4. Participated in Indo-Japan Conference on Frontier Nano material for Energy (FNE – 2012) held on 09-01-2012 to 11-01-2012, organized by School of Engineering & technology, Sharda University, Greater Noida (U.P.), India

Workshops (2011-2018)

1. Participated in workshop on “**Advances in Physics & Role of Experiments in Physics Teaching**” organized by Department of Physics on 05-11-2011.
2. Participated in “**Research Methodology**” organized by Department of Adult Education & Extension, G.K.V., Haridwar – 249404 from 22-02-2012 to 28-02-2012.
3. Workshop on “**Scientific Computing: Theory and Practices**” 8-13 October-2012, Organized by Department of Applied Mathematics, FET, GKV, Haridwar.
4. Participated in workshop on “**Radiochemistry and Applications of Radioisotopes**” organized by Radiations & Isotopes Tracers Laboratory, G.B. Pant University, Pantnagar-263145 from 22-02-2016 to 27-02-2016.
5. Participated in “**National Workshop on Research Methodology**” organized by Department of Yogic Science, G.K.V., Haridwar – 249404 from 14-12-2018 to 24-12-2018.

Orientation/Refresher/Short Term/FIP Programmes(2011-2019)

1. Participated in UGC Sponsored “**Orientation Programmes**” from 25-11-2011 to 22-12-2011 at Kumaun University, Nainital.
2. Participated in UGC Sponsored “**Refresher Course**” from - to - at Kumaun University, Nainital.
3. Participated in UGC Sponsored “**One Week Short Term Course**” organized by Pondicherry University from 03-08-2016 to 08-08-2016.

4. Participated in UGC Sponsored “**Refresher Course**” from 01-03-2019 to 21-03-2019 at University of North Bengal, Darjeeling.
5. Participated in “**One Month Mandatory Faculty Induction Programme**” organized by Teaching Learning Centre under PMMMNMTT scheme, MHRD, Govt. of India from 05-09-2019 to 04-12-2019

CONFERENCE PARTICIPATION/PRESENTATIONS- (2012-2019)

1. National Conference on "**Progress in Electronics & Allied Sciences (PEAS-2012)**". November 3-4, 2012, FET, GKV, Hardwar.
2. 57th DAE-Solid state Physics Symposium. December 3-7, 2012, IIT, Mumbai.
3. 2nd International Symposium on “**Semiconductor Materials and Devices (ISSMD-2)**” 31st Jan-2nd FEB-2013. Jammu University, Jammu.
4. 9th Conference of Indian Science Congress Association (Haridwar Chapter) on “**Future India: Science & Technology**”. October 13-14, 2018, GKV, Hardwar.
5. International Conference on “**Recent Advances at Interfaces of Physical and Life Science RAIPLS**”. January 28-30, 2019.

Paper Published in Journal (2011-2021)

1. “**Optical properties of Se or S-doped hydrogenated amorphous Silicon thin film with annealing temperature and dopant concentration**”

S.K. Sharma, **Himanshu Gupta**, L.P. Purohit, K. M. P. Kumar, BoGyan Kima, R. Kumar & R.M. Mehra, Journal of Alloys and Compounds **509**, 3338-3342, 2011, Impact 5.316.
2. “**Optical Dispersion In Annealed Thin Films of S-doped a-Si:H Alloys**”
L.P. Purohit, **H. Gupta**, Pankaj K. Pal, A. Kumar, R. Kumar, R.M. Mehra Vol. **5** No 1, 01020 (2013), Journal of Nano And Electronic Physics
3. “**Study of Photoluminescence Behaviour of Porous Silicon Samples Prepared at 20 mA Current Density**”
Fateh Singh Gill, **Himanshu Gupta**, L.P. Purohit, Pankaj K. Pal, Kiran Sharma, Neeraj Dhiman, R. Kumar, R.M. Mehra. Vol. **5** No 1, 01019 (3pp) (2013), Journal of Nano- And Electronic Physics
4. “**MN rule in a-Si:H alloys**”

Himanshu Gupta, L. P. Purohit, F. S. Gill, and R. Kumar AIP Conf. Proc. 1512, 576

(2013); doi: 10.1063/1.4791168 Editor(s): A. K. Chauhan, Chitra Murli, S. C. Gadkari, **Solid State Physics: Proceedings Of The 57th DAE Solid State Physics Symposium 2012**: 3–7 December 2012, Indian Institute of Technology, Bombay, Mumbai.

5. **“Optical dispersion parameters of amorphous $\text{Se}_{70}\text{Te}_{30-x}\text{Pb}_x$ films”**

P. K. Pal, **H. Gupta**, L.P. Purohit, K. Kumar, R. Kumar, R.M. Mehra, Journal of Ovonic Research Vol .10 (4), 127-139, 2014.

6. **“Electronic Transport in Se-doped a-Si: H Under Annealing”**

H. Gupta, L.P. Purohit, P. K. Pal, R Kumar, A Kumar, FS Gill, RM Mehra, Invertis Journal of Renewable Energy 4 (2) 69-73, 2014.

7. **“Dark and Photoconductivity in a Se-Te-Pb Thin Films”**

P. K. Pal, **H. Gupta**, L.P. Purohit, R Kumar, A. Kumar, FS Gill, RM Mehra, Invertis Journal of Renewable Energy 4 (2) 111-114, 2014.

8. **“Study of growth of dot and column in porous silicon samples of various thicknesses prepared at a constant current density”**

F.S. Gill, V. Panwar, **H. Gupta**, G.S. Kalra, S. Chawla, R. Kumar, R.M. Mehra, Physica E: Low-Dimensional Systems and Nanostructures. Vol. 73 (2015) 110-115.

9. **“Improved conductivity of carbon-nano-fiber (CNF)/polytetrafluoroethylene (PTFE) composite”**

S. Chandra, G.S. Kalra, V.K. Pushkar, F.S. Gill, V. Panwar, **H. Gupta**, P.K. Pal, T.K. Pathak, L.P. Purohit, AIP Conference Proceedings 1731, 060006 (2016).

10. **“Cascade Structured $\text{ZnO}/\text{TiO}_2/\text{CdS}$ quantum dot sensitized solar cell”**

Jagriti Tyagi, **Himanshu Gupta** and L.P. Purohit, Solid State Sciences 102 (2020) 106176.

<https://doi.org/10.1016/j.solidstatesciences.2020.106176>

11. **“Mesoporous ZnO/TiO_2 photoanodes for quantum dot sensitized solar cell”**

Jagriti Tyagi, **Himanshu Gupta** and L.P. Purohit, Optical Materials 115 (2021) 111014

<https://doi.org/10.1016/j.optmat.2021.111014>

12. **“Ternary alloyed $\text{CdS}_{1-x}\text{Se}_x$ quantum dots on TiO_2/ZnS electrodes for quantum dots-sensitized solar cells”**

Jagriti Tyagi, **Himanshu Gupta** and L.P. Purohit, Journal of Alloys and Compounds 880 (2021) 160480.

<https://doi.org/10.1016/j.jallcom.2021.160480>

13. “Highly transparent and conducting Al-doped ZnO as a promising material for optoelectronic applications”

Rishabh Raj, **Himanshu Gupta** and L.P. Purohit, Pramana – Journal of Physics (2021) 95:87.

<https://doi.org/10.1007/s12043-021-02123-y>

14. “ZTO transparent conducting thin films for optoelectronic applications”

Rishabh Raj, **Himanshu Gupta** and L.P. Purohit, Bulletin of Material Science (2021) 44:165

<https://doi.org/10.1007/s12034-021-02480-9>

15. “Electronic conduction in annealed sulfur-doped a-Si: H films”

H. Gupta, S.G. Fateh, S.K. Sharma, R. Kumar, R.M. Mehra, Journal of Nano and Electronic Physics Vol. 10 (2018) 03014.

Association with Professional Bodies

Semiconductor Society of India