

# **Faculty Profile**

Title Dr.	First Name	Anita	Last Name		Photograph
Designation	Assistant Professor				
Address (Office)	Physics Departm Gargi College Siri Fort Road University of De New Delhi-1100	lhi			25
Contact No. (Mobile)	9911491621				
Email	anita@gargi.du.a	ac.in			

# **EDUCATIONAL QUALIFICATIONS**

Degree	Institution	Year
B.Sc. (Hons.) Physics	Miranda House ,University of Delhi	2006
M.Sc. (Physics)	Miranda House ,University of Delhi	2008
Ph.D.	Department of Physics and Astrophysics, University of Delhi	2021

# **CAREER PROFILE**

I started my career as Junior Research Fellow in National Physical Laboratory, New Delhi. I worked in NPL from August 2008 to January 2009. In the year 2009, I was appointed as Assistant Professor in Physics Department Gargi College, University of Delhi and since then I am teaching here.

# **ADMINISTRATIVE ASSIGNMENTS**

Convener of Physics Society "Quasar" in Year 2009-10

Convener of Physics Society "Quasar" in Year 2010-11

Convener of Physics Society "Quasar" in Year 2011-12

Coordinator of B.Sc Physical Science for AY 2021-22 and 2022-23

Teacher -In -Charge of Physics Department 2023-24

# AREAS OF INTEREST / SPECIALIZATION

## Material Science, Electronics, Mechanics, Nano science

#### **SUBJECT TAUGHT**

Electronic Devices(Theory+ Lab), Mechanics(Theory+Lab), Wave and Oscillations(Theory+Lab), Mathematical physics (Theory), Wave and Optics (Theory+Lab), Digital Empowerment (VAC)(Theory+Lab), C++ Lab, Python Lab, Solid State Physics (Lab), Electromagnetic Theory Lab, Basic Instrumentation Skills Lab, Communication System Labetc.

#### RESEARCH GUIDANCE

# REFRESHER COURSE/ORIENTATION PROGRAMME/FACULTY DEVELOPMENT PROGRAMMES ATTENDED:

- 1. One week national FDP on "Development of Teacher's e-kit and MOOCs in Four Quadrant Format of e-Content" organized by Guru Angad Dev Teaching Learning Centre, S.G.T.B. Khalsa College, University of Delhi under the (PMMMNMTT) of MHRD from 12<sup>th</sup> Sept -20<sup>th</sup> Sept 20202.
- 2. Participated in Two week (Online) Faculty Development Programme on "Transformation in Higher Education: Issues and Road Ahead Organized by Government Degree College for Women, Anantnag in collaboration with Mahatma Hansraj Faculty Development Centre, Hansraj College, University of Delhi. A Centre of MoE, Govt. of India under the (PMMMNMTT) of MHRD from 28<sup>th</sup> Sept-12<sup>th</sup> Oct 2020.
- 3. Participated in Two week FDP on' Research Methodology" organized by TLC Ramanujan College , University of Delhi under the (PMMMNMTT) of MHRD from 1st Oct 2020 to 15th Oct 2020
- Participated in One week national FDP on "Advanced Pedagogical Techniques" organized by TLC Ramanujan College, University of Delhi under the (PMMMNMTT) of MHRD from 29th Oct to 5th Nov 2020
- 5. Participated in one week (Online) Faculty Development Programme on "Digital Pedagogy to enhance teaching and learning experience organized by Maitreyi College, University of Delhi in collaboration with Guru Angad DevTeaching Learning Centre of MoE under (PMMMNMTT) of MHRD from 15<sup>th</sup> Dec to 21<sup>st</sup> Dec 2020
- 6. Successfully completed a 4-Week Induction/Orientation Programme for "Faculty in Universities/Colleges/Institutions of Higher Education" organized by TLC, Ramanujan college, University of Delhi under the (PMMMNMTT) of MHRD from 10<sup>th</sup> Nov-9<sup>th</sup> Dec 2020
- 7. successfully completed One Week FDP on "ICT based Learning and Developing MOOCs for Teaching Process in Higher Education" organized by TLC, Ramanujan college, University of Delhi under the (PMMMNMTT) of MHRD from 29<sup>th</sup> DEC to 4 Jan 2021
- 8. Successfully completed two week inter-disciplinary online refresher course on "Managing Online Classes & Co-creating MOOCS 8.0" organized by TLC Ramanujan College, University of Delhi under the (PMMMNMTT) of MHRD from 4<sup>th</sup> -18<sup>th</sup> Sept 2021
- 9. Participated and successfully completed One week International (Online) Faculty Development Programme on "Material Characterization: Experimental and Theoretical Aspects" Organized by Mahatma Hansraj Faculty Development Centre, Hansraj Faculty development Centre, Hansraj College, University of Delhi. A Centre of MoE, Govt. of India under the (PMMMNMTT) of MHRD from 20<sup>th</sup> -24<sup>th</sup> Sept 2021

- 10. Participated and successfully completed One week Online FDP on "Advanced Pedagogical Techniques" organized by TLC Ramanujan College, University of Delhi under the aegis (PMMMNMTT) of MHRD from 28th Feb-6th March 2022
- 11. Participated in one day Webinar on "Overview of Intellectual Property Rights" from Gargi College, University of Delhi in collaboration with cell for IPR Promotions Managements, Ministry of Commerce and Industries, Govt. of India, under the aegies of NASI, Delh Gargi College, University of Delhi in collaboration with cell for IPR Promotions Managements, Ministry of Commerce and Industries, Govt. of India, under the aegis of NASI, Delhi on 26<sup>nd</sup> Feb 2022.
- 12. Successfully completed six days Faculty Development Program on "Research Techniques in Science and Technology" Organized by K. R.Mangalam University, Gurugram in Collaboration with Gargi College, University of Delhi from 18th July to 23rd July, 2022.
- 13. Successfully completed online one week Faculty Development Programme on "OPEN SOURCE TOOLS FOR RESEARCH" from 27 December, 2022 02 January, 2023 organized by TLC, Ramanujan College University of Delhi under the aegis of MINISTRY OF EDUCATION PMMNMTT
- 14. Successfully completed One Week (Online) Faculty Development Programme on "Principles of Radiation Detection and Measurement and Experimental Techniques" (3rd 9th April, 2023) organized by IQAC, Ramjas College, University of Delhi in collaboration with Mahatma Hansraj Faculty Development Centre Hansraj College, University of Delhi

# **PUBLICATIONS PROFILE**

- Anita, Vandna Luthra, "Tweaking electrical and magnetic properties of Al–Ni co-doped ZnO nanopowders" Ceramics International40 (2014)14927–14932.
  doi.org/10.1016/j.ceramint.2014.06.089
- 2. **Anita Singh**, Anant Pandey, Vandna Luthra, "Modulating structural, electrical and thermoluminisence properties of  $\gamma$  ray irradiated nanocrystalline  $Zn_{0.99}M_{0.01}O$  (M = Al/Gd) Radiation Physics and Chemistry 152 (2018) 69–74. doi.org/10.1016/j.radphyschem.2018.06.050
- 3. David C. Pugh, Vandna Luthra, **Anita Singh** and Ivan P. Parkin "Enhanced gas sensing performance of indium doped zinc oxide nanopowders", RSC Adv., 2015, 5, 85767 DOI: 10.1039/c5ra11613a.
- Vandna Luthra, Anita Singh, David C. Pugh, and Ivan P. Parkin "Ethanol sensing characteristics of Zn<sub>0.99</sub>M<sub>0.01</sub>O (M=Al/Ni) nanopowders" Phys. Status Solidi A 213, No. 1, 203–209 (2016) / DOI 10.1002/pssa.201532447

## E CHAPTERS/STUDY MATERIALS

 Anita Singh, Vandna Luthra. "Chapter 191 Modulating Structural, Optical and Electrical Properties of Zinc Oxide by Aluminium Doping", Springer Nature, 2019. doi.org/10.1007/978-3-319-97604-4.

#### PAPERS PRESENTED IN INTERNATIONAL/NATIONAL

#### CONFERENCES/SEMINARS/SYMPOSIA

- Attended National workshop on Ion Beams in Materials Research (IBMR-2013) during 22-23 March, 2013, MNIT Jaipur.
- 2. Attended 1<sup>st</sup> Indo-UK Seminar on Recent Advances in Chemical Sensors (IUCRACS-2014) during 11-12 Feb, 2014 in Gargi College, University of Delhi, Delhi-49.
- 3. Presented a **poster** in "3<sup>rd</sup> Indo-UK conference on Recent Advances on Chemical Sensors" held in Gargi College from 25-26 August 2015 of title "Variation in Ethanol Gas Sensing with doping and co-doping of ZnO".
- 4. Attended "International Conference on Technologically Advanced Materials and Asian Meeting on Ferroelectricity (ICTAM-AMF10) Nov7-11,2016 organized by University of Delhi.
- 5. Presented a **poster** titled" Effect of Annealing and Doping (Al, Ni, Cu) on structural, Optical and Electrical properties of Zinc Oxide thin films Deposited by sol-Gel method." in "International Conference on Advances in Nanomaterials and Nanoscience" on 4-5Nov 2016 in Jamia Milia Islamia University in Delhi.
- 6. Presented a **poster** titled "Modulating optical and electrical properties of Zinc Oxide with Aluminium doping" in "XIX International Workshop on the Physics of Semiconductor Devices", jointly organized by Solid State Physics Laboratory, Delhi and Indian Institute of Technology Delhi, New Delhi, Dec 11-15, 2017.
- 7. Presented an oral talk titled "Structural, electrical and magnetic properties of Zn<sub>0.99</sub>Al<sub>x</sub>Gd<sub>0.01-x</sub>O(x=0-0.01) co-doped nano-powders" in 2nd International Conference on Advances in Smart Materials and Emerging Technologies (ASMET-2021) Organized by Department of Applied Sciences and Humanities, Indira Gandhi Delhi Technical university for Women, Delhi dated 20<sup>th</sup> 21<sup>st</sup> Dec 2021

CONFERENCE/SEMINARS/SYMPOSIA/WEBINARS/PRESENTATIONS/ORGANIZATION
WORKSHOP/TRAINING PROGRAMME ATTENDED
RESEARCH PROJECTS (MAJOR GRANTS/RESEARCH COLLABORATION)
AWARDS AND DISTINCTIONS
CSIR-UGC Junior Research Fellowship 2008
GATE 2008
ASSOCIATION WITH PROFESSIONAL BODIES
OTHED ACTIVITIES
OTHER ACTIVITIES