

Curriculum Vitae

Mr. Nikhilesh Kumar Dilwaliya

Address: 610, Am Herrenberge 11, 07745 Jena, Germany.

Phone: (+91) 7838591359, (+49) 17674503902

✉@nikhilesh.dilwaliya@leibniz-ipht.de;

✉@nikhileshkumar988@gmail.com



Research Interests

- Solid State Physics
- Material Science
- Nanotechnology
- Energy Conservation and Sustainability
- Research and innovation

Education

2022-continues

Doctorate in Physics, Friedrich Schiller Universität, 07743 Jena, Germany

2019-2021

Master of Science in Physics, Department of Physics, National Institute of Technology, Srinagar (Jammu & Kashmir), India

2015-2018

Bachelor of Science in Physics, Dyal Singh College, University of Delhi (Delhi), India

Research Experience and Academic Honors

- 2021: **Young Researcher Award** by Institute of Scholars.
- 2021: **Professional Member** of Institute of Scholars
- 2021: **Best Service Award** as **conference secretariat** at ‘International Conference on Nanotechnology for Better Living ICNBL-2021’
- 2020: Research internships on “**Preparation of Indian Reference Material (BND[®]) of Mullite For the Calibration of Powder X-Ray Diffractometer**” at **CSIR-NPL** Winter Research Internship Program 2019 under supervision of **Dr. N. Vijayan** (Principal Scientist and Associate Professor (AcSIR), BND Division, National Physical Laboratory, Delhi, India)
- 2020: **Campus Recruitment Coordinator** at NIT Srinagar (2020-2021)
- 2019: Active member of Special Laboratory for Multifunctional Nanomaterials.
- 2019: **Department Representative** at Department of Physics, National Institute of Technology Srinagar
- 2019: JAM Qualified (2018 & 2019)
- 2016: Member of college physics society – Cosmos
- 2015: JEE Main Qualified

Publication List

- Malik Aalim Mushtaq, M. A. Shah, **N. K. Dilwaliya**, Vikash Dahiya. 2021. “Defects Dynamics in Graphene.” *International Journal of Applied Nanotechnology Research (IJANR)*. Volume 5(1). Article 3. <https://www.igi-global.com/article/defect-dynamics-in-graphene/273615> .
- **Nikhilesh Kumar Dilwaliya**, Ayushi Srivastava, Alok Sagar Gautam, Tushar Kandari. 2020. “Impact of Air Pollution on Climate, 29 Environment and Wildlife During COVID-19”. *Air Quality, Climate Change and The Environment Effects Referring to the Pandemic Covid-19 Lockdown*. ISBN - 978-93-84866-00-0.
- Alok Sagar Gautam, **Nikhilesh Kumar Dilwaliya**, Ayushi Srivastava, Sanjeev Kumar, Kuldeep Baudhh, Devendraa Siingh, M. A. Shah, Karan Singh & Sneha Gautam. 2020. “Temporary reduction in air pollution due to anthropogenic activity switch-off during COVID-19 lockdown in northern parts of India.” *Environmental Development and Sustainability* (2020). <https://doi.org/10.1007/s10668-020-00994-6>.
- **Nikhilesh Kumar Dilwaliya**, Vikash Dahiya, Malik Aalim, M. A. Shah. “Defects and Properties of Graphene: A Critical Review”. *International Journal of Solids and Structures*. (Under Review)

Patent

‘Smart Shoes Based on Wearable Sensing Nanomaterials’. Filed under ‘The Patent Act 1970’ to the patent office ‘Intellectual property Office Building, Sector 14, Dwarka, New Delhi.’ [Under Examination]

Technical Skills

- C++, MATLAB, Scilab, Origin Lab, MS Word, MS Excel, MS PowerPoint, Data Analysis.
- Handy with Physics Experiments of Mechanics, Electricity and Magnetism, Thermal Physics, Solid-State physics, Electronics, Waves and Optics, Quantum Mechanics.
- Experience with the handling of the instruments, Optical Microscope and UV-Visible Spectrometer.
- Experience with data analysis of XRD, UV-Visible, FTIR, SEM, FESEM, TEM, Photoluminescence, Raman Spectroscopy, Micro-Hardness Machine, Particle Size Analyzer data analysis, Crystal Growth by Slow Evaporation Solution Technique (SEST).

Conferences/Workshops and Competitions

- 2021 – **Organized** International Conference on “Nanotechnology for Better Living 2021” at National Institute of Technology Srinagar.
- 2021 – **Organized** a Short-Term Course on “Journey from Semiconductor Physics to Smart Devices to Intelligent Automation” at International Level in Dept. of Physics, National Institute of Technology Srinagar.
- 2021 – **Organized** a Science Quiz on “National Science Day” in National Institute of Technology Srinagar, India.
- 2021 – **Organized** a Seminar on “Pursuing Quantum Career in the Age of Neural Networks” by Dr. Rukhsan Ul Haq in National Institute of Technology Srinagar, India.
- 2020 – **Participated** in 24th National Seminar on Crystal Growth and Applications (NSCGA-2020) organized by Indian Association for Crystal Growth (IACG) and Periyar University, Salem, Tamil Nadu
- **Talk** – On presentation titled “Redefined Kg using Planck’s constant” as young scientist speaker at Young Scientist Meet – 2021 (YSM-21) organized by Adamas University, Kolkata, India.
- **Poster Presentation** – On “L-Ornithine Monohydrochloride: Studies on growth and optical behavior for non-linear applications” during NSCGA-2020 organized by IACG and Periyar University, Salem, Tamil Nadu.
- **Oral Presentation** – On “Growth of Ethyl P-hydroxybenzoate single crystal by Solution and Vertical Bridgeman technique” during NSCGA-2020, Periyar University, Salem, Tamil Nadu.
- **Talk** – On paper titled “Effect of CoVID-19 on Environment” in International Webinar organized by Hemvati Nandan Bahuguna Garhwal University, Srinagar, Uttarakhand.
- **Talk** – On presentation titled “Environmental effects of CoViD-19” as Young Scientist Speaker at International e-Conference organized by Bhagini Nivedita College, University of Delhi, Delhi.

References

Dr. M. A. Shah

Head of Physics Department
Faculty of Sciences, National
Institute of Technology Srinagar
Hazratbal Srinagar-190006 (J & K),
India.
Fax. No: +91-194-2420475
Hand Set: +91-9419018195/
01942106073
E.mail: shah@nitsri.net
mashahnit@gmail.com

Dr. N. Vijayan

Principal Scientist and Associate
Professor (AcSIR)
Indian Reference Material (BND®)
Division
National Physical Laboratory
(CSIR-NPL), New Delhi.
Fax: 011-45609310
Phone: +91 11 45608263
Email: nvijayan@nplindia.org

Dr. Ronny Stolz

Dept. Quantum systems
Leibniz Institute for Photonic
Technology
Albert-Einstein-Straße 9
07745 Jena, Germany
Phone +49 3641 206 119
Fax +49 3641 206 199
Email: ronny.stolz@leibniz-ipht.de
Website: www.leibniz-ipht.de