PUSPA RAJ ADHIKARI

South Korea
Email: info11puspa@gmail.com

Carrier Objective:

- **Diligent university student dedicated to research in physics aiming to leverage my knowledge and skill to the subject field for the veracious academic career as a physics researcher.**
- **To be a good team player in the dynamic as well as challenging and innovative environment with adaptability and a strong conscientious to learn and apply.**

Academic Qualification:

2018- FALL Present PhD in Material Science Sungkyunkwan University, South Korea

- Overall GPA 4.15/4.5
- Advanced Solid-State Physics, Condensed material Physics
- Project on Experimental and Theoretical/Computational simulations(DFT)

2014-2017 M.Sc. in Physics Tribhuvan University, Nepal

- 4th rank in batch
- Quantum mechanics, Nuclear, Electrodynamics
- Advanced Solid-State Physics, Spectroscopy
- Mathematical Physics, Statistical and digital electronics
- Computational Physics
- Experimental Projects

2009-2013 Bachelor's in Science and Technology Tribhuvan University, Nepal

- 9TH rank in college
- Physic, Chemistry & Mathematics (PCM)
- Quantum mechanics
- Solid state, Nuclear and Electrodynamics
- Statistic and Probability
- Calculus
- Experimental Projects

2007-2009 Proficiency Certificate level (PCL) Tribhuvan University, Nepal

- Physics, Chemistry, Math, Biology

2007 School Leaving Certificate: Shree Saraswathi Janta Secondary School

Employment History:

2018 fall PhD in advanced materials Science Sungkyunkwan University, South Korea

Condensed Materials Engineering/

2017-2018 Research-Intern /Teaching *Hydra research lab, Kathmandu, Nepal*

Electronic, Optical and ferroelectric properties of Quantum structure

0D,1D and 2D materials, SrTiO3 and BaTiO3 Perovskites

2016-2017 Research-Intern *ABV-IIITM, Advanced material research Centre, India*

DFT study, Theoretical Quantum simulation, Experimental training

Projects:

- **ABV-IIITM, Advance material research Centre.** **Gwalior, MP- India**
  (*CNTL, Nanostructure Project)*
- **Nepal Government, Ministry of Science and Technology** **Kathmandu, Nepal**
  (*Emergent Materials in Nepal, energy-Research)*
- **Thesis (Masters): Diameter Dependent Structural, Electronic and Optical Properties of TiC nanotubes: First principal DFT study**

Research Achievements (Publications):

- First Principles Study of Electronic and Optical Properties of Pristine and X (Cu, Ag and Au) Doped BiOBr. *Journal of Institute of Science and Technology* **22** (2), 63-69 (2018)
- Electronic and Structural Study of Hexagonal TiC Nanowires: Ab-Initio Study. *BIBECHANA* **16**, 7-14 (2019)
- Diameter Dependent Electronic and Optical Properties of Zigzag and Armchair Nanotubes: Ab-Initio Study. ***(Submitted, 2020)***

Research Interests:

- **Experimenting on Ultracold atoms**
- **Quantum simulation** and **Machine Learning (ML)** approach on Quantum processing.
- Focused core study of **Optical** lattice and **Superconducting** phenomena.

Languages:(most 5֍)

- Nepali ֍֍֍֍֍
- English ֍֍֍֍
- Hindi/ Urdu ֍֍֍֍
- Korean ֍֍

Personal Information:

- Date of Birth: 26th July,1990
- Nationality: Nepalese
- Permanent Address: Beldandi 04 Baibaha, Kanchanpur, Nepal.
- Temporary Address: Seoul, South Korea
- E-Mail: Info11puspa@gmail.com

References

1. **Dr. Gopi Chandra Kaphle**

Associate Professor at Tribhuvan University,
Central Department of Physics, Nepal
Hydra Research Lab (Advanced Quantum Simulations Research center)
E-Mail: *gckhydra@gmail.com*
(Previous advisor)

2. Dr. Anurag Srivastava

Professor at *ABV*- Indian Institute of Information Technology and Management (ABV-**IIITM**)
Principal Investigator, Computational Nano-Technology Lab (CNTL)
Coordinator, Technology Innovation and Incubation Center (TIIC)
Gwalior, M. P., INDIA - 474010.
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(Previous Research advisor)

3. Dr. Krishna Dhakal

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Department of Materials Science and Engineering (AMSE)
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(Previous Research advisor)