Prabesh Bista

CONTACT INFORMATION

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EDUCATION

M.Sc in Physics

09/2021-09/2024

National Central University, Zhongli, Taiwan

Thesis: non-collinear optical parametric amplification as a light source for photoemission

Advisor: Dr. Cheng-Tien Chiang

B.Sc in Physics

09/2015-09/2019

Tribhuvan University, Kathmandu, Nepal

Minor in Mathematics

EMPLOYMENT

Research Assistant

08/2020-08/2021

Institute of Atomic and Molecular Sciences, Academia Sinica, Taiwan

- Generated second and third harmonic signals in nonlinear optical experiments.
- Developed LabVIEW program for THORLABS PM100D powermeter.
- Procured laboratory components and assisted in lab setup.

Internship

03/2020-07/2020

Institute of Atomic and Molecular Sciences, Academia Sinica, Taiwan

Ambient photoemission spectroscopy and Kelvin-probe spectroscopy on the band gap and valence band of WS_2 .

Physics Lab Assistant (full-time)

05/2016-11/2019

Sagarmatha Engineering College, Lalitpur, Nepal

- Trained and guided students in performing laboratory experiments.
- Troubleshot and maintained laboratory equipment to ensure optimal functionality.

HONORS & AWARDS

Scholarship 09/2021-08/2024

Taiwan International Graduate Program

Academia Sinica, Taiwan

Best Admin Staff 11/2018

Sagarmatha Engineering College

Sagarmatha Welfare Council for outstanding performance.

Travel Grant 09/2018

Workshop on Tracking Detector in High Energy Physics National Center for Physics, Pakistan

PUBLICATION

Peer-Reviewed Article

11/2022

Photoluminescence of Nitrogen-Vacancy Centers by Ultraviolet One-and Two-Photon Excitation of Fluorescent Nanodiamonds

J. Phys. Chem. Lett. 2022, 13, 48, 11280-11287

Teng-I Yang, Yu-Wen Huang, **Prabesh Bista**, Chien-Fang Ding, Jeson Chen, Cheng-Tien Chiang, and Huan-Cheng Chang

Conference Proceedings

06-08/11/2024

Angle-resolved photoemission spectroscopy and microscopy on bulk NiTe₂ using ultrafast tunable laser

Ultrafast Science and Technology Spain (USTS 2024)

Mukesh Singh, **Prabesh Bista**, Yu-chan Lin, Chia-Nung Kuo, Chin Shan Lue, Cheng-Tien Chiang

PRESENTATION

Poster 09/2023

Thematic summer school on 2D Materials in Roscoff, France

Non-collinear optical parametric amplifier for photoemission spectroscopy

Poster 01/2023

Annual Meeting of the Physical Society of Taiwan

Development of an Infrared non-collinear optical parametric amplifier at sub-megahertz repetition rates

Poster 11/2022

IAMS Young Fellow Research Presentation

Construction of an infrared by non-collinear optical parametric amplifier

MENTORSHIP

IAMS-IIP Internship

06-07/2023

Marucheth Thongtheppairoj

Bachelor student at Sirindhorn international institute of Technology (SIIT), Thailand

SKILLS

Languages Nepali (mother tongue), English (fluent), Chinese (Basic)

Programming Python, LabVIEW

Software Microsoft Office, Origin, LATEX, SOLIDWORKS, ImageJ

Optics Beam-width measurement, second & third harmonic generation,

white light generation, parametric amplification, parametric

down conversion, pulse compression, autocorrelator

Others Basic handling in angle-resolved photoemission spectroscopy (ARPES)

ACTIVITIES & OUTREACH

• Participated in the thematic school Advanced Physics of van der Waals Hetero-Structures in Roscoff, France, from September 23 to October 1, 2023.

- Volunteered for intercultural service with a school in Taiwan through online engagement from September 5 to December 1, 2022.
- Participated in the online FOCUS PEEM workshop organized by FOCUS GmbH on June 16-17, 2021.
- Attended the Workshop on Space Weather and Upper Atmospheric Physics in Kathmandu, Nepal, from September 23 to 27, 2019.
- Participated in the workshop on Tracking Detector in High Energy Physics in Islamabad, Pakistan, from October 15 to 19, 2018.
- Organized the National Science Exhibition at Patan Multiple Campus, Lalitpur, Nepal, on February 18-19, 2018.

REFERENCES

Dr. Cheng-Tien Chiang

Assistant Research Fellow

Institute of Atomic and Molecular Sciences, Academia Sinica, Taipei, Taiwan

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Dr. Wibke Bronsch

Staff Scientist

T-ReX Laboratory, Elettra Sincrotrone, Trieste, Italy

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Dr. Raman Sankar

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