

# Prabesh Bista

## CONTACT INFORMATION

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## EDUCATION

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**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 spectroscopy  
Advisor: [Dr. Cheng-Tien Chiang](#)

**B.Sc in Physics** 09/2015-09/2019  
*Tribhuvan University, Kathmandu, Nepal*  
Minor in Mathematics

## EMPLOYMENT

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**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.
- Troubleshoot and maintained laboratory equipment to ensure optimal functionality.

## HONORS & AWARDS

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### 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

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### 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  $\text{NiTe}_2$  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

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### 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

### Oral

11/2021

*IAMS Young Fellow Research Presentation*

MHz non-collinear optical parametric amplifier as a light source for photoemission

## MENTORSHIP

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### IAMS-IIP Internship

06-07/2023

*Marucheth Thongtheppairoj*

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

## SKILLS

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<i>Languages</i>	Nepali (mother tongue), English (fluent), Chinese (Basic)
<i>Programming</i>	Python, LabVIEW
<i>Software</i>	Microsoft Office, Origin, L <sup>A</sup> T <sub>E</sub> X, SOLIDWORKS, ImageJ
<i>Optics</i>	Beam-width measurement, second & third harmonic generation, white light generation, parametric amplification, parametric down conversion, pulse compression, autocorrelator
<i>Others</i>	Basic handling in angle-resolved photoemission spectroscopy (ARPES)

## ACTIVITIES & OUTREACH

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- Participation in the thematic school [Advanced physics of van der Waals hetero-structures](#) in Roscoff, France on 23 September - 1 October, 2023.
- Volunteering at the school in Taiwan for [intercultural service](#) through online from 5 September - 1 December 2022.
- Participation in online [FOCUS PEEM](#) workshop organized by FOCUS GmbH on 16 - 17 June 2021.
- Participation in Workshop on Space Weather and Upper Atmospheric Physics, Kathmandu, Nepal on 23 - 27 September 2019.
- Participation in the workshop on [Tracking Detector in High Energy Physics](#), Islamabad, Pakistan on 15 - 19 October 2018.
- Organizing National Science Exhibition held at Patan Multiple Campus, Lalitpur, Nepal on 18 - 19 February 2018.

## REFERENCES

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### **Dr. Cheng-Tien Chiang**

Assistant Research Fellow

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

Email: ctchiang@pub.iams.sinica.edu.tw

### **Dr. Wibke Bronsch**

Staff Scientist

T-ReX Laboratory, Elettra Sincrotrone, Trieste , Italy

Email: wibke.bronsch@elettra.eu

### **Dr. Raman Sankar**

Assistant Research Scientist

Institute of Physics, Academia Sinica, Taipei, Taiwan

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