

Resume

Name: Bhishma Karki
Place of Birth (City and Country): Damak, Nepal
Date of Birth (Year-Month-day): 1979-05-21
Sex: Male
Marital Status: Married
Permanente Residential Address: Mahadevasthan Koteshower,
Shrinkhalla Galli ward No:-32,
Kathmandu,
Nepal.
E-mail: magnum.photon@gmail.com
Cell No.: 9851014005

Academic Qualifications:

- (a) *Level:* Doctor of Philosophy (Ph.D.)
Institution: Central Department of Physics, Tribhuvan University, Kirtipur
Year: 2014-2020
Title of Ph.D. thesis: “Photoelectrocatalytic Purification of Water Using Spray Deposited Zinc Oxide Thin Films”
- (b) *Level:* Master of Science (Physics) first class with Distinction.
Institution: University of Pune, Ganeshkhind, Pune-411007
Year: 2007-2009
- (c) *Level:* Bachelor’s Degree-Physics (Tribhuvan University)
Institution: National Multiple College, Bakhundole, Lalitpur, Nepal
Year: 2002-2005
- (d) *Level:* 10+2 Science (HSEB)
Institution: Himalayan White House Int. H. S School, Kathmandu, Nepal
Year: 2000-2002
- (d) *Level:* SLC (Government of Nepal)
Institution: Home Land Service MA VI, Lainchaur, Kathmandu, Nepal
Year: 1990-1999

Work Experiences

- (April 25, 2009 to January 1, 2013) Damak Multiple Campus Damak, Jhapa Lecturer for B.sc and +2 levels
- (July 07, 2009 to January 1, 2013) Damak Model Higher Secondary School, Damak, Jhapa Lecturer +2 level (Physics)
- (02/01/2013 to till Date) National Research Council Nepal, Kathmandu, Executive chairman.
- 01/06/2009 to January 1, 2013 Part time Lecturer on radiology Department of Physics on Life-line Hospital Damak Jhapa as Well as Founder Member.
- 01/03/2019 Part time Lecturer on Department of Physics, Tri-Chandra multiple Campus Ghanta Ghar Kathmandu.

Seminar and presentation:

- Paper presentation at Kathmandu University Nepal on Managing Load Shedding: A Solar Energy Way on 11 & 12 Dec 2011
- Seminar attended in Russia at Moscow State University and got training on Biodiversity and other on 13 September – 16 October 2012
- Paper presentation in Conference in Oxford University, United Kingdom High Energy Physics on 20 to 25 Jan 2013.
- Paper presentation in Conference in University Exeter, United Kingdom Renewable Energy on 5 to 8 March 2013.
- Paper presentation in Conference in University of Queensland, Brisbane, Australia Carbon emission on 10 to 12 Jun 2013
- Paper presentation in Conference in Monash University, Melbourne, Australia High Energy Physics on 15 to 21 September 2013
- Paper presentation in Conference in Cambridge University, United Kingdom Physics of Sustainability on 11 to 13 December 2014
- Paper presentation in Conference in Pierre and Marie Curie University France, Paris structural and electronic properties of condensed matter on 20 to 22 December 2014
- Visit UN Conference in Bonn Germany Climate Change on 1 to 12 Jun 2015
- UNCBD conference Mexico Climate Change on 1 to 12 may 2017

- European Advanced Materials Congress Characterization of Au: ZnO thin films and their use in photoelectrocatalytic degradation of Methylene blue (MB) Stockholm, Sweden during 23rd – 25th August 2016.
- 63rd Congress of Indian Society of theoretical and applied Mechanics (ISTAM-2018) Charge Carrier Dynamics of Liquid Semiconductor Interfaces School of Engineering, Dayananda Sagar University, Bangalore, India on 20 to 23 December 2018.
- Participated in PhD workshop on Intent writing for Education and Health on 9th May 2020 organized by International Institute of Health Science.
- Participated in webinar workshop conducted on the Operational Management of Educational Institutes on 30th May 2020 organized by International Institute of Health Science.

Publication:

- Thin Solid Films and Nanomaterials for Solar Energy Conversion and Energy Saving Applications Published in UGC Grants commission Nepal
- Spectroscopic characterization of laser ablation brass plasma Published in UGC Grants commission Nepal Booklet, Damak, Multiple Campus, Nepal.
- Synthesis and Study of Structural, Optical and Morphological Properties of ZnO Thin Films and Their Application in Photoelectrocatalytic Inactivation of Escherichia Coli Journal of American Academic Research JAAR Publishing Center San Francisco, CA, USA Volume 3, Issue12, December 2015.
- Analysis of PhotoElectro Catalytic Purification of Water International Journal of Engineering Research & Technology (IJERT) Volume 6, Issue 06, June 2017.
- Fabrication of Au: ZnO thin films by a solution-assisted route for application in photoelectrocatalytic degradation of methylene blue (MB) VBRI Press Advanced Materials Proceedings 2017, 2(9), 575-580.
- Characterization of Ag: ZnO Thin Film and Their Use in Photoelectrocatalytic degradation of Methylene blue (MB) IOST, Tribhuvan University JIST, 22 (2): 1-9 (2018).
- Water Purification from Organic Pollutants using a Photo-Oxidation, Research Journal of Applied Sciences, 14, 6, 192-197 (2019).
- Theoretical study of surface behavior of liquid semiconductor. International Journal of Research and Analytical Reviews, 6, 2, 642-650, (2019).

- Feasibility of Nitrate Removal using Hydroxylamine Hydrochloride from Sundarijal River Water through a Laboratory Scale, International Journal of Recent Technology and Engineering, 9, 6,127-131, (2021).
- Temperature of Electron Inside and Outside of Atom, Technology Reports of Kansai University, 63, 3, 7484-7492, (2021).
- Effect of Centrifugal Term Approximation on Short Range Potential, International Journal of Theoretical and Mathematical Physics 11(2):71-76, (2021).
- Study of UV Index above Dang, Pokhara and Kathmandu Valley from 2009 to 2020, Journal of Materials and Environmental Science 12(05):715-727.
- Variation of mass and time conversion of rest into a non-rest visible photon or vice-versa Journal of Physics Conference Series 1963(1):012117.
- Strength of Yukawa Potential for Elementary Masses Less than Meson Mass Journal of Physics Conference Series 1963(1):012116.
- Sensitivity Enhancement of Surface Plasmon Resonance Biosensor with 2-D Franckeite Nanosheets. Plasmonics (2021) <https://doi.org/10.1007/s11468-021-01495-6>
- Analysis of all-optical priority encoder using plasmonics waveguide Journal of Computational Electronics 20, 1884–1890 (2021).
- Discover Water Study the optical properties of drinking water supply by KUKL and KVWSIP in Kathmandu Valley Discover Water 1, 6, (2021).
- An Approach to Improve the Water Quality on Industrial Effluent by Phytoremediation with Water Hyacinth (Eichhornia Crassipes) EAI Endorsed Transactions on Bioengineering and Bioinformatics EAI <https://doi.org/10.4108/eai.12-10-2021.17125>.
- Comparative study of Boron Oxides Crystal with different sources X-ray production sources (Cu, Ag, Mo, and Fe) Materials Letters X <https://doi.org/10.1016/j.mlblux.2021.100110>.
- Sensitivity enhancement of surface plasmon resonance sensor using 2D material barium titanate and black phosphorus over the bimetallic layer of Au, Ag, and Cu Optics Communications <https://doi.org/10.1016/j.optcom.2021.127616>.
- Zinc sulfide, silicon dioxide, and black phosphorus based ultra-sensitive surface plasmon biosensor Optical and Quantum Electronics 54(2):107 <https://doi.org/10.1007/s11082-021-03480-z>

- Indium Phosphide and Black Phosphorus Employed Surface Plasmon Resonance Sensor for Formalin Detection: Numerical Analysis Optical Engineering 61(1):017101 <https://doi.org/10.1117/1.OE.61.1.017101>
- The Concentration of Molecular Nitrogen, Oxygen, Argon and Helium above Dang, Pokhara and Kathmandu Valley, 2020 Journal of Materials and Environmental Science 12(11):1504-1515
- Optical properties of Transparent Liquid: Water, Oils, and Honey Journal of Materials and Environmental Science 12(12): 1524-1537

Training:

- Research Methodology training from Damak Campus.
- Red Cross Training by Red cross society and member, Damak Branch, Nepal

Other Skills

- Knowledge of research methodologies
- Data and information collection
- Writing and presenting reports
- Good knowledge in LaTeX software
- Sound Knowledge about Wind Energy Generator