Indra Dev Sahu, PhD
Assistant Professor of Physics
Campbellsville University, Campbellsville, KY

A. Education/Training:

Institution and Location	Dates Attended	Degree	Conferred	Field of Study
Tribhuvan University, Nepal	1996-1999	B. Sc.	1999	Physics
Tribhuvan University, Nepal	1999-2002	M.Sc.	2002	Biomedical Physics
SUNY Albany, NY, USA	2005-2007	M. S.	2007	Physics
SUNY Albany, NY, USA	2005-2009	Ph. D.	2009	Biomedical Physics
Miami University, OH, USA	2010-2013	Postdoc	2013	Biomedical Science
Miami University, OH, USA	2013-2019	Research Scientist	2019	Biomedical Science
Miami University, OH, USA	2017-2019	Visiting Faculty	2019	Physics
Miami University, OH, USA	2019-present	Adjunct Assistant Professor		Chemistry & Biochemistry
Campbellsville University	2019-present	Assistant Professor		Physics

B. Positions/ Employment, Memberships and Honors:

2002-2005	Lecturer, Central Department of Environmental Science, Tribhuvan University, Kathmandu, Nepal
2002-2005	Teaching Faculty, Central Department of Physics, Tribhuvan University, Kathmandu, Nepal
2003-2004	Academic Coordinator, Central Department of Environmental Science, Tribhuvan University, Kathmandu, Nepal
2003-2005	Research Supervisor, Central Department of Environmental Science, Tribhuvan University, Kathmandu, Nepal
2004-2005	Teaching Faculty, National Institute of Science and Technology (NIST), Kathmandu, Nepal
2005-2009	Teaching Assistant, Department of Physics, University at Albany, State University of New York (SUNY), Albany, NY
2006-2009	Study Group Facilitator, Educational Opportunity Program, Academic Support Service, State University of New York (SUNY) at Albany, NY

2010-2013	Postdoctoral Fellow, Department of Chemistry and Biochemistry, Miami University, Oxford, OH
2013-2019	Research Scientist, Department of Chemistry and Biochemistry, Miami University, Oxford, OH
2017-2019	Visiting Physics Faculty, Department of Mathematical and Physical Sciences, Miami University Middletown Campus, Middletown, OH
2019- Present	Adjunct Assistant Professor, Department of Chemistry and Biochemistry, Miami University, Oxford, OH
2019- Present	Assistant Professor, Natural Science Division, Campbellsville University, Campbellsville, KY

Memberships

Life Membership:	Nepal Physical Society
2006 – 2010	American Physical Society
2013-2014	Sigma Xi, the Scientific Research Society
2010- Present	Biophysical Society
2012-Present	American Heart Association
2019-present	Kentucky Academy of Science (KAS)

Honors:

- National Science Foundation Research Award 2021
- Kentucky Academic of Science Summer Research Award, 2021
- Professional Development Award, 2020, 2021, Campbellsville University, KY
- Elsevier Reviewer Recognition Award, 2020
- Elsevier Reviewer Recognition Award of International Journal of Pharmaceutics, Elsevier, Amsterdam, Netherlands: 2019
- Elsevier Reviewer Recognition Award of Thin Solid Films, Elsevier, Amsterdam, Netherlands, 2018
- Outstanding Reviewer Award of Food Chemistry, Elsevier,Amsterdam, Netherlands: 2017
- Elsevier Reviewer Recognition Award, Elsevier,Amsterdam, Netherlands: 2016
- Research work highlighted in Protein Science Journal Issue: 2015
- Research work highlighted in Biochemistry Journal Website: 2013
- Most read/downloaded research in Biochemistry Journal: 2013
- Research Work Highlighted in *Biochemistry*, 2012
- Research Work Highlighted in *Biochemistry*, 2011
- Teaching Assistant Fellowship, SUNY Albany, 2005-2009
- Benevolent Smith Teaching Award, SUNY Albany, 2009
- Graduate Research Assistant (GRA) Award, SUNY Albany, summer 2009
- Graduate Research Assistant (GRA) Award, SUNY Albany, summer 2008
- Graduate Research Assistant (GRA) Award, Cornell University , summer 2007
- Graduate Student Employee Union (GSEU) Travel Award, SUNY Albany, 2007
- Graduate Research Assistant (GRA) Award, Cornell University , summer 2006
- RONAST (Royal Nepal Academy for Science and Technology) Outstanding Student Award, His Majesty Government of Nepal **,** 2002

- Outstanding Student Award, Tribhuvan University, Nepal, 1999
- Outstanding Student Award, Tribhuvan University, Nepal, 1996

C. Peer Reviewed Publications

(*https://scholar.google.com/citations?user=O6jjRAUAAAAJ&hl=en*

https://www.researchgate.net/profile/Indra-Sahu-2 **)**

Selected peer reviewed publication:

1. Conner Campbell , Fathima Dhilhani Mohammed Faleel, Matthew W. Scheyer, Samuel Haralu, Patrick L. Williams, William David Carbo, Aliyah Sharde Wilson-Taylor, Nima H. Patel, Charles R. Sanders , Gary A. Lorigan, Indra D. Sahu, BBA-Biomembrane 2022 (under revision)
2. Indra D. Sahu, Perspective on Membrane Protein Research, *Significances of Bioengineering & Biosciences*, 2021, 5, 448-452
3. Indra D. Sahu and Gary A. Lorigan, Probing Structural Dynamics of Membrane Proteins Using Electron Paramagnetic Resonance Spectroscopic Techniques, *Biophysica*, 2021, 1, 106-12
4. Tanbir Ahammad, Daniel L Drew, Indra D. Sahu, Rachel A Serafin, Katherine R Clowes, Gary A Lorigan, CW-EPR Spectroscopy Reveals the Structural Topology and Dynamic Properties of Active Pinholin $S^{21}68$ in a Lipid Bilayer, *J. Phys. Chem.* 2019, 123, 8048-8056.
5. Avnika P. Bali, Indra D. Sahu, Andrew F. Craig, Emily E. Clark, Kevin M. Burridge, Madison T. Dolan, Carole Dabney-Smith, Dominik Konkolewicz and Gary A. Lorigan, Structural Characterization of styrene-maleic acid copolymer-lipid nanoparticles (SMALPs) using EPR spectroscopy, *Chemistry of Physics and Lipids,* 2019*, 220,* 6-13.
6. Gunjan Dixit, Indra D. Sahu, Warren D. Reynolds, Tessa M. Wadsworth, Benjamin D. Harding, Colleen K. Jaycox, Carole Dabney-Smith, Charles R. Sanders, Gary A. Lorigan, Probing the Dynamics and Structural Topology of Reconstituted Human KCNQ1 Voltage Sensor Domain (Q1-VSD) in Lipid Bilayers using EPR Spectroscopy, *Biochemistry*, 2019, *58*, 965–973.
7. Benjamin D. Harding, Gunjan Dixit, Kevin M. Burridge, Indra D. Sahu, Carole Dabney-Smith, Richard E. Edelmann, Dominik Konkolewicz, and Gary A. Lorigan, Characterizing the structure of styrene-maleic acid copolymer-lipid nanoparticles (SMALPs) using RAFT polymerization for membrane protein spectroscopic studies, Chemistry of Physics and Lipids, 2019, 218, 65-72.
8. Indra D. Sahu and Gary A. Lorigan, EPR Techniques, Spin Labeling and Spin Trapping, Encyclodeia of Analytical Sciences, 2019, 3rd Edition, Pages 315-327, DOI: 10.1016/B978-0-12-409547-2.14080-6.
9. Lauren Bottorf, Indra D. Sahu, Robert M. McCarrick, and Gary A. Lorigan, Probing the Local α-helical Secondary Structure of ^{13}C-Labeled Membrane Proteins with Electron Spin Echo Envelope Modulation (ESEEM) Spectroscopy, *BBA Biomembrane*, 2018, *1860*, 1447-1451.
10. Indra D. Sahu, Andrew Craig, Megan M. Dunagum, Gary A. Lorigan, Characterization of Bifunctional Spin Labels for Structure and Dynamics of

Membrane Protein using EPR Spectroscopy, *J. Phys. Chem. B*, 2017, 121, 9185–9195.

11. Soumili Chatterjee, Rajan Vyas, Sreevatsa Chalamalasetti, Indra D. Sahu, Jérôme Clatot, Gary A. Lorigan, Isabelle Deschênes, Sudha Chakrapani, Structural Dynamics of Slow-Inactivation in a Voltage-Gated Sodium Channel, Journal of Genral Physiology*,* 2018, *150,* 1333-1347
12. Alice L. Herneisen, Indra D. Sahu, Robert M. McCarrick, Jimmy B. Feix, Gary A. Lorigan, and Kathleen P. Howard, A Budding-Defective M2 Mutant Exhibits Reduced Membrane Interaction, Insensitivity to Cholesterol, and Perturbed Interdomain Coupling**,** *Biochemistry*, 2017, 56**,** 5955–5963
13. Eduardo F. Vicente, Indra D. Sahu, Edson Crusca Jr, Luis G. M. Basso, Antonio J. Costa-Filho, Claudia E. Munte, Gary A. Lorigan and Eduardo M. Cilli, *Hs*DHODH Microdomain-Membrane Interactions are Influenced by the Lipid Composition, *J. Phys. Chem. B*, 2017, 121, 11085–11095
14. Lishan Liu, Indra D. Sahu, Robert M. McCarrick, Gary A. Lorigan, Probing the Secondary Structure of Membrane Peptides using 2H-labeled d10 Leucine via Site-directed Spin Labeling (SDSL) and Electron Spin Echo Envelope Modulation (ESEEM) Spectroscopy, J. Phys. Chem. B, January, 2016, 120, 633-640.
15. Mahesh Aitha, Lindsay Moritz, Indra D. Sahu, Omar Sanyurah, Zahilyn Roche, Michael W Crowder, Investigating the role of the hairpin loop in metallo-β-lactamase NDM-1 during catalysis, Journal of Biological Inorganic Chemistry, 2016, 156, 35-39.
16. Indra D. Sahu, Andrew Craig, Megan M. Dunagan, Kaylee R. Troxel, Rongfu Zhang, Andrew Meiburg, Corrinne Harmon, Robert M. McCarrick, Brett M. Kroncke, Charles R. Sanders, and Gary A. Lorigan, Probing Structural Dynamics and Topology of the KCNE1 Membrane Protein in Lipid Bilayers via Site-directed Spin Labeling and EPR Spectroscopy, Biochemistry, 2015, 54, 6402-6412.
17. Indra D. Sahu, and Gary A. Lorigan, Biophysical EPR Studies Applied to Membrane Proteins, J. Phys. Chem, & Biophys, 2015, 5, 188.
18. Indra D. Sahu, Brett M. Kroncke, Rongfu Zhang, Megan M. Dunagan, Hubbell J. Smith, Andrew Craig, Robert M. McCarrick, Charles R. Sanders, Gary A. Lorigan, Structural Investigation of the Transmembrane Domain of KCNE1 in Proteoliposomes, Biochemistry, 2014, 53, 6392-6401.
19. Indra D. Sahu, Eric J. Hustedt, Harishchandra Ghimire, Johnson J. Inbaraj, Robert M. McCarrick and Gary A. Lorigan, CW Dipolar Broadening EPR Spectroscopy and Mechanically Aligned Bilayers used to Measure Distance and Relative Orientation between Two TOAC Spin Labels on an Antimicrobial Peptide, Journal of Magnetic Resonance, 2014, 249, 72-79.
20. Indra D. Sahu, Robert M. McCarrick, Kaylee R. Troxel, Rongfu Zhang, Hubbell J. Smith, Megan M. Dunagan, Max S. Swartz, Prashant V. Rajan, Brett Kroncke, Charles R. Sanders, Gary A. Lorigan, DEER EPR Measurements for Membrane Protein Structures via Bi-functional Spin Label and Lipodisq Nanoparticles, Biochemistry, 2013, 52, 6627–6632.