

## EDUCATION:

<b>Ph.D. (Chemistry):</b> University of North Bengal, Darjeeling, India	<b>2019</b>
<b>M.Sc. (Chemistry):</b> University of North Bengal, Darjeeling, India	<b>2011</b>
<b>B.Sc. (Chemistry):</b> University of North Bengal, Darjeeling, India	<b>2009</b>
<b>Higher Secondary School</b>	<b>2006</b>
<b>Secondary School</b>	<b>2004</b>

**Role and activities in PhD:** Physicochemical Studies on Liposome Mimetic Systems and their Complexes with Biologically Relevant Polymers and focused on fabrication and characterizations of lipid nanoparticles with an aim to translate them as drug delivery nano-vehicle.

## PROFESSIONAL EXPERIENCE:

### 1. Position: Postdoctoral Fellow, Duration: 03-2022 to till to date

**Institution name/Country:** Polymer Institute, Slovak Academy of Science/Bratislava, Slovakia.

### 2. Position: Postdoctoral Fellow, Duration: 12-2019 to 12-2020

**Institution name/Country:** Harbin Institute of Technology/Shenzhen, China

## PUBLICATIONS:

1. Yundan Ruan, **Pritam Guha**, Shun-Li Chen, Qunhui Yuan, and Wei Gan, (2021). Observing the structural variations on binary complex vesicle surfaces and the influence on molecular transportation. **Chemical Physics**, 548, 111250.

2. Shan Xue, **Pritam Guha**, Qunhui Yuan, and Wei Gan, (2021). In Situ Spectroscopic Probes for Structures and Processes at the Surface of Noble Metallic Nanoparticles. **Particle and Particle Systems Characterization**, 38, 2000316.

3. **Pritam Guha**, Biplab Roy, Prasant Nahak, Gourab Karmakar, Chien H. Chang, Alexey G. Bikov, Alexander B. Akentiev, Boris A. Noskov, Amit K. Mandal, Anup Kumar, P. A. Hassan, V. K. Aswal, Takeshi Misono, Kanjiro Torigoe, and Amiya K. Panda; (2018). Exploring the dual impact of hydrocarbon chainlength and Piroxicam a conventional NSAID on Soylecithin/Ion pair amphiphiles mediated hybrid vesicles for brain – tumors targeted drug delivery. **Colloids and Surfaces A**, 546, 334–345.

4. **Guha, P.**; Roy, B.; Karmakar, G.; Nahak, P.; Koirala, S.; Sapkota, M.; Misono, T.; Torigoe, K.; Panda, A. K., (2015). Ion-Pair Amphiphile: A Neoteric Substitute That Modulates the Physicochemical Properties of Biomimetic Membranes. **The Journal of Physical Chemistry B**, 119 (11), 4251-4262.

5. Roy, Biplab; **Guha, Pritam**; Nahak, Prasant; Karmakar, Gourab; Maiti, Souvik; Mandal, Amit; Bykov, Alexey; Akentiev, Alexander; Noskov, Boris; Tsuchiya, Koji; Torigoe, Kanjiro; Panda, Amiya; (2018). Biophysical Correlates on the Composition, Functionality and Structure of Dendrimer-Liposome Aggregates. **ACS Omega**, 3, 9, 12235–12245.

6. Gourab Karmakar, Prasant Nahak, **Pritam Guha**, Biplab Roy, Priyam Chettri, Takeshi Misono, Kanjiro Torigoe, Anup Kumar, Ranendu Kumar Nath, Sukhen Bhowmik, Utpal Chandra De, Amiya Kumar Panda; (2018). Use of ion pair amphiphile as an alternative of natural phospholipids in enhancing the stability and anticancer activity of oleanolic acid loaded nanostructured lipid carriers. **Colloids and Surfaces A**, 545, 147–156.

7. Bhadra, A.; Karmakar, G.; Nahak, P.; Chettri, P.; Roy, B.; **Guha, P.**; Mandal, K. A.; Nath, K. R.; Pnda, A. K., (2017). Impact of detergents on the physicochemical behavior of itraconazole loaded nanostructured lipid carriers. **Colloids and Surfaces A**, 516, 63-71.

8. R. Bhattarai, T. Sutradhar, B. Roy, **P. Guha**, P. Chettri, A. K. Mandal, A. G. Bykov, A. V. Akentiev, B. A. Noskov and A. K. Panda, (2016). Double-Tailed Cystine Derivatives as Novel Substitutes of Phospholipids with Special Reference to

Liposomes. **The Journal of Physical Chemistry B**, 120, 10744-10756.

9. Nahak, P.; Karmakar, G.; Chettri, P.; Roy, B.; **Guha, P.**; Besra, S. E.; Soren, A.; Bykov, A. G.; Akentiev, A. V.; Noskov, B. A.; Panda, A. K., (2016). Influence of Lipid Core Material on Physicochemical Characteristics of an Ursolic Acid-Loaded Nanostructured Lipid Carrier: An Attempt To Enhance Anticancer Activity. **Langmuir**, 32, 9816-9825.

10. Koirala, S.; Roy, B.; **Guha, P.**; Bhattarai, R.; Sapkota, M.; Nahak, P.; Karmakar, G.; Mandal, A. K.; Kumar, A.; Panda, A. K., (2016). Effect of double tailed cationic surfactants on the physicochemical behavior of hybrid vesicles. **RSC Advances**, 6 (17), 13786-13796.

11. Nahak, P.; Karmakar, G.; Roy, B.; **Guha, P.**; Sapkota, M.; Koirala, S.; Chang, C.-H.; Panda, A. K., (2015). Physicochemical studies on local anaesthetic loaded second generation nanolipid carriers. **RSC Advances**, 5 (33), 26061-26070

12. Sapkota, M.; Karmakar, G.; Nahak, P.; **Guha, P.**; Roy, B.; Koirala, S.; Chettri, P.; Das, K.; Misono, T.; Torigoe, K.; Panda, A. K., (2015). Effect of polymer charge on the formation and stability of anti-inflammatory drug loaded nanostructured lipid carriers: physicochemical approach. **RSC Advances**, 5 (81), 65697-65709.

#### INVITED PRESENTATIONS:

- Global Academic Program: Universitas Indonesia & Hanyang University, Seoul “Functional Materials for Health, Energy and Environment” 2021. Feb. 23-26.

#### ORGANISATION OF INTERNATIONAL CONFERENCES:

- **5<sup>th</sup> Asian Conference on Colloid and Interface Science (ACCIS)** held at the University of North Bengal, West Bengal, India from 19<sup>th</sup> November-22<sup>nd</sup> November, 2013.

#### PRIZES AND AWARDS:

1. **Senior Research fellowship** UGC-BSR (University Grant Commission-Basic Scientific Research), Government of India.
2. Awardee of **Postdoctoral Fellowship**, Polymer Institute, Slovak Academy of Science, Bratislava, Slovakia (03, 2022-till to date).
3. Awardee of **Postdoctoral Fellowship**, School of Science, Harbin Institute of Technology, Shenzhen, China (12, 2019-12, 2020).
4. Awardee of **Türkiye Burslari Scholarships (24<sup>th</sup> August, 2021)**.
5. Awardee of certificate as **Young Scientist** for oral presentation in 17<sup>th</sup> National Conference on Surfactants, Emulsions and Biocolloids (NATCOSEB), held in Pt. Ravishankar Shukla University, Raipur on November 4-6, 2015.

#### Conference/Seminar/Workshop:

1. **International conference on challenges in drug discovery and delivery (ICCD3)**  
Birla Institute of technology and science, Pilani, Department of Pharmacy, March 2017
2. **Science academies lecture workshop on “Chemistry and Biology Interface”**  
Vidyasagar University, Department of Chemistry and Chemical Technology, April 2016
3. **17<sup>th</sup> National conference on surfactant, emulsions & biocolloids (NATCOSEB XVII)** Pt. Ravishankar Shukla University, Raipur, School of studies in Chemistry, November 2015
4. **One-day seminar on “Recent trends on Chemistry and Biology Interface”**  
University of North Bengal, Department of Chemistry, August 2015
5. **INDO-UK International workshop on advanced materials and their application in nanotechnology (AMAN 2014)**  
BITS Pilani, KK Birla Goa Campus, Department of Chemistry, May 2014
6. **5<sup>th</sup> Asian conference on colloid and interface science (ACCIS 2013)**  
University of North Bengal, Darjeeling.