

# Aalok Basu, Ph.D.

## Doctorate

Pharmaceutical and Fine Chemical Technology

## Education

PhD, Chemical Technology, University of Calcutta, 2015-2021

M.Pharm, Pharmaceutics, Dr. B. C. Roy College of Pharmacy and Allied Health Sciences, 2012-2014

B.Pharm, Pharmacy, Bengal College of Pharmaceutical Sciences and Research, 2008-2012

## Experience

Associate Professor, Dr. B. C. Roy College of Pharmacy and Allied Health Sciences, 2025-2026.

Postdoctoral Fellow, Mahidol University, 2022-2025

## Research Interests

- Nanoparticle drug delivery
- Biomaterials
- Cancer theranostics
- Cancer cell death
- Nanoparticle-protein interactions

## Last 5 Publications

1. Namporn, T., Manopwisedjaroen, S., Ngodngamthaweek, M., Pasomsuk, E., Jiravejchakul, N., Saengfak, R., ... & Ruenraroengsak, P. (2025). Evidence of Mpox Clade IIb Infection in Primary Human Alveolar Epithelium. *Emerging Microbes & Infections*, 14(1), 2477845.

<https://www.tandfonline.com/doi/full/10.1080/22221751.2025.2477845>

2. Basu, A., Sae-Be, A., Namporn, T., Suriyaphan, O., Sithisarn, P., Leanpolchareanchai, J., ... & Ruenraroengsak, P. (2024). Delivery of Avocado Seed Extract Using Novel Charge-Switchable Mesoporous Silica Nanoparticles with Galactose Surface Modified to Target Sorafenib- Resistant Hepatocellular Carcinoma. *International Journal of Nanomedicine*, 10341-10365.

<https://www.tandfonline.com/doi/full/10.2147/IJN.S478574>

3. Basu, A., Namporn, T., & Ruenraroengsak, P. (2023). Critical Review in Designing Plant-Based Anticancer Nanoparticles against Hepatocellular Carcinoma. *Pharmaceutics*, 15(6), 1611.

<https://www.mdpi.com/1999-4923/15/6/1611>

4. Singha, I., & Basu, A. (2022). Chitosan based injectable hydrogels for smart drug delivery applications. *Sensors International*, 3, 100168.

<https://www.sciencedirect.com/science/article/pii/S2666351122000134>

5. Basu, A., Bhowmick, S., & Mukherjee, A. (2022). Flavonolignan silibinin abrogates SDS induced fibrillation of human serum albumin. *Journal of the Indian Chemical Society*, 99(1), 100275.

<https://www.sciencedirect.com/science/article/abs/pii/S0019452221002752>

### **Patents**

- Basu, A (2022). A COMPOSITION AND A METHOD FOR SYNTHESIS OF AZITHROMYCIN LOADED NANOEMULSION- Patent no. 2022/10013, South Africa.
- Basu, A (2023). DECONTAMINATION OF WATER USING GUAR GUM DERIVATIVES AND APPLICATIONS THEREOF- Patent no. US 11,807,553 B1 (Status: FILED)

### **Memberships**

- West Bengal State Pharmacy Council (2012 – Present)
- Royal Society of Chemistry - Associate Member (2016- 2025)
- Association of Pharmaceutical Teachers of India - Life Member
- Indian Science Congress Association - Life Member

### **Awards**

MCSA Cofund NanoBio4Can Postdoctoral Fellowship – Izmir Biomedicine and Genome Center, Turkey (2026 – 2028)

International Postdoctoral Fellowship – Mahidol University, Thailand (2022 – 2025)

UGC Non-NET Junior Research Fellowship – University of Calcutta (2015)

University Silver medal, M.Pharm (Pharmaceutics), West Bengal University of Technology (2014)