

JON JYOTI KALITA

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EXPERIENCE

Assistant Professor, Department of Food Technology The Assam Royal Global University, Guwahati-35, Assam, India	2 nd September, 2024 – Till now
Research Fellow, Department of Biosciences and Bioengineering Indian Institute of Technology Guwahati, Assam, India	2022-2023

EDUCATION

Doctor of Philosophy, Department of Biosciences and Bioengineering Indian Institute of Technology Guwahati, Assam, India	2015-2023
Masters of Technology in Food Engineering and Technology Tezpur University (Central University), Assam, India	2013-2015
Bachelor of Engineering in Biotechnology, MVJ College of Engineering, Visvesvaraya Technological University, Karnataka, India	2008-2012

PUBLICATIONS

Journal publications

1. **Kalita, J. J.**, Sharma, P., & Bora, U. (2024). Selection and characterization of DNA aptamer targeting immunogenic peptide sequence of high molecular weight glutenin (HMW-GS) of gluten. *Cereal Research Communications*. <https://doi.org/10.1007/s42976-024-00556-w>
2. Das, A. K., Borah, M., **Kalita, J. J.**, & Bora, U. (2024). Cytotoxic potential of Curcuma caesia rhizome extract and derived gold nanoparticles in targeting breast cancer cell lines. *Scientific Reports*. <https://doi.org/10.1038/s41598-024-66175-x>
3. Das, A. K., **Kalita, J. J.**, Borah, M., Das, S., Sharma, M., Saharia, D., Sarma K. K., Bora, S., & Bora, U. (2023). Papaya latex mediated synthesis of prism shaped proteolytic gold nanozymes. *Scientific Reports*, 13(1), 5965. <https://doi.org/10.1038/s41598-023-32409-7>.
4. **Kalita, J. J.**, Sharma, P., & Bora, U. (2022). Recent developments in application of nucleic acid aptamer in food safety. *Food Control*, 109406. <https://doi.org/10.1016/j.foodcont.2022.109406>.

5. Sharma, P., **Kalita, J. J.**, Buragohain, P., & Deka, M. (2022). In Vitro Selection and Characterization of an Aptamer for Detection of the Epitopic Peptide Sequence of the Thermostable Direct Hemolysin (TDH) Toxin of *Vibrio parahaemolyticus*. *ACS Food Science & Technology*, 2(5), 784-792. <https://doi.org/10.1021/acsfoodscitech.1c00059>.
6. Kabiraj, D., **Kalita, J. J.**, Chetia, H., Singh, D., & Bora, U. Expanding the frontiers of rice research through omics. *J. Assam Sc. Soc.* Vo. 56, No.2, December 2015; PP. 1-28

Book Chapters

1. Bhaskar, B., Dutta, J., Mosahari, P. V., **Kalita, J. J.**, Buragohain, P., & Bora, U. (2020). Nanoparticle-based antimicrobial coating on medical implants. In *Nanostructures for Antimicrobial and Antibiofilm Applications* (pp. 79-99). Springer, Cham.
2. Bharali, B., Chetia, H., **Kalita, J. J.**, Mosahari, P. V., Chhillar, A. K., & Bora, U. (2019). Engineered nanomaterials in plants: Sensors, carriers, and bio-imaging. In *Comprehensive Analytical Chemistry* (Vol. 87, pp. 133-157). Elsevier.
3. **Kalita, J. J.**, Buragohain, P., Mosahari, P. V., & Bora, U. (2019). Food Allergens: Detection and Management. In *Food Bioactives* (pp. 243-279). Apple Academic Press.
4. Mosahari, P. V., Singh, D., **Kalita, J. J.**, Sharma, P., Chetia, H., Kabiraj, D., Mahanta, C. & Bora, U. (2018). Nanotoxicity: Impact on Health and Environment. In *Environmental Toxicity of Nanomaterials* (pp. 21-46). CRC Press.

Conference Proceedings

1. **Kalita, J. J.**, Buragohain, P., Kabiraj, D., Mosahari, P.V., Bora, U. Future prospects of edible insects farming in North-East India. International Symposium on Biodiversity and Biobanking, BIODIVERSE 2018, at IIT Guwahati, North Guwahati, Assam, India, 27th to 29th January 2018.
2. **Kalita, J. J.**, Kabiraj, D., Bharali, B., Saikia, D., Bora, U. Applications of aptamer-conjugated nanomaterials in biosensing and therapeutics. International Conference on Advances in Nanotechnology (ICAN-2017), at Assam Don Bosco University (ADBU), Azara, Guwahati, Assam, India, 9th to 13th January, 2017.

CONFERENCE/ SEMINAR/WORKSHOP ATTENDED

1. National Seminar on 'Millet-The Future Food' (SMFF-2023), Ghani Khan Choudhury Institute of Engineering and Technology, West Bengal, India January 12-13, 2023
2. International Symposium on Biodiversity and Biobanking, BIODIVERSE 2018, IIT Guwahati, North Guwahati, Assam, India January 27-29, 2018
3. International Conference on Advances in Nanotechnology (ICAN-2017), at Assam Don Bosco University (ADBU), Azara, Guwahati, Assam, India, January 9-13, 2017

4. NextGen Genomics, Biology, Bioinformatics and Technologies (NGBT) Conference 2017, Bhubaneswar, Odisha, India October 2-4, 2017
 5. National Seminar cum workshop on Innovative Prospects in Food Processing (IPFP-2015), Tezpur University, Tezpur, Assam, India March 27-28, 2015
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TEACHING/MENTORING EXPERIENCE

- Teaching assistant to the online course 'Genome editing and Engineering' taught by Prof. Utpal Bora under National Programme on Technology Enhanced Learning (NPTEL) funded by the Ministry of Education, Govt. of India, July-October, 2022.
 - Subject Matter Expert in the Faculty Development Program on 'Electrophoretic analysis of protein and DNA' organized by Handique Girls' College, Guwahati on 6 December, 2023
 - Mentored 4 Masters' students on dissertation projects and trained over 5 summer/winter trainees in BSBE, IIT Guwahati
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AWARDS AND HONORS

- Received Institute Fellowship (IIT Guwahati) under the funding by MHRD, New Delhi, India, 2015-2020
 - Received AICTE-GATE Scholarship for M.Tech programme, 2013-2015
 - Qualified Graduate Aptitude Test in Engineering (GATE) - Biotechnology in 2012 and 2014
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