

BIONE

E-ZINE OF BIOLOGICAL SCIENCES

ISSN: 2456-7264 | Issue – 29 | Published On 18/06/2024



Dr. Pallabi Kalita Hui

Dr. Pallabi Kalita Hui is currently working as an Assistant Professor in the Department of Biotechnology in National Institute of Technology (NIT), Arunachal Pradesh. She joined NIT Arunachal Pradesh as an Assistant Professor on 24th June 2015 and thereafter promoted to her current post on 24th June 2019. Prior to joining NIT, she worked in temporary positions as part-time and guest lecturer at Darrang College and Rajib Gandhi University, Arunachal Pradesh, respectively. She obtained her PhD from the Department of Biotechnology and Molecular Biology (MBBT), Tezpur University, Napaam, Assam working on the topic "Evaluation of nutritional potential of some aquatic weeds of North-East India for formulation of fish-feed for Indian Major Carps" under the guidance of Professor A.K. Mukherjee, presently the Director of IASST, Guwahati, Assam.

She has been working on different projects targeting the medicinal plants of Arunachal Pradesh. Her main subject of research is biochemical, nutritional and pharmacological characterization of the ethno-medicinal plants. She has already completed seven extramural projects funded by different funding agencies including DBT Twinning, DST ECR, IERP MOEF and DST NECTAR. So far, she guided three PhD scholars and has three national and international patents to her credit.

Dr. Kalita Hui was awarded the DST Early Career Award (DST ECR) in the year 2017. She was also awarded a fellowship by the Department of Science and Technology (DST), Government of India, New Delhi under the "Women Scientist Scholarship Scheme for Societal Programmes (WOS-B) in the year 2008". She also received the UGC-RGU sponsored 'Overseas Conference Fellowship' to present a paper in the international conference 'Aquaculture Europe 2007' held at Istanbul Expo Centre, Istanbul, Turkey, from 24th - 27th October 2007. She also received the UGC-CPEB II (RGU) sponsored 'Overseas Conference Fellowship' to present another paper in the International Conference of Food and Agricultural Engineering (ICFAE) organized by the International Scientific Committee, World Academy of Science, Engineering and Technology (WASET), Connecticut, CT 06878, USA and held at Miami (Florida) USA from 10th to 11th March 2014.

Currently she is working on a DST-SERB POWER project targeting Breast Cancer. The topic of her recent Project is “Evaluation of biochemical, pharmacological characterization of preclinical purity, safety and potency of *Paris polyphylla*, an ethnomedicinal plant from Arunachal Himalayas against breast cancer”. Under this project, a few bioactive compounds have already been isolated, characterised and purified from the medicinal plant after molecular dynamic simulation studies against the breast cancer receptors, ER α , EGFR, HER2 and stomach cancer receptor, VEGFR2. Biopolymer based nanoparticles have also been prepared with the purified bioactive compounds of the plant. Cytotoxicity assessment, gene expression studies of the nanoparticles and finally gene sequencing studies of the nanoparticles are also in process, targeting discovery of the novel compounds for treatment of breast cancer.