



**ASSAM UNIVERSITY, SILCHAR**

**Department of Ecology & Environmental Science**

**Prof. Jayashree Rout**

**Present position:** Dean, E P Odum School of Environmental Sciences

Professor, Department of Ecology & Environmental Science

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**Academic qualification:** PhD

**Area of specialization:** Algology, Lichenology, Environmental Biotechnology

**Awards:** Senior Scientist Gold Medal Award by Association for Biotechnology and Pharmacy, (ABAP) in an international Symposium on Biotechnology and Nanobiotechnology : Relevance to Human Health at Acharya Nagarjuna University, Guntur, Andhra Pradesh from 19-21 December 2009.

Total no. of publications (Publications of Journals listed in the SCI / UGC care list): 71  
h Index: 12

**No. of externally funded research projects:** 6,      **No. of Ph.D/M.Phil awarded:** 20

**Five best Publications:**

1. Biosynthesis of gold nanoparticles using a freshwater green alga, *Prasiola crispa*

B Sharma, DD Purkayastha, S Hazra, L Gogoi, CR Bhattacharjee, NN Ghosh, J Rout, **Materials Letters** 116, 94-97

2. An antioxidant extract of tropical lichen, *Parmotrema reticulatum*, induces cell cycle arrest and apoptosis in breast carcinoma cell line MCF-7

NB Ghate, D Chaudhuri, R Sarkar, AL Sajem, S Panja, J Rout, N Mandal

**PloS one** 8 (12), e82293

3. Biosynthesis of fluorescent gold nanoparticles using an edible freshwater red alga, *Lemanea fluviatilis* (L.) C. Ag. and antioxidant activity of biomatrix loaded nanoparticles

B Sharma, DD Purkayastha, S Hazra, M Thajamanbi, CR Bhattacharjee, NN Ghosh, J Rout,

**Bioprocess and Biosystems Engineering** 37 (12), 2559-2565



4. Efficient biodegradation of low-density polyethylene by cyanobacteria isolated from submerged polyethylene surface in domestic sewage water

P Sarmah, J Rout

**Environmental Science and Pollution Research** 25 (33), 33508-33520

5. Alga-mediated facile green synthesis of silver nanoparticles: Photophysical, catalytic and antibacterial activity

D Borah, N Das, N Das, A Bhattacharjee, P Sarmah, K Ghosh, M Chandel, J Rout, P Pandey, N N Ghosh, C R Bhattacharjee

**Applied Organometallic Chemistry** 34 (5), e5597