



UNIVERSITY OF CALCUTTA

FACULTY ACADEMIC PROFILE/ CV

Full name of the faculty member: BISWAJIT KAMILA

Designation: Assistant Professor

Specialization: Chemical Engineering



Contact information:

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Academic qualifications:

College/ university from which the degree was obtained	Abbreviation of the degree
<i>University of Calcutta</i>	B.Sc in Chemistry Hons
<i>University of Calcutta</i>	B.Tech in Chemical Engineering
Jadavpur University	M.E. in Chemical Engineering
NIT Durgapur	Ph.D pursuing

Positions held/ holding:

Assistant Professor since 18th July 2016

Research interests:

- Modeling and Experimental work on Pyrolysis, Combustion and Gasification
- Modeling of and Experimental work on Microfluidic Devices for Biomolecule Separation
- Modeling of and Experimental work on Fluidization and Inverse Fluidization
- Modeling of and Experimental work on Waste Water Treatment
- Modeling of and Experimental work on Bio-diesel Preparation

Select list of publications:a) *Journal Paper:*

1. Mukherjee, S., **Kamila, B.**, Paul, S., Hazra, B., Chowdhury, S., & Halder, G. (2021). Optimizing fluoride uptake influencing parameters of paper industry waste derived activated carbon. *Microchemical Journal*, 160, 105643. <https://doi.org/10.1016/j.microc.2020.105643>
2. Sen, S., Dutta, A., Ponnala, R., **Kamila, B.**, Baltrenas, P., Baltrenaite, E., & Dutta, S. (2020). Removal of hexavalent chromium from synthetic wastewater using alginate immobilized cyanobacteria: Experiment and mathematical modeling. *Environmental Engineering Science*, 37(4), 283–294. <https://doi.org/10.1089/ees.2019.0035>
3. Banerjee, S., **Kamila, B.**, Barman, S., Joshi, S. R., Mandal, T., & Halder, G. (2019). Interlining Cr(VI) remediation mechanism by a novel bacterium *Pseudomonas brenneri* isolated from coalmine wastewater. *Journal of Environmental Management*, 233(December 2018), 271–282. <https://doi.org/10.1016/j.jenvman.2018.12.048>
4. Ghosh, A., **Kamila, B.**, Adhikari, K., & Dutta, S. (2018). Valorization of waste micro-algal biomass - collected from coke oven effluent treatment plant and evaluation of sorption potential for fluoride removal Gargi Biswas1 Philips Prince Pokkatt1. *Water Science and Technology*, 78(1). <https://doi.org/10.2166/wst.2017.638>
5. **Kamila, B.**, Sadhukhan, A. K., Gupta, P., Basu, P., & Acharya, B. (2017). Modeling of torrefaction of small biomass particles. *Biofuels*, 1–10. <https://doi.org/10.1080/17597269.2017.1358941>
6. **Kamila, B.**, Sadhukhan, A. K., Gupta, P., Basu, P., Regmi, B., Dutta, A., & Acharya, B. (2017). Two-dimensional modeling of torrefaction of a large biomass particle. *International Journal of Green Energy*, 14(13), 1119–1129. <https://doi.org/10.1080/15435075.2017.1359785>
7. Prabhakar, A., Sadhukhan, A. K., **Kamila, B.**, & Gupta, P. (2017). Modeling and Experimental Studies on CO₂ Gasification of Coarse Coal Char Particle. *Energy & Fuels*, 31(3), 2652–2662. <https://doi.org/10.1021/acs.energyfuels.6b03241>

b) Conference/ seminar volumes:

International Conference:

1. 2-D Modeling Of Combustion Of Biomass Char Considering Homogeneous And Heterogeneous Reaction, **Biswajit Kamila**, Barnali Bhui, Anup Kumar Sadhukhan And Parthapratim Gupta, *Golden Jubilee International Conference*, NIT Durgapur, India.
2. Studies On Gasification Of Biomass Char: 2-D Modeling, Anusuyatalukdar, Biswajit Kamila, Anup Kumar Sadhukhan, Parthapratim Gupta, *Golden Jubilee International Conference*, NIT Durgapur, India.
3. Modeling Of Microfluidic Devices For Biomolecule Separation, **Biswajit Kamila**¹, Abhiram Hens², *Golden Jubilee International Conference*, NIT Durgapur, India.
4. Prediction of Minimum Inverse Fluidization Velocity by CFD Modelling, Arindam Dey, **Biswajit Kamila** and Bimal Das, *Golden Jubilee International Conference*, NIT Durgapur, India.

National Conference:

1. 2-D Modeling Of Pyrolysis of Large Biomass Particle, Biswajit Kamila, Ravi Prakash Shiromani, Pradeep Singh, Vikram Raju Guguloth, Prakhar Singh, Anup Kumar Sadhukhan And Parthapratim Gupta, *Chemcon 2014*, Chandigarh, India.
2. 2-D Modeling Of Torrefaction of Large Biomass Particle, Satyansh Singh, Biswajit Kamila, Anup Kumar Sadhukhan And Parthapratim Gupta, *Chemcon 2014*, Chandigarh, India.
3. 2-D Modeling Of Combustion of Biomass Char-Volume Reaction Model, Barnali Bhui, Biswajit Kamila, Anup Kumar Sadhukhan And Parthapratim Gupta, *Chemcon 2014*, Chandigarh, India.

Academic Exposure in associate with Department of Chemical Engineering, University of Calcutta and Calcutta University Chemical Engineering Alumni Association (CUChEAA)

Webinar arranged:

1. Mr. Sujit Roy, Alumnus 1968, delivered a lecture on “Refinery Complex – Concept to Commissioning” through a webinar on December 06, 2020 at 7:00 pm.
2. Mr. Basudeb Sarkar, Alumnus 1982, delivered a lecture on “Introduction to Oil and Gas Production” through a webinar on November 22, 2020 at 7:00 pm.

Lectures arranged:

1. A lecture was delivered on Heterogeneous Catalyst and its Application” by Dr. Prakash Biswas, Associate Professor, IIT Roorkee. He is an alumnus (2000) of the Department and delivered the lecture on 28th June, 2019 in the Prof. N K Bose Auditorium.
2. Mr. Colin Mendes, General Manager & Head - Human Resources, Domestic Projects Group, Voltas Limited, delivered a lecture in 5th June 2018 on “How to built up a leadership Quality for Industry”

3. Mr. Hirak Mitra, General Manager, Specials Production, Hindalco, delivered a lecture on “Overview on Plant Management” in the Prof. N K Bose Auditorium, on November 03, 2017.
4. Mr. D. P. Misra, FNAE. FIChemE. FIChE. FIE delivered a lecture on “Indian Chemical Industry-An Outlook” in our Prof. N. K. Bose Auditorium on November 01, 2017.
5. Mr. Dipak Pahari, Proprietor, NRG Tech Pvt. Ltd. delivered a lecture on “Facing Interviews” in the Computer Laboratory of the Department, on July 06, 2017.

Seminar arranged:

1. Two Days **National Symposium** on Recent Trends in Chemical and Allied Industries - Technology, Economics and Related Issues were arranged by the Association on September 13 & 14, 2019 at the Departmental Auditorium.
2. Two days Seminar on “Chemical Engineering: What do I need to know? –Industry Perspective” held on April 26 & 27, 2018 in the Prof. N K Bose Auditorium.
3. Half day Seminar on “Chemical and Process Design & Engineering” held on March 15, 2018 in the Prof. N K Bose Auditorium. The program was organized in collaboration with TEQIP –Phase III.

Training Programme:

1. **Pre-placement Training by utilizing Sujit Kumar Mandal Memorial Fund:** was arranged on December 6 & 7, 2019 at the Prof. N K Bose Auditorium of the Department . Next-Gen Recruitment Ventures Ltd., Kolkata 700001, conducted the two days program for the B. Tech Final year (7th Semester, 2019) and M. Tech (2nd Sem, 2019) students.
2. A training session was organized to conduct practical classes on **ASPEN** in the departmental computer laboratory. The program was started on March 25, 2017 and ended on April 15, 2017. Prof. P Ray along with Mr. B Kamila organized the program.

Membership of Learned Societies:

1. Life Associate Member in Indian Institute of Chemical Engineers (IChE)
2. Organizer of Chemcon 2007, Calcutta

Other notable activities:

Participation in:

1. Short Term Course on 'Zero Discharge: Recent Advancement and Sustainability' National Institute of Technology Durgapur, Durgapur, West Bengal
2. Chemcon 2014, Chandigarh, India.
3. Golden Jubilee International Conference, NIT Durgapur, India.