Komal Verma Roll Number: 206107015 PhD – Chemical Engineering IIT Guwahati Mobile No: 9559268746 Mail Id: <u>komalverma8746@gmail.com</u> : <u>kverma@iitg.ac.in</u>



| Educational qualifications | | |
|----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Motilal Nehru National Institute of Technology Allahabad | 9.45 CPI | 2018-2020 |
| Dr. AITH Kanpur | 86.23% | 2018 |
| CBSE board | 90.6% | 2013 |
| CBSE board | 9.6 CGPA | 2011 |
| | Ifications Motilal Nehru National Institute of Technology Allahabad Dr. AITH Kanpur CBSE board CBSE board | IficationsMotilal Nehru National Institute of Technology Allahabad9.45 CPIDr. AITH Kanpur86.23%CBSE board90.6%CBSE board9.6 CGPA |

Research Interests

• Reaction Engineering, Waste management, Gasification, Pyrolysis, Kinetic analysis

Technical skills

- **Technical instruments** : Muffle furnace, X-ray fluorescence, Bomb calorimeter, Viscometers, Aniline & Flash point Apparatus
- Miscellaneous : Microsoft Office

Projects

- Kinetics study of Co-gasification of Petroleum coke and coal
 May 2020
 Dr. Ashish N. Sawarkar , Assistant Professor, Dept. of Chemical Engineering , MNNIT Allahabad
- Physico-chemical characterization of Coal and Sunflower de-oiled cake May 2018 Dr. Sumit Prajapati , Assistant Professor, Dept. of Chemical Engineering , Dr. AITH Kanpur

Publications in Journals

- 1. Gajera, Z. R., Verma, K., Tekade, S. P., Sawarkar, A. N., 2020. Kinetics of co-gasification of rice husk biomass and high sulphur petroleum coke via TGA. *Bioresource Technology Reports*, doi:10.1016/j.biteb.2020.100479 (Published online on June 20, 2020).
- 2. Verma, K., Gajera, Z.R., Sawarkar, A. N. Kinetics of co-gasification of petcoke and coal. Submitted to *Journal of The Institution of Engineers (India): Series E (IEIE)* doi: 10.1007/s40034-020-00178-x (Published online on September 20, 2020)

Presentation in Conferences

- "Co-gasification of Petroleum Coke and coal" by Komal Verma, Zavin R. Gajera, , Ashish N. Sawarkar has presented in the National Conference on **Advances in Chemical Engineering and Science 2020** at the Department of Chemical Engineering, Indian Institute of Science Education and Research Bhopal, Madhya Pradesh.
- "Co-gasification of Rice Husk and Petroleum Coke" by Zavin R. Gajera, Komal Verma, Ashish N. Sawarkar has accepted for presentation in the forthcoming International Conference BioSangam 2020 "**Biotechnological Interventions for Societal Development**" at Prayagraj during February 21-23, 2020.

Overview

- 1. Physico-chemical characterization and kinetics of Co-gasification of petroleum coke and coal through thermogravimetric analysis.
- 2. Physico-chemical characterization and kinetics of pyrolysis of mustard oil cake through thermogravimetric analysis.

Reference: Dr. Ashish N. Sawarkar Asst. Prof. (Grade-I) , MNNIT Allahabad, ansawarkar@mnnit.ac.in