

# Cirriculum Vitae

Name	Gaurav Singh
Designation	Assistant Professor
Department	Department of Oil Technology, School of Chemical Technology, H.B.T.U. Kanpur
Mob.	+91-6307405122
E-mail	gauravs@hbtu.ac.in



## Personal Profile

Father's Name: Mr. Ram Bahadur Singh

Date of Birth: 20th- May, 1996

Residence: D-25, Type IV Faculty Quarters, HBTU West Campus Kanpur, U.P. Pin: 208002

## Academic Qualifications

S.No.	Degree	Year	Institution / Board / University	Marks / SGPA
1.	High School	2011	Tulsi I C Babuganj, Jamethi, Pratapgarh, U.P. Board	68%
2.	Intermediate	2013	Tulsi I C Babuganj, Jamethi, Pratapgarh, U.P. Board	84.6%
3.	B. Tech.	2019	Harcourt Butler Technological Institute, Kanpur, A.K.T.U.	66.4%
4.	M. Tech.	2021	Harcourt Butler Technical University, Kanpur	8.6 SGPA
5.	Ph. D.	Pursuing	Harcourt Butler Technical University, Kanpur	-

## Positions and responsibilities

1. Working as Assistant Professor in the Department of Chemical Technology (Oil Technology) School of Chemical Technology, HBTU Kanpur (10.06.2022 to till date).
2. Warden Abdul Kalam Hostel, HBTU Kanpur
3. Convener, Photography-Sub Council, HBTU Kanpur
4. Hony. Secretary, Oil Technologists Association of India Central Zone (OTAI CZ)
5. Coordinator Training and Placement, Department of Chemical Technology (Oil Technology) School of Chemical Technology, HBTU Kanpur.
6. Member of Bureau of Indian Standards, CHD-25
7. Member of Indian Institute of Chemical Engineers Kanpur Zone.
8. Member of Women Study Centre, HBTU Kanpur.
9. Worked as Graduate Engineering Trainee at AAK India Ltd (31.01.2022 to 09.06.2023).
10. Worked as Guest Lecturer in the Department of Chemical Technology (Oil Technology) School of Chemical Technology, HBTU Kanpur (25.10.2021 to 25.01.2022)

## Projects

1. Guided Industrial project entitled "A comparative study on Bleaching efficiency of different Bleaching Earths, Sponsored by Sunny Earth India Limited.
2. Completed the M. Tech. project entitled "Study on synthesis of Fatty Acid Dimers and their applications".
3. Completed the B. Tech. Project entitled "Extraction of Nutraceuticals from Palm Oil Residue using Supercritical Fluid Extraction Technique".

## Patents

1. **Indian Design Patent No. 378426-001**, A Solar-Powered Exhaust Cooling Fan for Cars, Dr. S. V. A. R. Sastry, Dr. Pankaj Kumar Gupta, Dr. Shravan Kumar, Mr. Gaurav Singh, 01 February, 2023
2. **South African Patent No. 2023/03697**, A Method of Processing an Anti-Graffiti Nano-Coating for Walls, Dr. S. V. A. R. Sastry, Dr. Adarsh Kumar Arya, Dr. Shravan Kumar; Dr. Rajkamal Kushwaha, Mr. Gaurav Singh, 06 April 2023.

## Publications

1. G. Singh, P. K. S. Yadav, (2023) Nanotechnology: A Promising Tool for Lubricants, *International Journal of Innovative Science and Research Technology (IJISRT)*, 8, 5, 3641-3652.
2. G. Singh, P. K. S. Yadav, (2022) Synthesis of fatty acid dimers and their applications: An overview, *Indian Journal of Advances in Chemical Science*, 10,1, 47-57.
3. G. Singh, P. K. S. Yadav, S. Rajwani, (2021) Clay catalyzed dimerization of linseed oil: Synthesis of linseed oil dimers, *International Journal of Research in Engineering and Science*. 9, 10, 60-64.
4. G. Singh, S. Rajwani, P. K. S. Yadav, (2019) Biolubricants & Nano Lubricant Additives: A Review, *Journal of Lipid Science and Technology*. 7, 51, 81-98.

## Book Chapters

1. Smriti Dwivedi, P.K.S. Yadav, Gaurav Singh (2024) "Maleic Anhydride Surfactants as an alternative to Sodium Lauryl Sulphate (SLS)", *Sustainability in Chemical Processes through Digitalization and Green Chemistry Approaches, Chemical Engineering Methods and Technology, Nova Science Publishers, 14,.....* DOI: <https://doi.org/10.52305/HUMP1467>.
2. Gaurav Singh and P.K.S. Yadav, (2021) Hazardous waste characteristics and standard management approaches, *Hazardous Waste Management, An Overview of Advanced and Cost-Effective Solutions, Elsevier*, 07, 145-163, DOI: <https://doi.org/10.1016/B978-0-12-824344-2.00008-2>.

## Conference Proceeding

1. Devang Gupta, G. Singh, P. K. S. Yadav. (2023) "Extraction of Protein from Yellow & Black Mustard Cake and its Comparison", Bharti Publications, ISBN: 978-81-19757-00-8, 131-135, Conference Proceeding of CHEM TECHNOVA 2024, IChE Student Chapter & Department of Chemical Engg. School of Chemical Technology, HBTU Kanpur (organized on 21st March -23rd March 2024).
2. G. Singh, P. K. S. Yadav. (2023) "Synthesis of Poly Ethylene Glycol-based Amphiphilic Dispersant: PEGylation of Waste Soybean Oil Fatty Acid Methyl Ester", Bharti Publications, ISBN: 978-81-19757-00-8, 140-146, Conference Proceeding of CHEM TECHNOVA 2024, IChE Student Chapter & Department of Chemical Engg. School of Chemical Technology, HBTU Kanpur (organized on 21st March -23rd March 2024).

## Conference Oral Presentations without Proceeding

1. Devang Gupta, G. Singh, P. K. S. Yadav. (2023) "Extraction of Protein from Yellow & Black Mustard Cake and its Comparison", CHEM TECHNOVA 2024, IChE Student Chapter & Department of Chemical Engg. School of Chemical Technology, HBTU Kanpur (organized on 21st March -23rd March 2024).
2. G. Singh, P. K. S. Yadav. (2023) "Synthesis of Poly Ethylene Glycol-based Amphiphilic Dispersant: PEGylation of Waste Soybean Oil Fatty Acid Methyl Ester", CHEM TECHNOVA 2024, IChE Student Chapter & Department of Chemical Engg. School of Chemical Technology, HBTU Kanpur (organized on 21st March -23rd March 2024).

3. G. Singh, P. K. S. Yadav. (2024)"Polyethylene Glycol-Based Non-Ionic Surfactants and their applications as Emulsifiers" International Conference on "Application of Oils and Fats in FMCG Sector" Organized by ***Oil Technologists Association of India and Indian Agricultural Research Institute*** during March 15-16, 2024 at NASC, Pusa Campus, New Delhi.
4. Devang Gupta, G. Singh, P. K. S. Yadav. (2023) "Value Addition of Mustard Oil", ***CHEM TECHNOVA 2023***, IChE Student Chapter &Department of Chemical Engg. School of Chemical Technology, HBTU Kanpur (26<sup>th</sup> -27<sup>th</sup> May 2023).
5. Smriti Dwivedi, G. Singh, P. K. S. Yadav. (2023) "Maleic Anhydride Surfactants as an alternative to Sodium Lauryl Sulphate (SLS)", ***CHEM TECHNOVA 2023***, IChE Student Chapter &Department of Chemical Engg. School of Chemical Technology, HBTU Kanpur (26<sup>th</sup> -27<sup>th</sup> May 2023).
6. G. Singh, P.K.S. Yadav. (2023) "Synthesis of Poly Ethylene Glycol based Amphipathic Dispersants for Nano Coatings", ***CHEM TECHNOVA 2023***, IChE Student Chapter &Department of Chemical Engg. School of Chemical Technology, HBTU Kanpur (26<sup>th</sup> -27<sup>th</sup> May 2023).
7. Smriti Dwivedi, G. Singh, P.K.S. Yadav. (2022) "Maleic Anhydride based Surfactants and their Properties", presented in ***CHEMCON 2022***, 75<sup>th</sup> Annual Session & International Conference organized by Harcourt Butler Technical University (27<sup>th</sup> -30<sup>th</sup> December, 2022).
8. G. Singh, P.K.S. Yadav. (2022) "Synthesis of Amphoteric Dispersants as Nanoparticle Stabilizers from renewable sources", presented in ***CHEMCON 2022***, 75<sup>th</sup> Annual Session & International Conference organized by Harcourt Butler Technical University (27<sup>th</sup> -30<sup>th</sup> December, 2022)
9. S. Dwivedi, P. K. S. Yadav, G. Singh, "Challenges and Opportunities with Alkyl Polyglycoside Surfactants in Strengthening Indian Economy" Presented in 76th Annual Convention & International Conference held at National Physical Laboratory New Delhi, India by ***Oil Technologists' Association of India (2022)***.
10. G. Singh, S. Rajwani, P.K.S. Yadav. (2021) "Dimer acid based polyurethanes: A second generation raw material for coating industry", presented in International Conference on ***Green Chemistry and Engineering towards Sustainable Development – An Industrial Perspective (16-18 June 2021)***, Organized by Department of Chemical Engineering, Sardar Vallabhbhai National Institute of Technology (SVNIT), Surat, Gujarat – 395007, India.

#### Workshop/ Seminar/ Conferences, Organized

1. Organized one week training program on Cosmetics Product Formulation June 03-07, 2024.
2. Organized a one day Photography workshop and Game of Click Contest on 23 September 2023.
3. Coordinated two days conference Indacon-2023 organized by Department of Chemical Engineering and Department of Biochemical Engineering School of Chemical Technology, HBTU Kanpur
4. Organized CHEMCON-2022, 75<sup>th</sup> Annual Session & International Conference (27<sup>th</sup> -30<sup>th</sup> December, 2022) as executive secretary.
5. Organized 2 days' Workshop on "Recent Advances in water Purification and waste water treatment", held on November 29 & 30, 2023, organized by Department of Chemical Engineering and Department of Biochemical Engineering School of Chemical Technology, HBTU Kanpur

#### FDP's, Attended

1. Attended one week Faculty Development Program on "Advance Pedagogical Learning and University Administration held from May 27- June 01, 2024, organized by the HRD Cell, HBTU Kanpur.
2. Attended 5 days Faculty Development Program on "***Sustainable Green Chemical Technologies***" held during 21<sup>st</sup> August 2023 to 25<sup>th</sup> August 2023, organized by Department of Chemical Engineering, School of Chemical Technology, HBTU Kanpur

3. Attended 5 days Faculty Development Program on “**Challenges and Recent Trends in Mathematical Modeling and Scientific Computation**” held during December 18 to 22, 2023 organized by Department of Mathematics, School of Basic and applied Sciences, HBTU Kanpur

#### Short-term courses/ Workshop/ Seminar, Attended

1. Attended a one day Workshop on “**Intellectual Property Rights**” held on January 29, 2024, organized by Council of Science and Technology (CST), U. P. and HBTU Kanpur
2. Attended 2 days’ Workshop on “**Recent Advances in water Purification and waste water treatment**”, held on November 29 & 30, 2023, organized by Department of Chemical Engineering and Department of Biochemical Engineering School of Chemical Technology, HBTU Kanpur
3. Attended 2 days’ workshop on **Intellectual Property Rights**, held on December 5 & 6 2023, organized by Ministry of Micro, Small & Medium Enterprises
4. Attended one day workshop on **Organic Waste Management** held on 12<sup>th</sup> -13<sup>th</sup> January 2023, organized by **Kanpur Nagar Nigam and Deutsche Gesellschaft fur International Zusammenarbeit (GIZ) GmbH**.
5. Attended 4 days Conference on **Meeting the Challenges of Energy Efficient Process Innovation and Automation**, Organized by **OTAI West Zone 2023**.
6. Attended One Day Workshop on **Non -Isocyanate Polyurethanes: Advancing applications by leveraging cure chemistries** Organized by OTAI CEC 2022.
7. Attended one day online national workshop on **Basics of Tribology and its Real-life Application** (Conducted as part of the Centenary Year Celebrations of HBTU Kanpur) Organized Jointly by **Department of Oil Technology, HBTU Kanpur, Oil Technologists’ Association of India (HQ) & Anton PaarIndia Pvt. L.td.** scheduled on 03rd September, 2021.
8. Attended International Conference on **Green Chemistry and Engineering towards Sustainable Development – An Industrial Perspective** (16-18 June 2021) Organized by **Department of Chemical Engineering, Sardar Vallabhbhai National Institute of Technology (SVNIT), Surat, Gujarat – 395007, India**.
9. Attended 75<sup>th</sup> annual convention and international conference on **Limiting Trans Fats in Oil and Fats Below 2% before 2022: Challenges and Potential Solution** organized on 28<sup>th</sup> feb-2021 organized by **OTAI**.
10. Attended 74<sup>rd</sup> annual convention and international conference on **Process Audit in Oil Seeds and Oil Processing Industries** Organized by **OTAI**.
11. Attended 73<sup>rd</sup> annual convention and international conference on **Value Addition in Oilseeds, Oils and Derivatives through Innovative Technologies** held at **IIT-BHU**, organized by **OTAI**.
12. Attended surfactant and oil seminar under the department of Oil Technology HBTU Kanpur funded by TEQIP.
13. Attended seminar of **Food Procurement** organized by department of Bio Chemical Engineering and Food Technology HBTU Kanpur funded by TEQIP.

#### Internships/ Trainings

1. Summer internship at **B.L. Agro Industries Ltd.** for 42 days in oil refinery and quality control lab.
2. 2 days industrial visit at **Indagro Foods Pvt. Ltd. Unnao** in Effluent Treatment Plant.