

## **Profile Page**



Name : Dr. Nitin Naresh Pandhare  
Designation : Assistant Professor Grade-i  
Department : Chemical Engineering  
Qualification : PhD (IIT Roorkee)  
M.Tech (IIT Kharagpur)  
B.Tech (LIT Nagpur)  
Address : Department of Chemical Engineering  
Dr. B R Ambedkar National Institute of Technology Jalandhar  
Jalandhar, Punjab - 144027  
Email : pandharenn@nitj.ac.in

### **Research Interests :**

1. Industrial Pollution Control Engineering.
2. Catalysis and Chemical Reaction Engineering.
3. Selective dehydration, hydrogenation and hydrogenolysis of biomass-derived oxygenated hydrocarbon over supported nanoparticle catalysts.
4. Conversion of biomass to fuels and chemicals.
5. Kinetic modelling.

### **Other Profile Links :**

#### **Google Scholar Link :**

Dr. Nitin Naresh Pandhare [Click Here](#)

#### **Personal Web Link :**

Vidwan [Click Here](#)

ORCID [Click Here](#)

Researchgate [Click Here](#)

Publons Web of Science Research ID [Click Here](#)

SCOPUS [Click Here](#)

### **Journal Publications :**

Year	Journal	Publication
2022	Current Research in Green and Sustainable Chemistry, 5 (2022) 100289	Mohan Lal Meena, Himanshu Malviya, Nitin Naresh Pandhare and Prakash Biswas, Kinetic modeling of conversion of glycerol to 1,2-propanediol over bifunctional LDH catalyst

2022	Biomass Conversion and Biorefinery, (2022) 1-18	V. N. S. Gunasri Appala, Nitin Naresh Pandhare and S. Bajpai, Biorefining of leather solid waste to harness energy and materials—A review
2019	Reaction Kinetics, Mechanisms and Catalysis, 127, 523–542	Dinesh Kumar Pandey, Nitin Naresh Pandhare and Prakash Biswas, Production of propylene glycol (propane-1,2-diol) in vapor phase over Cu–Ni/Al <sub>2</sub> O <sub>3</sub> catalyst in a down flow tubular reactor: effect of catalyst calcination temperature and kinetic study
2017	Energy and Fuels 31(8) (2017) 8521-8533	Al Ameen A, Smita Mondal, Satyanarayana Murty Pudi, Nitin Naresh Pandhare, and Prakash Biswas, Liquid Phase Hydrogenolysis of Glycerol over Highly Active 50% Cu-Zn(8:2)/MgO Catalyst: Reaction Parameter Optimization by Using Response Surface Methodology
2017	Industrial and Engineering Chemistry Research 57(1), (2017) 101-110	Nitin Naresh Pandhare, Satyanarayana Murty Pudi, Smita Mondal, Keval Pareta, Manish Kumar and Prakash Biswas, Development of kinetic model for hydrogenolysis of glycerol over Cu/MgO catalyst in a slurry reactor
2016	Journal of the Taiwan Institute of Chemical Engineers 61 (2016) 90-96.	Nitin Naresh Pandhare, Satyanarayana Murty Pudi, Prakash Biswas, and Shishir Sinha, Vapor phase hydrogenolysis of glycerol to 1,2-propanediol over $\gamma$ -Al <sub>2</sub> O <sub>3</sub> supported copper or nickel monometallic and copper–nickel bimetallic catalysts
2016	Organic Processes Research and Development 20 (2016) 1059-1067	Nitin Naresh Pandhare, Satyanarayana Murty Pudi, Prakash Biswas and Shishir Sinha, Selective hydrogenolysis of glycerol to 1,2-propanediol over highly active and stable Cu/MgO catalyst in vapor phase

## Conference Publications :

Year	Conference	Publication
2021	An international conference on “Chemical, Bio and Environmental Engineering” (CHEMBIOEN-2021)	Anas Khan, Shaurya Kumar Singh, Tarun Kumar and Nitin Naresh Pandhare, “Review study air pollution control system for secondary aluminum recycling and casting process”
2021	An international conference on “Chemical, Bio and Environmental Engineering” (CHEMBIOEN-2021)	Shaurya Kumar Singh, Tarun Kumar and Nitin Naresh Pandhare, Indoor air pollution and its health impact: A case study of Muradabad city, India
2021	An international conference on “Chemical, Bio and Environmental Engineering” (CHEMBIOEN-2021)	Shagun Agarwal, Deepak Sahu and Nitin Naresh Pandhare, CFD analysis of valve tray hydraulics using ASPEN-HYSYS
2020	An international conference on “Chemical, Bio and Environmental Engineering” (CHEMBIOEN-2020)	V.N.S. Gunasri Appala, Nitin Naresh Pandhare and S. Bajpai, Effective utilization of solid waste from leather industry-A review”
2020	An international conference on “Chemical, Bio and Environmental Engineering” (CHEMBIOEN-2020)	Narendra Kumar Nagar, Ajay Bansal and Nitin Naresh Pandhare, Bioethanol production from kitchen food waste”
2018	71st Annual session of Indian Institute of Chemical Engineers, CHEMCON-2018, 27-30, Dec, 2018, NIT Jalandhar, Punjab, India.	Gunasri Appalla, Nitin Naresh Pandhare and Shailendra Bajpai, “Assessment of chromium remediation by recent strategies- A review”
2014	64th Canadian Chemical Engineering Conference, 19-22, Oct, 2014, Niagara Fall, Canada.	Nitin Naresh Pandhare, Satyanarayana Murty Pudi, Prakash Biswas, Shishir Sinha, “Selective hydrogenolysis of glycerol to 1,2-propanediol over highly active and selective Cu-Ni/Al <sub>2</sub> O <sub>3</sub> catalysts”
2014	The 9th India Japan bilateral conference, Bicon-2014, 12-17 October, 2014, Jaipur, India.	Satyanarayana Murty Pudi, Nitin Naresh Pandhare, Prakash Biswas, “Conversion of glycerol to value added products over supported nanoparticle catalysts”

2013	International Conference on Advances In Chemical Engineering, 22-24, February, 2013, IIT Roorkee, India.	Deepesh Yadav, Nitin Naresh Pandhare and Prakash Biswas, "Hydrogenation of Furfural to Furfuryl Alcohol over Ni/?-Al <sub>2</sub> O <sub>3</sub> catalyst"
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### Book/Chapter Publications :

Type	Title	Publisher	Authors	ISBN/ISSN No.	Year
Book Chapter	Mathematical models for optimization of anaerobic digestion and biogas production	Springer Singapore	Venkata Naga Surya Gunasri Appala, Nitin Naresh Pandhare & Shailendra Bajpai	978-981-16-8681-8	2022
Book Chapter	Catalysts for Conversion of Lignocellulosic Biomass Into Platform Chemicals and Bio-Aromatics	Scrivener Publishing LLC	Anjireddy Bhavanam, Poonam Gera, Nitin Naresh Pandhare and Subhrajeet Dash	978-1-119-81879-3	2022
Book Chapter	Advances in Chemical, Bio and Environmental Engineering	Springer Nature Switzerland AG	Shagun Agrawal, Deepak Sahu, Bhisham Kumar Dhurandher, Anchal Bahman, Jatinder Kumar Ratan, Kanchan, Nitin Naresh Pandhare, and Om Prakash Verma	978-3-030-96554-9	2022
Book Chapter	Advances in Chemical, Bio and Environmental Engineering	Springer Nature Switzerland AG	Jatinderpal Singh, Subhrajeet Dash, Anjireddy Bhavanam, Poonam Gera, D. Giribabu, and Nitin Naresh Pandhare	978-3-030-96554-9	2022

### Research Projects :

Role	Project Type	Title	Funding Agency	From	To	Amount	Status	Co-Investigator
Co-PI	Consultancy Project	Environmental audit of M/s Trident Ltd., (Towel division) vill. Dhaula, Tehsil & Distt Barnala	(PPCB) M/s Trident Limited, Barnala	29-12-2020	25-12-2021	725700	Completed	Dr. J K Ratan and Dr. S K sinha

Co-PI	Industry R&D project	Color reduction of effluent from ETP of dying unit	M/s Trident Limited, Barnala	26-04-2022	till date	626580	Ongoing	Dr. J K Ratan, Dr. Sumer Singh Meena and Dr. G N Nikhil
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### Events Organized :

Category	Type	Title	Venue	From	To	Designation
STC	National	Emerging technologies for next generation bio-fuels and bio-products	Department of Chemical Engineering Dr. B. R. Ambedkar National Institute of Technology Jalandhar	21/02/2020	25/02/2020	Coordinator
STC	National	Modern Practices in Hydrocarbon Engineering	Department of Chemical Engineering Dr. B. R. Ambedkar National Institute of Technology Jalandhar	06/11/2020	10-11-2020	Coordinator
STC	National	Valorization of lignocellulosic biomass towards sustainable fuels, chemicals and materials	Department of Chemical Engineering Dr. B. R. Ambedkar National Institute of Technology Jalandhar	18-09-2020	22-09-2020	Coordinator
Conference	International	CAMSE 2021	Dr. B. R. Ambedkar National Institute of Technology Jalandhar	17-07-2021	19-07-2021	Organizing Secretary
Conference	International	CHEMBIOEN-2021	Department of Chemical Engineering Dr. B. R. Ambedkar National Institute of Technology Jalandhar	20-08-2021	22-08-2021	Organizing Secretary

### Professional Affiliations :

Designation	Organization
Assistant Professor	Dr. B. R. Ambedkar National Institute of Technology Jalandhar

### PhD Supervised :

Scholar Name	Research Topic	Status	Year	Co-Supervisor
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Suneel Yadav	Novel utilization of waste of sugar and allied industries with biocircular economic sustainability	Ongoing		Dr. J K Ratan
Ms. V N S Gunasri Appala	Study on biogas production from tannery and kitchen waste using anaerobic co-digestion process	Ongoing		Dr. Shailendra Bajpai

### PG Dissertation Guided :

Student Name	Dissertation Title	Status	Year	Co-Supervisor
Mr. Narendra Kumar Nagar	A study on Bioethanol production from mixed kitchen Food waste	Completed	2020	Dr. Ajay Bansal

### Patents :

Name	Reg./Ref. No.	Date of Award/Filling	Organization	Status
Copper-zinc-magnesium catalyst for highly selective conversion of glycerol to 1,2-propanediol in liquid phase	Patent no.: 373960	17/05/2017	IIT Roorkee	Granted

### Admin. Responsibilities :

Position Held	Organization	From	To
Assistant Warden (Residential)	IIT Roorkee	01-04-2012	31-05-2013
Warden Hostel no: 5	Dr. B. R. Ambedkar National Institute of Technology Jalandhar	01/03/2018	01/01/2019
Warden Hostel no: 5	Dr. B. R. Ambedkar National Institute of Technology Jalandhar	09-03-2021	Till Date