

## Dr. Utkarsh Maheshwari

<b>Email</b>	:	drutkarshm@gmail.com	(Primary)
		utkarshmaheshwari@gmail.com	(Secondary)
<b>Skype id</b>	:	utkarsh_maheshwari	
<b>Contact Number</b>	:	+91-9772976299, 7906432671	
<b>Homepage</b>	:	<a href="https://www.drutkarshm.info/">https://www.drutkarshm.info/</a>	

### Career Summary:

- Teaching experience of **16+ years** at graduate and postgraduate level of Chemical and Petroleum Engineering curriculum.
- Working as **Associate Professor** at Department of Chemical Engineering, School of Engineering, Management and Research, D. Y. Patil International University, Akurdi, Pune since 1<sup>st</sup> August 2024.
- **Certified Internal Auditor** for **ISO 21001:2018 Educational organizations — Management systems (EOMS)** for educational organizations.
- Awarded by **India Prime Quality Education Awards 2021** organized by FoxClues, Dailyhunt and The Chronicle Journal in recognition for his enduring commitments to exceptional contribution towards education.
- Presently serving as **National Council Member** of the Indian Institute of Chemical Engineers (IICHE) for 2023-25.
- Elected as **Honorary Controller of Examination** of IICHE for the year 2024, 2025.
- Presently serving as **Honorary Chairman** of the Indian Institute of Chemical Engineers (IICHE), Pune Regional Center for 2025-27.
- Served as **Honorary Secretary** of the Indian Institute of Chemical Engineers (IICHE), Pune Regional Center for 2021-25.
- **Headed**, Department of Chemical Engineering at Dr. D. Y. Patil Institute of Engineering, Management & Research, Akurdi, Pune for 1<sup>st</sup> December 2016 to 8<sup>th</sup> April 2018.
- Doctorate (Ph.D.): Removal of Metal Ions from Wastewater using Adsorption- Experimental and Theoretical Studies; Masters (M.E.) in Chemical Engineering; Bachelors (B.Tech.) in Petrochemical Engineering.
- **Technical and Management Consultant** for a thermoplastic paint manufacturing company for a duration of November 2015 - November 2016 and August 2022.

- **Member of 16 International Associations** and **Reviewer for 25 journals** of International repute.
- Published **3 Book Chapter, 19 Journal Papers** and **100+ Conference Papers** individually and collectively with project students and colleagues.

**Educational Qualifications:**

Degree	University/Institute	Year	Subject	Class
Ph.D.*	BITS, Pilani	2015	Heavy Metal Removal	-
M.E	BITS, Pilani	2009	Chemical Engineering	I <sup>st</sup>
B.E.	Z.H.College of Engineering and Technology, Aligarh	2007	Petrochemical Engineering	I <sup>st</sup>

\* Field of research: Removal of heavy metals using adsorption

**Continuous Learning** : **147 Nos.**

**Certification Courses** : **89 Nos.**

- Completed in total **70 courses** from **26 Universities and Network** using Coursera Platform
- Completed **4 courses** from **4 University and Network** using EDX platform
- Completed **7 courses** with Elite tag from **4 IITs** using NPTEL/Swayam Platform
- Completed **4 courses** on Sustainability from **Inst. of Chemical Engineers (IChemE), UK**
- Completed **2 courses** from **Shaw Academy**, London
- "Basic Photography Foundation" course from **Indian Institute of Photography**
- Proficiency in Languages (French) from the **Aligarh Muslim University**

**Quality Improvement Programs (QIP) :** **01 No.**

**Faculty Development Programme(FDP):** **46 Nos.**

**ShortTerm Training Programme (STTP):** **02 No.**

**Workshop** : **07 Nos.**

**Others** : **02 Nos.**

**Project Titles****PhD Thesis**

Removal of Metal Ions from Wastewater using Adsorption: Experimental and Theoretical Studies

**M.E**

Study of Pressure Swing Adsorption Process for the Production of Hydrogen.

**B.Tech.**

Techno-Economic Feasibility Study on the Manufacture of Polypropylene from Propylene

**Teaching Experience: (≈ 16+ yrs)**

- Presently working as **Associate Professor** at Department of Chemical Engineering, School of Engineering, Management and Research, **D. Y. Patil International University, Akurdi, Pune** since 1st August 2024 ( $\approx$  6 yrs 3+ months)
- Worked as **Associate Professor** at the Department of Chemical Engineering, **D. Y. Patil Institute of Engineering, Management & Research, Akurdi, Pune** from 1<sup>st</sup> August 2020 to 31st July 2024 (3 yrs)
- Worked as **Assistant Professor** at the Department of Chemical Engineering, **Dr. D. Y. Patil Institute of Engineering, Management & Research, Akurdi, Pune** since 21<sup>st</sup> November 2016 till 31<sup>st</sup> July 2020 ( $\approx$  3 yrs 8 months).
- Worked as **Lecturer** at the Department of Chemical Engineering, **Birla Institute of Technology and Science (BITS)-Pilani** from 22<sup>nd</sup> October 2009 to 17<sup>th</sup> July 2016 ( $\approx$  6 yrs 9 mnths)

#### **Consultancy Experience: 1 year**

- Worked as a Technical Consultant to "Amitek Infra Pvt. Ltd.", Jaipur from November 2015 to November 2016 ( $\approx$  1 yr)

#### **Industrial Experience**

- Visited Water Treatment Plant at **PCMC Water Treatment Plant**, Pimpri Chinchwad, Pune on 13th August 2024.
- Visit to the Water Treatment Plant at **Harduaganj Thermal Power Station**, Aligarh, U.P. on 12<sup>th</sup> July 2015
- Visit to **Indian Oil Corporation Ltd Research & Development Ceter**, Faridabad on 17<sup>th</sup> October 2013
- Visit to **Indian Oil Corporation Ltd Refinery, Panipat** on 17<sup>th</sup> September 2011
- Visit to **Indian Oil Corporation Ltd Refinery, Panipat** as a part of 6<sup>th</sup> Summer School Programme on “Petroleum Refining & Petrochemicals” held at Indian Oil Institute of Petroleum Management, Gurgaon organized by Petrotech society, New Delhi in collaboration with Indian Oil Corporation Ltd-R&D and IIPM from 6<sup>th</sup> to 10<sup>th</sup> June 2011
- Six months industrial training as a part of Practice School in **British Oxygen Company, Kolkata** from January 2009 to June 2009. The projects handled are:
  - o Cryogenic Nitrogen plant for Hindustan Petroleum Corporation Limited, Mumbai for a duration of 2 months (From 9<sup>th</sup> April 2009 to 8<sup>th</sup> June 2009)
  - o Hydrogen PSA project for Bongaigaon Refineries and Petrochemical Limited, Assam for a duration of 3 months (9<sup>th</sup> January 2009 to 8<sup>th</sup> April 2009)As the company is an EPC firm, my work was to co-ordinate between the vendors and timely deliver of the vessels and other accessories for completion of the project on time. During my Cryogenic projects, I was also involved in the account settlement of the projects.

- One month industrial training in Polypropylene plant of **Reliance Industries Limited, Hazira** Complex in June 2006.

I have done my internship in the Polypropylene section of the Reliance Industries Limited, Hazira section. There I had learned the process and the various operations involved in the production of polymers.

**Academic and Administrative Responsibilities (In and Outside Institute): 69**

**National and International Associations : 43 Nos.**

**M.E. Dissertation/B.E. Thesis Supervised : 49**

**Academic and Research Projects Supervised : 100+ Nos.**

### **Courses Taught**

Introduction to Chemical Engineering, Technical Management and Commercialization, Separation process II/ Selected Chemical Engineering Operations; Thermodynamics; Petroleum Reservoir Engineering; Petroleum Downstream Processing; Petroleum Refinery Engineering; Chemical Engineering Thermodynamics; Environmental Pollution Control; Kinetics and Reactor Design; Process Plant Safety & Environment; Chemical Engineering Thermodynamics; Fertilizer Technology; Energy Management; Process Design Principles I; Transport Phenomena; Process Dynamics and Control; Fluid Mechanics; Chemical Process Technology; Petrochemical Engineering, Heat Transfer, Chemical Process Calculations, Process Instrumentation and Control

### **Research Interest:**

Removal of Pollutants Using Adsorption; Environmental Engineering; Petrochemical Technology; Residue Upgradation; Refining; Enhanced Oil Recovery; Modeling and Simulation; Optimization; Alternate energy sources; Biochemical engineering

### **Funded Research Project:**

Title	: Recovery of Multiple Metal Ions from Industrial Wastewater using Adsorption
Amount	: 2.00 Lakhs
Funding Agency	: UGC, New Delhi
Duration	: 2013-2015

### **Analytical Equipments Familiar With:**

Atomic Absorption Spectrophotometer, UV-VIS Spectrophotometer, Volume Trace Analyzer, FTIR Spectrophotometer and others

### **Softwares Familiar with**

Aspen Plus, Unisim, Fluent, Microsoft Office, Matlab, Lightroom, Adobe Illustrator, Adobe Photoshop

**Professional recognition, awards, fellowships received: 20**

1. Invited to **deliver lecture** on "Importance and Profile building" on 8th October 2025 at Department of Chemical Engineering, Sinhgad College of Engineering, Pune
2. Invited as **Resource Person** to deliver talk on "**Innovations in Watewater treatment: Advancing towards sustainable technologies**" on 20th August 2025 during the 5 days ISTE approved online faculty development programme on "Role of Engineering Professionals in Fulfilling Sustainable Development Goals".
3. Invited as **Guest of Honor** for the **inaugural function of the Chemical Engineering Conference PRAKALP 2025** on **21st March 2025**
4. Received **Fellowship** of **Indian Chemical Society(ICS)** in 2024 during its 100th year of existence.
5. Chaired Session at **CHEMCON 2024** organized by NIT, Jalandhar from 27<sup>th</sup> to 30<sup>th</sup> December 2024
6. Invited to **deliver lecture** on "Importance and Profile building" on 25th September 2024 at Department of Chemical Engineering, Sinhgad College of Engineering, Pune
7. Received **Fellowship** of **Indian Institute of Chemical Engineers(IIChE)** during CHEMCON 2023
8. Chaired session at **CHEMCON 2023** organized at HIT, Kolkata from 27<sup>th</sup> to 30<sup>th</sup> December 2023
9. Chaired session at **CHEMCON 2022** organized at HBTU, Kanpur from 27<sup>th</sup> to 30<sup>th</sup> December 2022
10. Chaired session at **ACMS 2022** organized by IIChE at HIT Kolkata from 14<sup>th</sup> to 16<sup>th</sup> April 2022.
11. Awarded by **India Prime Quality Education Awards 2021** organized by FoxClues, Dailyhunt and The Chronicle Journal.
12. Invited as **Resource Person at TEQIP-III** sponsored one week workshop on "Refresher Course in Chemical Engineering and Technology" 2019 at Padmabhooshan Vasantraodada Patil Institute of Technology (PVPIT), Budhgaon, Sangli during 18th June-22nd June 2019
13. Felicitated by **H.E. Smt. Pratibha Patil mam, Ex-President, India** for working in the field of Organizing Blood Donation Camps on 13<sup>th</sup> May 2018
14. Invited as **Judge** for 'Prakalp', 13<sup>th</sup> National Chemical Engineering Students Conference, organized by MIT Academy of Engineering, Pune along with IIChE, Pune regional Center on 8<sup>th</sup> September 2017
15. Invited as **Judge** for Promising and Innovative Young Chemical Engineer (PIYCE-2017), organised by AISSMS College of Engineering & IIChE Pune Regional Center on 26<sup>th</sup> March 2017
16. **Chaired** a session on "New process technologies & Adsorption technology" held during the 67<sup>th</sup> Annual Session of IIChE (CHEMCON-2014) and Indo-Japanese Symposium, jointly organized by Chandigarh Regional Center, IIChE and Dr, SSB University Institute of Chemical Engineering & Technology, Chandigarh, 27<sup>th</sup> to 30<sup>th</sup> December 2014

17. **Delivered** a lecture on "The Importance of Water" at Regional Science Congress, 2014 organized by Jawahar Navodaya Vidyalaya, Kajra, Jhunjhunu on 11<sup>th</sup> November, 2014
18. **Awarded** travel grant from Centre for International Co-operation in Science (CICS) to attend 2013 AIChE Annual Meeting held at Hilton San Francisco Union Square, San Francisco, CA during 3<sup>rd</sup> to 8<sup>th</sup> November 2013
19. **Chaired** a session in 5<sup>th</sup> International Congress of Chemistry and Environment (ICCE-2011), Glory Beach Resort, Port Dickson, Negeri Senbilan, Malaysia, 27<sup>th</sup> to 29<sup>th</sup> May 2011
20. Awarded **GATE scholarship** during M.E. from 2007-2009

**List of publications** : **131**

<u>Book Chapter Publication</u>	:	<b>03</b>
<u>Journal publications</u>	:	<b>20</b>
Related to my Ph.D. work	:	07
Others	:	13
<u>Conference Proceedings</u>	:	<b>116</b>
Related to my Ph.D. work	:	12
Students project supervised	:	104
<u>Others</u>	:	<b>03</b>

In the area of Reservoir Engineering, Simulation & Optimization of Petrochemical Processes using Aspen Plus, Enhanced Oil Recovery Techniques, Alternative Energy Sources, etc.

**Patents Applied** : **02**

- **Utkarsh Maheshwari**, Kirti Zare, D. P. Deshpande, Pankaj Vardhe. "Spiral Finned Crystallizer for Progressive Freeze Concentration", Application No. 201721022784A published on 21/07/2017
- **Utkarsh Maheshwari**, Priti Phalak, Sonali Singh, Shweta Kumbhar. "Production of wine from grapes and brown rice", Application no. 201721022793A published on 21/07/2017