



Department of Chemical Engineering Malaviya National Institute of Technology, Jaipur

(2020-21)

(1) Collaborative research publications.

Sr. No.	Name of the Faculty	Name of authors and their institute	Details of published research publication	Page Nos.
1	Dr. Vijayalaxmi Gosu/Dr. V. Subbaramaiah	1. B. H. Hameed – Dept. of Chemical Engineering, College of Engineering, Qatar University, Doha	"Lithium loaded coal fly ash as sustainable and effective catalyst for the synthesis of glycerol carbonate from glycerol." <i>Journal of Environmental Chemical Engineering</i> 9.5 (2021): 105999.	
2	Dr. Vijayalaxmi Gosu/Dr. V. Subbaramaiah/ Dr. U. K. Arun Kumar	Tian C. Zhang – Dept. of Civil and Environmental Engineering, University of NEBRASKA, Lincoln, Omaha, USA	"A novel Ce-CaO/MgO catalyst derived from marble waste through green synthesis route for glycerol carbonate synthesis." <i>Reaction Kinetics, Mechanisms and Catalysis</i> 132.2 (2021): 839-858.	
3	Dr. Vijayalaxmi Gosu	1. Sushil Kumar Saraswat – Dept. of Chemical Engineering, MBM Engineering College, JNV University, Jodhpur, Rajasthan 2. Muslum Demir - Department of Chemical Engineering, Osmaniye Korkutata University, Osmaniye, Turkey	"Adsorptive removal of heavy metals from industrial effluents using cow dung as the biosorbent: Kinetic and isotherm modeling." <i>Environmental Quality Management</i> 30.1 (2020): 51-60.	
4	Dr. Virendra K. Saharan	1. Kamalnayan Singh, D. P. Barai, Shivani S. Chawhan, B. A. Bhanavase, – Department of Chemical Engineering, LIT, Nagpur	Synthesis, characterization and heat transfer study of reduced graphene oxide-Al ₂ O ₃ nanocomposite based nanofluids: Investigation on thermal conductivity and rheology, <i>Material toady communications</i> 26 (Elsevier)	
5	Dr. Rohidas Bhoi	1. Dr. Ashish Unnarkat – PDPU, Gandhinagar 2. Dr. Ashutosh Namdeo – CSIR, North East Institute of Science and Technology, Jorhat, Assam	Ashish Unnarkat, Ashutosh Namdeo, Rohidas Bhoi "Bimetallic catalyzed decomposition of hydrogen peroxide-Kinetics, effect of support and reaction medium" <i>Materials Today: Proceedings</i> Volume :45 (6) / 5183-5189 / 2021 (Elsevier)	
6	Dr. Sushant Upadhyay/ Dr. Kailash Singh	1. Dr. Sarita Kalla – SVNIT, Surat	"Separation of HCl/water mixture using air gap membrane distillation, Taguchi optimization and artificial neural network." <i>Chemical Product and Process Modeling</i> (2020).	

7	Dr. Sushant Upadhyay	1. Sachin Bansal, Pankaj Kumar Pandey – Department of Chemical Engineering, Amity University, Rajasthan	"Dynamic Sorption of Methylene Blue (MB) Dye in Continuous Column Using Bio- Sorbent " Asian Journal of Water, Environment and Pollution Volume :18 / 87-93 / 2021 (IOS Press)
8	Dr. Kailash Singh	1. Awadhesh Singh Pundir, Varshika Singhal, Mayank Pandey, Garvit Gupta, Moh. Rohaan, Sunil Rajoria, Girish Tyagi – Dept. of Chemical Engineering, MIET – Meerut UP	"RTD Modeling of a Non-Ideal Coiled-Tube Reactor through Experimental Investigation for Pulse Input Using Methylene Blue Dye." Journal of Environmental Treatment Techniques 8.3 (2020): 1220-1231.
9	Dr. Lovjeet Singh	1. Gurmeet Singh, Jyoti Gahtori, Rishi Kumar Gupta, Rajaram Bal, Ankur Bordoloi – Light Stock Processing Division, CSIR, IIPR Dehradun 2. Chanchal Samanta - Bharat Petroleum Corporation Limited, R&D Center, Noida	"Catalytic Hydrogenation of Furfural to Furfuryl Alcohol Over Chromium-Free Catalyst: Enhanced Selectivity in the Presence of Solvent" Molecular Catalysis Volume :500 / 111339 / 2020 (Elsevier)
10	Dr. Lovjeet Singh	1. Sweeta Kotnala, Jyoti Gahtori, Arun Kumar, Ankur Bordoloi - Light Stock Processing Division, CSIR-Indian Institute of Petroleum, Dehradun, Uttarakhand 248005, India 2. Chelesea Tucker, Eric Van Steen Department of Chemical Engineering, Catalysis Institute, University of Cape Town, Cape Town 7700, South Africa	"Steam reforming of glycerol for syngas production using Pt-Ni nano particles supported on bimodal porous MgAl ₂ O ₄ " Energy & Fuels Volume :35 / 935-940 / 2021 ISBN: 0-306-46429-2 (American Chemical Society)
11	Dr. Vikas Kumar Sangal	1. Jaysingh Singla, Ina Thakur, Anoop Verma- School of Energy and Environment, Thapar institute of engineering and Technology, Patiala	"Dimensionally stable anode (Doped-MMO) mediated electro-oxidation and multi-response optimization study for remediation of urea wastewater" Chemosphere Volume :285 / 131498 / 2021 (Elsevier)
12	Dr. Vikas Kumar Sangal	1 Himadri Rajput, Rahi Changotra, Amit Dhir - School of Energy and Environment, Thapar institute of engineering and Technology, Patiala	"Photoelectrocatalytic treatment of recalcitrant compounds and bleach stage pulp and paper mill effluent using Au-TiO ₂ nanotube electrode" Chemical Engineering Journal Volume :408 / 127287 / 2021 (Elsevier)
13	Dr. Vikas Kumar Sangal	1. Steffi Talwar - Department of Chemical Engineering, Thapar institute of engineering and Technology, Patiala 2. Anoop Verma- School of Energy and Environment, Thapar institute of Technology, Patiala	"Synergistic degradation employing photocatalysis and photo-Fenton process of real industrial pharmaceutical effluent utilizing the Iron-Titanium dioxide composite" Process Safety and Environmental Protection Volume :146 / 564-576 / 2021 (Elsevier)
14	Dr. Dipaloy Dutta	1. Alpana Saini, Sanghamitra Barman, Kinshuk Sharma Karan Kumar, Nitin Goyal Department of Chemical Engineering, Thapar Institute of Engineering and Technology, Patiala, Punjab, India	"Kinetic and Thermodynamic Study of Thionine Dye Adsorption by Peanut hull" Indian Chemical Engineer Volume :00 / 1-11 / 2020 (Taylor & Francis)

15	Dr. Madhu Agarwal	1. Sanjeev Gupta, Pushkar Shukla - Grasim Industries Limited (Aditya Birla Group), Bharuch, Gujarat 392012, India	Naked eye detection and measurement of fluoride concentration in groundwater using novel synthesized receptor" Sensors and Actuators A: Physical Volume :318 / 112776 / 2021 (Elsevier)	
16	Dr. Madhu Agarwal	1. Dr. A. K. Dalai - Department of Chemical and Biological Engineering, College of Engineering university of Saskatchewan, Canada	"An overview on the recent advancements of sustainable heterogeneous catalysts and prominent continuous reactor for biodiesel production" Journal of Industrial and Engineering Chemistry Volume :88 / 58-77 / 2020 (Elsevier)	
17	Dr. Madhu Agarwal	1. Sanjeev Gupta, Pushkar Shukla - Grasim Industries Limited (Aditya Birla Group), Bharuch, Gujarat 392012, India	"Removal of fluoride from water by using a coagulant (inorganic polymeric coagulant)" Environmental Science and Pollution Research Volume :13 / 1-9 / 2020 (Springer)	
18	Dr. Surajit Ghosh	1. Ruby Gill, Ajit Sharma, Deepak Kumar, Pushpendra Kumar - Department of Chemistry , Lovely Professional University, Punjab 144411 2. Van-Huy Nguyen - Faculty of Applied Sciences, Ton Duc Thang University, Ho Chi Minh City 700000, Viet Nam 3. Dai-Viet N. Vo - Center of Excellence for Green Energy and Environmental Nanomaterials, Nguyen Tat Thanh University, Ho Chi Minh City 755414, Viet Nam 4. Thanh-Dong Pham - Faculty of Chemistry, University of Science, Vietnam National University, 334 Nguyen Trai, Thanh Xuan, Hanoi, Viet Nam; Key Laboratory of Advanced Materials for GreenGrowth, University of Science, Vietnam National University, 334 Nguyen Trai, Thanh Xuan, Hanoi, Viet Nam	"Vertically aligned ZnO nanorods for photoelectrochemical water splitting application" Materials Letter Volume :277 / 128295 / 2020 (Elsevier)	
19	Dr. Sonal/ Dr. Virendra Kumar Saharan/Dr. Suja George/ Dr. Rohidas Bhoi	1. Dr. K. K. Pant – IIT Delhi	"Recent Advancements and Detailed Understanding of Kinetics for Synthesis Gas Conversion into Liquid Fuel." <i>Catalysis for Clean Energy and Environmental Sustainability: Petrochemicals and Refining Processes- Volume 2 2</i> (2021): 459.	

20	Dr. Sonal/ Dr. Virendra Kumar Saharan/Dr. Suja George/ Dr. Rohidas Bhoi	1. Dr. K. K. Pant – IIT Delhi	"Recent Advancements and Detailed Understanding of Kinetics for Synthesis Gas Conversion into Liquid Fuel." <i>Catalysis for Clean Energy and Environmental Sustainability: Petrochemicals and Refining Processes-Volume 2 2</i> (2021): 459.	
21	Dr. Vikas Kumar Sangal	1. Steffi Talwar, Dr. Navneet Kaur - Department of Chemical Engineering, Thapar institute of engineering and Technology, Patiala 2. Anoop Verma- School of Energy and Environment, Thapar institute of engineering and Technology, Patiala	"Recent Advances in the Structural Modifications of Nanoparticles to Enhance Photocatalytic Activity." <i>Nanobiotechnology for Green Environment</i> (2021): 67-81.	
22	Dr. Vikas Kumar Sangal	1. Steffi Talwar, - Department of Chemical Engineering, Thapar institute of engineering and Technology, Patiala 2. Anoop Verma- School of Energy and Environment, Thapar institute of engineering and Technology, Patiala	"Application of Fe-TiO ₂ Nanoparticle Composite Encompassing the Dual Effect." <i>Nanobiotechnology for Green Environment</i> . CRC Press, 2021. 249-261.	
23	Dr. Lovjeet Singh	1. Brajesh Kumar – NIT Srinagar 2. Indu Chauhan – NIT Jalandhar	"Carbon-based Catalysts for Biorefinery Processes: Carbon-based Catalysts for Valorization of Glycerol Waste from Biodiesel Industry", <i>Handbook of Biomass Valorization for Industrial Applications</i> .	
24	Dr. Lovjeet Singh	1. Pradeep Kumar – IET Lucknow 2. Brajesh Kumar – NIT Srinagar	Photocatalytic Biomass Valorization "into Valuable Chemicals", <i>Handbook of Biomass Valorization for Industrial Applications</i> .	

(2) **Visit to other Institutions with date & Purpose.**

Sr. No.	Name of the Faculty	Institute visited	Date of visit	Purpose of visit	Page Nos.
1	Dr. Vikas Kumar Sangal	Mahatma Gandhi University, Kottayam, Kerala	11-13 th December 2020	Session Chair	
2	Dr. Vikas Kumar Sangal	Dr B R Ambedkar National Institute of Technology, Jalandhar	25-27 th June 2021	Session Chair	
3	Dr. Surajit Ghosh	Lovely Professional University, Phagwara, India	June 25-26, 2021	Session Chair	
4	Dr. Manish Vasishth	SVNIT, Surat	16-17 April 2021	Session Chair	
5	Dr. Manish Vasishth	NIT Jalandhar	25-27 June 2021	Session Chair	

(3) **Conferences/ FDPs/ Workshops/ Trainings/ Courses attended etc.**

Sr. No.	Name	Title of Event	Place	Funding Agency	Date(s)	Page Nos.
1	Dr. Surajit Ghosh	STC on “Computationally Designing of Materials for Materials Genome”	IIT Indore	CPDA	1-6 th March 2021	
2	Dr. Surajit Ghosh	STC in “Advances in Corrosion Sciences and Engineering”	IIT Indore	CPDA	21-26 Nov. 2020	
3	Dr. V. Subbaramaiah	Full agenda of DST and ACS virtual workshop	Online	NA	30-10-2020	
4	Dr. V. Subbaramaiah	International Webinar on “Green Fuels: Novel Catalytic Synthesis”	RBSET Campus, Lucknow	CPDA	18-07-2020	
5	Dr. V. Subbaramaiah	International Webinar on “Process Safety for Design Engineers”	GMR Institute of Technology, Kakinada	CPDA	29-06-2020	
6	Dr. Vikas Kumar Sangal	Fifth International Online Conference on Reuse and Recycling of Materials (Polymers, Wood, Paper, Leather, Glass, Metals, Ceramics, Semi Conductors, Water etc) and their products (ICRM – 2020)	Mahatma Gandhi University, Kottayam, Kerala	CPDA	11-13 th December 2020	
7	Dr. Sonal	National Workshop on Solid Waste Management	IIT Delhi	CPDA	30-31 July 2021	
8	Dr. V. Subbaramaiah	Webinar on “Industrial Safety and Occupational Health”	Annamalai University	CPDA	9 July 2020	
7	Dr. Lovjeet	National Workshop on Solid Waste Management	IIT Delhi	CPDA	30-31 July 2021	

Any other relevant point.

Sr. No.	Name of Faculty	Name of the Institute	Details	Date	Page Nos.
1	Dr. Surajit Ghosh	VIT, Vellore	External evaluator for UG final year projects	May, 2021	