# **Department of Chemical Engineering**

# Research Activity Report (July 2021- December 2021)

#### 1. Research activities of the faculty members:

Number of faculty in the Department	: 19
Number of faculty with Ph D qualification	: 14
Number of faculty pursuing Ph D	: 04

### Papers published by the faculty members in National and International Journals:

S. No.	Name of Faculty	Title of the paper	Title of Journal/ Publisher	Date
1	Dr. G. Sudha	Enzymatic Degradation of Polycarbonates: Response surface methodology (RSM) based approach,	Journal of Physics: Conference Series,IOP Publishing, ISSN: 1742-6588,E-ISSN: 1742-6596.	2021 Aug 1 (Vol. 1979, No. 1, p. 012006)
2	Dr. M. Srividhya	Characteristic study of exfoliated graphene particles from waste batteries	Brazilian Journal of Chemical Engineering	Aug,2021

## Papers presented by the faculty members in National and International conferences/ symposiums/ workshops:

Dr. G. Sudha, Associate Professor, Dept. of. Chemical Engineering presented a paper in International Conference on Smart Waste Management 2021 (SWM 2021) organized by Department of Chemical Engineering, SRMIST, Kattankulathur, 11.02.2021 to 12.02.2021.

National and International Conferences/ symposiums/ workshops attended by the Faculty members:

S.No.	Faculty Name	Short term course/Webinar/ Workshop/Seminars	Organized by	Duration
1.	Dr. N.Meyyappan, Professor and HOD, Dept. of Chemical Engineering	AICTE sponsored STTP Modeling and Simulation of Industrial Processes (MOSCHEM-Phase I)	Department of Chemical Engineering, Annamalai University.	20.09.2021 to 25.09.2021

2.	Dr.G.Sudha, Associate Professor, Dept. of. Chemical Engineering	Innovation Ambassador training (Foundation Level)	MoE's Innovation Cell & AICTE	30.06.2021 to 30.07.2021
3.	Dr. R. Rajesh @nithyanandam Associate Professor, Dept. of. Chemical Engineering	Webinar on Refining of the Future	Department of Chemical Engineering, Manipal University, Jaipur in association with Indian Chemical council.	20.7.2021
		Webinar on Innovative Disinfectant System – For Safe Business	Department of Mechanical Engineering, SVCE.	12.08.2021
4.	Mr.N.Arun Prem Anand, Assistant Professor, Dept. of. Chemical Engineering	AICTE sponsored STTP Modeling and Simulation of Industrial Processes – (MOSCHEM-Phase I)	Department of Chemical Engineering, Annamalai University.	20.09.2021 to 25.09.2021
		AICTE Sponsored STTP Recent Advances in soft computing techniques for optimizing industrial processes (MOSCHEM-Phase II)	Department of Chemical Engineering, Annamalai University.	27.09.2021 to 2.10.2021
5.	Dr.N.P.Kavitha, Assistant Professor, Dept. of. Chemical Engineering	AICTE sponsored STTP Modeling and Simulation of Industrial Processes – (MOSCHEM-Phase I)	Department of Chemical Engineering, Annamalai University.	20.09.2021 to 25.09.2021

6.	Dr.V.Divya, Assistant Professor, Dept. of. Chemical Engineering	AICTE sponsored STTP Modeling and Simulation of Industrial Processes – (MOSCHEM-Phase I)	Department of Chemical Engineering, Annamalai University.	20.09.2021 to 25.09.2021
		Seminar on Revised Accreditation Framework for Quality Enhancement in Higher Educational Institutes.	Internal Quality Assurance Cell of Sri Sairam Engineering College, Chennai.	14.07.2021 to 15.07.2021
		Workshop on Data Visualization using Tableau	Department of Information Technology, IQAC- Sri Venkateswara College of Engineering.	29.11.2021 to 30.11.2021
7.	Dr. Vishnu Prasad, Assistant Professor, Dept. of. Chemical Engineering	AICTE Sponsored STTP Recent Advances in soft computing techniques for optimizing industrial processes (MOSCHEM-Phase II)	Department of Chemical Engineering, Annamalai University.	27.09.2021 to 2.10.2021
		AICTE Sponsored STTP Optimization, Modeling and Simulation for process industries (MOSCHEM-Phase III)	Department of Chemical Engineering, Annamalai University.	04.10.2021 to 09.10.2021
		Webinar on Innovative Disinfectant System – For Safe Business	Department of Mechnical Engineering, SVCE.	12.08.2021

8.	Dr. S. Sivanarutselvi, Assistant Professor, Dept. of. Chemical Engineering	AICTE sponsored STTP Modeling and Simulation of Industrial Processes – (MOSCHEM-Phase I)	Department of Chemical Engineering, Annamalai University.	20.09.2021 to 25.09.2021
9.	Dr. M. Srividhya, Assistant Professor, Dept. of. Chemical Engineering	Webinar on Green Hydrogen Imperative for Carbon Neutrality	IEI, Pune local centre.	03.09.2021
10.	Dr. Philip Bernstein Saynik, Assistant Professor,	Webinar on Publishing Ethics	Taylor & Francis Group	26.08.2021
	Dept. of. Chemical Engineering	Webinar on How to be an effective peer reviewer	Peer Review Systems, Taylor & Francis Group	09.09.2021
		Scientific writing workshop	ACS Publications	20.09.2021

# FDP Attended

S.		Name of the Conference/		_
No.	Name of Faculty	symposium/ workshop	Place	Date
1	Dr. R. Palani, Associate Professor, Dept. of. Chemical Engineering	AICTE ATAL online FDP on FDP on Carbon Capture, Utilization and Storage: Opportunities and Challenges	Government engineering college, Kozhikode.	13.12.2021 to 17.12.2021
2	Dr. R. Rajesh @nithyanandam Associate Professor, Dept. of. Chemical Engineering	ATAL Sponsored FDP on Fluid flow analysis using Aspen Hysys and Aspen Plus for Chemical engineers	Vel Tech High Tech Dr.Rangarajan Dr.Sakunthala Engineering College, Chennai.	13.09.2021 to 17.09.2021
		AICTE ATAL online FDP on Recent advancements in sustainable energy storage and conversion	Manipal Institute of Technology	25.10.2021 to 29.10.2021
3	Dr.G.Sudha, Associate Professor, Dept. of. Chemical Engineering	Faculty Development Program on Current Trends in Desalination	Department of Chemical Engineering, SRM Institute of Science and Technology, Kattankulathur	04.10.2021 to 08.10.2021
4	Mrs. A.C.Vijayalakshmi, Assistant Professor, Dept. of. Chemical Engineering	ATAL Sponsored FDP on Fluid flow analysis using Aspen Hysys and Aspen Plus for Chemical engineers	Vel Tech High Tech Dr.Rangarajan Dr.Sagunthala Engineering College,Chennai	13.09.2021 to 17.09.2021
5	Dr. D.Sivakumar, Assistant Professor, Dept. of. Chemical Engineering	Online International Faculty Development Programme on Strategies on Effective Way to Write Research Papers	Department of Chemical Engineering, SSN College of Engineering, Kalavakkam, Chennai.	18.11.2021 to 27.11.2021
6	Mr.S.Jai Ganesh, Assistant Professor, Dept. of. Chemical Engineering	AICTE – ATAL Online Elementary FDP on Artificial Intelligence and Machine Learning with Data Science FDP - Online on Virtual Labs	Babasaheb Naik College of Engineering, Maharashtra. NITK Surathkal.	14.7.2021 to 18.07.2021 06.09.2021 to 09.09.2021

	Mr.S.Bharath	AICTE ATAL online FDP	Government	13.12.2021 to
7	Assistant Professor, Dept. of. Chemical Engineering	on Carbon Capture, Utilization and Storage: Opportunities and Challenges	engineering college, Kozhikode.	17.12.2021
8	Dr.N.P.Kavitha, Assistant Professor, Dept. of. Chemical Engineering	Online International Faculty Development Programme on Strategies on Effective Way to Write Research Papers	Department of Chemical Engineering, SSN College of Engineering, Kalavakkam, Chennai.	18.11.2021 to 27.11.2021
	Dr.G.Manikandan, Assistant Professor, Dept. of. Chemical Engineering	ATAL sponsored FDP on Artificial Intelligence and Machine Learning with Data Science	Babasaheb Naik College of Engineering	17.07.2021 to 18.07.2021
9		ATAL Sponsored FDP on Fluid flow analysis using Aspen Hysys and Aspen Plus for Chemical engineers	Vel Tech High Tech Dr.Rangarajan Dr.Sagunthala Engineering College,Chennai	13.09.2021 to 17.09.2021
		Online International Faculty Development Programme on Strategies on Effective Way to Write Research Papers	Department of Chemical Engineering, SSN College of Engineering, Kalavakkam, Chennai.	18.11.2021 to 27.11.2021
	Dr.V.Divya, Assistant Professor, Dept. of. Chemical Engineering	AICTE-ATAL FDP on Computational Methods in Chemical Engineering	National Institute of Technology Hamirpur, Himachal Pradesh	06.09.2021 to 10.09.2021
10		ATAL Sponsored FDP on Fluid flow analysis using Aspen Hysys and Aspen Plus for Chemical engineers	Vel Tech High Tech Dr.Rangarajan Dr.Sakunthala Engineering College, Chennai	13.09.2021 to 17.09.2021
11	Dr. Vishnu Prasad, Assistant Professor, Dept. of. Chemical Engineering	AICTE ATAL online FDP on Carbon Capture, Utilization and Storage: Opportunities and Challenges	Government engineering college, Kozhikode.	13.12.2021 to 17.12.2021
12	Dr. S. Sivanarutselvi, Assistant Professor, Dept. of. Chemical Engineering	AICTE ATAL FDP on Recent advances in management and processing of industrial and domestic waste	Siddaganga Institute of Technology Tumkur, Karnataka	16.08.2021 to 20.08.2021

	Dr. M. Srividhya,	AICTE ATAL FDP on	St.Joseph College	23.08.2021
13	Assistant Professor,	Molecular modeling and	of Engineering	to
15	Dept. of. Chemical	Insilico Drug Designing		27.08.2021
	Engineering			
	Mr. M. Ananda	AICTE-ISTE approved one	Dr.D.Y. Patil	18.10.2022 to
	Boopathy,	week FDP on Sustainable	Institute of	22.10.2021
14	Assistant Professor,	Waste Management	Technology,	
	Dept. of. Chemical		Pune	
	Engineering			

**Departmental research activities:** Ongoing funded projects in the in the Department:

S. No.	Name of the Project	Funding Agency	Period & Amount Sanctioned	Coordinators	Status of the project
1	Process development and pilot scale demonstration for removal of metallic and other impurities from used pickle solution of SSTP, NFC	BRNS	3 Years 20.15 Lakhs	Dr. N. Meyyappan, Dr. C. AnandBabu	In Progress

Research Presentations by students in National and International Conferences/ symposiums/ workshops:

S. No.	Name of Students	Title of the paper	Name of the Conference/ symposium/workshop	Date
1	Sowndarya V Third Year	IoT- lifesaver in chemical process industries	Vigyan Sabha - National level conference on case study organised by IICHE- GVPCE(A)	11/07/2021
2	Shreeyas M S Third year	Sustainable Farming - The Future	Vigyan Sabha - National level conference on case study organised by IICHE- GVPCE(A)	11/07/2021
3	Supraja G.S Third year	Case study on manufacture of medical oxygen and demand	VIGYAN SABHA a national level conference on case study conducted by IIChE Student Chapter, Department of Chemical Engineering, Gayatri Vidya Parishad	11/07/2021

			College of Engineering, Madhurawada,	
			Visakhapatnam.	
4	Arsath Kader K A Third year	Sustainable farming the future	VIGYAN SABHA a national level conference on case study conducted by IIChE Student Chapter, Department of Chemical Engineering, Gayatri Vidya Parishad College of Engineering, Madhurawada, Visakhapatnam.	11/07/2021
5	Sai Durga Shoba R Third year	Nanotechnology in Food Industry	Vigyan Sabha - National level conference on case study organised by IICHE- GVPCE(A)	11/07/2021
6	Darshan B Final year Arsath Kader K A Third year	Techfinix'21 (Second Prize)	National Level Technical Symposium organized by Paavai Engineering College,	27/08/2021
7	Vatsasri Raman Third year	Environmental Pollution & its Control	INVENTE6.0 - A National Level Technical Fest organized by SSN College of Engineering	9/9/2021
8	Varshini V R Third Year	Resource recovery form e- waste	2nd International Conference on Waste, Energy and Environment (ICWEE-2021) organized by Centre for Waste Management and Centre of Excellence for Energy Research jointly with Department of Chemical Engineering, Sathyabama Institute of Science and Technology.	24/09/2021
9	Shreeyas M S & Sowndarya V Third year	Environmental Pollution and Its Control	INVENTE6.0 - A National Level Technical Fest organized by SSN College of Engineering	9/10/2021
10	Ajay P Third year	Production Of Biofuel From Microalgae	INVENTE6.0 - A National Level Technical Fest organized by SSN College of Engineering	09/10/2021

11	Charulatha.G Second Year	A buisness model to utilize restaurant waste for producing valuable products	iCUBE	13/10/2021
12	Swetha k Third year	Resource recovery from e- waste	2nd International Conference on Waste, Energy and Environment "ICWEE-2021"	24/09/2021
13	Apoorva Ravi Final Year	Synthesis and Cyclic voltametric study of 2,4- bis(o-chlorophenyl)-3- azabicyclo [3.3.1] nonan- 9-one	Smart Materials and Emerging Technologies 2020 Conference	17/10/2020
14	Naidu Mahendra Swamydurai Final Year	In-situ synthesis and coating of silver nanoparticles using coir fiber	Virtual international conference on smart waste management, SWM-2021	12/10/2021
15	Tharun Kumar. S Supraja G.S Third year	Stellar Nucleosynthesis	National students' space challenge (NSSC)	10/12/2021