# **Faculty Achievements**

# Research Publications (Assessment Period-2019-2022):

S. No.	Faculty Name	Area of Specialization	Research Publication	Book / Book Chapters	Patent (Published/ Granted*)
1.	Dr. S.V Satyanarayana	Membrane Separations, Pervaporation, Environmental Engineering, Optimization	43	4	02
2.	Dr. T. Bala Narsaiah	Fluidization, Nanotechnology	35	1	-
3.	Mr. M. Kalyan Kumar	Environmental Engineering, Energy Engineering	1	1	-
4.	Dr. S Sharada	Microreactors, Nanotechnology, Environmental Engineering	16	5	01
5.	Dr. B. Dilip Kumar	Nanotechnology, Photo- electrochemistry, Batteries, Electrocatalytic materials, Environmental Engineering	12	4	01*
6.	Mr. K Subba Rao	Environmental Engineering	-	-	-
7.	Ms. P. Uma Maheshwari	Membrane separations, Pervaporation,	1	-	-
8.	Mr. M. Murali Naik	Adsorption	4	ı	-
9.	Mr. A. Raja Sekhar Babu	Nanotechnology	-	-	-
10.	Mr. K. Peddintaiah	Microreactors	3	-	-
11.	Ms. G. Neha Mallika	Nanotechnology	1	-	-
12.	Ms. D. Sowjanya	Reaction Engineering	-	-	-
13.	Mr. V. Ramanjeneyulu	Environmental engineering	-	-	-
14.	H. Rehana Anjum	Membrane separations, waste water treatment	1	-	-
15.	Ms. Ch Maneesha	Nanotechnology			

#### **Patents:**

S.No.	Name of the Invention	Names of the inventors	National/Inte rnational	Published/ Granted Year
1.	Antipsoriatic Effects of Clobetasol Loaded Nano Structured Lipid Carriers On Imiquimod Induced Psoriasi	Kudumala Ramesh Reddy,  Suggala Venkata Satyanarayana, Veeram Jayasankar Reddy, Palagati Sucharitha	National	Application No. 202141009486 A, Published (2021)
2.	Clobetasol Loaded Solid Lipid Nanoparticles on Imiquimod Induced Psoriasis	Kudumala Ramesh Reddy, Suggala Venkata SatyanarayanaVeeramJ ayasankar Reddy, Palagati Sucharitha	National	Application No. 202141009425 A, Published (2021)
3.	Click Chemistry based Approach to Improve the Photostability of Dyes for Long Term Stability Dye Sensitized photoelectrochemical Water splitting	Arun Prakash Upadhyay, <b>Dilip Kumar Behara</b> ,  Sri Sivakumar, Raj Ganesh S Pala	National	Indian Patent Granted with Patent No: 342773 on Granted (2020)
4	Electrocoagulation techniques for the effective treatment of waste water from various sources	Dr. S. Sharada, Mrs. Shaik Firoz	National	Filed on 13-04- 2023 Published on 05-05- 2023

### The faculty members are Editorial board members and reviewers as per the below

#### **Editorial Board Member of International/ National Journals:**

- Antarctica Journal of Chemical Engineering
- International Journal of Biological Sciences and Engineering
- Journal Material Science & Research
- International Journal of Nano Dimension
- International Journal of Chemistry & Chemical Engineering
- Journal of Environmental Research & Development
- International Journal of Application or Innovation in Engg. & Management
- International Journal of Scientific And Engineering Research
- International Journal or Research in Engineering & Deck amp; Technology
- International Journal of Advanced Research
- International Journal of Environmental Research & Damp; Management
- Research Journal of Engineering & Dry; Technology

#### **Reviewers of International Journals:**

- ACS Paragon Plus Environment (ACS Publications)
- Journal of Hazardous Materials (Elsevier Journal)
- Journal of Membrane Science (Elsevier Journal)
- Separation and Purification Technology (Elsevier Journal)
- Separation Science & Department (Taylor & Separation Science & Separat

- European Journal of Lipid Science (Wiley)
- Chemical Engineering Journal (Elsevier Journal)
- Journal of Chemical Engineering and Materials Science
- International Journal of Environmental Engineering (Elsevier Journal)
- Chinese Journal of Chemical Engineering (Elsevier Journal)

# Awards/Honors received by Faculty (Assessment Period-2019-2021):

S. No.	Faculty Name	Award/Honour	Organization	State/National/ International
1.	Dr.S.V.Satyanarayana	Received "Best researcher amongst Engineering faculty 2020" on 1 <sup>st</sup> May 2021 at SVCE, Tirupati	ISTE, AP section	State Award
2.	Dr. T. Bala Narsaiah	Received "State Teacher Award" in University level from Hon'ble Chief Minister Sri. Y. S. Jagan Mohan Reddy, Government of Andhra Pradesh on 05.09.2019 at Amaravathi, Vijayawada	JNTUA, Anantapur	State Award
3.	Dr. S. Sharada	Received "Young women scientist Award" from University society for Research and Development on the eve of International women's day celebrations on 8 <sup>th</sup> March 2022	USRD	State Award

# Sponsored Research (Assessment Period-2018-2021):

Investigators Names	Project Title	Duration	Funding Agency	Amount (in lakhs)
S. V. Satyanarayana, P Dinesh Sankar Reddy, Dilip Kumar Behara	Development of highly stable mixed matrix membranes (MMM) for dehydration of hydrazine hydrate via Pervaporation for rocket fuel applications.  Spatial distribution of Uraniun and	2018- 2021	DST- SERB- EMR	32.78
Satyanarayana	associated water quality parameters in ground water/drinking water	2016-	BRNS	30.84
Dinesh Sankar Reddy, Hema Chandra Reddy Dilip Kumar Behara*	Nanoparticle Enhanced Phase Change Material Microcapsules/Fibers for Advanced Energy Storage and Allied Applications"	2018- 2021	DST- SERB EMR	37.83

Dilip Kumar Behara,	Physicochemical Studies of			1.2
Dinesh Sankar Reddy	TiO <sub>2</sub> /Fe <sub>2</sub> O <sub>3</sub> /ZnO Heterostructure Assemblies for Electrochemical Water Splitting/Dye Degradation Applications	2017- 2019	UGC	
Dilip Kumar Behara, Dinesh Sankar Reddy	Physicochemical studies of Type - I/II heterostructure assemblies for electrochemical water splitting/dye degradation applications	2017- 2019	IEI, R&D	0.7
M. Kalyan Kumar	'Removal of pollutants in Municipal Waste Water by electro coagulation'	2022- 2024	RSG, JNTUA	1.0

<sup>\*</sup> In-charge Investigator for the period 2019-2022

# **FACULTY COMPETENCIES**

### 1. Dr.SV Satyanarayana, Professor

- > Research areas include membrane technology, waste water treatment, mass transfer
- ➤ Published papers in International Journals: 132, National Journals: 12, Conferences: 112, Books:05 & Patents: 02
- ➤ Elected as President (2019), **Indian Institute of Chemical Engineers**, **Kolkata**
- ➤ Elected as Vice President (2016) and Registrar (2015), **Indian Institute of Chemical Engineers**, **Kolkata**
- ➤ Received "Best researcher amongst Engineering faculty 2020" by ISTE, AP section on 1<sup>st</sup> May 2021
- Guided PhD: 32, MS (by Research): 1, M.Tech: 35, MSc: 2, B.Tech: 35
- ➤ Nine research projects for an amount of Rs 196.61 lakhs funded by, BRNS, BHEL, AICTE, DST, VSSC, UGC, NTRF

### **Sponsored Research Projects:**

Investigators Names	Project Title	Duration	Funding Agency	Amount (in lakhs)
S. V. Satyanarayana, P Dinesh Sankar Reddy, Dilip Kumar Behara	Development of highly stable mixed matrix membranes (MMM) for dehydration of hydrazine hydrate via Pervaporation for rocket fuel applications.	2018- 2021	DST- SERB- EMR	32.78
Prof. S. V. Satyanarayana	Spatial distribution of Uraniun and associated water quality parameters in ground water/drinking water	2016- 2020	BRNS	30.84

#### **Patents**

Name of the Invention	Names of the inventors	National/I nternation al	Published/ Granted Year
Antipsoriatic Effects of Clobetasol Loaded Nano Structured Lipid Carriers On Imiquimod Induced Psoriasi	Kudumala Ramesh Reddy, <b>Suggala Venkata Satyanarayana,</b> Veeram Jayasankar Reddy, Palagati Sucharitha	National	Application No. 202141009486 A, Published (2021)
Clobetasol Loaded Solid Lipid Nanoparticles on Imiquimod Induced Psoriasis	Kudumala Ramesh Reddy, <b>Suggala Venkata Satyanarayana</b> VeeramJ ayasankar Reddy, Palagati Sucharitha	National	Application No. 202141009425 A, Published (2021)

# 2. Dr. T. Bala Narasaiah, Professor

- ➤ Research areas include fluidization, waste water treatment, nanotechnology, micro reactor technology
- ➤ Published 66 papers in international & national journals, 21 papers in conference proceedings, 3 book chapters, 4 books
- ➤ Published a book on "Pharmaceutical waste water treatment using TiO<sub>2</sub> & N-TiO<sub>2</sub> nanoparticles, T. Bala Narsaiah, G. Neha Mallika, by LAMBERT academic publishing, ISBN 978-620-0-32243-2, 2020
- ➤ Published a book on "Computational Simulation Tools in Engineering", V. Ramesh Kumar, T. Bala Narsaiah, K. Ravichand, BS Publications, ISBN 978-93-8759-304-6, 2018
- ➤ Guided PhD: 09, M.Tech projects :26, B.Tech projects-25
- ➤ Received "State Teacher Award" in University level from Hon'ble Chief Minister Sri.Y.S.Jagan Mohan Reddy, Government of Andhra Pradesh on 05.09.2019 at Amaravati, Vijayawada
- > Appointed as Member, Task Force Committee, Telangana Pollution Control Board (TSPCB), Hyderabad from Oct, 2022.

# 3. Dr. S Sharada, Associate Professor:

- Research areas include Environmental Engineering , Nanotechnology and Reaction Engineering
- ➤ Published 35 research papers, 7 book chapter and 1 patent
- ➤ Received "Young women scientist Award" from University society for Research and Development on the eve of International women's day celebrations on 8<sup>th</sup> March 2022
- ➤ Guided M.Tech projects: 31, B.Tech projects: 27

#### **Patents:**

Name of the Invention	Names of the inventors	National/I nternatio nal	Published/ Granted Year
Electrocoagulation techniques for the effective treatment of waste water from various sources	21. 8. 81101100, 1.118. 8110111	National	Filed on 13-04-2023 Published on 05-05-2023

# 4. Dr. B. Dilip Kumar, Associate Professor

- Research areas include Nanotechnology, Photo-electrochemistry, Batteries, Electro catalytic materials, Environmental Engineering
- ➤ Published 21 research papers, 5 papers in conference proceedings, 5 book chapters and 1 patent
- ➤ One PhD awarded under during 2019-2023
- ➤ 2 DST-SERB projects, 1 IEI(India) project, 1 consultancy project completed
- ➤ Guided PhD: 01, M. Tech projects: 20, B.Tech projects: 25

Investigators Names	Project Title	Duration	Funding Agency	Amount (in lakhs)
Dinesh Sankar Reddy, Hema Chandra Reddy Dilip Kumar Behara*	Nanoparticle Enhanced Phase Change Material Microcapsules/Fibers for Advanced Energy Storage and Allied Applications"	2018- 2021	DST- SERB EMR	37.83
Dilip Kumar Behara,  Dinesh Sankar Reddy	Physicochemical Studies of TiO <sub>2</sub> /Fe <sub>2</sub> O <sub>3</sub> /ZnO Heterostructure Assemblies for Electrochemical Water Splitting/Dye Degradation Applications	2017- 2019	UGC	1.2
Dilip Kumar Behara, Dinesh Sankar Reddy	Physicochemical studies of Type - I/II heterostructure assemblies for electrochemical water splitting/dye degradation applications	2017- 2019	IEI, R&D	0.7

### **Patents**

Name of the Invention	Names of the inventors	National/Inte rnational	Published/ Granted Year
Click Chemistry based Approach to Improve the Photostability of Dyes for Long Term Stability Dye Sensitized photoelectrochemical Water splitting	Arun Prakash Upadhyay, <b>Dilip Kumar Behara</b> ,  Sri Sivakumar, Raj Ganesh S Pala	National	Indian Patent Granted with Patent No: 342773 on Granted (2020)

### 5. Mr. M. Kalyan Kumar, Assistant Professor

- Research areas include Environmental Engineering, Biochemical Engineering, Energy Engineering
- ➤ Published 12 research papers, 1 book chapters, 23 Conferences
- ➤ Guided M. Tech projects: 28, B.Tech projects: 31

**Sponsored Research Project:** 

Investigators Names	Project Title	Duration	Funding Agency	Amount (in lakhs)
M. Kalyan Kumar	'Removal of pollutants in Municipal Waste Water by electro coagulation'	2022- 2024	RSG, JNTUA	1.0

# 6. Mr. K Subba Rao, Assistant Professor (C)

- > Pursuing PhD in the area of chemical reaction Engineering
- Guided M. Tech projects: 02 B. Tech projects: 12

# 7. Dr. P. Uma Maheshwari, Assistant Professor (C)

- Research areas include Membrane separations, Pervaporation
- ➤ Published 6 research papers and 2 Book chapters
- ➤ Guided M. Tech projects: 03 B. Tech projects: 03

# 8. Dr. M. Murali Naik, Assistant Professor (C)

- Research areas include waste water treatment through adsorption
- Published 10 research paper, 4 books
- ➤ Guided M. Tech projects: 04 B.Tech projects: 11

# 9. Dr. A. Raja Sekhar Babu, Assistant Professor (C)

- Research areas include Nanotechnology, environmental Engineering
- ➤ Published 2 Research papers, 1 book Chapter and 1 conference proceeding
- ➤ Guided M. Tech projects: 08 B. Tech projects: 04

# 10.Dr. K. Peddintaiah, Assistant Professor (C)

- ➤ Research areas include Micro reactor technology
- ➤ Published 3 research paper and 1 conference proceeding
- Guided M. Tech projects: 02 B. Tech projects: 03

# 11.Ms. G. Neha Mallika, Assistant Professor (C)

- Research areas include Nanotechnology, environmental Engineering
- Published 3 Research papers
- ➤ Published a book on "Pharmaceutical waste water treatment using TiO<sub>2</sub> & N-TiO<sub>2</sub> nanoparticles, T. Bala Narsaiah, G. Neha Mallika, by LAMBERT academic publishing, ISBN 978-620-0-32243-2, 2020
- ➤ Guided M. Tech projects: B. Tech projects:

# 12.Mrs. D. Sowjanya, Assistant Professor (C)

- Research areas include chemical reaction engineering, micro reactor technology
- ➤ Guided M. Tech projects: 03, B. Tech projects: 03

# 13.Mr. V. Ramanjaneyulu, Assistant Professor (C)

- Research areas include environmental engineering, Rheology
- ➤ Guided M. Tech projects: B. Tech projects:

# 14.Mrs. H. Rehana Anjum, Assistant Professor (C)

- Research areas include membrane technology, waste water treatment
- ➤ Published 7 Research papers, Book Chapter 03
- ➤ Guided M. Tech projects: 01 B. Tech projects: 02

# 15.Mrs. Ms. Ch Maneesha, Assistant Professor (C)

- Research areas include Nano technology, waste water treatment
- ➤ Guided M. Tech projects: 02, B. Tech projects: 02