

Newsletter (2020-2021)

Department of Chemistry JNTUH University College of Engineering, Kukatpally, Hyderabad (T.S.) – 500085 INDIA.



Greetings from Department of Chemistry, JNTUH.

The Department of Chemistry was established at the inception of the Jawaharlal Nehru Technological University Hyderabad. The Department of Chemistry has become one of the important science departments of the University. The department also has dedicated and enthusiastic group of faculty members involved in research activities at the Ph.D level. The areas include Synthetic Organic Chemistry, Spectroscopy, Inorganic Metal-Complexes, Analytical Chemistry and Natural Products of Biological importance. The department has grants from CSIR, UGC. The Department of Chemistry stood as one of the highly prolific institutions carrying research in organic chemistry from 2010 to till today.

VISION:

The Department is committed to raise the intellectual tone of the young students in understanding and incorporating the basics of rapidly progressing changes in the fields of Science & Technology, with an objective of enhancing their competence by applying their proficiency and skill for industrial and economic development by creating better living environment in the society.



Dr. M. Thirumala Chary, Professor & Head Depat. Of Chemistry, JNTUH.

MISSION:

- To identify, scientifically evaluate and implement proven, prevention-oriented, forward-looking solutions to critical scientific and technological problems.
- To make technology a principal instrument of economic development of the country and to improve the quality of life of the people though technological education, innovation, research, training and consultancy.
- The Department has a small but enthusiastic group of Teaching Faculty who has taken to teaching of Chemistry and Chemical research wholeheartedly. The Department has good laboratories and infrastructural facilities with financial inputs from the University, the College, the UGC and CSIR.

THE GOALS:

- To strengthen the edifice of Engineering and Technological Education on the four pillars teaching, research, training and consultancy.
- To play the lead role in harnessing and developing human resources towards economic, industrial, management through Chemistry.
- To attain technical excellence.
- To stimulate, support and collaborate in R & D efforts with industry.
- To pioneer and actively participate in evolving appropriate technologies.
- To develop native genius for the development of rural India.
- To adhere to the ethics of instruction.

INNOVATIVE PRACTICES ADOPTED:

- To incorporate fields experiences and field problems in lectures.
- To involve students in consultancy projects.
- To give practical oriented live projects for students as their project works.
- To take students to sites where some important and latest techniques are used to give latest technology exposure to students.
- To arrange guest lecturers of well-known researchers from various institutes across the globe for the benefit of the students

Courses offered by Dept. of Chemistry during 2018-19:

- *1.* B.Tech–I year–Applied Chemistry (all branches)
- 2. B. Tech–II Year–Analytical & Organic Chemistry (Chemical Engineering)

Faculty of the Department

S.No	Name	Designation	Photo
1	Dr. Bhoomi Reddy Rama Devi	Professor	
2	Dr. Aparna Pasula	Assistant Professor	2
3	Dr. Thatituri Sabithakala	Assistant Professor	
4	Prof. M. Thirumala Chary	Professor & Head of the Department	
5	Dr. Taduri Ashok Kumar	Assistant Professor (C)	

FACULTY ACHIEVEMENTS:

Number of Ph.Ds awarded during 2020-21:

S.No.	Name of the PhD scholar	Name of the Department	Name of the guide	Year of registration	Year of award of the PhD
Dr. B.	Rama Devi:	•			
1.	B. Mahesh Goud	Chemistry	B. Rama Devi	2015	2020
Dr. P.	Aparna:				
2.	V. Durga Prasad	Chemistry	Co-guide	2011	2020
3.	Kotthireddy	Chemistry	Dr. P. Aparna	2015	2020
	Kavitha				
4.	Yakaiah Sargam	Chemistry	Co-guide	2012	2020
Dr. M.	Thirumala Chary:		-		
5.	K.Y.Kiran Kumar	Chemistry	Dr. M. Thirumala	2011	2020
			Chary (Co-		
			Supervisor)		
6.	Kishore Kumar	Chemistry	Dr. M. Thirumala	2015	2020
			Chary		

Number of research papers published during 2020-21: Dr. B. Rama Devi, Professor:

S.No.	Title of the paper	Name of the authors	Name of the journal	Year	Type of publicat ion
1.	A Simple, Specific, Mass Compatible and Validated Gas Chromatographic Method for the Estimation of Piperidine-3-amine Content in Linagliptin Finishedand Stability Samples	B. Janaki Durga Prasad Nagi Reddy Vuyyuru, A. Malleswara Reddy, B. Rama Devi, Y. Ravindra Kumar	Asian Journal of Chemistry	2020	Int
2.	Synthesis and Characterization of Potential Impurities of Eltrombopag Olamine	Bhoomireddy Rama Devi Katujoju Srinivasachary, Chennuri Rahesh, Shashikant Tiwari, Y.S. Somannavar, Sailendra Kumar Nadakudity, Krishna Murthy V.R. Moturu, Syamala Bhanuchandar		2020	Int

Dr. M. Thirumala Chary, Professor:

S.No.	Title of the paper	Name of the authors	Name of the journal	Year	Nat./Int
1.	A simple, sensitive, high resolution,customized reverse phase ultra high performance liquid chromatography method for related sub stances of a therapeutic peptide using qbd approach.	Kiran kumar, Venugopal rao, Thirumala Chary	Analytical methods	2020	Int
2.	Microwave Assisted Synthesis of 3-Chloro- N-(2-(5-chloro-1-tosyl- 1H-benzo [d] Imidazol- 2-yl) ethyl)-N- SubstitutedQuinoxalin-2- Amine Derivatives Using DCQX.	ShashikalaRamesh Laxminarayana, Thirumala Chary	Organic chemistry plus	2020	Int
3.	Synthesis, biological evaluation and docking studies of (4-Aryl-3- methyl-4,5- dihydropyrazolo[3,4- c]pyrazol-1(3a <i>H</i>)- yl)(3- hydroxyquinoxalin-2- yl)methanones	Rajani Devi Laxminarayana, Thirumala Chary	Indian Journal of Chemistry(B)	2020	National
4.	Synthesis, biological assay and docking studies of 2-(4,5- dihydro-3-substituted- 1H- pyrazol-5-yl)-3- methoxyquinoxaline	Rajani Devi Laxminarayana, Thirumala Chary	Indian journal of Heterocycli cChemistry	2020	National

Dr. T. Ashok Kumar, Assistant Professor (C):

S.No.	Title of thepaper	Name of the authors	Name of the journal	Year	Type of publication
1.	A simple and facile synthesis of novel 1,2,3-triazole substituted pyrimidine derivatives	Mahesh Goud Bakkolla, Ashok Kumar Taduri , Rama Devi Bhoomireddy	Journal of Heterocycl ic Chemistry	2020	Int

Bibliometrics of the publications during 2020-2021:

Dr. B. Rama Devi, Professor:

S.No.	Title of the Paper	Name of the authors	Title of the	Year of	Citation
			Journal	publication	Index
1.	A simple and facile synthesis of	Mahesh Goud Bakkolla,	Journal of	2020	1
	novel 1, 2, 3- triazole substituted	Ashok Kumar Taduri,	Heterocyclic		
	pyrimidine derivatives	Rama Devi Bhoomireddy	Chemistry		

Dr. P. Aparna, Assistant Professor:

S.No.	Title of the Paper	Authors	Journal Name	Year	Citation Index
1.	Discovery of DB18, a potent inhibitor of CLK kinases with a high selectivity against DYRK1A kinase	Anagani Kanaka Durga Bhavani	Bioorganic & Medicinal Chemistry	2020	2
2	3-aryl isoxazole side chains	Appala Venkata Ramana Murthy, Vennu Narendar,	Bioorganic & Medicinal Chemistry Letters,	2020	2
3	component Gewald	Kotthireddy Kavitha, Devulapally Srikrishna, Pramod Kumar Dubey, Pasula Aparna	Journal of Sulfur Chemistry	2020	10

S.No.	Title of the Paper	Authors	Journal Name	Year	Citation Index
		-	Journal of Heterocyclic Chemistry	2020	1

Dr. T. Ashok Kumar, Assistant Professor (C):

FacultyDevelopment Programmes (FDP) attended during 2020-21:

Dr. B. Rama Devi, Professor:

S.No.	Name of the teacher	Title of the Program	Duration (From-To)
1.	Dr. B. Rama Devi	E-Symposium on Recent Trends	4-6 th June 2021
		on Applications of Chemistry in	
		Engineering (RTACE - 2021)	
2.		3day workshop on Preparing for	12^{th} -14 th August, 2020.
		UG Program Accreditation	
		under IQAC, Sponsored by	
		TEQIP-III	
3.		"LEAD INDIA – Live Webinar	4 th July, 2020
		on "Imapct of CoVid-19 on the	-
		future of higher education"	
4.		"LEAD INDIA – Live Webinar	July 27, 2020
		on "Impact of CoVid-19 on the	
		development of rural economy-	
		challenges and opportunities"	
5.		Two-day faculty development	24 th January, 2020
		programme on Frontiers in	
		Engineering Chemistry	
		organized by CVR College of	
		Engg, Hyderabad	

On-line Conferences Organized:

S.No.	Name of the teacher	Title of the Program	Duration (From-To)
1.	Dr. B. Rama Devi,	National Conference on	January 28-29 th 2021
	Convener,	Advances in Chemistry and	
	NCACACE-21	Chemical Engineering.	
		(NCACACE-21) as Convener	

S.No	Title of the	Title of Conference /	Organized by	Year	Int/Nat.
	paper/lecture	Seminar	8 1		
	presented				
1.	One-pot as well as multi-step synthesis of n-alkylated (Z)-3- (1H- indole-3-yl)-2-(4-(2- oxo-2H- chromen-3-yl)thiazol- 2-yl)acrylonitriles under green reaction pathways and evaluation of their anti-hepato cellular carcinoma studies with	Advances in Chemistry and Chemical Engineering	Department of Chemistry& Chemical Engineering JNTUH - CEH	2021	National
2	molecular docking			2021	National
2.	Session Chair	National Conference on	Department of Chemistry&	2021	National
		Advances in Chemistry and Chemical Engineering	Chemical Engineering JNTUH - CEH		

Dr. P. Aparna, Assistant Professor:

Dr. T. Sabithakala, Assistant Professor:

FDP's attended (online):

S.No.	Name of the teacher	Title of the Program	Duration (From-To)
6.	Dr. T. Sabithakala, Asst. Professor	Webinar on "10 Essential Scholarly Publishing Tips froman ACS Editor"	03-06-2020.
7.		Webinar on "Covid-19 on the future of higher education-Challenges and opportunities	4-7-2020
8.		Webinar on "Employability PostCOVID Era: Expectation of Industry Vs Education System's Preparedness"	11-7-2020
9.		Workshop on Spectral Analysis of Organic Molecules NationalInstitute of Pharmaceutical Education and Research (NIPER)	16th & 17th July 2020.
10.		DST & ACS virtual workshop On Masteringthe publishing process	July 28, 2020
11.		International webinar on quantum and nano particles foradvanced applications	06 th August,2020
12.		3- dayonline workshop on preparing for UG programaccreditation	12-14 th August,2020
13.		International webinar on Biomedical product development- challenges and opportunities	4 th Sep, 2020

Orientation and Refresher Course attended:

S.NO	Name of the Course / Summer School	Place	Duration	Sponsoring Agency
1.	FDP on managing online classes and co-creating MOOCs	Online	2 Weeks 18-05-2020 to 03-06-2020	Ramanujan College, Delhi
2.	FDP on open source tools for research	Online	1 Weeks 08-06-2020 to 14-06-2020	Ramanujan College, Delhi
3.	FDP on Material science and nanotechnology(FDP-MSNT- 2020)	Online	2 Weeks 03-08-2020 to 17-08-2020	Dept. of Chemistry, B&B.Abdur Rahman Cresent Institute of Science andTechnology, Chennai.
4.	Science and technology of Advanced materials(STAM-2021)	Online	1 Week 22-02-2021 to 26-02-2021	AICTE, Dept. of basic &applied science, NIT- Arunachal Pradesh
5.	Two-week Online Refresher Course on "Novel Therapeutic Approaches in Drug Discovery & Development againstPandemic Diseases"	Online	01/03/2021 to 16/03/2021	UGC-HRDC,JNTUH, Hyderabad

List of Conferences and seminars conducted:

S.No.	Name of the teacher	Title of the Program	Duration (From-To)
1.	Dr. T. Sabithakala, Asst.	UGC sponsored one- week online	30-08-2020 to 06-09-
	Professor	short term course on "Modern	2021.
		methods in Organic Synthesis and	
		Analytical Techniques	
2.		Two day National conference on	28-29 th Jan,2021
		"Advances in chemistry and	
		Chemical Engineering (NCACACE-	
		2021)	
3.		Session chair for technical session in	28-29 th Jan,2021
		Two day National conference on	
		"Advances in chemistry and chemical	
		engineering(NCACACE-2021)	

S. No.	Name of the	Name of the Faculty&	Nature of the	Title of the Event	Duration	Grant released for	No. of Participan
	Dept./Centre	Designation	Event			conduct	ts
1	Chemistry	Dr. B. Rama Devi, Head & BOS Chairperson, Professor of Chemistry	National Conference	National Conferences on Advances in Chemistry And Chemical Engineering (NCACACE-21)	02 Days, 28th - 29th, January - 2021	Rs. 80000	100
2	Class Review Committee	BOS Chairperson,	Online Induction Programme for B.Tech I Yr. Students	Convert Potential into Performance	01 Day, 20th March, 2021	NIL	>100
3	Class Review Committee	BOS	Online Induction Programme for B.Tech I Yr. Students	Scope of Engineering - Need of skills - Role of Alumni	01 Day, 27th, March 2021	NIL	>100
4	UGC-HRDC	Dr. T. Sabithakala& Asst. Professor of Chemistry	Online Short term course	Modern Methods in Organic Synthesis and Analytical techniques	07 Days, 30th Aug- 06th Sept, 2021	NIL	>100
5	UGC-HRDC	Dr. P. Aparna & Asst. Professor of Chemistry	Online Short term course	Modern Methods in Organic Synthesis and Analytical techniques	07 Days, 30st Aug- 06th Sept, 2021	NIL	>100

Dr. T. Ashok Kumar, Assistant Professor (C):

Papers presented in a conference:

1. Green Catalysis: Syntheses and anti-cancer evaluation of some new 2-heterostyrylbenzimidazol using triacetylborate-glycerol, A Two day National conference on "Advances in chemistry and Chemical Engineering (NCACACE-2021), 28-29th Jan, 2021.

Value Added Programs attended:

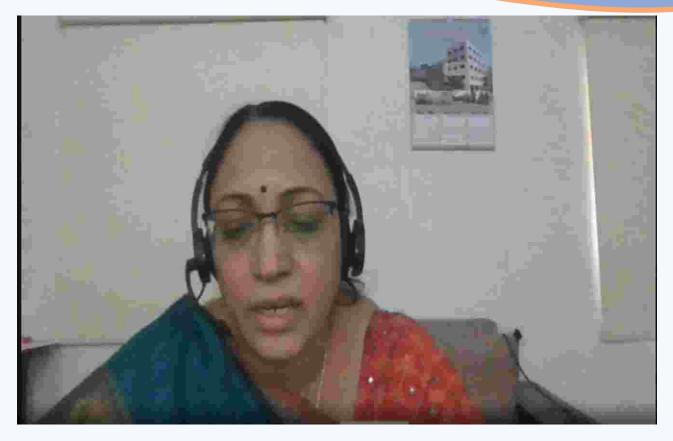
S.No.	Name of the teacher	Title of the Program	Duration (From-To)
1.	Dr. T. Ashok Kumar,	Reimagining How to Sustain	June 23, 2020
	Asst. Professor (C)	Student Engagement &Learning	
		– Virtually	
2.		Adopting Digital Methods in	June 23, 2020
		Teaching	
3.		How to improve teaching skills	June 24, 2020
4.		Digital teaching Tools	29 th June 2020 to 5th May,
			2020
5.		Advancements in Science and its	22 June to 26^{th} June, 2020
		Applications in Engineering	
6.		Recent Advances in Chemical	22^{nd} June – 28^{th} June, 2020
		Sciences	
7.		Materials Processing and	June 27, 2020
		Technology	
8.		3 day TTT Program on Modern	04 th -06 th August, 2020
		Online Tools and Software for	_
		Remote Teaching and E-Content	
		Development	

Seminars/Conferences organized:

A Two day National conference on "Advances in chemistry and Chemical Engineering (NCACACE-2021), 28-29th Jan, 2021.

Highlights:

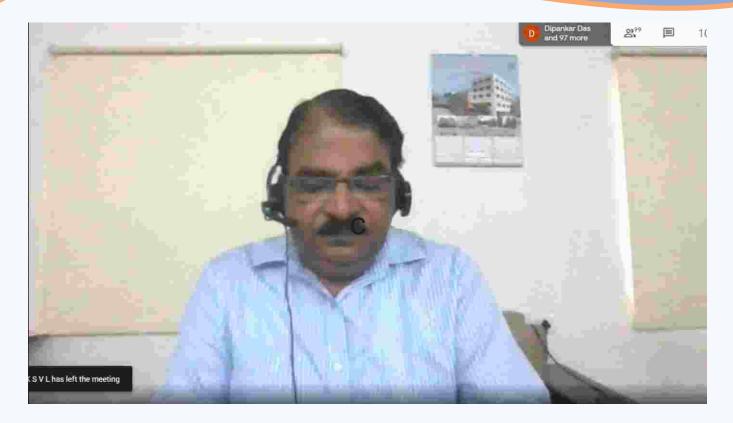
- Six speakers delivered invited talks who represented reputed institutions such as IICT, NIT's, IIT's and Universities from various parts of the country.
- More than 100 delegates were attended on the first day along with the registered participants.
- 25 research papers have been selected for oral presentations which were organized virtually using "Google Meet" platform.
- Three best oral paper presentations got selected for "best oral presentation" award.
- 10 Professors from both JNTU Hyderabad and JNTU Jagityala chaired all the sessions.
- Faculty members of Dept. of Chemistry & Dept. of Chemical Engg, JNTU Hyderabad and JNTU Jagityala organized the 2 day National conference successfully.



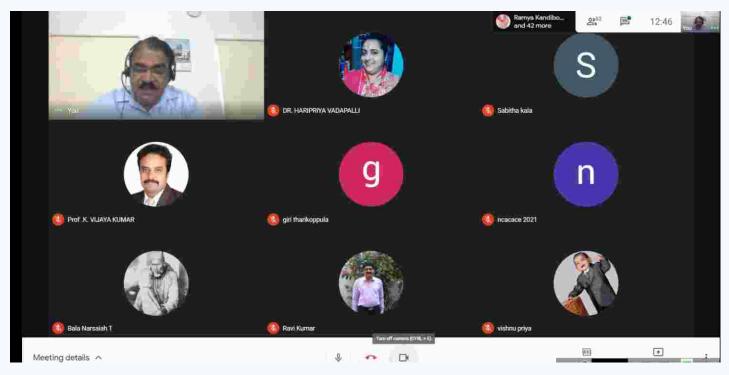
Dr. B. Rama Devi, Convener addressing the session, NCACACE-21



. P. Aparna, Co-ordinator addressing the session, NCACACE-21



Dr. M. Thirumala Chary addressing the session, NCACACE-21



Sessions, NCACACE-21