



FACULTY PROFILE

1. Academic accomplishments :

Sl.No	Degree	Specialization	University / Institution	Year of Completion
1	Ph.D.	Synthetic organic chemistry	CSIR-IICT/Osmania Univeristy	2010
3	M.Sc	Organic chemistry	Andhra University	2002
4	B.Sc	Maths, Physics, chemistry	Andhra University	1997

2. Area of Interest:

Synthesis of natural and synthetic bioactive molecules and methodology developments.

3. Professional / Experience:

Sl.No	Field of Experience	Institution / Organization	Nature of Appointment	From	To
1	Teaching	Tagore Govt. Arts and Science college, Pondicherry	Regular	Feb.2018	Mar.2022
2	Teaching	GITAM University, Hyderabad	Regular	2011	Feb. 2018
3	Industrial	Sai Advantium pharma, Hyderabad	Regular	2010	2011
4	Postdoc	Sungshin University, South Korea, Seoul	-	2009	2010
5	CSIR-JRF AND SRF	CSIR-IICT Hyderabad	Ph.D work	2003	2009
6	Chemist	Dr. Reddy's labs, Hyderabad	Regular	2002	2003

4. Publications:

1. Stereoselective synthesis of α -hydroxy- β -amino acid derivatives from β -hydroxy- γ,δ -unsaturated sulfilimine. *Tetrahedron Letters*, Volume 49, Issue 20, 12 May 2008, Pages 3216-3220

Sadagopan Raghavan, **Shaik Mustafa**.

2. A novel, easy and mild preparation of sulfilimines from sulfoxides using the Burgess reagent *Tetrahedron Letters*, Volume 49, Issue 27, 30 June 2008, Pages 4256-4259

Sadagopan Raghavan, **Shaik Mustafa**, Kailash Rathore.

3. An asymmetric synthesis of (+)-desoxoprosophylline

Tetrahedron Letters, Volume 49, Issue 35, 25 August 2008, Pages 5169-5171

Sadagopan Raghavan, **Shaik Mustafa**.

4. N-Cbz sulfilimines as valuable intramolecular nucleophiles for the stereoselective synthesis of (-)-deoxocassine and (+)-desoxoprosopphylline

Tetrahedron, Volume 64, Issue 43, 20 October 2008, Pages 10055-10061

Sadagopan Raghavan, **Shaik Mustafa**.

5. Versatile Route to (E)- and (Z)-2-Hydroxy-3,4-unsaturated Disubstituted Sulfilimines and Their Haloamidation Reaction. Sadagopan Raghavan, **Shaik Mustafa** and B. Sridhar. *Jour. Org. Chem*, **2009**, *74*, 4499-4507.

6. Synthesis and characterization of IMPY derivatives that regulate metal-induced amyloid- β aggregation. *Metallomics*, 2011, **3**, 284–291. Jung-Suk Choi,, Joseph J. Braymer, Se Kyung Park,, **Shaik Mustafa**, Junghyun Chae, and Mi Hee Lim.

7. Synthesis, characterization and biological activities of pendant arm - pyridyl-tetrazole Cu(II) complexes : DNA Binding /cleavage activity and Cytotoxic studies. *Chemistry & Biodiversity* *12* (2015) 1516-1534. **Shaik Mustafa**, B.UmaMaheswarao, M.S.Surendrababu, Kalidindi Krishnam Raju, G. Nageswara Rao.

8. Synthesis, structure elucidation and DFT studies of a new isomeric pyridyl-tetrazole Derivative. *Journal of Chemical and Pharmaceutical Research*, 2015, *7*(3):1907-1911. M. S. Surendra Babu, B. Umamaheswara Rao, V. Krishna, **Shaik Mustafa** and G. Nageswara Rao.

9. Unexpected one pot C(Aryl)-N bond cleavage and Quetiapine A formation from the reduction reaction of 2- amino-6-nitrophenol derivatives: *Tetrahedron Letters* *56* (2015) 6104-6107. **Shaik Mustafa***, K. Santhosh Reddy, M. S. Surendra babu.

10. *Synthesis, Antimicrobial, Bactericidal and Anti-Biofilm Activities of novel Pyridyl Tetrazole Analogs*; **Shaik Mustafa***, D. Vijaya Lakshmi, B. K. Sahoo. *Journal of Chemical and Pharmaceutical Research*, 2016, *8*(11):1-6.

11. *Synthesis, characterization and DNA cleavage studies of isomeric pyridyl-tetrazole ligands and their Ni(II) and Zn(II) complexes*. *Journal of Saudi Chemical Society* (2017) *21*, 291–299. M.S. Surendra Babu, B. Umamaheswara Rao, V. Krishna, **Shaik Mustafa***, G. Nageswara Rao.

12. *Cu-Complexes of Pyridyl Tetrazole Ligands with Pendant arms Amide and Hydrazone -Synthesis, Characterization, DNA binding and Antioxidant Properties*; *Transition Metal Chemistry* (2016) *41*: 517-523. K. Santhosh Reddy, M. S. Surendra babu, **Shaik Mustafa***.

13. Mild, Neutral and Versatile Protocol for Ester Hydrolysis. D. Vijaya laxmi, K. Balakrishna, **Shaik Mustafa***; *Asian Journal of Chemistry* *30*(2), 2018, 309-311

14. Design, Synthesis, UV-Vis and Fluorescence studies of Naphthoquinone pyridyl-tetrazole based chemosensor; K. Balakrishna, D. Vijayalakshmi, **S. Mustafa***, and T. K. Ghorpade. *Indian J Pharm Sci*, 2018; *80*(4):772-776.

15. Novel cliptype Pyridyl-Tetrazole Analogues- Synthesis, Characterization, Single X-ray crystal structure, DFT, Docking studies and Anti-oxidant Properties; M.S.Surendra Babu; K. Santhosh Reddy; KalYan Sundar Ghosh; Bijaya Ketan Sahoo; CH. Himasekar; **Shaik Mustafa*** *Asian Journal of Chemistry* *30*(2), 2018, 333-342

16. Synthesis, Characterization of Mixed Cu(II) Pyridyl Tetrazoles and 1,10-Phenanthroline Complexes - DFT and Biological Activity. *Open Chemistry Journal*, 2019, 6, 1-7. Ch. Himasekar, **Shaik Mustafa** and Manabolu S. Babu

5. CONFERENCES

- Presented a paper in International conference on '**CHEMISTRY BIOLOGY INTERFACE SYNERGETIC NEW FRONTIER**' (CBISNF) held in New Delhi, India (Nov.21-26, 2005).
- Participated and presented a paper in an international conference ARTS, SCIENCE, MANAGEMENT & ENGINEERING (ICASME – 2009), 23-25 April, 2009, Goa, India.
- Participated as logistics in a National Conference (NACT-2012, April, 2-3) organized by Dept. of Chemistry, GITAM University, Hyderabad, India.
- Participated in the International conference on '**Emerging Trends in Chemical and Pharmaceutical Sciences**' held in IICT-Hyderabad, India (Oct.15-17, 2014).
- Participated in the International Conference **on "Trend Setting Innovations in Chemical Sciences and Technology (TSCST-15)" Held at JNTU, Hyderabad** on 16-18, Dec. 2015
- Participated and presented a paper entitled "Design, Synthesis and Fluorescence studies of Naphthoquinone pyridyl-tetrazole based Chemical Probe" in a national conference Organized at National Institute of Technology, Puducherry (NITP), Karaikal on 19-20 Sept. 2018.
- Participated and presented a paper entitled "Synthesis and biological studies of pyridyl-tetrazole ligand 2-(1-((4-methyloxazol-2-yl)methyl)-1H-tetrazol-5-yl)pyridine' in a national conference Organized at Pondicherry Central University, Puducherry on 04-05 of March, 2019.

6. Orientation/Refresher/ Short term Courses /Workshop/Training

Programme attended:

Sl.No	Title of the Programme	Sponsors	Venue & Duration	Whether International /National / State /Regional / College or University Level
1	Orientation Course	UGC-HRDC-PU	HRDC-Pondicherry University, 20/11/2019-10/12/2019	National
2.	Refresher Course	UGC-HRDC-PU	HRDC-Pondicherry University, 15/07/2021-28/07/2021	National

7. Research Projects

Sl.No	Title of the Project	Status (ongoing/Completed)	Funding agency
1	<i>Efficient Diversification Synthesis of Potent Anti-Alzheimer Compounds</i>	Principal investigator, Completed	Rs.24,80,000, DST-SERB
2	<i>A novel investigation for an efficient nano crystalline metaloxide doped phenoxazine dye sensitized solar cells</i>	Principal investigator, Completed	Rs.12,35,800/- UGC-MRP

8. HONORS & AWARDS:

- Awarded Senior Research Fellowship (**SRF**) from the Council for Scientific and Industrial Research (**CSIR**), New Delhi, Govt. of India (2005).
- Awarded Junior Research Fellowship (**JRF**) from the Council for Scientific and Industrial Research (**CSIR**), New Delhi, Govt. of India (2003-2005).