


Faculty Profile

Name :	Dr. Sneha Sagar (Associate Professor, LJIP)	
Date of Birth :	29/01/1990	
Educational Qualifications:		
-Ph.D. (University)	Ph.D. in Pharmacy, NIRMA University (2013-2018)	
-Master's (University)	M.Pharm. in Medicinal Chemistry, NIPER Ahmedabad (2011-2013)	
-Bachelor's(University)	B.Pharm., Gujarat University (2007-2011)	
-Any Other:	-----	
Area of Specialization :	Pharmacy, Pharmaceutical Chemistry, Medicinal Chemistry	
Date of Joining (LJIP)	16/07/2018	
Present Position :	Associate Professor, Department of Pharmaceutical Chemistry, L.J. Institute of Pharmacy	
Contact Details:		
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Work Experience :	Teaching (2 years) Industrial(--)) Research & Development (5 years)	
Subjects taught :		
-Under Graduate level	Inorganic Chemistry (1st sem.), Organic Chemistry-I (2nd sem.), Organic Chemistry-II (3rd sem.), Organic Chemistry-III (4th sem.), Medicinal Chemistry-I (4th sem.), Medicinal Chemistry-II (5th sem.)	
-Post Graduate level	-----	
Area of Specialization in your field	Design, synthesis and biological activities of small heterocycles for treatment of various diseases.	
A brief account of work done by you in the M. Pharm. and Ph.D.	<p style="text-align: center;">M.Pharm:</p> <p style="text-align: center;"><i>“Novel Fused Pyrazolo-Pyrimidinone Analogues as Potential Anti-Diabetic Agents: A Dual Pharmacophore Approach ”</i></p> <p>Design, synthesis, biological activity and docking studies of series of novel pyrazolo[3,4-d]pyrimidinones were carried out. These molecules were tested by <i>in vitro</i> DPP-IV assay and further evaluated for <i>in vivo</i> diabetes model. Compounds exhibited promising <i>in vivo</i> blood glucose lowering activity in male <i>Wistar</i> rats.</p> <p style="text-align: center;">Ph.D.</p> <p style="text-align: center;"><i>“Design and synthesis of novel imidazo-pyridine derivatives and their bioisosteres in the management of Alzheimer’s disease”</i></p> <p>Alzheimer’s disease (AD) is associated with multiple neuropathological events including BACE-1 inhibition and neuronal inflammation which lead to the death of neuronal cells. In order to target multiple pathophysiology of the disease, multitarget-directed ligands (MTDLs) have been evolved. This study focuses on design, synthesis and biological activity of novel imidazo-pyridines and their bioisosteres in the treatment of AD. Imidazo[1,2-a]pyridines linked to</p>	

thiazoles, quinoxalines linked to bisthiazoles and thiadiazines linked to thiazoles were synthesized and characterized. These compounds exhibited potent activity in *in vitro* BACE-1 inhibition assay. *In vivo* studies demonstrated efficient anti-inflammatory activity with inherent gastro-intestinal safety. Moreover, Compounds unveiled noteworthy anti-oxidant, anti-amyloid, neuroprotective, and anti-amnesic properties. Overall, results of the present study manifest the potential outcome of these MTDLs for AD treatment.

New Technologies /methods developed by you

Scale up and Technology Transfer

Industrial Projects Carried Out :(No.)

Revenue/Royalty earned by the Organization in Indian Rupees

No. Government funded Projects undertaken by you and their total value

Research Guidance :

-Master's

-Guide for PhD

Summer/Winter/School/Conference/

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Workshops attended:

Summer/Winter/School/Conference/

Workshops Conducted:

Patents taken/applied for:

01 (Published)
1918/MUM/2013: 'Novel pyrazoles and pyrazolo pyrimidines' (2013)

Publications: No of books: -----

Research Papers : 5 (Elsevier- 03, ACS publications- 01, Bentham publication-01)

Some of the notable papers are mentioned below:

1. ACS Chemical Neuroscience 2018

Thiazolyl-thiadiazines as Beta Site Amyloid Precursor Protein Cleaving Enzyme-1 (BACE-1) Inhibitors and Anti-inflammatory Agents: Multitarget-Directed Ligands for the Efficient Management of Alzheimer's Disease

<https://pubs.acs.org/doi/10.1021/acchemneuro.8b00063>

2. Bioorganic Chemistry 2019

Pharmacological investigation of quinoxaline-bisthiazoles as multitarget-directed ligands for the treatment of Alzheimer's disease

<https://www.sciencedirect.com/science/article/abs/pii/S0045206818312987>

3. Life Sciences 2020

In silico studies on therapeutic agents for COVID-19: Drug repurposing approach

<https://www.sciencedirect.com/science/article/pii/S0024320520304008>

4. Bioorganic and Medicinal Chemistry Letters 2015

Design, synthesis and biological evaluation of novel pyrazolo-pyrimidinones as DPP-IV inhibitors in diabetes

<https://www.sciencedirect.com/science/article/abs/pii/S0960894X15300494>

5. Current Bioactive Compounds 2018

Conferences ,Workshops and Seminars

1. Attended one week national level **e-Faculty development programme** on “**Redefinig the Role of Educator in COVID-19 outbreak era**” organized by GTU-Anand Pharmacy College, 2020.
2. Participated in **29th APSI Scientist meet & International conference** organized by SMT. N. M. Padaliya Pharmacy College, 2019.
3. Completed one day training on “**Basics of HPLC, Instrumentation, Maintenance, Troubleshooting in Labsolutions on Shimadzu HPLC**”, at L. J. Institute of Pharmacy, 2019.
4. Participated in **Empresario Startup Summit 2018**, held in EDII, Gandhinagar.
5. Poster presentation and participation in “**International Conference on Drug Design**”, 2017 organised by Schrodinger.
6. Participated in Two days National workshop on “**Methods for Statistical Data Analysis of Experimental Data**” in 2017.
7. Attended conference on “**New Paradigm in Pharma Innovation**” organised by Pharma Labotica, 2016.
8. Poster presentation and participation in “**6th International Translational Cancer Research Conference**”, 2016.
9. Poster presentation and participation in “**7th International Symposium on Current Trends in Pharmaceutical Sciences**” organised by Ramanbhai foundation in 2015.
10. Participated in Hands on workshop on “**Computer Aided Drug Design and PK/PD Modelling**”, 2014.
11. Attended National Workshop on Molecular Modeling for Drug Design (MMDD-12), 2012.

Notable Achievements and activity excuted:

- Awarded gold medal in NIPER Ahmedabad for Securing 1st Rank in M. S. Pharm Medicinal chemistry with CGPA 8.8/10
- Received DST-INSPIRE fellowship to carry put Ph.D. Research work (2013-2018).
- Received best Ph. D thesis award by Gujarat Science Academy in Pharmaceutical Sciences in the year 2019.

Association with Professional Bodies

Grants Received/Fetched:

Consultancy and Expertise available for industries
