

TRANSFORMING CHEMICAL SCIENCE INTO A SUSTAINABLE BUSINESS

We are an innovation-led sustainable scientific solution provider. Offering services for medicinal chemistry, process development, CRAMS business, and R and D digitization. The sustainopreneur team of SynVision Chem brings years of relevant experience to the company.

A team of experienced chemists, technicians, and business professionals is responsible for dealing transparently and ethically with customers.





Our Values "S P I R I T"

- <u>S</u>ustainopreneurship: Entrepreneurship through innovation for sustainability.
- Passion: Passion in everything we do.
- Integrity: Maintaining high moral principles and professional standards.
- <u>R</u>espect: Treat people with courtesy, politeness, and kindness.
- Ingenuity: Think out of the box (beyond the textbook teaching).
- <u>T</u>eam Work: Team is the only identity, demonstrating team spirit with internal & amp; external partners.

Our Vision

To Be A Preferred Partner For Sustainable Innovative Scientific Solutions.

Why choose us?

Your Success Is Our Goal

Value For Money:

Cost-effectiveness and On-Time delivery are integral parts of our business model.

Quality:

Quality is the signature of our work. We value your business and are committed to delivering quality standards.

Strong Expertise:

With our core competence in the field, we offer the best value to our customers.

Out Of The Box Thinking:

We don't let our knowledge become our limitation. We go beyond textbook teaching to explore and invent novel sustainable processes and synthetic routes.



Flexible Business Model

A flexible business model enables clients to work as a team. Depending on requirements, clients can either choose a full-time equivalent (FTE) or a fee-for-service (FFS) pricing model, or a hybrid of both for synthetic chemistry services. We also offer a more flexible and cost-effective, Fees-for-Success pricing model to minimize risk to success factor.

Our Services Includes

Medicinal Chemistry

Library synthesis, Scale-up of Intermediate / Potential candidates.

• Custom Synthesis

Cost-effective and innovative solutions for custom synthesis requirements.

• R&D Digitization

Selection, configuration, adoption, and integration of laboratory digitization systems (LIMS, E-Lab Notebook, Inventory system, Data Analysis System.

Sustainable process development

Sustainable process development for API, KSM, and advanced intermediate of API, agrochemicals, specialty chemicals, and intermediates.

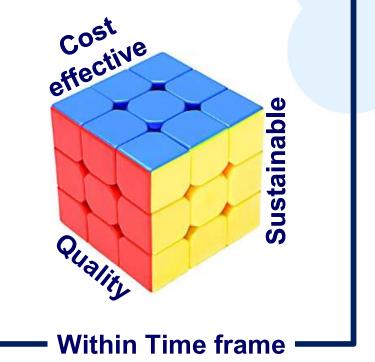
• CRAMS

We have collaboration with third-party manufacturing site to offer facilitation for techtransfer and manufacturing up to several hundred kilograms in non-GMP / cGMP environments.

Looking for Custom Synthesis Partner ? SynVision Chem INDUATION EXCELLENCE

Our custom synthesis services are designed to offer, a multidimensional-optimized solution, to meet the custom synthesis needs of our client "On Time" and with desired quality.

We offer cost-effective solutions through our "Fee-For-Success" business model.



Section Science Sc



Our Strength and Limitations

Strength

- We have expertise to handle any Organic
 Reactions from mg to multi Kg scale.
- Temp range from -80 to 160 C
- We can develop a process for synthesizing same cyano-molecule without using hazardous Regents like cyanides.

- Isotope labelling
- Reaction at Temp higher than 160 C

Limitations

Cyanation Reaction using Cyanide salt like NaCN, KCN.

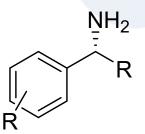


Achievement so far.....

Our R&D is operational since March 2023,

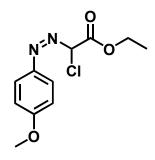
Since then, we have achieved many breakthroughs, in the area of Custom Synthesis and Process development.

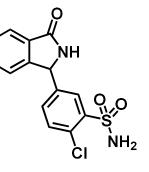
- > Developed sustainable process as an alternative to transamination:
- Boc and Fmoc protection of Amino acids:
- Successfully completed five projects on sustainable processes for important KSMs of API
- Process development for manufacturing of peptide coupling agent
- > Impurity synthesis: Two process impurities for API synthesized and delivered.

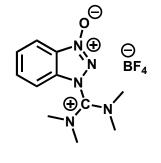


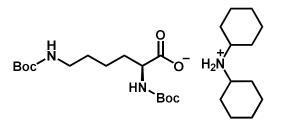


Process Development and Tech-transfer successfully done for following products









Apixaban KSM

Chlorpthalidone KSM

Ο

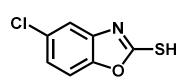
0/

 H_2N

TBTU

N,N-Di-Boc-L-lysine Dicyclohexylammonium Salt

IN-PROCESS



Suvorexant KSM

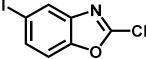
Chlorothiazide KSM

'NH₂

NH₂

HOTH CI

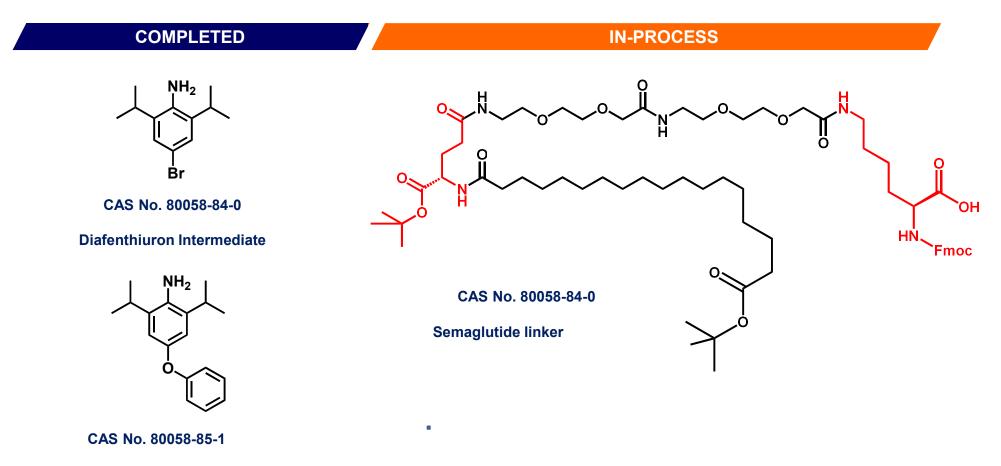
Ambroxol:HCI KSM



Suvorexant KSM



Custom Synthesis



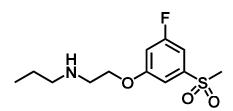
Diafenthiuron Intermediate



Research Reference Compouds

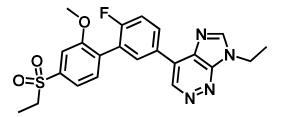
MESDOPETAM

DARIGABAT



Mesdopetam (IRL790) functions as a dopamine D3 receptor antagonist, showing a Ki value of 90 nM and an IC50 of 9.8 μ M for the human recombinant D3 receptor. It possesses psychomotor stabilizing properties and is utilized in the study of motor and psychiatric issues associated with Parkinson's disease. The compound's salt and free forms exhibit similar biological activity at equivalent molar concentrations. The salt form, Mesdopetam hemitartrate, offers improved water solubility and stability.

Name	: N-(2-(3-fluoro-5-(methylsulfonyl)phenoxy)ethyl)	
	propan-1-amine	
Synonyms	s: Mesdopetam / IRL790	
Stats	: Phase lib/Phase III Clinical trial for PD	
CAS No.	: 1403894-72-3	
MF	: C ₁₂ H ₁₈ FNO ₃ S	
MW	: 275.34	
Purity	: NLT 98%	



Darigabat is GABA_A receptor positive allosteric modulator. It selectively targets $\alpha 2$, $\alpha 3$, and $\alpha 5$ subunit-containing GABA_A receptors,

Name	: 7-ethyl-4-(4'-(ethylsulfonyl)-6-fluoro-2'-methoxy-	
	[1,1'-biphenyl]-3-yl)-7H-imidazo[4,5-c]pyridazine	
Synonyms: Darigabat / CVL865 / PF-06372865		
Stats	: Phase II Clinical trial for photosensitive	
	epilepsy, focal onset seizures, panic disorder,	
	and other anxiety disorders.	
CAS No. : 1614245-70-3		
MF	: C ₁₂ H ₂₁ FN ₄ O ₃ S	
MW	: 440.13	
Purity	: NLT 98%	



Our expertise in Chemistry.....

- > Asymmetric synthesis.
- Functional group transformative reactions (Oxidation, Reduction substitution)
- Synthesis of Borane reagents: Boronic acids, Boronic esters, Fluoroborates,
- Ammonia-Borane, amino-boranes.
- Fluorination: Synthesis of fluroro-intermediates
- > Chlorination, Bromination, Nitration reactions
- C-C, C-N coupling reactions
- Grignard reagents, n-BuLi, 9-BBN, Ipc₂BOMe can be handle upto Kg scale.
- Phosphoramidites and H-Phosphonates (building blocks for oligonucleotide synthesis)
- Protected natural and modified amino acids.
- Carbohydrates and heterocyclic intermediate synthesis.

SynVision Chem Our expertise in Sustainable Process Development

Unprecedented "In Water" Imidazole Carbonylation: Paradigm Shift for Preparation of Urea and Carbamate

Kamlesh J. Padiya,^{*,†} Sandip Gavade,[‡] Bhavana Kardile,[†] Manojkumar Tiwari,[‡] Swapnil Bajare,[†] Madhav Mane,[‡] Vivek Gaware,[‡] Shaji Varghese,[‡] Dipak Harel,[‡] and Suresh Kurhade[‡]

Department of Medicinal Chemistry, Nycomed Pharma Pvt. Ltd., 29-31 Suren Road, Andheri east, Mumbai-400 092, India

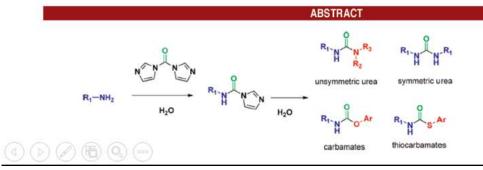


The paper was highlighted in OPRD Safety Notables: Information from the Literature Org. Proc. Res. Dev. 2012, 16, 12, 1980-1985

Some Items of Interest to Process R&D Chemists and Engineers Org. Proc. Res. Dev. 2012, 16, 7, 1244-1257

kamleshpadiya@lupinpharma.com

Received April 20, 2012



Urea Derivatives in Modern Drug Discovery and Medicinal Chemistry J. Med. Chem. 2020, 63, 6, 2751-2788

Organic Carbamates in Drug Design and Medicinal Chemistry J. Med. Chem. 2015, 58, 7, 2895-2940



Our expertise in Sustainable Process Development

Article



pubs.acs.org/OPRD

"On-Water" Reaction of (Thio)isocyanate: A Sustainable Process for the Synthesis of Unsymmetrical (Thio)ureas

Amit Dattatray Karche, Prabakaran Kamalakannan, Rajendra Powar, Gautham G. Shenoy, and Kamlesh J. Padiya*



ABSTRACT: We describe a facile, sustainable, and chemoselective process for the synthesis of unsymmetrical (thio)ureas through the "on-water" reaction of (thio)isocyanates with amines. Detailed mechanistic studies revealed that the physical nature and solubility of reagents in water are responsible for the observed reaction rate and selectivity. Significant efforts have been made to design a scalable process to achieve the "zero waste" "water-mediated" protocol for the synthesis of (thio)ureas from (thio)isocyanates and amines. The decisive advantages of the process are the simple product isolation through filtration and the recycling of the water effluent. It also avoids the use of sensitive anhydrous reaction conditions and toxic volatile organic solvents. The developed process ensures that chemoselectivity and robustness and are successfully scaled-up to produce 100 g of isoproturon in high yield and purity. Green chemistry parameters such as process mass intensity, reaction mass efficiency, and molar efficiency values (with and without solvent) were calculated and compared.

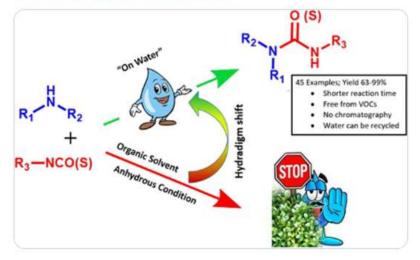
KEYWORDS: water-mediated synthesis, on-water synthesis, green chemistry, sustainable process, urea synthesis, thiourea synthesis



Organic Process Research & Development @OPRD ACS

An easy, chemoselective, and sustainable synthesis of (thio)ureas via "On Water" reaction of (thio)isocyanates, work epitomizing a paradigm shift to the "hydradigm." Please have a look at the article from @PadiyaKamlesh and colleagues. Nice TOC graphic! pubs.acs.org/doi/10.1021/ac...

...





CONTACT US



19/A, D-1 Block, Punit Industries, MIDC Chinchwad, Pune 411019, INDIA



+91 8530390457 +91 9765800457



www.synvisionchem.com info@synvisionchem.com

THANK YOU!!