Dr. Gopal Chandru Senadi, Ph.D

Nationality: Indian

Language: Telugu, Tamil, English

Autobiography:

I would like to introduce as Dr. Gopal Chandru Senadi born on 29-03-1985, Chennai, and Tamilnadu, India. I did by B.Sc Chemistry in 2005 from University of Madras followed by M.Sc Applied Chemistry from Anna University in 2007. After the graduation, I was associated with two leading Contract Research Organizations like GVK Biosciences Pvt Ltd, Hyderabad, Telangana and Anthem Biosciences Pvt Ltd, Bengaluru, Karnataka for a period of 4.4 years as a synthetic organic chemist. During these times, I have understood the significance of organic chemist and their contributions to the drug synthesis and process development. With the above-mentioned experience, I was highly motivated to pursue Ph.D in Organic Chemistry, particularly an international PhD program. In this context, I was informed about the excellent facility available in the Taiwan for the international students who were interested to study depending upon their educational profiles.

I found Prof. Jeh-Jeng Wang, from Department of Medicinal and Applied Chemistry at Kaohsiung Medical University as my choice of interest. Fortunately, I was selected to work in his lab after an online video interview and other official process. My doctoral work discussed the harnessing activity of alkynes/alkenes under various catalytic conditions and exploring the scope of isocyanides as a C1 synthons. During the postdoctoral stint in the same lab (Aug 2015-July 2018), I was more interested in exploring the reactivity of isocyanides and carbon-carbon multiple bonds under metal- as well as metal-free conditions. The developed new synthetic methods will be useful for the medicinal chemists and industrial people in the synthesis of bioactive drug molecules and its scaffolds for various infectious diseases. The outcome of this research work were resulted in good research publications including a Taiwanese patent.

I cannot move forward without mentioning the freedom availed from faculties at KMU. In particular, my mentor who was also an active researcher himself and always happy to discuss the problem and solutions to overcome it scientifically. Hard work alone is not sufficient to become an efficient researcher, the need of advanced instruments to get the data’s of your investigated research are highly crucial without any time

	delay and KMU has an excellent lab facilities with sophisticated instruments. To mention a few from a chemist point of view are NMR, X-Ray, GC, GC-MS, LC-MS, HPLC, UV-VIS, FL, FTIR, Raman, etc. Importantly, the students promptly without any delay can handle these instruments. The exposure obtained by repeated handling of these instruments not only made me an expert of these techniques, also became an asset throughout my career. I certainly do not have words to express how my life has changed during this time living in Taiwan. Chinese language, night markets, tea, etc everything has blended into a special kind of life. Mountains, canyons, beaches and amazing food – this delightful island has it all. The living expenses are not too high as compared with western countries and found out that people are too friendly and too trustable and polite. I never imagined that a human being could be that kind. I am fascinated by these behaviors and the country is very safe at any point of time in a whole day. Today, I would say confidently that "Taiwan is my second home" because I dwell there for 7 years (11th September 2011 – 5th August 2018) including PhD for 4 year and as a Postdoc for 3 years.

Doctoral:

Institute: Department of Medicinal and Applied Chemistry, Kaohsiung Medical University
Research field: Organic Synthesis and New Synthetic Methodologies
Thesis supervisor: Prof. Dr. Jeh-Jeng Wang

Master:

Institute: College of Engineering, Anna University
Research field: Resolution of Racemic Carboxylic acid using Chiral Amines
Thesis supervisor / Co-advisor: Prof. Dr. V. Murugesan & Prof. Dr. D. V. Ramana

Selected Publications:

S.No.	Author(s)	Title	Name of Journal	Volume	Page	Year
1	**Senadi, G. C.;** Kudale, V. S.; Wang, J. – J.	Sustainable Methine Sources for the Synthesis of Heterocycles under Metal- and Peroxide-Free Conditions	Green Chemistry	21	979	2019
2	**Senadi, G. C.;** Wang, J. -J	*p* -TsOH Promoted Synthesis of Benzo-Fused O-Heterocycles from	Green Chemistry	20	3420	2018

		Alkynols via Ring Contraction and C-O Scission Strategy				
3	**Senadi, G. C.;** Guo, B. -C.; Chang, Y. -C.; Hu, W. -P.; Wang, J. –J**.**	Synthesis of Fused-Pyrazines via Pd-Catalyzed Double Benzyl Isocyanide Insertion and Cross-Dehydrogenative Coupling	Advanced Synthesis and Catalysis	360	491	2018
4	**Senadi, G. C.;** Reddy, M. M.; Lu, T. -Y.; Wang, J. –J.	Oximes as a Recyclable Template for the Synthesis of Ureas and Carbamates by an In Situ Generation of Carbamoyl Oximes	Green Chemistry	19	4272	2017
5	**Senadi, G. C.;** Wang, J. -Q.; Gore, B. S.; Wang, J. –J.	Bis(dibenzylideneacetone)palladium(0)/tert-Butyl Nitrite- Catalyzed Cyclization of *o*-Alkynylanilines with tert-Butyl Nitrite: Synthesis and Applications of Indazole 2-Oxides	Advanced Synthesis and Catalysis	359	2747	2017
6	**Senadi, G. C.;** Lu, T.-Y.; Dhandabani, G. K.; Wang, J. –J**.**	Palladium-Catalyzed Double-Isocyanide Insertion via Oxidative N–O Cleavage of Acetyl Oximes: Syntheses of 2H-Pyrrol-2-imines	Organic Letters	19	1172	2017
7	**Senadi, G. C.;** Dhandabani, G. K.; Hu, W. –P.; Wang, J. –J	Metal-free annulation/aerobic oxidative dehydrogenation of cyclohexanones with o-acylanilines: efficient syntheses of acridines	Green Chemistry	18	6241	2016
8	**Senadi, G. C.;** Guo, B. C.; Hu, W. –P.; Wang, J. –J	Iodine-promoted cyclization of N-propynyl amides and N-allyl amides via sulfonylation and sulfenylation	Chemical Communications	52	11410	2016
9	**Senadi, G. C.;** Gore, B. S.; Hu, W. -P, Wang, J. –J.	BF_3-Etherate Promoted Cascade Reaction of 2-Alkynylanilines with Nitriles: One-Pot Assembly of 4-Amido-Cinnolines	Organic Letters	18	2890	2016
10	**Senadi, G. C.;** Liao, C. -M.; Kuo, K. -K.; Lin, J. -C.; Chang, L. -S.; Wang, J. -J, Hu, W.- P	Design, Synthesis and Antimetastatic Evaluation of 1-benzothiazolylphenylbenzotriazoles for Photodynamic Therapy in Oral Cancer Cells	MedChemComm	7	1151	2016
11	**Senadi, G. C.;** Chen, C. -Y.; Kuo, K. -K.; Lin, Y. -T.; Wang, J. -J.; Lee, J. -H.; Wang, Y. -C.; Hu, W. –P.	Design and synthesis of pyrrolobenzodiazepine-gallic hybrid agents as p53-dependent and -independent apoptogenic signaling in melanoma cells	European Journal of Medicinal Chemistry	109	59	2016
12	**Senadi, G. C.;** Hu, W. -P.; Lu, T. -Y.; Garkhedkar, A. M.; Vandavasi, J. K.; Wang J. –J.	I_2-TBHP Catalyzed Oxidative Cross-Coupling of N-Sulfonyl Hydrazones and Isocyanides to 5-Aminopyrazoles,	Organic Letters	17	1521	2015
13	**Senadi, G. C.;** W.-P, Hu.; Garkhedkar, A. M.; Boominathan, S. S. K.; Wang, J. –J.	Palladium(II)-catalysed regioselective synthesis of 3,4-disubstituted quinolines and 2,3,5-trisubstituted pyrroles from alkenes via anti-Markovnikov selectivity	Chemical Communications	51	13795	2015
14	**Senadi, G. C.;** Hu, W. -P.; Boominathan, S. S. K.; Wang J. –J.	Palladium(0) Catalyzed Single- and Double- Isonitrile Insertion: A Facile Synthesis of Benzofurans, Indoles, and Isatins	Chemistry A European Journal	21	998	2015
15	**Senadi, G. C.;** Hu, W. -P.; Boominathan, S. S. K.; Wang J. –J.	Nickel- or Palladium-Catalyzed Stereoselective Synthesis of Tetrasubstituted Olefinic Indolines-Fused Triazoles: Extension to the Spiroindoline Core	Advanced Synthesis and Catalysis	355	3679	2013
16	**Senadi G. C.;** Hu, W. -P.; Hsiao, J. -S.; Vandavasi, J. K.; Chen, C. -Y.; Wang J. –J.	Facile, Selective, and Regiocontrolled Synthesis of Oxazolines and Oxazoles Mediated by ZnI_2 and $FeCl_3$	Organic Letters	14	4478	2012