

agap²Skills portfolio

Organic Chemist

Organic Synthesis Creative R&D Teamwork Goal-Oriented

About Me

Hi! I am Ha, currently a PhD fellow in Organic Chemistry at Stockholm University. I have a solid background in Chemical Engineering, Organic Synthesis as well as Material Science. Furthermore, I have 3-year experience as a R&D Manager in chemical industry. I am going to graduate in September 2024. Hence, I am now open to new opportunities and offers.

Summary of experience

Stockholm University	PhD fellow in Organic Chemistry	During 4 years and 7 months
AstraZeneca R&D	Visiting Researcher	During 2 months
ICIQ	Visiting Researcher	During 3 months
Hyosung Vietnam	R&D Manager	During 3 years
National Tsing Hua University	Master's student	During 2 years
Key Lab for Molecular and Nanoarchitecture	Research Assistant	During I year and I month

Languages

Korean • • • • •

*	Vietname	se	••••	Native
(Swedish	• •	•••	SFI 3D, 2023

TOPIK 2, 2018



Experiences

PhD fellow in Organic Chemistry

STOCKHOLM UNIVERSITY

March 2020 to September 2024 - During 4 years and 7 months



Context

I am funded by European Commission Marie Skłodowska-Curie Action - Innovative Training Network (MSCA-ITN) CO2PERATE (Cooperation towards a sustainable chemical industry based on CO2).

My research topic is chemical synthesis from carbon dioxide as a benign C1 synthon using heterogeneous catalysts.

Supervisor:

Prof. Belén Martín-Matute (Stockholm University)

Co-supervisors:

Prof. Xiaodong Zou (Stockholm University)

Prof. Ruben Martin (ICIQ - Institute of Chemical Research of Catalonia)

Dr Chad Elmore (AstraZeneca R&D)

Responsibilities

Synthesis of small molecules, homogeneous and heterogeneous catalysts.

Characterizations and analysis of compounds and samples.

Writing proposals and scientific reports.

Supervising new students.



Visiting Researcher

ASTRAZENECA R&D

January 2024 to February 2024 - During 2 months



Carbon-14 isotopic labelling of pharmaceuticals.

Supervisor: Dr Chad Elmore

Responsibilities

Synthesis of small molecules.

Performing reactions using Carbon-14.

Purification and characterization of the products.

Technical environment

GMP

Visiting Researcher

ICIQ

October 2022 to December 2022 - During 3 months



Context

Photoredox catalysis and Nickel chemistry in organic synthesis. Supervisor: Prof. Ruben Martin

Responsibilities

Synthesis of small molecules, photocatalysts, Nickel complexes. Photoinduced radical-polar crossover reactions.

Purification and characterization of the products.

R&D Manager

HYOSUNG VIETNAM
April 2017 to March 2020 - During 3 years



Context

Optimizing chemical recipes for production of tire reinforcement materials. Working closely with Production and QA/QA Teams and doing troubleshooting to ensure highest product quality. 3-month working at Hyosung R&DB Labs, Anyang, South Korea (Jun - Aug, 2017).

Responsibilities

R&D duties within tire reinforcement materials. Supporting Production and QA/QC. Customer visits.

Technical environment

- + ISO
- + OHSAS

Master's student

NATIONAL TSING HUA UNIVERSITY February 2015 to January 2017 - During 2 years



Context

Working with supercritical fluids and aromatic hydrogenation reactions. Supervisor: Prof. Chung-Sung Tan

Responsibilities

Performing high-pressure reactions. Synthesis of small molecules and heterogeneous catalysts. Sample characterization.

Research Assistant

KEY LAB FOR MOLECULAR AND NANOARCHITECTURE January 2014 to January 2015 - During 1 year and 1 month





C-N coupling reactions using Maganese-based Metal-Organic Framework heterogeneous catalyst. Supervisor: Prof. Nam T.S. Phan

Responsibilities

Organic synthesis.

Organic compound purification and characterization.

Degrees & Education

From Mar 2020 to Sep 2024

STOCKHOLM UNIVERSITY

PhD in Organic Chemistry

Research topic: Chemical Synthesis from Carbon Dioxide.

This study requires an interdisciplinary knowledge including Organic Chemistry, Medicinal Chemistry, Material Science, and Analytical Chemistry.

Funding from European Commission via MSCA-ITN project CO2PERATE (Grant agreement ID: 859910).

From Feb 2015 to Jan 2017

NATIONAL TSING HUA UNIVERSITY

MSc in Chemical Engineering

Research topic: Aromatic Hydrogenation of Phthalates Using Bimetallic Nanoparticle Catalysts.

This study was conducted as the request of a Taiwanese plastic company (Nan Ya Plastics) for synthesis of phthalate-free plasticizers.

From Aug 2009 to Jan 2014

VIETNAM NATIONAL UNIVERSITY - HOCHIMINH CITY

BEng in Chemical Engineering

Thesis: Direct Amination of Azoles Using Mn-MOF Heterogeneous Catalyst. I got my undergraduate degree in Chemical Engineering (Honor and Talented Program) with sub-major of Organic Chemistry. Hence, I have learnt both about fundamental organic chemistry and chemical production in industrial scale.

Skills

Softwares _

+ LIMS

+ ChemDraw+ MestReNova

••••

+ Microsoft Office

+ Origin

+ Electronic Lab Notebooks

••••

Method development Method validation Quality & RA Quality Assurance Quality Control **Laboratory techniques** _ + Nuclear Magnetic + High Resolution Mass Resonance Spectroscopy Spectrometry + High Performance Liquid + Gas Chromatography Chromatography + Scanning Electron + Transmission Electron Microscopy Microscopy + Energy-Dispersive X-Ray + Atomic Force Microscopy Spectroscopy + Thermogravimetric Analysis + Fourier-Transform Infrared Spectroscopy + Ultraviolet-Visible + Fluorescence Spectroscopy Spectroscopy + Gas Absorption Analysis + X-Ray Absorption Spectroscopy + Powder X-Ray Diffraction + High Performance + X-Ray Fluorescence

Certifications

Spectroscopy



OHSAS 18001:2007

OHSAS certificate from my employment at Hyosung Vietnam



ISO 45001:2018

Automated Flash System

ISO certificate from my employment at Hyosung Vietnam



ISO 14001:2015

ISO certificate from my employment at Hyosung Vietnam



5-Core Tools

Certificate from my employment at Hyosung Vietnam



7 QC Tools

Certificate from my employment at Hyosung Vietnam



Handling of Allergenic Chemical Products

Certificate from my employment at Stockholm University

Conferences and events

15-19/07/2024 - MOF2024 (Speaker)

9th International Conference on Metal-Organic Frameworks and Open Framework Compounds - Singapore

27-30/05/2024 - NordCO2 Annual Meeting (Speaker)

Nordic Consortium for CO2 Conversion - Oslo, Norway



08-10/04/2024 - CO2PERATE Annual Meeting (Speaker)

Marie Skłodowska-Curie Innovative Training Networks - Tromsø, Norway



20-23/11/2023 - **IKCOC-15** (Participant)

The 15th International Kyoto Conference on New Aspects of Organic Chemistry - Kyoto, Japan



24-26/10/2023 - Sunlight- and Power-to-X (Speaker)

Conference on Solar Fuels, Electro Fuels, Green Hydrogen and CO2 Valorization - Uppsala, Sweden



13-15/06/2023 - CO2PERATE Annual Meeting (Speaker)

Marie Skłodowska-Curie Innovative Training Networks - Göteborg, Sweden

24-27/04/2023 - NordCO2 Annual Meeting (Speaker)

Nordic Consortium for CO2 Conversion - Saariselkä, Finland



26-28/09/2022 - CO2PERATE Annual Meeting (Speaker)

Marie Skłodowska-Curie Innovative Training Networks - Rostock, Germany

NordCO₂ 16-18/08/2022 - NordCO2 Annual Meeting (Speaker)

Nordic Consortium for CO2 Conversion - Hveragerði, Iceland

09/06/2022 - Mistra SafeChem Research Student Group

Safe and Efficient Chemistry by Design - Digital meeting



21-23/02/2022 - CO2PERATE Annual Meeting (Speaker)

Marie Skłodowska-Curie Innovative Training Networks - Digital meeting

25-26/11/2021 - NordCO2 Annual Meeting (Speaker)

Nordic Consortium for CO2 Conversion - Oslo, Norway



27-28/10/2016 - **RSCE2016** (Speaker)

23rd Regional Symposium on Chemical Engineering - Vungtau, Vietnam



8-10/10/2016 - **TSCFA2016** (Speaker)

The 15th Symposium on Development of Supercritical Fluid Technology and Application, the 4th Cross-Strait Symposium on Supercritical Fluid Technology and the 2nd International Workshop on Supercritical Fluid Dyeing Technology - Kaohsiung, Taiwan