Student Projects

supervised by Dr. Roger Marti

Bachelor Theses – Bachelor of Sciences in Chemistry at HEIA-FR

Clément Gaillard	Scale-up Studies of Single Atom Catalyzed Suzuki Reaction (**2021**) *in Collaboration with Dr. Sharon Mitchell, ETH Zürich*
Ursina Gnädinger	Mini-CSTRs as New Process Tools (**2020**)
Ricardo Silvestre	Butyl 3-Hydroxybutyrate as Bio-based Solvent (**2020**)
Luca Roselli	Alginate as Sustainable Chiral Catalyst (**2020**) *in Collaboration with Prof. Luca Bernardi, University of Bologna*
Mylène Soudani	Scale-up of the Fractionation of Lignocellulosic Biomass (**2019**) *in Collaboration with Prof. Luterbacher, EPFL*
Estelle Saner	Scale-up of Akardit-I (**2019**) *in Collaboration with Nitrochemie Wimmis AG*
Virginie Kottelat	Synthesis of PHB-derived Biofuel Esters (**2019**)
Thomas Ferrari	Copper(I) catalysed synthesis of trifluoromethylaziridines from diazotrifluoroalkanes (**2018**) *in Collaboration with Prof. Ollevier, University of Laval, Quebec*
Thibault Richard	mini-CSTR – Test Runs (**2018**)
Silvia Brandao de Sousa	Bioinspired Synthesis of Lignans (**2018**)
Jessica Aeby	Scale-up studies for the synthesis of enterolactone (**2017**)
Fabien Marinaccio	Synthesis of piperazic acid derivatives (**2017**)
Florian Dardano	Enantioselective hydrosilylation of ketones and diazo esters (**2017**) *in Collaboration with Prof. Ollevier, University of Laval, Quebec*
Vanessa Valenzano	Flow Synthesis of PEG4-Sulfite (**2017**) *in Collaboration with Merck Cie, Schaffhausen*
Jonathan Waser	Hydrogel Toolbox – Heparin Building Block & UV-Free Chemistry (**2016**) *in Collaboration with ETH Zürich*
Jasmina Salamanca	N-Benzoyl Cysteine Derivatives – Synthesis & Scale-up Studies (**2016**) *in Collaboration with Prof. Kim Do, CHUV Lausanne*
Christian Aeby	Synthese von Unsymmetrischen Harnstoff-Derivaten, insbesondre Akardit II (**2016**) *in Collaboration with Nitrochemie Wimmis AG*
Denis Zufferey	Iron(II)-catalyzed Mukaiyama Aldol Reaction using Silica-grafted Bipyridines (**2015**) *in Collaboration with Prof. Ollevier, University of Laval, Quebec*
Tobie Wohlhauser	Process Development of the Henry Reaction (**2015**) *in Collaboration with Dorphan SA*
Yvan Stampfli	Hydrogele für Drug Delivery (**2014**)
Sofia Almeida	Phosgene-Free Synthesis of Akardit II (**2014**) *in Collaboration with Nitrochemie Wimmis AG*
Anaïs Bourradou	Chitosan/Polyamine-based Hydrogels (**2014**)

Florence Page	DNA Click Chemistry II (**2013**) *in Collaboration with Microsynth AG*
Roberto Mascioni	Iron(II)-catalyzed Mukaiyama Aldol Reaction using Silica-grafted Bipyridines (**2013**) *in Collaboration with Prof. Ollevier, University of Laval, Quebec*
Mattia Poretti	Scale-up d'une synthèse du β^2-Phenylalanine (**2013**)
Sébastien Jacquier	Synthèse de la β^2-phényl alanine (**2012**)
Julien Sautaux	DNA Click Chemistry (**2012**) *in Collaboration with Microsynth AG*
Sébastien Rossier	Synthesis of Calcitronic Acid (**2012**)
Damien Renfer	Nanomaterials for Drug Delivery (**2012**) *in Collaboration with Prof. Kleitz, University of Laval, Quebec*
Lionel Chappuis	Alkyne Building Blocks for Click Chemistry (**2011**)
Roxane Magnin	Direct Amidation Coupling between prim. Amines and Carboxylic Acids (**2011**) *in Collaboration with Syngenta AG, Monthey*
Lionel Schouwey	Iron(II)-catalyzed Asymmetric Mukaiyama Aldol Reaction (**2011**) *in Collaboration with Prof. Ollevier, University of Laval, Quebec*
Laurent Starrenberger	Process Optimization of Rh-Catalyzed Polyether Synthesis (**2011**) *in Collaboration with Prof. Lacour, University of Genève*
Romain Despland	Sulfid Oxidation Reaction – Catalyst Screening (**2010**)
Radek Skupienski	Route Finding on a Pyrazine Impurity (**2010**) *in Collaboration with Merck Cie, Schaffhausen*
Rebecca Brönnimann	Synthesis of a New Cyclic 1,1'-Bicyclopentyl-Ether (**2010**) *in Collaboration with Sigma-Aldrich AG, Buchs*
Pierre-Ebale Gallina	Synthèse du Licochalcone A (**2009**)
Yannik Lambert	Pyrazins via Asp-Approach (**2009**) *in Collaboration with Merck Cie, Schaffhausen*
Sasha Meyer	Synthesis of New Cyclic Ethers (**2009**) *in Collaboration with Sigma-Aldrich AG, Buchs*

Bachelor Theses – Bachelor of Sciences in Chemistry at ZHAW Winterthur

Thomas Fischer	Synthese von β^2-Aminosäuren nach Gellmann's Isoxazolidinone-Approach (**2008**) *in Collaboration with Sigma-Aldrich AG, Buchs*
Joel Gubler	Synthese einer Pyrazin-Verbindung (**2008**) *in Collaboration with Merck Cie, Schaffhausen*
Maja Lutz	Fluoreszenz-Labeling von Oligonucleotiden (**2008**) *in Collaboration with Microsynth AG, Balgach*
Michel Marro	Enantioselektive Hydrierung von Dehydroaminosäuren (**2008**) *in Collaboration with Senn Chemicals, Dielsdorf*

Manuel Möri	Synthese von β-Aminosäuren durch Anti-Michael-Addition an Nitroacrylate (**2008**) *in Collaboration with Prof. Seebach, ETH Zürich*
Stephan Schnidrig	H-Cube für kontinuierliche Hydrierungen von C-C-Doppelbindungen (**2008**) *in Collaboration with Givaudan, Dübendorf*
Yves Wyss	Indol-Synthese nach der Reissert-Indol Synthese (**2008**) *in Collaboration with Dottikon Exclusive Synthesis, Dottikon*
Nadia Collenberg	Folat-Konjugate: Festphasen-Synthese via γ-Glutaminsäue-Derivate (**2007**) *in Collaboration with Merck Cie, Schaffhausen*
Luis Federer	Organokatalyse mit Prolin-Derivaten (**2007**) *in Collaboration with Sigma-Aldrich AG, Buchs*
Silvan Lüthi	Die Nef-Reaktion zur Synthese von Benzofuran-Derivaten (**2007**) *in Collaboration with Dottikon Exclusive Synthesis, Dottikon*
Ylenia Maniglio	Amberwood - Bestimmung der absoluten Konfiguration und neue Cyclododecanderivate (**2007**) *in Collaboration with Givaudan, Dübendorf*
Stefan Pletscher	Chirale β-Nitroacryl-Derivate als Synthesebaustein für β-Aminosäuren (**2007**) *in Collaboration with Prof. Seebach, ETH*
Marina Simeunovic	C-Terminales Labelling von Peptiden - Azido-Prolin als neuer Linker (**2007**) *in Collaboration with Prionics AG, Schlieren*
Ivana Brdar	Synthese von TADD-OOH und TADD-Amin als Organo-Katalysatoren (**2006**) *in Collaboration with Sigma-Aldrich AG, Buchs*
Claudio Bomio	Festphasen Synthese von Folat-Konjugaten (**2006**) *in Collaboration with Merck Cie, Schaffhausen*
Christoph Göhring	Synthese und Evaluation von Fluorescein-Derivaten für Peptid-Labeling (**2006**) *in Collaboration with Prionics AG, Schlieren*
Hanspeter Sprecher	α,β-ungesättigte *N*-Acyl-TRIOZ-Derivaten für 1,4-Additions-Reaktionen (**2006**) *in Collaboration with Prof. Seebach, ETH*
Adrian Halter	Evaluation und Optimierung der Hydrierung von Nitroolefinen (**2006**) *in Collaboration with Dottikon Exclusive Synthesis, Dottikon*
Cegniz Tunaboylu	Synthese eines Fluorescein-Folsäure-Konjugates (**2005**) *in Collaboration with Merck Cie, Schaffhausen*
Peter Dietiker	Synthese eines Bicyclo[2.2.2]oktan-Derivates als chiraler Ligand (**2005**) *in Collaboration with Sigma-Aldrich AG, Buchs*
Dominic Franck	Synthese und Prozessoptimierung eines Aminosäure-Derivates (**2005**) *in Collaboration with Senn Chemicals, Dielsdorf*

Master Theses - Master of Science in Life Sciences HES-SO // Chemical Development & Production

Estelle Saner	Optimization of Gold Catalyzed Reactions by application of a Porous Organic Cage (POC) in a Micellar System (**2021**) *in Collaboration with Dr. M. Parmentier, Novartis AG, Basel*
Jean-Luc Fuchs	Cyclopropanation of imine-protected heterocyclic benzylamines (**2021**) *in Collaboration with Dr. G. Schäfer, Idorsia Pharmaceutical Ltd., Allschwil*

Fabien Neuenschwander	Process Development of Bis(2-oxazoline)-based Poly(ester amide)s and Application as Fibres (**2021**) *this Master project was awarded the Prize of the SVC*
Fabio Casanova	Insertion Reactions of Diazo Compounds into Si–H Bonds in Continuous-Flow (**2020**) *in Collaboration with Prof. Ollevier, University of Laval, Quebec*
Jasmina Salamanca	Process Understanding & Optimization for the Synthesis of PEG4-Sulfite (**2020**) *in Collaboration with Merck AG, Schaffhausen*
Luce Albergati	mini-CSTR – A new Process Tool for the Lab (**2020**)
Lara Amini	Development of Flow Methodologies for the Synthesis of Trifluoromethylated *N*-Fused Heterocycles (**2019**) *in Collaboration with Idorsia Pharmaceuticals AG, Basel* *this Master project was awarded the Prize of the SVC*
Alessandro Cattaneo	BioPrinting & Hydrogels - Challenges and Applications (**2019**)
Virgine Rochat	DORPHAN DO-10: A Drug Discovery Project (**2019**) *in Collaboration with Dorphan SA, Lausanne*
Samuel Unterhofer	Corey-Bakshi-Shibata Reduction in Flow - From Lab to Production (**2018**) *in Collaboration with Cerbios Pharma, Lugano*
Sofia Almeida	Synthesis of Trifluoromethylated Heterocycles (**2017**) *in Collaboration with Actelion Pharmaceuticals AG, Basel*
Selim Agrebi	Test of Novel «Fouling-free» Micro Reactors Systems in an Industrial Setting (**2017**) *in Collaboration with Lonza AG, Visp*
Mattia Poretti	Minimizing critical impurities in Fmoc-Amino Acid Derivatives (**2016**) *in Collaboration with Novabiochem Merck Cie, Schaffhausen*
Giorgio Genasci	Diaminotriazole as Building Block for API Synthesis (**2016**) *in Collaboration with Actelion Pharmaceuticals AG, Basel*
Tamara Wyss	Automated Optimization in Flow Chemistry (**2015**) *in Collaboration with Lonza AG, Visp*
Christophe Laporte	Scale-up studies of cysteine amide derivates (**2014**) *in Collaboration with Lonza AG, Visp & CHUV Lausanne*
Nicolas Dupasquier	PEG-Conjugated Drugs for slow release systems (**2013**)
Elia Kilcher	Scale-up Study of chiral organocatalytic Mannich reaction for β2-Amino Acids (**2013**)
Daniel Meyer	Synthesis of Fmoc-β2-homo-Serine and –Threonine by Chiral Organocatalytic Mannich Reaction (**2011**) *in Collaboration with Prof. D. Seebach, ETH Zürich*
Sacha Meyer	Alternative Green Solvent in Synthesis and Application in Flow (**2011**)

Students IN

Emma Saubagnac	Production & Application of Keratin for Sustainable Plastics (**2021**) *from SIGMA Clermont*
Sabrina Gharout	Hydrogels-Nanoparticles microdevice for targeted Drug Delivery (2021) *from University of Sorbonne, Paris in collaboration with Prof. Ali Abou-Hassan*

Davide Lardani	Process Development & Scale-up of the Mn-Promoted Synthesis of 1,2-Dioxane Derivatives (**2020**) *from University of Bologna in collaboration with Prof. Claudio Trombini*
Federico Bongiovanni	Process Optimization and Scale-up of a Polyester Amide Monomer (**2019**) *from University of Bologna in collaboration with Prof. Luca Bernardi*

Ph.D. – as Co-Supervisor

Maxime Hedou	Development of high-performance polymers using novel sugar-based monomers (on-going) *in Collaboration with Prof. Jeremy Luterbacher, EPF Lausanne*
Dario Poier	Single Atom Catalysis – Scope and Industrial Applications (on-going) *in Collaboration with Prof. Javier Pérez-Ramírez, ETH Zürich*
Radek Skupienski	Synthesis of Fmoc-β^2-homo-Serine and –Threonine by Chiral Organocatalytic Mannich Reaction (**2020**) *in Collaboration with Prof. Kim Do, CHUV Lausanne*