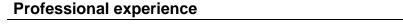
Msci. Martin Hulla Ph.D.

Assistant Professor at Charles University

Mezibranska 11, Prague 1, 110 00, Czech Republic

Email: HullaM@natur.cuni.cz

Nationality: Czech



2019 Charles University – Prague, Czech Republic Assistant Professor in Inorganic Chemistry

2015 - 2019 École Polytechnique Fédérale de Lausanne (EPFL) - Switzerland

Doctoral assistant

- Research of organic and salt catalysts in reactions involving CO₂
- Undergraduate laboratory teaching and supervision

2013 - 2014 Velocys - Abingdon, United Kingdom

Catalyst testing operator

- Heterogenous catalyst activity and lifetime testing for steam methane reforming and Fisher-Tropsch reactions in micro-channel reactors

2011 - 2012 Cambridge Display Technology - Cambridge, United Kingdom

Technical assistant and Research trainee

Novel microelectronic device design, fabrication process development and characterization

Education

2015 - 2019 École Polytechnique Fédérale de Lausanne (EPFL) - Switzerland

Doctoral assistant (Ph.D.)

Doctoral Thesis (**Prof. Paul J. Dyson**): "Organocatalysts in C-N bond formating reactions of amines with carbon dioxide"

2008 - 2013 Imperial College London - United Kingdom

Master of Science in Chemistry with a Year in Industry (incorporating Bachelor's level study); graduated with First Class Honours

Master Thesis (**Dr. James Wilton-Ely**): "The catalytic activity of Rhodium Complexes with 1,1-dithio ligands"

Industrial Research Project in collaboration with Cambridge Display Technology (**Dr. Chris Newman**): "Large area molecular junctions – device development for contact and access resistance measurement in organic thin film transistors"

Teaching experience

2018 - 2019 Supervision of trainee laboratory technician - practical school student

Student training in basic laboratory techniques

2015 - 2018 Practical laboratories in Inorganic chemistry, EPFL - undergraduate students

- Design of synthetic and analytical experiments
- Practical demonstrations and supervision of students
- Laboratory practical and report marking



Supervision and marking of exams in general chemistry 2017 - 2018

Semester project supervision, EPFL - undergraduate student Spring 2018

Project design, supervision and marking

First author publications

2020 Martin Hulla, Paul J. Dyson: Pivotal Role of the Basic Character of Organic and Salt Catalysts in C-N Bond Forming Reactions of Amines with CO₂, Angew. Chem. Int. Ed.,

2020, 59, 1002-1017

2019 Martin Hulla, Simon Nussbaum, Alexy R. Bonnin, Paul J. Dyson: The dilemma between acid and base catalysis in the synthesis of benzimidazole from o-phenylenediamine and carbon dioxide, Chem. Comm., 2019, 55, 13089-13092

> Martin Hulla, Daniel Ortiz, Sergey Katsyuba, Dmitry Vasyliev, Paul J. Dyson: Delineation of the Critical Parameters of Salt Catalysts in the N-Formylation of Amines with CO2, Chem. Eur. J., 2019, 25, 11074-11079

Martin Hulla, Gabor Laurenczy, and Paul J. Dyson: Mechanism study of the N-formylation of 2018 amines with CO₂ and hydrosilanes, ACS Catalysis, 2018, 8, 10619-10630

2017 Martin Hulla, Sami M. A. Chamam, Gabor Laurenczy, Shoubhik Das and Paul J. Dyson: Delineating the mechanism of ionic liquids in the synthesis of guinazoline-2,4(1H,3H)-dione from 2-aminobenzonitrile and CO₂, Angew. Chem. Int. Ed., 2017, 56, 10559-10563

Martin Hulla, Felix D. Bobbink, Shoubhik Das, and Paul J. Dyson: Carbon dioxide based N-2016 formylation of amines catalysed by fluoride and hydroxide anions, ChemCatChem, 2016, 8,

3338-3342

Professional memberships

Member of the Royal Academy of Science (United Kingdom) 2013

Member of the Swiss Chemical Society (Switzerland) 2017

Language and Computer Skills

Czech

Fluent (C2) - With over 11 years of education, teaching and work experience in **English**

English

French Intermediate (B1)

Computer skills OS Windows, MS Office

ChemDraw, MestReNova, Basic Labview programming

Interests

Member of the voluntary society of Hradek

The society preserves and maintains a castle ruin in the Czech Republic

Adventure travel and trekking

Himalayas (Nepal and India), Andes (Peru), Fann Mountains (Tajikistan), Altai (Mongolia), Daba Mountains (China) and others