

Curriculum vitae

Antonia Högnäsbacka



PERSONAL PROFILE

Highly motivated and skilled M. Sc. (Tech) with extensive practical laboratory knowledge. An energetic team player who is easily inspired by new ideas and the energy of other group members. I am a person who thrives in multidisciplinary and multicultural environments and will always strive to motivate and unite persons in the same project.

EDUCATION

Master of Science (Tech.) student, Aalto University, School of Chemical Technology, 2014-2015

Programme: Chemical Technology

Major: Organic chemistry, minor: Pharmaceutical chemistry

Master's Thesis under the supervision of Professor Ari M. P. Koskinen "Phase-transfer catalysis as a tool for building quaternary stereocenters". Available at: <https://aaltodoc.aalto.fi/handle/123456789/18659>

Bachelor of Science (Tech.) student, Aalto University, School of Chemical Technology, 2009-2014

Programme: Chemical Technology

Major: Organic chemistry, minor: Biotechnology and food technology

Bachelor's Thesis: Paclitaxel and alkaloid taxoids.

Secondary school graduate, Korsholms Gymnasium, 2006-2009

WORK EXPERIENCE

PhD, VUmc

(November 2016-)

I am developing small molecule EGFR binding PET-tracers in an EU funded project called PET3D, "PET imaging in Drug Design and Development".

Scientist, Orion

(May 2016-October 2016)

As a substitute for a job alternation leave, I participated in the search for new active substances in a multidisciplinary team. I planned and executed synthesis routes that would lead to the molecules that had been suggested and agreed upon in synthesis meetings. This included being responsible for the purity of the compound and the collection of sufficient analytical data to verify the structure in question.

Teaching assistant, Aalto University

(January 2016-April 2016)

I worked as the head assistant in two undergraduate organic chemistry laboratory courses. I taught full-time, supervised eight teaching assistants and was responsible for the operation of the teaching laboratory. The work included directing the laboratory work of undergraduates, teaching of laboratory techniques and work practices in addition to the maintenance of the entire student laboratory infrastructure.

Research assistant, Orion

(July 2015-October 2015)

I participated in a C-H activation IMI (Innovative Medicines Initiative) Chem21-project, synthesizing, planning and co-writing the resulting article in the project. I also wrote patent examples and NMR specifications for patents and participated in the synthesis of new substances in other non-IMI projects.

Master's Thesis worker, Orion

(January 2015-July 2015)

"Phase-transfer catalysis as a tool for building quaternary stereocenters". Supervisor: Prof. Ari Koskinen at Aalto University, thesis advisor: Dr. Sc. Esa Kumpulainen at Orion Corporation.

**Research assistant, Orion
(summer of 2014)**

I participated in a drug development project in which new methods of synthesis were developed as well as new active substances. The syntheses were diverse and included alkylation, arylation, acetylation, formation of heterocycles as well as protecting functional groups and removing the protecting groups. The scale varied in size, from 10 milligrams to 100 grams.

**Course assistant, Aalto University
(February-April 2014)**

Junior teaching assistant in an organic chemistry laboratory course (Organisen kemian laboratoriotyöt 2)

**Substitute analyst,
Vaasan Vesi
(summer of 2012, summer of 2013)**

Physical and chemical determinations related to the different stages of the water purification utilized at Vaasan Vesi. In connection to the renewal of the sand in the slow-filtration, quality analysis of the new sand was required. A variety of office work such as payroll calculation and posting was required as well.

**Substitute analyst,
Vaasan Ympäristölaboratorio
(summer of 2010, summer of 2011)**

Different determinations linked to quality determinations of sea-, lake- and groundwater samples, as well as investigation of liquid samples ordered by various clients (such as: manganese, iron, chloride, nitrate, oxygen, chlorophyll and dichromate concentrations, determinations of alkalinity, colour, turbidity, appearance, pH and conductivity).

**Fyrverkeriskolan AB
(February 2013-)**

Designing, building and executing musical firework shows.

PUBLICATIONS

"Synthesis of chiral (2-indolyl)methanamines and insight into the stereochemistry protecting effects of the 9-phenyl-9-fluorenyl protecting group" by Ari M. P. Koskinen, Christopher S Lood, Aino E Laine, Antonia Högnäsbacka, Martin Nieger. Eur. J. Org. Chem. DOI: 10.1002/ejoc.201500391

LANGUAGE SKILLS

Swedish: Mother tongue
Finnish: Excellent

English: Excellent
French: Satisfactory

Italian: Satisfactory

IT-SKILLS

Operating systems: Windows (Excellent), Linux (Good)

CambridgeSoft Chemdraw

CambridgeSoft ELN (Electronic Laboratory Notebook)

Shrödinger Maestro

Bruker Topspin

ACD/Spectrus Processor

Reaxys, Scifinder