

# The development of molecular tools for investigating NAD+ metabolism and signalling

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## List of publications

#### Solid-Phase Synthesis and Biological Evaluation of Peptides ADP-Ribosylated at Histidine

H. Minnee, J.G.M. Rack, G.A. van der Marel, H.S. Overkleeft, J.D.C. Codée, I. Ahel, D.V. Filippov. *Angewandte Chemie International Edition*, **2023**, e202313317.

# Four of a Kind: A Complete Collection of ADP-Ribosylated Histidine Isosteres Using Cu(I)- and Ru(II)-Catalyzed Click Chemistry

H. Minnee, H. Chung, J.G.M. Rack, G.A. van der Marel, H.S. Overkleeft, J.D.C. Codée, I. Ahel, and D.V. Filippov. *Journal of Organic Chemistry*, **2023**, 88, 10801-10809.

#### Mimetics of ADP-Ribosylated Histidine through Copper(I)-Catalyzed Click Chemistry

H. Minnee, J.G.M. Rack, G.A. van der Marel, H.S. Overkleeft, J.D.C. Codée, I. Ahel, and D.V. Filippov. *Organic Letters*, **2022**, 24, 3776-3780.

A Divergent Synthesis of L-arabino- and D-xylo-Configured Cyclophellitol Epoxides and Aziridines S.P. Schröder, R. Petracca, H. Minnee, M. Artola, J.M.F.G. Aerts, J.D.C. Codée, G.A. van der Marel, H.S. Overkleeft. *European Journal of Organic Chemistry* **2016**, 28, 4787-4794.

### Curriculum vitae

Hugo Minnee was born on July 28<sup>th</sup>, 1994 in Katwijk aan Zee, the Netherlands. After obtaining his high school diploma in 2012 at the Andreas College Pieter Groen located in Katwijk. He commenced with the bachelor Molecular Science and Technology (MST) at Leiden University and Delft University of Technology. The bachelor was completed *cum laude* in 2015 after successfully performing a research internship at the Bio-Organic Synthesis group of prof. H.S. Overkleeft, which focused on the synthesis of a covalent retaining xylosidase inhibitor.

In 2015, he became full-time board member of the study association for the bachelor MST and the master Chemistry and was involved in all educational affairs. Then in 2016, he commenced the research master Chemistry at Leiden University with a specialization in Chemical Biology. The main internship was completed in the Molecular Physiology group of prof. M. van der Stelt and was titled 'Clickable lipids: bio-orthogonal alkyne modification of docosahexaenoic acid and docosahexaenoyl ethanolamine'. During his master studies, he was selected for the extracurricular VNCI Topsector Chemie, which provided the opportunity to perform an additional 6-months internship at AkzoNobel in Deventer under supervision of M. van den Berg, entailing the synthesis of a small library of ligands for accelerator complexes. The master-degree was obtained *cum laude* in 2018, and shortly thereafter followed by the start of the doctoral studies in January 2019 at the Bio-Organic Synthesis group in Leiden under the supervision of D.V. Filippov and J.D.C. Codée.

Parts of the research described in this thesis was orally presented at CHAINS (Online, 2020). Posters were presented at Eurocarb (Leiden, 2019), FASEB NAD<sup>+</sup> Metabolism and Signalling Conference (Online, 2020) and the FEBS Advance Lecture Course Cellular Stress and ADP-ribosylation (Naples, 2021).