GESELLSCHAFT DEUTSCHER CHEMIKER

KOLLOQUIUM

Sommersemester 2019

Titel

Late-Stage Functionalizations

Vortragender

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Abstract

The unnatural isotope fluorine–18 (18F) is used as a positron emitter in molecular imaging. Currently, many potentially useful 18F-labeled probe molecules are inaccessible for imaging, because no fluorination chemistry is available to make them. Syntheses must be rapid on account of the 110-minute half-life of 18F, and fluorination should ideally be executed as the ultimate synthetic step. I will describe the development of novel, modern reactions directed at the synthesis of 18F and 19F containing complex small molecules. In particular, I will describe the approach to functionalize complex small molecules at a late stage, and the challenges associated with it, as well as the applications for late-stage C-H functionalization reactions to create molecular complexity for applications in catalysis, drug discovery, and medicine.

Nature **2011**, *473*, 470
Science **2011**, *334*, 639
Nature **2016**, *534*, 369
Nature **2018**, *554*, 551

Ort

Chemie, HS3 – Campus Nord, Otto-Hahn-Straße 6
Anfahrt: http://gdch.chemie.uni-dortmund.de

Zeit

Dienstag, 28.05.2019, 17 Uhr

Meet the Prof. für Studierende im Anschluss an den Vortrag

gez. Professor Dr. Daniel Rauh
Gesellschaft Deutscher Chemiker
Ortsverband Dortmund