

Programme

For the 4th Workshop of the Graduate School

“Fluorine as a Key Element”

10th and 11th of October 2013

Schedule

biological fluorine chemistry
 organic fluorine chemistry
 solid-state fluorine chemistry

inorganic fluorine chemistry
 transition metal fluorine chemistry

Thursday	Friday
lunch	breakfast
12.30-13.30 Prof. J. T. Welch	08.30-08.50 Clemens Scholtysik
12.30-13.50 Elisabeth Nyakatura	08.50-09.10 Stefan Ellrodt
13.50-14.10 Vivian Assante	09.10-09.30 Moritz Malischewski
coffee	09.30-09.50 Blazej Duda
14.30-14.50 Ulla Gerling	coffee
14.50-15.10 Jan-Stefan Völler	10.10-10.30 Annika Meyer
15.10-15.30 Shijie Ye	10.30-10.50 Juliane Krüder
15.30-15.50 Carsten Lüdke	10.50-11.10 Darina Heinrich
15.50-16.20 Olaf Wagner	11.10-11.30 Paul Kläring
coffee	lunch
16.40-17.00 Zeinab Kaawar	12.30-13.30 Prof. J. T. Welch
17.00-17.20 Elisaveth Kanaki	13.30-13.50 Josefine Berger
17.20-17.40 Larisa Schmidt	13.50-14.10 Theresia Ahrens
17.40-18.10 Alexander Rehmer	

Scientific Programme Thursday 10th October 2013

12:15 – Welcome, Opening Remarks

12:30 – Opening Lecture

Prof. John T. Welch, PhD

College of Arts and Sciences, University at Albany

13:30 – Biological Fluorine Chemistry I

13:30

Studying the Interaction Profiles of Nonnatural Amino Acids – Towards Predicting their Specific Applications at α -Helical Interfaces

M. Sc. Elisabeth Nyakatura (Freie Universität Berlin, Prof. Dr. B. Kokschi)

13:50

Impact of fluorination on proteolytic stability of peptides; a case study using α -chymotrypsin and pepsin

M. Sc. Vivian Asante (Freie Universität Berlin, Prof. Dr. B. Kokschi)

14:10 – Coffee Break

14:30 - Biological Fluorine Chemistry II

14:30

How fluorinated amino acids influence peptide folding and aggregation

M. Sc. Ulla Gerling (Freie Universität Berlin, Prof. Dr. B. Kokschi)

14:50

Ribosomal incorporation of trifluoroethylglycine (TfeGly) into amyloid forming peptide VW18

M. Sc. Jan-Stefan Völler (Freie Universität Berlin, Prof. Dr. B. Kokschi)

15:10

Crystallization of fluorinated BPTI-proteases complexes

M. Sc. Shijie Ye (Freie Universität Berlin, Prof. Dr. B. Kokschi)

15:30

Fluorinated 1,10-Phenanthroline with biological activity

M. Sc. Carsten Lüdke (Freie Universität Berlin, Prof. Dr. N. Kulak)

15:50

Fluorinated Polyglycerol Structures in Self-Assembly and Surfactant Chemistry

M. Sc. Olaf Wagner (Freie Universität Berlin, Prof. Dr. R. Haag)

16:20 – Coffee Break

16:40 – Solid - State Fluorine Chemistry

16:40

Theoretical investigations for group XII and group II fluorides

M. Sc. Zeinab Kaawar (Freie Universität Berlin, Prof. Dr. B. Paulus)

17:00

Towards a model for MgF₂ nanoparticles based on periodic quantum chemical calculations and surface thermodynamics.

M. Sc. Elisavet Kanaki (Freie Universität Berlin, Prof. Dr. B. Paulus)

17:20

Synthesis and characterisation of nanoscopic Ytterbium fluoride compounds

Dipl.-Chem. Larisa Schmidt (Humboldt-Universität zu Berlin, Prof. Dr. E. Kemnitz)

17:40

Synthesis and Properties of nanosized Calcium Fluoride

Dipl.-Chem. Alexander Rehmer (Humboldt-Universität zu Berlin, Prof. Dr. E. Kemnitz)

Scientific Programme Friday 11th October 2013

8:30 – Inorganic Fluorine Chemistry / Transition Metal Fluorine Chemistry

8:30

Outlook on organometallic technetium fluorides

M. Sc. Clemens Scholtysik (Freie Universität Berlin, Prof. Dr. U. Abram)

8:50

Hypervalent Organoiodine compounds

M. Sc. Stefan Ellrodt (Freie Universität Berlin, Prof. Dr. K. Seppelt)

9:10

One-electron oxidation of inorganic molecules

M. Sc. Moritz Malischewski (Freie Universität Berlin, Prof. Dr. K. Seppelt)

09:30

Ar-CF₂TMS synthones with great potentials

Dr. Blazej Duda (Freie Universität Berlin, Prof. Dr. D. Lentz)

9:50 – Coffee Break

10:10 – Transition-Metal Fluorine Chemistry

10:10

Molecular tweezers based on bridged corannulenes

M. Sc. Annika Meyer (Freie Universität Berlin, Prof. Dr. D. Lentz)

10:30

Regioselective Hydrodefluorination

M. Sc. Juliane Krüger (Freie Universität Berlin, Prof. Dr. D. Lentz)

10:50

Complexes of cyclic pi-perimeters with perfluorinated vinyl sidechains

M. Sc. Darina Heinrich (Freie Universität Berlin, Prof. Dr. D. Lentz)

11:10

Fluorometallation Reactions: A Key Step for the Fluorination of Alkenes and Alkynes?

Dipl.-Chem. Paul Kläring (Humboldt-Universität zu Berlin, Prof. Dr. T. Braun)

11:30 – Lunch Break

12:30 – Lecture

Prof. John T. Welch, PhD

College of Arts and Sciences, University at Albany

13:30 – Transition-Metal Fluorine Chemistry

13:30

Fluorination of Organic Compounds with Palladium and Platinum complexes

Josefine Berger (Humboldt-Universität zu Berlin, Prof. Dr. T. Braun)

13:50

Synthesis and Reactivity of a Rhodium(I) Germyl Complex

Theresia Ahrens (Humboldt-Universität zu Berlin, Prof. Dr. T. Braun)