

Framework

The FFF-MS workshop is financially supported by the NORMAN network and set in the framework of the “WG4” of the “NORMAN network - Nano- and micro scale particulate contaminants” - Task Group II “The Analytical Toolbox”



WG4 - Nano- and micro scale
particulate contaminants

<http://www.norman-network.net>

Thanks to our joint Sponsors



<http://www.postnova.com/>



<http://www.wyatt.com/>

Contact & travel information

For further information please contact:

Dr. Frank von der Kammer & Dr. Milica Velimirovic

(Department of Environmental Geosciences, University of Vienna),

Dr. Stephan Wagner (Department of Analytical Chemistry, Helmholtz-Centre for Environmental Research – UFZ, Leipzig), or

Dr. Björn Meermann (Federal Institute of Hydrology (BfG), Department G2 - Aquatic Chemistry)

e-Mail: nanoanalytics@univie.ac.at

Further information will be available soon on:

<http://umweltgeologie.univie.ac.at/hofmann-group/workshops/>



Department of Environmental Geosciences
Center of Earth Sciences
University of Vienna
Althanstrasse 14, UZA II
A-1090 Vienna

by train:

International trains ride to Vienna west-train station

<http://www.oebb.at/en/>

by plain:

Vienna international airport - about 20 km from city center of Vienna - connection via airport-busses/trains

<http://www.viennaairport.com/>



universität
wien



HELMHOLTZ
CENTRE FOR
ENVIRONMENTAL
RESEARCH – UFZ

5th Workshop on Field-Flow Fractionation – Mass Spectrometry (FFF-MS)

Nanoparticle analysis in
environmental- & life-sciences
as well as
consumer products

September 28th & 29th 2017
Vienna, Austria



universität
wien



HELMHOLTZ
CENTRE FOR
ENVIRONMENTAL
RESEARCH – UFZ

ENPs in various applications

Up to now a wide set of powerful analytical techniques is available allowing for nanomaterial analysis as well as characterization. Especially FFF/ICP-MS, sp-ICP-MS and microscopy-based techniques came to the fore. Furthermore, techniques, such as sp-ICP-MS in conjunction with a fractionation/separation system open up new and beneficial possibilities.

The next challenging step is advancing the set of available techniques to real matrix applications as well as developing broadly applicable sample preparation protocols suitable for nanoparticle analysis - in particular in the fields of environmental-, life-sciences as well as consumer products under real-life conditions

Thus, research in the field of ENPs is still an ongoing, challenging issue.

The **5th Workshop** on Field Flow Fractionation and Mass Spectrometric techniques (FFF-MS) will focus on the **analysis of nanoparticle in environmental- & life-sciences as well as consumer products.**

The Workshop is **financially supported** by the “**NORMAN Network - Engineered Nanomaterials**”, **POSTNOVA Analytics** and **WYATT Technology**.



<http://www.postnova.com/>



<http://www.wyatt.com/>

Scope of the Workshop

As cooperation between the *University of Vienna (Department of Environmental Geosciences)*, *Helmholtz-Centre for Environmental Research (UFZ Leipzig)* and the *Federal Institute of Hydrology (BfG, Department G2 - Aquatic Chemistry, Koblenz, Germany)* the **5th FFF-MS Workshop** will take place in **Vienna, Austria.**

Part I (first day – free of charge) will start with two survey lectures given by experts in the field: **Dr. Ralf Kaegi (EAWAG aquatic research, Zurich, Switzerland)** and **Prof. Spiros A. Pergantis (University of Crete, Department of Chemistry, Greece)**. Scientific presentations and posters will complete the morning session – **attendees giving an oral presentation will receive a financial travel subsidy.** During the afternoon session attendees will solve problems regarding data processing and analytical method development.

Part II of the workshop (optional second day, fee: 280 €) is optional and will contain practical lab work. The University of Vienna (Environmental Geosciences) has several FFF systems (flow and centrifugal) and on-line coupled detectors (e.g., SLS, DLS, ICP-MS) available where users can collect practical experience and further discuss existing problems (restricted to: **10 participants, application required**). Further **information** on registration and the program will be available soon on:

<http://umweltgeologie.univie.ac.at/hofmann-group/workshops/>

Vienna at a glance

Vienna is the **federal capital** of Austria and with 1.8 mio. inhabitants the largest city in Austria. Vienna is located on the north-eastern foothills of the Alps at the banks of the river Danube.

Due to its political importance (head offices of several international agencies, e.g., OPEC, IAEO, UNO) Vienna is one of the world's cosmopolitan cities.

Vienna has a **long history** firstly mentioned in the year 881 AD. The city center of Vienna is part of the **UNESCO** world cultural heritage with many famous sights, e.g., big wheel, castle “Schönbrunn”, “Stephan’s” cathedral.



<http://www.wien.gv.at/tourismus/index.html>