## Framework

The FFF workshop is set in the framework of the "EU COST Action ES1205" and the "WG4" of the "NORMAN network - engineered nanomaterials".

(http://www.es1205.eu)

WG4 - Engineered Nanomaterials

(http://www.norman-network.net)

## Contact & travel information

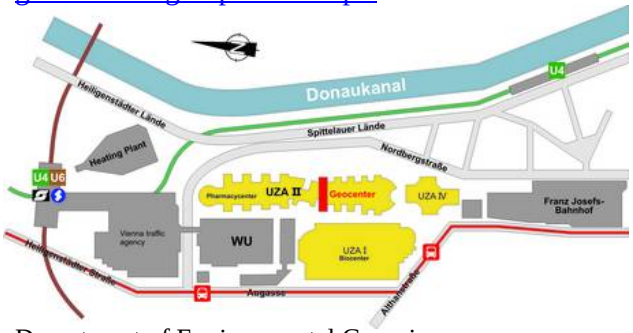
For further information please contact:

***Dr. Stephan Wagner*** & ***Dr. Frank von der Kammer*** *(Department of Environmental Geosciences, University of Vienna) or*

***Dr. Björn Meermann*** *(BfG, Department G2 - Aquatic Chemistry)*

*e-Mail:* **nanoanalytics@univie.ac.at**

*Further information will be available soon on:*
http://umweltgeologie.univie.ac.at/environmental-geosciences-group/workshops/




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

**by train:**
International trains ride to Vienna west-train station
http://www.oebb.at/en/index.jsp

**by plain:**
Vienna international airport - about 20 km from city center of Vienna - connection via airport-busses/trains
http://www.viennaairport.com/

# 3rd Workshop on Field-Flow Fractionation – Mass Spectrometry (FFF-MS)

## Natural "nanomaterials" – colloids

September 05th & 06th 2015
Vienna, Austria

as a satellite event of the ICEENN, 2015

FFF-MS Workshop

## Natural “nanomaterials” - colloids

Natural colloids are defined as organic or inorganic entities, naturally occurring in the (aquatic) environment with at least one dimension in the size range of 1 nm – 1 µm. Natural colloids play an important role in binding and transporting (anthropogenic) compounds, e.g., trace and toxic metal(loid)s, radionuclides, and nutrients.

FFF/ICP-MS evolved as a powerful indispensable tool in the field of natural colloid analysis helping to unravel the distribution of elements among different colloidal size fractions on a qualitative and quantitative manner.

Research in the field of natural colloids is an ongoing issue and, hence, the 3rd **Workshop** on Field Flow Fractionation (FFF) and Mass Spectrometric techniques (MS) will focus on the **analysis of natural colloids**.

The Workshop is financially supported by the “NORMAN Network - Engineered Nanomaterials” and the “EU COST Action ES1205.

## Scope of the Workshop

The 3rd FFF-MS workshop in 2015 will focus on the analysis of natural colloids in environmental matrices.

As cooperation between the *University of Vienna (Department of Environmental Geosciences)* and the *Federal Institute of Hydrology (BfG, Department G2 - Aquatic Chemistry, Koblenz, Germany)* the 3rd 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: **Prof. Lee Ferguson (Duke University, USA), and Prof. Horst Geckeis (Karlsruhe Institute of Technology, Germany)**. Scientific presentations will complete the morning session – **attendees giving a presentation will be completely reimbursed**. During the afternoon session attendees will solve problems regarding data processing and analytical method development.

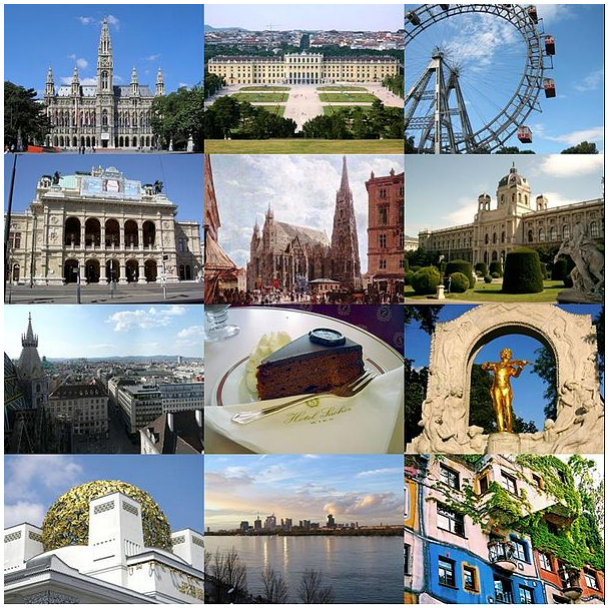
**Part II** of the workshop (second day – 280 €) is optional and will contain practical lab work. The University of Vienna (Environmental Geosciences) has several FFF systems (flow and centrifugal) and online coupled detectors (e.g., SLS, DLS, ICP-MS) available where users can collect practical experience 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/environmental-geosciences-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 blanks 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 worlds´ 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