Organisational matters

Venue
The workshop will be held in the main building of the German Federal Institute of Hydrology, Koblenz, Am Mainzer Tor 1. The main entrance is in Julius-Wegeler-Straße near the “Rhein-Mosel-Halle”. The BfG is in 10-minute walking distance from the main station “Koblenz-Hauptbahnhof”. Please note that there are very limited parking facilities nearby.

Registration
We ask you to make sure that your registration is received by 8 October 2010. Please use the Registration Form (attached hereto) that you may return by telefax, mail or E-mail. We will confirm the receipt of your registration by E-mail.

Registration fees for participation will be 100 € for Norman members and 150 € for non-Norman members. The fee covers the costs of all refreshments offered during the coffee breaks and lunch and a boat cruise along the River Rhine including the dinner on board. Payment should be made in EUR by bank transfer until 8 October 2010.

Accommodation
We have reserved a contingent of rooms for participants in the Hotel IBIS
H1831@accor.com; telephone: +49 (0)261 / 20240
There you can book accommodation by using the keyword “NORMAN” until 8 October 2010.
Further possibilities you find on the third page of this flyer.

Poster presentation
You are invited to submit a poster describing results of your current work closely related to the workshop topics. Out of these submissions, 20 posters will be selected to be presented on clipboards and during a special poster session.
The deadline for abstract submission is the 8 October 2010. The abstract should not exceed one page of text (Times New Roman, 11 pt, single spaced).

Working language
The official language of the workshop is English.

Contact
If you have further questions, please contact

Thomas Ternes
Phone: 0049 (0)261/ 1306-5443
Fax: 0049 (0)261/ 1306-5363
E-Mail: ternes@bafg.de

Corinna Brinkmann: abstract submission
Phone: 0049 (0)261/ 1306-5942
Fax: 0049 (0)261/ 1306-5363
E-Mail: brinkmann@bafg.de

Yvonne Strunck: registration and accommodation
Phone: 0049 (0)261/ 1306-5361
Fax: 0049 (0)261/ 1306-5333
E-Mail: strunck@bafg.de

Have a pleasant journey to Koblenz!
Today’s emerging substances will probably be part of tomorrow’s regulated substances. The Network of reference laboratories, research centres and related organisations for monitoring of emerging environmental substances (NORMAN) is an independent and competent platform in the field of emerging substances. NORMAN facilitates an exchange of information, debate and research collaborations at a global level with official recognition from institutional agencies of the EU.

The workshop on “Engineered Nanoparticles in the Environment” will discuss the future approaches in the emerging field of nanoparticles. The workshop addresses, amongst others, issues related to analytical techniques for nanoparticles in environmental matrices, the fate of engineered nanoparticles in the aquatic environment and during wastewater treatment, their interactions with inorganic and organic pollutants as well as their potential ecotoxicological impacts on biota.

The main objective of the workshop will be to discuss and evaluate the future requirements with regard to a profound environmental assessment of engineered nanoparticles.

Programme

Tuesday, 19 October 2010

12:30 Welcome and introduction  
Peter Heininger and Thomas Ternes,  
Federal Institute of Hydrology (BfG), Germany

Session 1: Relevance of nanoparticles (NPs)

12:45 Synthesis, characterisation and environmental impacts of manufactured nano-particles  
Jamie Lead, University of Birmingham, UK

13:30 Modeled environmental concentrations of engineered nanomaterials for different regions and at different resolutions  
Fadri Gottschalk, EMPA, Switzerland

14:00 Colloids and nanoparticles  
Frank von der Kammer, University of Vienna, Austria

14:30 Coffee break with snacks

Poster session

Session 2: Analysis of NPs

15:15 Detection of engineered nanoparticles in the aquatic environment: analytical challenges  
Ralf Kaegi, Eawag, Zürich, Switzerland

15:45 Nanomaterial residues in aquatic ecosystems  
Damia Barcelo, IDAEA-CSIC, Barcelona, Spain

16:15 Analysis of engineered inorganic nanoparticles in environmental systems  
Gabi Schaumann, University of Koblenz-Landau, Landau, Germany

16:45 Discussion

17:00 Adjourn

18:30 Boat cruise on the Rhine with dinner on board

Wednesday, 20 October 2010

Session 3: Stability of NPs in water

8:30 Grinding and dispersing of nanoparticles in aqueous suspensions  
Sandra Breitung-Faes, TU Braunschweig, Germany

9:00 Stability of silver nanoparticles in aqueous suspensions  
Markus Delay, Karlsruhe Institute of Technology (KIT), Germany

9:30 Role of organic matter, calcium, phosphate, pH and ionic strength on the stability of nanoparticles  
Rute F. Domingos, University of Lisbon, Portugal

10:00 Coffee break

Session 4: Fate of NPs in the aqueous environment

10:30 Quantifying fullerene C60 including transformation products in water with LC LTQ Orbitrap MS and application to environmental samples  
Thomas L. ter Laak, KWR Watercycle Research Institute; Nieuwegein, Netherlands

11:00 Emissions of nanosilver and its behavior in wastewater treatment plants  
Michael Burkhardt, HSR Hochschule für Technik, Rapperswil, Switzerland

Session 5: Sorption of NPs in the environment

11:30 Sorption of non-ionic organic compounds onto carbon-based nanomaterials  
Thorsten Häffer, University of Duisburg-Essen, Duisburg, Germany

12:00 Analysis of the adsorption of environmentally relevant macromolecules on TiO2 NP and the effects on dispersion stability, agglomeration and sedimentation rates  
Julian Gallego-Urrea, University of Gothenburg, Sweden

12:30 Lunch

13:30 Poster session

Session 5: Ecotoxicity of NPs

14:30 Toxicity of inorganic NPs to Daphnia magna – Does size really matter?  
Ralf Schulz, University of Koblenz-Landau, Landau, Germany

Platform discussion

15:00 Addressing the relevance and impact of NPs – Where are we going in the future?

16:30 Lab-tour

17:30 End of the meeting
### Recommended Hotels (for guests of the BfG, September 2010)

<table>
<thead>
<tr>
<th>No</th>
<th>Hotel</th>
<th>Single Room (€)</th>
<th>Address</th>
<th>E-mail</th>
<th>Telephone</th>
<th>Fax</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hotel Brenner</td>
<td>63,—</td>
<td>Rizzastr. 20-22</td>
<td><a href="mailto:gof@hotel-brenner.de">gof@hotel-brenner.de</a></td>
<td>(+49)261/91578-0</td>
<td>(+49)261/36278</td>
</tr>
<tr>
<td>2</td>
<td>Hotel Hamm</td>
<td>51,50</td>
<td>St. Josef-Str. 32</td>
<td><a href="mailto:info@hotel-hamm.de">info@hotel-hamm.de</a></td>
<td>(+49)261/30321-0</td>
<td>(+49)261/30321-60</td>
</tr>
<tr>
<td>3</td>
<td>Hotel Hohenstaufen</td>
<td>67</td>
<td>Emil-Schüller-Str. 41-43</td>
<td><a href="mailto:info@hotel-hohenstaufen.de">info@hotel-hohenstaufen.de</a></td>
<td>(+49)261/3014-0</td>
<td>(+49)261/3014-444</td>
</tr>
<tr>
<td>4</td>
<td>GHOTEL Koblenz</td>
<td>65,—</td>
<td>Neversstraße 15</td>
<td><a href="mailto:koblenz@ghotel.de">koblenz@ghotel.de</a></td>
<td>(+49)261/200245-0</td>
<td>(+49)261/200245-555</td>
</tr>
<tr>
<td>5</td>
<td>Hotel Ibis</td>
<td>67,—</td>
<td>Rizzastr. 42</td>
<td><a href="mailto:H1631@accor.com">H1631@accor.com</a></td>
<td>(+49)261/3024-0</td>
<td>(+49)261/3024-240</td>
</tr>
<tr>
<td>6</td>
<td>Hotel Kleiner Riesen</td>
<td>55,—</td>
<td>Kaiserin-Augusta-Anlagen 18</td>
<td><a href="mailto:info@hotel-kleinerriesen.de">info@hotel-kleinerriesen.de</a></td>
<td>(+49)261/30346-0</td>
<td>(+49)261/160725</td>
</tr>
<tr>
<td>7</td>
<td>Hotel Haus Morjan</td>
<td>57,—</td>
<td>Konrad-Adenauer-Ufer</td>
<td><a href="mailto:info@hotel-haus-morjan.de">info@hotel-haus-morjan.de</a></td>
<td>(+49)261/304290</td>
<td>(+49)261/3042956</td>
</tr>
<tr>
<td>8</td>
<td>Mercure Hotel Koblenz</td>
<td>88,—</td>
<td>Julius-Wegeler-Str. 6</td>
<td><a href="mailto:H2004@accor.com">H2004@accor.com</a></td>
<td>(+49)261/136-0</td>
<td>(+49)261/136-1199</td>
</tr>
</tbody>
</table>
How to find the Federal Institute of Hydrology (BfG)

By car:
Either Motorway A3, exit “Dernbacher Dreieck” or Motorway A61, exit “Kreuz Koblenz”, continue A48 in the direction of Koblenz, exit “Koblenz-Nord”. Follow B9 towards Koblenz for approx. 8 km. Follow signs for “Koblenz/Rhein-Mosel-Halle”. Go straight on and turn right after the 4th traffic light towards “Rhein-Mosel-Halle/Weindorf”. Follow the road to the left and go straight on at the lights. The BfG main building is on the right.

(Parking facilities: Rhein-Mosel-Halle or in streets nearby).

By aeroplane:
From Cologne Airport by train to Koblenz via Cologne (Köln).
Travel time: approx. 1½ hours. Train connection approx. every half an hour.

From Frankfurt/Rhein/Main Airport by train via station „Fernbahnhof“.
Travel time: approx. 1¼ hours. Trains to Koblenz go every hour.

For further information: http://reiseauskunft.bahn.de/bin/query.exe/en

From Frankfurt/Hahn Airport by bus to Koblenz railway station (Hauptbahnhof).
Travel time: approx. 1¼ hours. Bus connections five times a day.