



Budapest (Hungary): panorama of the Danube and Pest, seen from Buda Castle Hill  
Photo by: Marc Ryckaert

## Heat Exchanger Fouling and Cleaning-2013

<http://heatexchanger-fouling.com/>

June 09-14, 2013

Danubius Health Spa Resort Margitsziget  
Danubius Grand Hotel Margitsziget  
1138 Budapest, Margitsziget, Hungary  
[www.danubiushotels.com/margitsziget](http://www.danubiushotels.com/margitsziget)  
[www.danubiushotels.com/grandhotel](http://www.danubiushotels.com/grandhotel)

### CALL FOR PAPERS

#### Conference chair:

Professor H. Müller-Steinhagen  
Technische Universität Dresden, Germany  
E-mail: [rektor@tu-dresden.de](mailto:rektor@tu-dresden.de)

#### Conference co-chairs:

Dr. M.R. Malayeri,  
University of Stuttgart, Stuttgart, Germany  
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Professor A.P. Watkinson  
The University of British Columbia, Canada  
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#### Organising Committee:

Dr. Fernando Aguirre (Heat Transfer Research Inc. USA),  
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#### Synopsis

Fouling, i.e. the formation of deposits on the heat transfer surfaces is one of the most severe problems in the design and operation of heat exchangers. In most industrial situations, the inefficiency of heat transfer resulting from fouling has a direct link to excess fuel consumption in the process. In addition to the appropriate selection of operating conditions and exchanger geometry, there are numerous chemical and mechanical methods to mitigate fouling and to remove deposits from the heat transfer surfaces. However, all methods to reduce fouling require some understanding of the mechanisms of the deposition process, the structure of the deposits and the factors which govern adhesion to the heat transfer surfaces. Even with optimal design and operation, cleaning of the heat exchanger surfaces eventually becomes necessary.

The aim of this series of conferences is to facilitate innovative thinking and to explore new theoretical and practical approaches to address the tremendous challenges associated with fouling of heat exchangers. It will also provide an opportunity for experts from industry, academia and research centers from around the world to present their latest research and technological developments in fouling mitigation and cleaning strategies. In addition to academic research we, therefore, particularly welcome industrial case studies, whether there have been successful solutions to fouling or not.

#### Scope of the Conference

The key themes of Heat Exchanger Fouling and Cleaning 2013 are:

- Crude oil and hydrocarbon fluid fouling
- Fouling in cooling water and thermal desalination units
- Fouling in power plants
- Fouling in the dairy and food industries
- Fouling in automotive industry
- Mechanisms of heat transfer fouling (crystallisation, particulate, reaction, corrosion, solidification and biofouling)

- Surface and chemical treatment
- Modeling and CFD studies
- Design of heat exchangers
- Micro and compact heat exchanger fouling
- Fouling mitigation
- Cleaning of heat exchangers
- Heat exchanger fouling monitoring

#### Conference Format

The conference will begin on Sunday evening and continues through to Friday lunchtime. Morning and late afternoon/evening sessions are scheduled to provide a stimulating balance between formal presentations, small group interactions and informal discussions. Adequate time will be provided in the social hours and in the afternoons for ad/hoc discussions and/or for exploring the beautiful surroundings of the hotel. The number of conference participants will be limited to about 100, in order to encourage maximum interaction. Furthermore, all participants will be accommodated in the conference hotel and share meals and evening functions.

#### Conference Venue – Budapest, Hungary

Budapest is the capital and the largest city of Hungary as well as the principal political, cultural, commercial, industrial, and transportation centre. According to the 2011 Census, Budapest had 1.74 million inhabitants within an area of 525 square kilometres (202.7 sq mi). Budapest became a single city occupying both banks of the river Danube with the unification on 17 November 1873 of west-bank Buda and Óbuda with east-bank Pest.

Frequently described as one of the most beautiful cities in Europe, its extensive World Heritage Site includes the banks of the Danube, the Buda Castle Quarter, Andrassy Avenue, Heroes' Square and the Millennium Underground Railway, the second oldest in the world. Other highlights include a total of 80 geothermal springs, the world's largest thermal water cave system, and third largest Parliament building (Wikipedia).

In our conference venue, Danubius Health Spa Resort Margitsziget and Danubius Grand Hotel, we will experience the power of nature on tranquil Margaret Island, located just 10 minutes from the city centre in the middle of a romantic park on Margaret Island, and surrounded by ancient trees and historical ruins. A hotel and spa with fantastic pools, and thermal baths filled with the natural, mineral-rich, healing waters of Budapest. The hotel is located 28km from the airport (45 Minutes by Taxi) and 5km or 9km from both railway stations. We already arranged a half day city-

sightseeing tour for all conference participants and their guests. A special highlight is the conference dinner, which will be held as part of a boat trip on the river Danube.

To further enjoy the beautiful location and venue, conference participants will be able to stay for a very special rate before and after the conference. These additional arrangements may be booked together with registration for the conference, but will be invoiced separately through the hotel when checking out.

The temperature in Budapest during the second week in June 2012 is shown in the following Table:

10	11	12	13	14	16
Hi 73°F 23°C	Hi 72°F 22°C	Hi 70°F 21°C	Hi 68°F 20°C	Hi 75°F 24°C	Hi 86°F 30°C
Lo 63°F 17°C	Lo 61°F 16°C	Lo 57°F 14°C	Lo 55°F 13°C	Lo 52°F 11°C	Lo 55°F 13°C

### **Important dates and submission deadlines**

Abstracts due 30 November 2012  
Notification of acceptance 15 December 2013  
Full manuscript due 31 March 2013

Both oral and poster presentations will be scheduled. Interested participants are asked to submit a one-page abstract (max. 250 words) for consideration to Dr. Reza Malayeri:

[m.malayeri@itw.uni-stuttgart.de](mailto:m.malayeri@itw.uni-stuttgart.de)

Following acceptance of the abstract, guidelines for preparation of the full manuscript will be provided. For industrial contributions, the option of submitting an extended abstract rather than a full-length manuscript is offered. After the conference, all papers will be peer-reviewed and electronically published on the conference web-site:

<http://heatexchanger-fouling.com/>

which also provides access to the proceedings of the previous fouling conferences of this series. A number of selected papers will additionally be published in a special issue of **Heat Transfer Engineering**.

Any enquiries regarding abstracts and manuscripts should be addressed to:

Dr. Reza Malayeri, Head of research group on fouling and cleaning in process industries, Institute of Thermodynamics and Thermal Engineering, University of Stuttgart, Stuttgart-Germany,

E-mail: [m.malayeri@itw.uni-stuttgart.de](mailto:m.malayeri@itw.uni-stuttgart.de)  
T: +49-711-6856-7656; F: +49-711-6856-3503

It should also be pointed out that each participant may present a maximum of two papers and that the final acceptance of the manuscript and its inclusion in the pre/post-conference proceedings are subject to participation of at least one author to present the work.

### **Fees and registration**

**The registration fees cover accommodation, all meals, excursion, conference banquet, daily social hour, conference fees, pre-prints and on-line publication of the papers.**

For registration and payment **before April 1st 2013**, the Early Bird Registration Fee will apply:

Full Participants: €1,400.00  
Post Graduate Students: €1,000.00  
Accompanying Guests: € 470.00

**After 1st April 2013**, the following fees will apply:

Full Participants: €1,600.00  
Post Graduate Students: €1,150.00  
Accompanying Guests € 520.00

For registration please log onto the conference website.

The conference has a limit of 100 participants, and registration will be closed on May 5<sup>th</sup>, 2013 or once fully booked (as it happened during previous years). Registrations are only fully confirmed when payment arrived at the conference account.

<http://heatexchanger-fouling.com/>

### **Previous conference e-proceedings**

The previous e-proceedings of this conference series (2003 onwards) can be obtained free of charge from the conference homepage:

<http://heatexchanger-fouling.com/proceedings.htm>