### HEAT EXCHANGER FOULING & CLEANING CONFERENCE XV

April 21 – 26, 2024 • Dolce CampoReal Lisboa • Lisbon, Portugal

### CALL FOR PAPERS

### SYNOPSIS

Heat exchanger fouling presents a persistent challenge that affects the economics, production capacity, and environmental and safety considerations in diverse industries, including food, pharmaceutical, water, chemical, petrochemical, and refining.

Numerous studies have shown that heat exchanger fouling is contributing significantly to global  $CO_2$  emissions. A better understanding of fouling mechanisms, fouling control, and mitigation will help the energy-intensive process industries to significantly reduce their carbon footprint.

Furthermore, cost penalties associated with heat exchanger fouling are estimated to be roughly 0.25% of the gross domestic product (GDP) for industrialized countries. Fouling of heat transfer equipment is costing global industries hundreds of millions of dollars every year in increased equipment and maintenance costs, as well as energy and production losses.

It is important to advance research in fouling mechanisms, performance monitoring and process optimization methods, the use of predictive models, and fouling mitigation and cleaning technologies.

The Heat Exchanger Fouling & Cleaning Conference provides a unique opportunity to facilitate innovative thinking through the sharing of ideas, research, and technology. Collaboration is encouraged through interaction, discussion, and networking. Attendees will be able to participate in informative presentations and poster sessions, as well as interactive ad hoc discussions. Social activities—meals, evening receptions, and an offsite excursion—are also planned.

Submissions from industry and academia—including students presenting their work—are welcome. Because fouling is a complex problem, all papers related to this topic will be considered, including practical and theoretical approaches, case studies, modeling, techniques on cleaning, or new inventions.

### SCOPE OF THE CONFERENCE

The themes of the 2024 Heat Exchanger Fouling & Cleaning Conference include

- Fouling in industrial heat exchanger systems
  - Crude oil and hydrocarbon systems
  - Cooling water systems
  - Petrochemical systems
  - Biofuels and renewable feedstocks
  - Thermal desalination units
  - Power plants
  - Dairy and food industries
- Micro, milli, and compact heat exchanger fouling
- Mechanisms of heat transfer fouling (crystallization, particulate, reaction, corrosion, and biofouling)
- Monitoring, scheduling, and controlling the fouling and cleaning in heat exchangers and associated networks
- Design, retrofit, and revamp of heat exchangers and associated networks
  to mitigate fouling
- Surface modifications
- Cleaning of heat exchangers
- Modeling and simulation of fouling processes
- Numerical/CFD studies on fouling processes
- · Modeling environmental and economic impact of fouling and cleaning
- Role of digital transformation in fouling management

### **CONFERENCE CHAIR:**

DR.-ING. HANS U. ZETTLER Heat Transfer Research, Inc., USA hans.zettler@htri.net

#### CONFERENCE SECRETARY: DR. EDWARD ISHIYAMA

Heat Transfer Research, Inc., USA edward.ishiyama@htri.net

### SCIENTIFIC COMMITTEE:

**DR.-ING. WOLFGANG AUGUSTIN** Technische Universität Braunschweig, Germany w.augustin@tu-braunschweig.de

**DR. GUILLAUME DELAPLACE** INRAE, France guillaume.delaplace@inrae.fr

### DR.-ING. HEIKE GLADE

Universität Bremen, Germany heike.glade@uni-bremen.de

### DR.-ING. LES JACKOWSKI

Chevron Energy Technology Company, USA Ijau@chevron.com

PROF. LUIS MELO University of Porto, Portugal Imelo@fe.up.pt

#### DR. AARON SMITH

Heat Transfer Research, Inc., USA aaron.smith@htri.net

### PROF. QI ZHAO

University of Dundee, UK q.zhao@dundee.ac.uk

## For more information, visit www.heatexchanger-fouling.com.

# HTRL®

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### IMPORTANT DATES AND SUBMISSION DEADLINES

### **ABSTRACTS DUE** September 27, 2023 NOTIFICATION OF ACCEPTANCE October 25, 2023 FULL MANUSCRIPT DUE January 24, 2024

Both oral and poster presentations are scheduled. Interested participants are asked to submit a one-page abstract (max. 250 words) to foulingconference@htri.net for consideration.

Following the acceptance of abstracts, 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, papers that pass the peer-review process will be electronically published on the conference website. Furthermore, a number of select papers will be printed in an engineering journal.

Each participant may present a maximum of two papers. The final acceptance of the manuscript and its inclusion in the conference proceedings is dependent upon author participation.

### PREVIOUS CONFERENCE E-PROCEEDINGS

The previous e-proceedings of this conference (2003 onwards) can be obtained free of charge from the conference homepage: heatexchanger-fouling.com/refereed-proceedings/

### CONFERENCE FORMAT

The conference begins Sunday afternoon and finishes on Thursday evening after the Gala Dinner and awards (with hotel check out on Friday, April 26). Morning and afternoon sessions provide a stimulating balance between formal presentations, small group interactions, and informal discussions. Adequate time is provided in the afternoons and social hours for ad hoc meetings and discussions. To encourage maximum interaction and to avoid parallel sessions, the number of conference participants is limited to 120. As with previous conferences, the registration fees include accommodations, meals, and social activities. All participants will stay in the conference hotel and meet for meals and evening functions.

### For more information, visit www.heatexchanger-fouling.com.



Panoramic view of Dolce CampoReal Lisboa. Photograph courtesy of the Dolce CampoReal Lisboa Hotel.

### **CONFERENCE VENUE**

Dolce CampoReal Lisboa is the jewel of the Oeste region. Located in Torres Vedras and just a 30-minute drive from Lisbon, this resort offers tranquility and all the amenities of a five-star hotel.

The 151 rooms and suites offer breathtaking views that overlook either the golf course, vineyards, or the protected landscape of the Socorro and Archeira Mountains. Allow yourself to stay and enjoy the indoor and outdoor swimming pools, spa, tennis courts, and football pitch.

Taste the best of Oeste-region cuisine and the rich flavoring of Lisbon wines at the three restaurants and two bars. The Grande Escolha offers a unique fine-dining experience.

With  $2150m^2$  of meeting space (all equipped with ergonomic furniture and top notch audio-visual equipment) Dolce CampoReal Lisboa is the perfect place for inspiring events. Discover it and surprise yourself!

### CONFERENCE EXCURSION

Included in the registration fee is a half-day excursion to the city of Lisbon, Portugal on the Tuesday afternoon of April 23, 2024.

### CONFERENCE FEES Early Bird registration fee (net) before or on February 1, 2024

Industrial Participants Academic Professors Students (Post Graduates) Accompanying Guests

US\$2350.00 US\$2050.00 US\$1250.00 US\$850.00

#### Late registration from February 1, 2024

Industrial Participants US\$2450.00 Academic Professors US\$2150.00 Students (Post Graduates) US\$1300.00 Accompanying Guests US\$900.00

Fees include conference proceedings, accommodation at the hotel, meals, and the conference excursion. There is also a free social hour every evening at the hotel bar. The Accompanying Guest fee includes shared accommodation and everything apart from the conference proceedings.

Registrations are confirmed once payment has been received by the conference account. Conference registration will close when 120 participants are booked.

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