

Proceedings of the International Conference on Heat Exchanger Fouling and Cleaning - 2024 (Peer-reviewed) April 21–26, 2024, Lisbon, Portugal; Editors: H.U. Zettler and E.M. Ishiyama

Preface for the 15th International Conference on Heat Exchanger Fouling and Cleaning

We are pleased to reflect on the success of the **15th Heat Exchanger Fouling & Cleaning Conference**, which took place in the scenic city of **Lisbon, Portugal** from **April 21 to 26, 2024**. This year's conference marked another milestone in our long-standing tradition of fostering innovation and collaboration in the field of heat exchanger fouling and cleaning. Since the conference's inception in 1995, it has provided a unique platform for academics, researchers, and industry professionals to come together, share their insights, and tackle the complex challenges related to fouling.

Over the course of this event, we hosted an impressive lineup of **67 presentations**, featuring **40 contributions** from leading research institutions and universities, and **27 from industry**. The program covered a wide range of topics, including fouling in hydrocarbon systems, crystallization, biofouling, reaction fouling, and fouling in food processing. In line with the evolving landscape of our field, this year's discussions also emphasized advanced technologies such as **machine learning for fouling prediction**, **surface modifications**, and **new cleaning technologies**. These sessions provided participants with fresh perspectives on both the scientific and practical aspects of fouling and cleaning.

Among the many memorable presentations were those that explored the impact of surface treatments on fouling, predictive models for cleaning, and the integration of **artificial intelligence** into fouling mitigation strategies. These topics sparked engaging discussions and highlighted the progress our community continues to make in addressing these critical issues.

The conference also provided invaluable opportunities for networking, reinforcing old connections and fostering new collaborations. As always, informal conversations during breaks and social events played a key role in deepening relationships and driving the exchange of ideas. It is this sense of community, alongside the technical knowledge shared, that makes our conference so special.

We would like to express our deep gratitude to everyone who participated in the post-conference review process. Your timely feedback was essential for finalizing the conference proceedings. Selected papers have been chosen for publication in respected journals such as *Heat Transfer Engineering* and *Heat and Mass Transfer*, further solidifying the conference's contribution to the advancement of our field.

Lastly, we remember **Professor Norman Epstein**, whose contributions and commitment to our community have left an enduring impact. His memory continues to inspire us as we push forward in our efforts to better understand and mitigate fouling.

Once again, we extend our sincere thanks to all attendees for your active participation and enthusiasm. The success of the 15th Heat Exchanger Fouling & Cleaning Conference is a

testament to the dedication and passion of this incredible community. We look forward to seeing you at the next edition of the conference as we continue our journey of innovation and collaboration.

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