

## **WEBINAR FORUM**

Friday, 7th July 2023

"Methodologies Available to Design a Heat Exchanger and Solve In-service Heat Transfer Problems"

Tom Elson, Element Materials Technology.

There are many methodologies available to design a heat exchanger and solve in-service heat transfer problems. The traditional trifecta of experimental, theoretical, and numerical simulation still holds true. There is an age-old argument of simulation versus testing and which model of reality is right. This talk argues that there is room for both in this world and that simulation and testing can complement each other. In particular, the talk will focus on specific studies where computational fluid dynamics has been used to assist the design of heat exchangers, compliment testing, and act as a design verification tool. Through these studies the speaker hopes to demonstrate how simulation can be used to accelerate product development timescales and provide insight into the underlying physics that are key to efficient design processes and resolving in-service challenges.

The presentation will start at **12 noon** (for one hour).

Free Webinar Registration Link: HERE



## Presenter - Tom Elson

Tom is a Principal Engineer at Element Digital Engineering. A Chartered Engineer with an MEng in Aerospace Engineering followed by a PhD in Computational Aerodynamics. With ten years industry experience working in R&D and product design across a range of sectors including oil and gas, additive manufacturing, and consumer products. Most of this experience has been utilising various computational analyses to accelerate product development, often with a large focus on heat transfer.

Specialties in aerodynamics, heat transfer, computational fluid dynamics and optimisation methods. Tom enjoys challenging Multiphysics simulations and applying data science/statistical methodologies to get the right answer faster.