



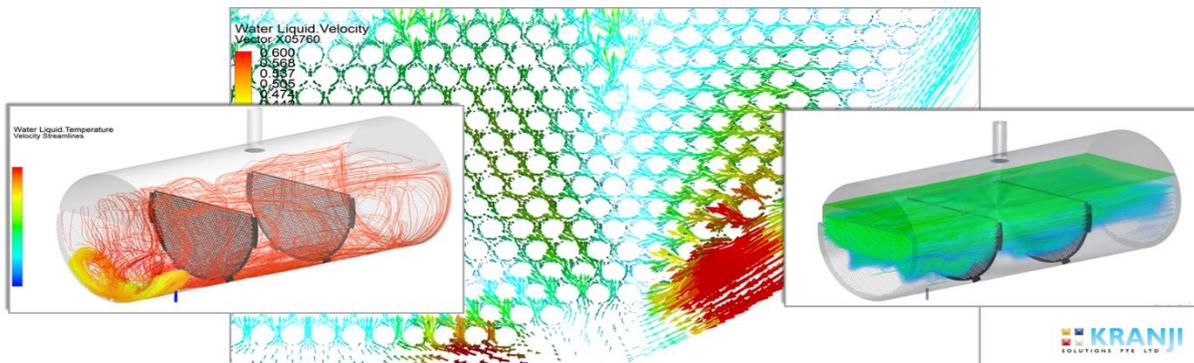
heat transfer society

WEBINAR FORUM

Tuesday, 14th December 2021

“Understanding Heat Transfer and Complex Buoyancy-driven Circulation in Sulphur Condensers”

*Tom Ralston and Abdulqadir Aziz,
Kranji Solutions Pte Ltd*



Sulphur condensers are key equipment in the Sulphur Recovery Unit (SRU) of a refinery or gas processing plant. Loss of integrity means shut-down and production losses on \$100,000s per day. The presentation will describe modelling, undertaken as part of a more general failure analysis, concerning these Condensers in the SRU of a large Middle-East gas processing facility. The presentation focuses on fully transient Computational Fluid Dynamic Simulation (CFD) of shell-side natural circulation. Naturally circulating boiling water provides cooling of these condensers. Unique visual insights will be shared, of two-phase circulation processes which were essential to the operator’s wider failure analysis. Supporting studies and modelling will also be discussed, including key process data time-trends, Aspen HYSYS®/SulSim process simulations, and heat exchanger modelling with Aspen Shell & Tube Exchanger.

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

Free Webinar Registration Link: [HERE](#)

www.hts.org.uk

If undelivered, please return to Colin Weil, 7 Sequoia Park, Hatch End, Pinner, Middlesex HA5 4BS
Enquiries: David Norton, Tel: 01444 237575, Email: dnorton@bihl.com

Speaker Bios

Tom Ralston

Tom commenced his career with the UK National Engineering Laboratory (NEL), contributing to experimental and analytical heat transfer research, consultancy, and software development. His experience includes combustion and furnaces, shell & tube, air-cooled exchangers and compact exchangers, de-bottlenecking, and failure analysis. Tom managed the HTFS software business with Hyprotech and AspenTech before his current role as process heat transfer consultant with Kranji.

Abdulqadir Aziz

Abdulqadir has specialized in CFD simulations for 9 years, having worked on racing cars, wind turbines, separation processes and heat exchangers. He attained a PhD in Mechanical Engineering in 2017. In his current role as CFD Engineer for Kranji Solutions, he specializes in separation, mixing and heat exchange processes.