Tuesday, June 6

08:00 **Check in**

GENERAL SESSION – EUROPE

08:30 **_FLOW-3D_ global update and direction**
Dr. Amir Isfahani, Flow Science

09:00 **A case study of _FLOW-3D_ with amusement rides**
Tim Jacobi, Zamperla

09:30 **Modelling of freezing and thawing of urea aqueous solution for SCR in automotive emission control**
Dr. Philippe Georis, Plastic Omnium

10:00 **Sinking bubbles – A numerical analysis**
Dr. Daniel Weiss, FHNW

10:30 **Break**

11:00 **Numerical modeling of bead mixing**
Dr. Julien Bœuf, Roche Diagnostics GmbH

11:30 **_FLOW-3D_ products – Development overview**
Dr. Michael Barkhudarov, Flow Science

12:30 **Lunch**

HYDRAULICS WATER TRACK – STRASBOURG

14:00 **Bottom outlets at hydropower dams: challenges in assessing air demand using CFD modelling**
Pierre-Louis Ligier, SWECO

14:30 **Scour of rock by fluid-solid coupling**
Dr. Erik Bollaert, AquaVision Engineering

15:00 **Bridge hydraulics – Can we do better? Applied CFD to inform 2D modelling techniques. The Queensland Department of Transport and Main Roads' approach to designing better bridges**
Urs Baeumer, Queensland Department for Transport and Main Roads

15:30 **Break**

16:00   **Study of currents and recirculations downstream of an open gated dam**
Thomas Viard, EDF

16:30   ***FLOW-3D* HYDRO modeling to enhance the design of a combined spillway/high-level outlet works**
Dr. Frank Lan, AECOM

17:00   **Investigation of the different models of Elliptical-Lopac Gate performance under submerged flow conditions**
Ashkan Pilbala, University of Trento

19:00   **Conference Dinner**

ADDITIVE MANUFACTURING & LASER WELDING TRACK – LE 7

14:00   **Multiphysics simulation of the impact of ringspot Gaussian beam shape on the melt pool conditions during the laser powder bed fusion of stainless steel 316**
Dr. Mohamad Bayat, Technical University of Denmark

14:30   **Thermo-fluid modeling of influence of attenuated laser beam intensity profile on melt pool behavior in laser-assisted powder-based direct energy deposition**
Mohammad Sattari, University of Twente

15:00   **Modelling and simulation of laser welding technologies using *FLOW-3D* WELD**
Michael Allan, Manufacturing Technology Centre

15:30   **Break**

16:00   **Towards thermo-fluid model of melt pool dynamics during laser dispersing of ceramic TiB particles**
Bart Ettema, University of Twente

16:30   **A multi-physics CFD study on laser beam shapes to control porosity formation during laser beam welding of aluminium 1060**
Qamar Hayat, University of Warwick

17:00   **Laser welding of dissimilar materials – Simulation driven optimization of process parameters**
Dr. Marcin Serdeczny, Flow Science

19:00   **Conference Dinner**

MUNICIPAL WATER TRACK – BRUSSELS/LUXEMBOURG

14:00	**Ferric chloride flocculant tracking in wastewater treatment**	
	Steve Saunders, Ibis Group	

14:30 **Using *FLOW-3D* HYDRO to improve collection system hydraulic model**
Bassam Aldhafari, San Francisco Department of Public Works Hydraulic Section

15:00 **Optimisation of the operation of the buffer tank of the Seine-Valenton wastewater treatment plant**
Jean-Baptiste Monge, PROLOG INGENIERIE

15:30 **Break**

16:00 **Wastewater vortex drop shaft – 2 fluid modelling with *FLOW-3D* HYDRO**
Markus Grünzner, Flow Science Deutschland

16:30 **Methods for modeling aeration and dissolved oxygen**
John Wendelbo, Flow Science

17:00 **Roundtable Discussion**

19:00 **Conference Dinner**

Wednesday, June 7

GENERAL SESSION – EUROPE

09:00 ***FLOW-3D* (x): Expand your simulation experience**
Raul Pirovano, XC Engineering

09:30 **Faster postprocessing with *FLOW-3D* POST**
Dr. Michael Barkhudarov, Flow Science

10:00 **Break**

METAL CASTING TRACK – LE 7

10:30 **Opportunities and challenges in simulating HPDC MegaCasting parts**
Elias Schläpfer, IdeeRoth AG

11:00 **Die erosion: A case study**
Boris Baldin, Form Stampi

11:30	**Simulation of solidification of gravity sand casting by *FLOW-3D* CAST** Albert An, China Machinery Industrial Products Co., Ltd.
12:00	**Effective and automated postprocessing using Python scripts – Application examples for *FLOW-3D* CAST** Dr. Matthias Todte, Flow Science Deutschland
12:30	Lunch
14:00	**An exploration of the optimal gating geometry for investment cast, superalloy aerospace turbine blades using *FLOW-3D* (x) optimization software** Christopher Jones, Cranfield University
14:30	**Minimizing air entrainment in an HPDC shot sleeve during slow-shot stage** Dr. Michael Barkhudarov, Flow Science
15:00	Break and Vote

COASTAL, MARITIME & ENVIRONMENTAL TRACK – BRUSSELS/LUXEMBOURG

10:30	**Study of the vulnerability reduction to extreme floods of the Marne water intake structure of the Marne reservoir lake** Gwenaël Chevallet, BRL Ingénierie
11:00	**Debris in rivers: How *FLOW-3D* HYDRO can help with the clean-up** Dr. Kate Bradbrook, JBA Consulting
11:30	***FLOW-3D* HYDRO application to marinas** Ignacio Berenguer Pérez, HIDTMA, S.L.
12:00	**Barchan dunes simulation with *FLOW-3D* HYDRO** Aurelien Auzias, TECH-AM
12:30	Lunch
14:00	**A numerical investigation of fish-friendly fine screens by porous-media approach** Dr. Serhat Küçükali, Hacettepe University
14:30	**Numerical simulations of three-dimensional subaerial landslide generated waves: Comparing *FLOW-3D* HYDRO and OpenFOAM** Ramtin Sabeti, Brunel University
15:00	Break and Vote

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HYDRAULICS WATER TRACK – STRASBOURG

10:30   **Spatial distribution of pressure along a dam flap gate**
Dr. Vanessa Martin, EDF

11:00   **Off stream reservoir inlet structure**
Dr. Tomas Studnicka, AQUATIS

11:30   **Visualization of simulation results in photorealistic 3D models**
Thorben Frener, Fichtner Water & Transportation GmbH

12:00   **CFD analysis of discharge from fixed-cone valves on proposed outlet work system at a dam**
Ron Berry, GEI

12:30   **Lunch**

14:00   **CFD modeling of the PSH Porąbka Żar with an additional compensation chamber**
Bernard Twaróg, Cracov University of Technology

14:30   **Roundtable Discussion**

15:00   **Break and Vote**

GENERAL SESSION – EUROPE

15:30   ***FLOW-3D* products – A look ahead**
Dr. Michael Barkhudarov, Flow Science

16:00   **Best presentation award, closing remarks and open forum**