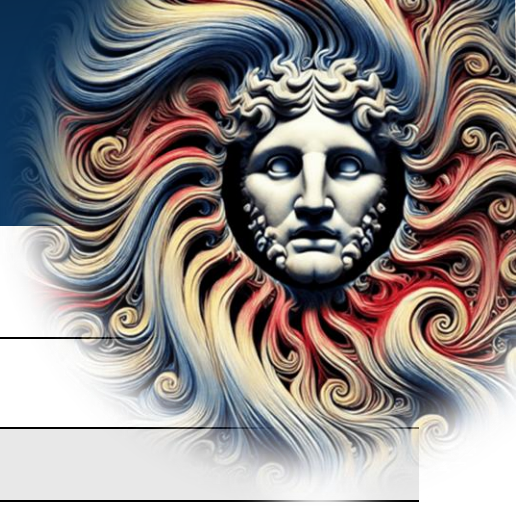
International Workshop on Flow-Induced Blood Damage in Rotating Systems

BDW 2025



Programme

Thursday 4th September

08:30	**Breakfast/Registration**
09:00	**Welcome** Katharine Fraser, *University of Bath*
09:10	**Mechanical circulatory support related hemorheological research** Nobuo Watanabe, *Shibaura Institute of Technology*
10:00	**Experimental and numerical analysis of the cell-free layer in blood flows up to a haematocrit of 39%** Max Lihs, *University of Rostock*
10:40	**Tea break**
11:10	**Expanding the role of numerical hemolysis modeling in cardiovascular device design and evaluation** Ilaria Guidetti, *Politecnico di Milano*
11:50	**Automated design and simulation workflow for VAD** Anna Lancmanova, *Czech Technical University in Prague/Czech Academy of Sciences*
12:30	**Lunch break**
13:30	**Impact of realistic operating conditions on preclinical assessment of hemolysis** Simon Klocker, *Medical University of Vienna*
14:10	**Comparison of the hemolytic behavior of pediatric and adult blood in a Couette shearing device** Vera Froese, *Charité Berlin*
14:50	**Tea break**
15:20	**Development of blood mimicking fluids: a comparative study in different flow regimes** Gesine Hentschel, *Leibniz University Hannover*
16:00	**Updates on the BDW Testcase** Benjamin Torner, *Medical University of Vienna*
18:00	**Evening reception (food and drinks included)** *The Boater* *9 Argyle St, Bath BA2 4BQ*

Friday 5th September

08:30	**Breakfast/Registration**
09:00	**Welcome back** Katharine Fraser, *University of Bath*
09:10	**Advances in hemocompatibility testing of mechanical circulatory support devices** Bala Sivraman, *Abbott*
09:50	**Haemolysis measurements for centrifugal and pulsatile pumps** Ronald Knight, *Haemair*
10:30	**Tea break**
11:00	**Pumpless in-vitro oxygenator haemolysis setup** Nicolas Gendron, *RWTH Aachen University*
11:40	**Model hierarchies for hemolysis prediction in blood-handling medical devices** Nico Dirkes, *RWTH Aachen University*
12:20	**Lunch break**
13:20	**Rapid-fire: Correlating turbulence with blood damage** Rosmarie Schoefbeck, *Medical University of Vienna*
13:40	**Analyzing turbulent effects on blood damage using a counter-rotating Taylor-Couette system** Henri Wolff, *Charité Berlin*
14:20	**Tea break**
14:50	**The effects of turbulence over the performance of three commercial blood pumps** Peng Wu, *Southeast University*
15:30	**Rapid-fire: EchoPIV for turbulent field measurement in blood analogues** Evelyn Hu, *University of Bath*
15:50	**Closing words** Katharine Fraser, *University of Bath*