Program Overview (Tentative)

Tuesday, May 7

	Room A (TERRSA Hall) Foyer
15:00 – 18:00	Registration
	Room A (TERRSA Hall)
17:30 – 19:30	Welcome reception

Program Overview (Tentative)
Wednesday, May 8

	Plenary, Room A (TERRSA Hall)
8:30 – 8:40	Welcome remarks
8:40 – 9:30	Fundamentals and Applications of Ammonia Combustion for Carbon Neutrality Hideaki Kobayashi Institute of Fluid Science, Tohoku University, Japan
9:30 – 10:20	Do the Thermodynamic Properties of New Fuels Challenge the Current State-of-the-art Modeling? Terese Løvås Department of Energy and Process Engineering, Norwegian University of Science and Technology (NTNU), Norway
10:20 – 10:40	Break Exhibition (Foyer)

	Room A	Room B	Room C	Room D	Room E	Room F	Room G	Room H	Room I	Room J	Room K	Room L	Room M
10:40 – 12:20	Turbulent Combustion (1)	Turbulent Combustion (2)	Droplets and sprays (1)	MS12 Spread of ammonia combustion research - Role of numerical simulation (1)	Combustion dynamics and instabilities (1)	Numerical methods for reacting flows (1)	MS14 Numerical modeling and simulation of reactive dense particle-laden flows (1)	High-performance computing for combustion applications (1)	MS06 Detonations in Liquid-Fuel Sprays: Recent Progress and Open Questions (1)	MS08 Advances in Detailed Numerical Simulation of Reciprocating Engines	Simulations with AI technologies (1)	Heterogeneous combustion (1)	Laminar flames (1)
12:20 – 13:30	Lunch break Women researchers' luncheon meeting Presentation by sponsors (Room A (TERRSA Hall))												
13:30 – 15:10	Turbulent Combustion (3)	Detonation, explosions (1)	Droplets and sprays (2)	MS12 Spread of ammonia combustion research - Role of numerical simulation (2)	Combustion dynamics and instabilities (2)	Numerical methods for reacting flows (2)	MS14 Numerical modeling and simulation of reactive dense particle-laden flows (2)	High-performance computing for combustion applications (2)	MS06 Detonations in Liquid-Fuel Sprays: Recent Progress and Open Questions (2)	MS15 Combustion simulation acceleration using GPU and manycore heterogenous computing hardwares	Simulations with AI technologies (2)	Heterogeneous combustion (2)	Gas turbines, engines and furnaces (1)
15:10 – 15:30	Break Exhibition (Foyer)												
15:30 – 17:10		Detonation, explosions (2)	Droplets and sprays (3)	MS12 Spread of ammonia combustion research - Role of numerical simulation (3)	Combustion dynamics and instabilities (3)	Numerical methods for reacting flows (3)	MS14 Numerical modeling and simulation of reactive dense particle-laden flows (3)	New combustion technologies (1)	MS06 Detonations in Liquid-Fuel Sprays: Recent Progress and Open Questions (3)	MS01 Reaction Kinetics of Carbon-Neutral Fuels	Kinetics, mechanism reduction (1)	Emissions and pollution (1)	Gas turbines, engines and furnaces (1)
17:10 – 19:30	Student and young researchers' mixer												

Program Overview (Tentative)

Thursday, May 9

	Plenary, Room A (TERRSA Hall)												
8:40 – 9:30	Machine-learning for Combustion: Opportunities and Challenges Matthias Ihme Department of Mechanical Engineering, Stanford University, USA												
9:30 – 9:50	Break Exhibition (Foyer)												
	Room A	**Room B**	**Room C**	**Room D**	**Room E**	**Room F**	**Room G**	**Room H**	**Room I**	**Room J**	**Room K**	**Room L**	**Room M**
9:50 – 12:30	Turbulent Combustion (3)	New combustion technologies (2)	Ignition, quenching	Combustion dynamics and instabilities (4)	Fires (1)	Simulations with AI technologies (3)	MS11 Liquid Rocket Engine Combustion	MS 16 High-fidelity numerical simulations using FUGAKU-scale supercomputers in Academic-Industrial Collaborations	Gas turbines, engines and furnaces (3)	MS09 Numerical Combustion Research on Fundamental Phenomena in Automobile Engines	MS20 Modeling and Simulation of High-speed Compressible Reacting Flows	Heterogeneous combustion (3)	Laminar flames (2)
12:30 – 17:30	Excursion												
18:30 – 21:00	Banquet (Daigo-ji)												

Program Overview (Tentative)

Friday, May 10

	Plenary, Room A (TERRSA Hall)												
8:40 – 9:30	Advances in Simulations of Dual-fuel Combustion Epaminondas Mastorakos Department of Engineering, University of Cambridge, UK												
9:30 – 9:50	Break Exhibition (Foyer)												

	Room A	Room B	Room C	Room D	Room E	Room F	Room G	Room H	Room I	Room J	Room K	Room L	Room M
9:50 – 11:50	Turbulent Combustion (5)	Detonation, explosions (3)	MS10 Sustainable Aviation Fuel: Modeling Challenges and Opportunities	Simulations with AI technologies (4)	Kinetics, mechanism reduction (2)	Numerical methods for reacting flows (4)	MS07 Computational Tools for Detonation-Driven Propulsion Physics (1)	MS18 Data-driven tools for HPC simulations of e-fuels combustion	Gas turbines, engines and furnaces (4)	MS04 Linearized Modelling of Flame Dynamics	MS02 Direct numerical simulations, analysis, and modeling of premixed hydrogen flames (1)	MS19 Tabulation Methods for Homogeneous and Heterogeneous Reacting Flow: Machine Learning and Other Approaches	Laminar flames (3)
11:50 – 13:00	Lunch break Presentation by sponsors (Room A (TERRSA Hall))												
13:00 – 15:00	Turbulent Combustion (6)	MS05 Liquid Ammonia Spray and Combustion: Numerical Modelling (1)	MS03 Combustion Noise and Thermoacoustic Instabilities (1)	Turbulent Combustion (7)	Detonation, explosions (4)	Numerical methods for reacting flows (5)	MS07 Computational Tools for Detonation-Driven Propulsion Physics (2)	MS13 Advances in dimensionality reduction and manifold learning for the parametrization and modeling of large combustion systems (1)	Fires (2)	Kinetics, mechanism reduction (3)	MS02 Direct numerical simulations, analysis, and modeling of premixed hydrogen flames (2)	MS17 Machine learning techniques for reacting flow simulation and analysis (1)	Laminar flames (4)
15:00 – 15:20	Break Exhibition (Foyer)												
15:20 – 17:20		MS05 Liquid Ammonia Spray and Combustion: Numerical Modelling (2)	MS03 Combustion Noise and Thermoacoustic Instabilities (2)	Turbulent Combustion (8)	Detonation, explosions (5)	Numerical methods for reacting flows (6)	Emissions and pollution (2)	MS13 Advances in dimensionality reduction and manifold learning for the parametrization and modeling of large combustion systems (2)	Fires (3)		MS02 Direct numerical simulations, analysis, and modeling of premixed hydrogen flames (3)	MS17 Machine learning techniques for reacting flow simulation and analysis (2)	Laminar flames (5)
17:30 – 19:30	Farewell party												