UNIVERSITY OF CAMBRIDGE | Cavendish Laboratory Department of Physics CORDE

The 33rd CSCST-SCT UK Conference

Tuesday, 1 September 2026 | Pre-Conference Programme

Time	Activity	Location	Details
12:00 – 17:00	**Early registration**	Ray Dolby Centre	Registration is open from 12:00 to 17:00. Delegates may leave personal belongings, at their own risk, in the designated storage area in the ground-floor North Seminar Room. All items must be collected before 17:00, when building access ends.
13:00 – 16:00	**Badminton**	University of Cambridge Sports Centre	Four courts and 16 racquets reserved.
13:00 – 16:00	**Table tennis**	Studio 1, first floor	Four tables and 16 bats reserved.
15:00 – 15:45	**Yoga class**	Studio 2, first floor	Instructor-led 45-minute class.
19:00	**Conference dinner**	St John's College	A three-course dinner will be served at one of Cambridge's historic colleges.

Sports activities

Activities take place at the University of Cambridge Sports Centre.

- Wear appropriate indoor sports footwear.
- Only bottled water is permitted in the sports hall and studios.
- Report any damage to equipment or facilities immediately.
- Follow staff instructions at all times.

Arrival Information

- Overflow parking is available in Car Park 8 (see the map)
- Locker cards are available on request from Annie at the Sports Centre.
- A café and vending machine are located on the ground floor.

Car park 8


Charles Babbage Rd
Charles Babbage Road
Department of Materials Science and Metallurgy
5 min
0.2 mile
5 min
0.3 mile
Charles Babbage Rd
Institute for Manufacturing (IfM)
University Nursery at West Cambridge
Charles Babbage Rd
West Café
Sports Centre and Gym, University of Cambridge

Wednesday, 2 September 2026 | Conference Programme

Time	Activity	Location	Details
09:00-09:30	**Arrival and registration**	Atrium	
09:30-09:45	**Welcome speech**	Cluster Room	Dr David Ward, Head of Characterisation, CORDE; Dr Yeshui Zhang, Chair of CSCST. Chair: Shaoliang Guan.
09:45-10:20	**Plenary talk**	Cluster Room	George Zheng Chen, University of Nottingham. Can the FFC Cambridge Process Enable Green Steelmaking?
10:20-10:50	**Keynote talk**	Cluster Room	Yan Wang, University of Cambridge. Clean interfaces based on 2D semiconductors.
10:50-11:10	**Tea break**	Atrium	
11:10-11:15	**Session 1 opening**	Cluster Room	Chair: Yichang Yan, University of Birmingham.
11:10-11:15	**Session 2 opening**	Seminar West	Chair: Hang Yang, UCL.
11:15-11:40	**Invited talk 1**	Cluster Room	Junlei Tang, Southwest Petroleum University. Combating corrosion in dynamic water electrolysis: the key to scaling up green hydrogen.
11:15-11:40	**Invited talk 2**	Seminar West	Henry Tan, University of Aberdeen. Interfacial chemistry and stress-driven nanotopography evolution of metallic implants.
11:40-12:00	**Talk 1**	Cluster Room	Liqiu Liu, University of Birmingham. Platinum nanowire-coated porous transport layers with improved interfacial contact for enhanced performance of proton exchange membrane water electrolyser.
11:40-12:00	**Talk 4**	Seminar West	Jie Chen, UCL. Water serves as a charge-transfer medium for ultrafast aqueous batteries.
12:00-12:20	**Talk 2**	Cluster Room	Chuyue Peng, UCL. Decoupling Iodine Conversion from Hidden Chloroaluminate

			Intercalation Enables Ultrafast and Ultralong-Life Aluminium-Iodine Batteries.
12:00-12:20	**Talk 5**	Seminar West	Yuanjing Zhao, University of Surrey. Electrified Carbon-Neutral Methanol Production Pathways: A Multiscale Techno-Economic-Environmental Assessment Based on the UK Energy System.
12:20-12:40	**Talk 3**	Cluster Room	Tian Wang, University of Aberdeen. Mechanistic Insights and Process Optimization of Ni-Fe Catalyzed Pyrolysis of Waste Plastics into Carbon Nanotubes and Hydrogen.
12:20-12:40	**Talk 6**	Seminar West	Zhiwen Jiang, UCL. Synergistic interaction of quaternary ammonium cations and inorganic anion clusters enabling long-cycling static aqueous zinc-bromine batteries.
12:40-13:00	**Talk 15**	Cluster Room	Hao Fu, UCL. Unveiling Cation-Anion Synergy at the Zn/Electrolyte Interface for Ultrastable Aqueous Zinc Batteries.
12:40-13:00	**Invited talk 7**	Seminar West	Yujun Si, Sichuan University of Science and Engineering. Spatially confine cobalt species within mesopores of iron-nitrogen doped carbon catalyst to boost the dual activities to oxygen reduction and evolution reactions.
13:00-14:00	**Lunch**	Atrium	
14:00-14:05	**Session 3 opening**	Cluster Room	Chair: Henry Tan, University of Aberdeen.
14:00-14:05	**Session 4 opening**	Seminar West	Chair: Tian Wang, University of Aberdeen.
14:05-14:30	**Invited talk 3**	Cluster Room	Shuya Jia, University of Strathclyde. A novel titania-silica catalyst for converting methyl lactate to lactide

			towards a circular economy for PLA.
14:05-14:30	**Invited talk 4**	Seminar West	Chunxia Guo, Inner Mongolia University of Technology. Zirconia-halloysite nanotube composites for the removal of arsenic species from water: adsorption performance and mechanism.
14:30-14:50	**Talk 7**	Cluster Room	Zeyu Geng, UCL. Relay Catalysis Enabled by Spatially Differentiated Pair-atom Sites for Industrial Nitrate-to-Ammonia Electrosynthesis.
14:30-14:50	**Talk 11**	Seminar West	Qiqiu Huang, University of Birmingham. Accelerating electro-thermochemical energy storage via additive manufacturing.
14:50-15:10	**Talk 8**	Cluster Room	Zibo Chen, University of Strathclyde. Sustainable production and optimization of high value compounds through biomass staged pyrolysis.
14:50-15:10	**Talk 12**	Seminar West	Zien Huang, UCL. Stabilizing Zn Anodes under Lean-Electrolyte Conditions via a Reconstructed Glass-Fibre/Cellulose Nanofibre Separator.
15:30-15:30	**Talk 9**	Cluster Room	Yuting Mao, UCL. Heterointerface-Enabled Photoelectrochemical Coupling in BiI3/BiOIO3 for Photo-Assisted Aqueous Zinc-Ion Batteries.
15:30-15:30	**Talk 13**	Seminar West	Xingyu Li, University of Aberdeen. Chemical Structural Evolution of Bituminous Coal under Supercritical CO2-H2O Conditions: Implications for CO2 Geological Storage.
15:30-15:50	**Talk 10**	Cluster Room	Yalun Zhao, University of Surrey. Dynamic CO2 Absorption Modeling in KOH Solution: Single-Pass Gas Flow

			and Closed-Loop Gas Recirculation.
15:30-15:50	**Talk 14**	Seminar West	Jihao Sun, UCL. Dual-Anion Hofmeister Regulation of a Gelatin Interphase for Stable and Reversible Zn Metal Anodes.
15:50-16:10	**Tea break**		
16:10-16:30	**Invited talk 5**	Cluster Room	Lina Qiu, University of Science and Technology Beijing. Analysis and identification of intracellular and extracellular enzymes of Thiobacillus denitrificans and their effect on the corrosion of EH36 steel by sulphate-reducing bacteria.
16:30-16:50	**Invited talk 6**	Cluster Room	Hang Yang, UCL. Aqueous battery electrolytes beyond the solvation default: from solvation structures to interfacial ion accessibility.
16:50-17:00	**Award ceremony and closing remarks**	Cluster Room	Yeshui Zhang and Shaoliang Guan.