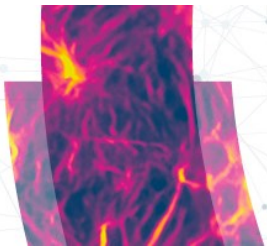
Advances in supramolecular gels

30 April – 2 May 2025 | Glasgow, Scotland



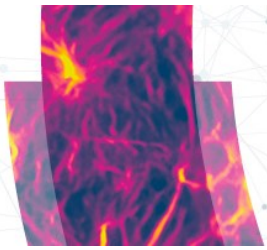
Faraday Discussions

Wednesday 30 April 2025

12:00	Registration and lunch
13:00	**Welcome and introductions** Dave Adams and Annela Seddon *Co-Chairs of Scientific Committee*
13:10	**Outline of Discussion format** Kirstine Anderson and Brian Li *Royal Society of Chemistry Publishing Editors*
13:15	**Introductory lecture – Spiers memorial lecture** (Session chair: Dave Adams, *University of Glasgow*) Darrin Pochan *University of Delaware, USA*
14:15	Refreshments
	Session 1: Characterising supramolecular gels (Session chair: Annela Seddon, *University of Bristol*)
14:45	**Surfactant-like peptide gels are based on cross-β amyloid fibrils** Vince Conticello *Emory University, USA*
14:50	**Unveiling the structure of protein-based hydrogels by overcoming Cryo-SEM sample preparation challenges** Dimitra Katrantzi *University of Leeds, UK*
14:55	**Autoinduction through the coupling of nucleation-dependent self-assembly of a supramolecular gel and a reaction network** Gareth Lloyd *Lincoln University, UK*
15:00	Discussion
16:15	Lightning poster presentations (by invitation of the Scientific Committee)
16:30	Poster session and wine reception Sponsored by *Soft Matter*
18:00	Close of sessions

Advances in supramolecular gels

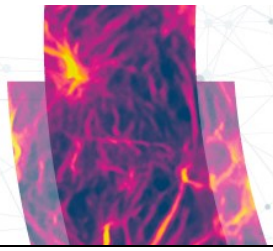
30 April – 2 May 2025 | Glasgow, Scotland



Faraday Discussions

Thursday 1 May 2025

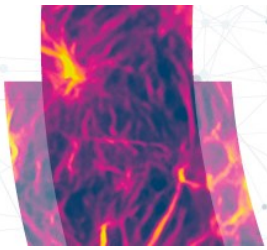
	Session 1: Characterising supramolecular gels (Session chair: Annela Seddon, *University of Bristol*)
09:00	**Phytantriol and monoolein in aqueous deep eutectic solvents and protic ionic liquid solutions** Karen Edler *Lund University. Sweden*
09:05	**Modulating the phase state of gelating peptides to enable high-resolution structural determination and a structural understanding of immunomodulatory function** Joel Schneider *National Cancer Institute, USA*
09:10	**Cryo-EM brings near-atomic resolution to many self-assembled systems** Edward Egelman *University of Virginia, USA*
09:15	Discussion
10:30	Refreshments
	Session 2: Design of gelling systems (Session chair: Dave Adams, *University of Glasgow*)
11:00	**Bridging computational metrics and experimental measures in peptide self-assembly dynamics** Tell Tuttle *University of Strathclyde, UK*
11:05	**From molecular assembly to gel formation** Jan van Esch *Technische Universiteit Delft, Netherlands*
11:10	**Crystal structures and gelation ability: Is it worth correlating?** Parthasarathi Dastidar *Indian Association for the Cultivation of Science, India*
11:15	Discussion
12:30	Lunch
13:30	**Title TBC** Julia Ortony *University of California, San Diego, USA*
13:35	**Mechanistic insights into BSA triggered supramolecular hydrogelation** Loïc Jierry *University of Strasbourg/Institut Charles Sadron CNRS, France*
13:40	Discussion
14:30	*Soft Matter* 20th anniversary celebrations and refreshments
	Session 3: Using supramolecular gels (Session chair: Demetra Giuri, *University of Bologna*)
15:10	**Designing peptide hydrogels for controlled drug release** Aline Miller *University of Manchester, UK*
15:15	**Supramolecular-guided electroactive hydrogel printing via digital light processing** Herdeline Ann Ardoña *University of California, Irvine, USA*
15:20	**Silylated peptides as building blocks for material synthesis using sol-gel polymerization** Meital Reches



	Hebrew University of Jerusalem, Israel
15:25	**Impact of counterion and salt form on the properties of peptide hydrogels for long-acting injectable drug delivery** Garry Laverty *Queen's University Belfast, UK*
15:30	Discussion
17:10	Close of sessions
19:00	Conference dinner

Advances in supramolecular gels

30 April – 2 May 2025 | Glasgow, Scotland



Faraday Discussions

Friday 2 May 2025

	Session 4: Multicomponent systems (Session chair: Krishna K. Damodaran, *University of Iceland*)
09:00	**Characterising printed low molecular weight gelators using small angle neutron scattering and rheology** Emily Draper *University of Glasgow, UK*
09:05	**Multicomponent supramolecular hydrogels of self-sorting or coassembling phenylalanine derivatives** Bradley Nilsson *University of Rochester, USA*
09:10	**Infrared responsive three-component supramolecular hydrogels** Bart Jan Ravoo *University of Münster, Germany*
09:15	Discussion
10:30	Refreshments
11:00	**Co-assembly or self-sorting? Nano-IR spectroscopy and mapping of multi-component gels** Silvia Marchesan *University of Trieste, Italy*
11:05	**Dissipative self-assembly of droplets in hydrogel** Kai Liu Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences, China
11:10	**The hydrophobic effects on peptide self-assembly** Huaimin Wang *Westlake University, China*
11:15	Discussion
12:30	**Concluding remarks lecture** (Session chair: Xuehai Yan, *Institute of Process Engineering, Chinese Academy of Science)* Thorri Gunlauggson *Trinity College Dublin, Ireland*
13:00	**Acknowledgements**
13:15	Close of meeting and refreshments

Please note that this is a draft programme and timings may change.