

School of Chemical and Process Engineering 2026

Invite you to the PGR-Industry Event

13-14 January 2026



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SCAPE-PGR@Leeds.ac.uk

[info & registration link](#)

Welcome to the SCAPE PGR-Industry Days 2026!

On behalf of the School of Chemical and Process Engineering (SCAPE), we are pleased to welcome you to the SCAPE Postgraduate Research (PGR)- Industry day 2026 - a two-day event celebrating the research and industrial engagement of our postgraduate and postdoctoral community.

SCAPE is a globally recognised (top 100) research & innovation hub, with 98% of outputs rated “world-leading” or “internationally excellent” in REF 2021. Supported by expert supervisors, dedicated staff, and advanced facilities, our School enables cutting-edge research across energy, materials, and manufacturing.

This event is a platform for dialogue, partnership, and inspiration. Whether you're an industry partner, academic colleague, or future collaborator, we hope SCAPE 2026 sparks new ideas and connections.

Prof Frans Muller
Prof Rik Drummond Brydson
Prof Sheng Dai

Director of Post Graduate Studies & Conference Chair
Director of Research & Innovation
Head of School



Nick McCarthy, runner up
best presentation
AZ-CASE Conf.

Digital Manufacturing and Processing (Lead: Prof Sven L M Schroeder)

The digiMP theme transforms chemical and process engineering through a combination of deep physicochemical process understanding, smart automation, AI-driven control and advanced reactor technologies. Closely linked to the Institute of Process Research and Development (iPRD), research is at the forefront of research establishing autonomous continuous manufacturing platforms that are scalable and sustainable.

Our academic staff include experts in fluid dynamics, machine learning, multiscale modelling, particle technology and advanced analytics, especially surface and interface analysis. They work together to develop process solutions that improve efficiency, reduce waste, and accelerate innovation. The theme is the key driver of Industry 5.0 within SCAPE, operating with industrial partners across the pharmaceuticals, energy, fine chemicals, formulated products and food sectors.

Materials for a Sustainable Future (Lead Prof Gin Jose)

The Materials for a Sustainable Future (M4SF) research theme focuses on materials circularity in advanced devices engineering such as batteries, optoelectronic sensors, etc. The theme aims to understand the structure-functional relationships and to exploit them for designing and manufacturing materials with the ability to perform advanced electronic, magnetic, optical, mechanical and other functionalities. Through advanced characterisation, materials formulation and device engineering, our theme focuses on developing alternative methods and materials for the technologies of the future addressing energy and net zero, ICT, wearables, healthcare, food and agriculture sectors.



Oisín Owens won best poster
Colloids Conf. San Sebastián



Flora Chitalu at the
Renewable Energy
Conference in Uganda

Energy Transition and Net Zero (lead: Assoc. Prof Andrew Ross)

The Energy Transition and Net Zero research theme focuses on sustainable energy innovations across four sub-themes. Advanced Fuels and Technologies explores clean combustion, hydrogen, biofuels, and catalytic processes. Resource Recovery and Zero Waste targets waste valorisation, bioenergy, and water treatment. Systems and Sustainability integrates energy systems modelling, life cycle assessments, and policy analysis to support decarbonisation. Nuclear Engineering addresses reactor thermal hydraulics, safety, and waste management. The theme combines experimental, computational, and techno-economic approaches to develop low-carbon solutions, improve energy efficiency, and support global net zero goals.

SCAPE 2026



UNIVERSITY OF LEEDS



Programme

Venue: SCAPE: LTB and LTC

Day1		
morning		Lab tours
12:00	1:00	Arrival, Tea, coffee & lunch
13:00	0:10	Welcome and introductions
13:10	0:15	SCAPE research landscape: digiMP theme
	0:05	Theme 1 flash presentations
13:30	0:15	SCAPE research landscape: ETNZ theme
	0:05	Theme 2 flash presentations
13:50	0:15	SCAPE research landscape: M4SF
	0:05	Theme 3 flash presentations
14:10	0:30	Research presentations (2 sessions)
14:40	0:35	Break
15:15	0:30	Research presentations (2 sessions)
15:45	0:40	Round table: The PGR to Industry Transition
16:25	2:30	Poster & Pizza reception (SCAPE 406+407)
		Drinks in the library (optional)
Day2		
09:30	00:20	Welcome and overview of EPS and Leeds university
10:00	01:15	Theme 1 & 2 Research showcase 2 parallel sessions
11:15	00:30	break
11:45	01:00	Theme 2 & 3 Research showcase 2 parallel sessions
12:45	01:15	Lunch & posters
14:00	01:10	Theme 1 & 3 Research showcase 2 parallel sessions
15:10	00:10	Poster Prizes (y1,y2,y3)
15:20	00:10	Closing of the event
15:30		Tea, Coffee and networking

Registration

To join us at SCAPE2026
please register by **Friday 19 Dec 2025**

online: [SCAPE2026 LINK](#)

email: SCAPE.PGR@leeds.ac.uk

Contact

Chair: F.L.Muller@leeds.ac.uk

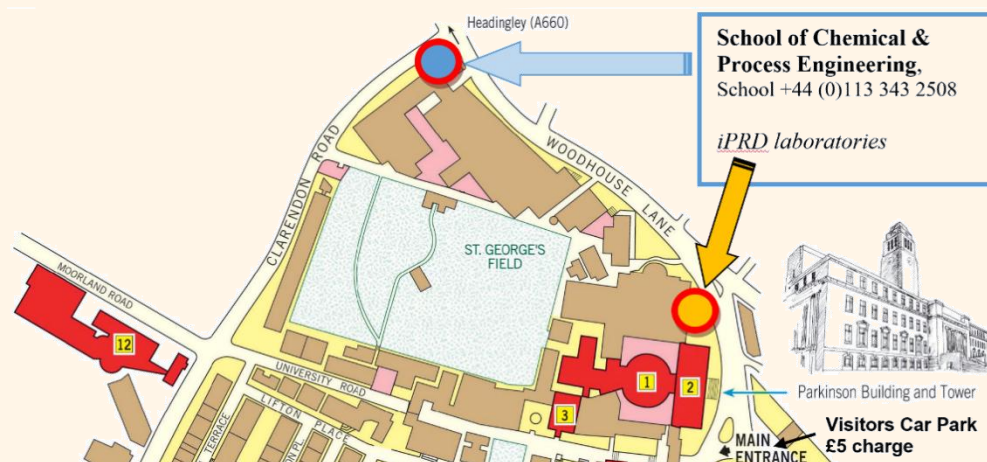
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School of Chemical and Engineering,
University of Leeds, Woodhouse, Leeds,
LS2 9JT, United Kingdom



QR code for directions
w3w: [apple.elite.pint](#)

Entrance:
211 Clarendon Road





Research

Materials for a Sustainable Future

- ▶ Advanced materials characterisation methods
- ▶ Photonic, electronic and biomaterials
- ▶ Nanomaterials, polymers, colloids, ceramics, glasses
- ▶ 3D manufacturing and laser processing

Facilities & Affiliations

Diamond Light Source, Royce Institute, Bragg Centre, RAL, LEMAS, superSTEM; Femtosecond laser manuf., mech, thermal, elec., optical and phys.props characterisations.

Researchers

Theme Lead: Prof. Gin Jose
Deputy theme lead: Dr Olivier Cayre
17 Academics, 16 PDRA, 29 PGR,
>10 Associate members in EPS and beyond

Funding

ICP Royce, ISF (university of Leeds), MRC (biosensor), Givaudan, PermMag-DiSARE, Enabling precision engineering of complex chemical products for high value technology sectors, AMICI.

Recent and Current Partners: Syngenta, Givaudan, Nestle, Akzo Nobel, Knowles UK, QinetiQ, Thales UK, Ionix Advanced Technologies, Atomising Systems Ltd, LSN Diffusion, Glass Futures, Silex World, IS instruments, Chromacity, Attenorough Med., Rautomead Ltd., Capital Refractories Ltd, Stressphotonics, SoftServe, Astra Zeneca, Tescan, Infineum, Knauff, Blastlog, GTS Ltd, NIQS Technology Ltd, Eluceda Ltd, Pirta Ltd.

Energy Transition and Net Zero

- ▶ Cutting-edge Clean Fuel Technologies
- ▶ Innovative Waste-to-Value Solutions B3
- ▶ Integrated Systems and Policy Modelling
- ▶ Collaborative, Multi-disciplinary Approach

Facilities & Affiliations

Researchers

Theme Lead: Assoc.Prof. Andrew Ross
Deputy theme lead: Prof Tim Cockerill
19 Academics, 17 PDRA, 50 PGR,
>25 Associate members in EPS and beyond

Funding

FermoChar, TRANSPARANT, ENEN2plus, SATURN CDT, Transforming Flexibles, SussCan, LowCat Demo,

Recent and Current Partners: Sellafield Ltd, NDA, UKNNL, AWE, UKAEA, Atkins, Cavendish, Fraser Nash, Environment Agency, Nuvia, Tuv-Sud, Wood, BAM Nuttall, RWM, Albumidex, Three Brewers, Biome, Horiba, Eminox, Interkat, Clean Air & Power, Mahle, Influx Technologies, Tully Engineering, Horiba MIRA, Combustion, Gasmet, Wilsons BioChemical, Defiant Renewables

Digital Manufacturing and Processing

- ▶ AI/ML-Driven Sustainable Manufacturing
- ▶ Process Intensification by Deep Process Understanding
- ▶ Multiscale – Multiphase- Multicomponent Products
- ▶ Automated Self-Optimising Reactors

Facilities & Affiliations

iPRD, VXSf, Research Complex at Harwell, Diamond Light Source, ESRF, Royce Institute, Bragg Centre, RUEDI

Researchers

Theme Lead: Prof. Sven L M Schroeder
Deputy theme lead: Prof Richard Bourne
15 Academics, 16 PDRA, 43 PGR
>20 Associate members in EPS and beyond

Funding

FLEXICHEM, NanoMan, Mediforge, Mephisto, OPTOMS CEDAR CDT, Mats4.0 CDT, Mol2Pro CDT, Henry Royce Institute, CMAC, Catalysis Hub

Recent and Current Partners: AMT, AWE, AbbVie, AkzoNobel, AstraZeneca, Atomising Systems Ltd, , Britest, Cambridge Crystallographic Data Centre, CMAC, DSTL, DeepMatter, Diamond Light Source, Dr. Reddy's, Freeman Tech, IBM, Infineum UK Ltd, Innospec, J&J, Johnson Matthey, Merck, Labman Automation, Lyondell Basell, Malvern, Malvern Instruments, Particle Tech, Perceptive Engineering, P&G, Pfizer, Process Systems Enterprise (PSE), Promethean Particles Ltd, Qatar University, RutterDesign, Samsung, Somaserve, Sun Chemical, Swagelok Manchester, Syngenta, TOTAL, Texas Instruments, UCB, Vapourtec, Venator, UCB





Impact

Materials for a Sustainable Future

Selected references

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Multifunctional flexible and stretchable electrochromic energy storage devices. doi: [10.1016/j.pmatsci.2024.101244](https://doi.org/10.1016/j.pmatsci.2024.101244)

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Ultrashort Pulsed Laser-Assisted Direct Restoration of Human Enamel Using 3D Printable Biocomposite. doi: [10.1002/admt.202401362](https://doi.org/10.1002/admt.202401362)

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Energy Transition and Net Zero

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Digital Manufacturing and Processing

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