THE Advanced Materials SHOW

CERAMICS UK

29th & 30th June 2022
NEC, Birmingham, UK

SHOW PREVIEW

Your essential guide to The Advanced Materials Show & Ceramics UK

INSIDE: Exhibitor List & Floorplan, Conference Agenda, Exhibitor Spotlight, Visitor Information

> "The Advanced Materials Show has been great at bringing people together, from materials suppliers to end users and product manufacturers".
>
> **James Baker,** CEO at **Graphene @Manchester**

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Event Partners Disclaimer:
The conference programme and schedule are subject to change at any time.
For the latest update, please visit:
www.advancedmaterialsshow.com
www.ceramics-uk.com

Welcome to our show preview. Contained in the following pages you will find some of the highlights planned for the four co-located events this June.

The Advanced Materials Show and Ceramics UK will be joined for the first time this year by Battery Cells & Systems Expo and Vehicle Electrification Expo, giving exhibitors and speakers access to an array of technologies within rapidly growing sectors.

We can't wait to welcome the industry back to reunite again. As well as providing a four-track conference programme, an exhibit hall showcasing technology and innovation from over 300 companies, and four market-leading co-located events, we also have a series of special events and competitions taking place.

We hope you can join us at The NEC, Birmingham, UK on 29th - 30th June. Entrance is free and one ticket gives you access to all conferences and exhibitions taking place, just remember to register in advance on the website www.advancedmaterialsshow.com

On behalf of the whole organising team, we look forward to welcoming you to the NEC in June!

Steve Bryan
Managing Director
Event Partners

FLOORPLAN

EXHIBITOR **LIST**

The Advanced Materials Show ● Ceramics UK ●

3DCERAM-SINTO	18-428
3M Advanced Materials	18-209
Advanced Insulation Systems Ltd	18-223
Advanced Material Development	17-223
AEM Canada Group Inc.	17-122
Agate Products Limited	17-124
Altech Chemicals Limited	17-232
Alvatek LTD	17-822
AM Centre of Excellence	18-430
Applied Graphene Materials	18-500
Applied Thermal Control	18-423
Archer Technicoat Ltd	18-403
Ash Technologies	18-425
AZO Network	18-414
Biolin Scientific AB	17-138
Blue Frog Scientific	18-715
Bosch Advanced Ceramics	18-534
British Ceramic Confederation	18-729
Bruker UK Ltd	18-333
Brunel University London	18-620
Bunting Magnetics Europe Ltd	18-117
Cambridge Smart Plastics	18-520
CDS Group	18-402
Ceramic Applications	18-429
Cerion Nanomaterials	18-502
Ceylon Graphene Technologies	18-721
C.M.S. SpA	18-103
CN Technical Services Ltd	18-412
CPI Limited	18-218
Cranfield University	18-102
Delong Instruments	18-726
Dustcontrol	18-109
Dylan James Scientific	17-219
Elliot Scientific Ltd	18-225
EM Analytical	18-524
FCT Systeme GmbH	18-334
FerroTec Ceramics	18-335
Fischer Instrumentation (GB) Ltd	18-514
Frey & Co. GmbH	18-530
Gencoa	17-120
General Graphene Corporation	18-519
Gerdau Graphene	18-506
Goodfellow	18-410
Graphene Composites	18-213
Graphene Layers	17-221
GrindoSonic	17-114
Henniker Plasma	18-323
Henry Royce Institute	18-424
Hiden Isochema	18-221
Hitachi High-Tech Europe	18-432
HORIBA UK Ltd	18-319
HydroGraph Clean Power	18-101
IONTOF	18-320
IKA Ltd	18-211
INNOVATEST UK	18-231
Intellegens	18-714
International Syalons	18-532
IPS Ceramics	17-132
J.Rettenmaier & Söhne	18-433
JAI Engineers UK Ltd.	18-339
Jeol UK	18-418
Kennametal	18-518
KEYENCE	18-212
KOTRA	17-212
Kratos Analytical	18-105
Kyocera	18-203
LayerOne	18-504
Linkam Scientific	17-316
Lithoz	18-528
Loadpoint Limited	18-226
Lohmann Technologies (UK) Ltd	17-532
Loughborough Materials Characterisation Centre	18-731
Loughborough Surface Analysis	18-522
Lubrizol Advanced Materials	18-728
Lucideon	18-627
Malvern Panalytical	17-315
Mantec Technical Ceramics	18-341
Materials Direct UK	18-129
Meritics Ltd.	18-337
Merrow Scientific	18-513
Midlands Industrial Ceramics Group	18-724
Minchem Ltd.	18-426
Mi-Net	17-231
MITO Material Solutions	18-107
MoistTech Corp	18-526
Morgan Technical Ceramics	17-229
Murgitroyd	18-525
Nanoe	18-427
Nanosurf	18-405
Nanotechnology Industries Association	18-719
NeoGraf Solutions	18-215
NETZSCH Gerätebau GmbH	18-419
Nordson Test & Inspection	18-725
novoMOF AG	18-720
Olympus UK & Ireland	18-217
Park Systems UK	18-615
PCL Ceramics	18-627
PI-KEM Limited	17-205
Precision Ceramics	18-233
Promethean Particles	18-230
QinetiQ	18-515
Quantum Design UK and Ireland	18-127
Radical Materials	18-331
Rauschert GmbH	18-431
Resodyn	18-422
Scanwel Ltd	18-320
SciMed Ltd.	18-201
Shimadzu	18-105
SiKEMIA	18-340
SPECS	18-320
Stable Micro Systems	18-115
Stat Peel	18-421
Surface Measurement Systems	18-336
Sympatec	18-324
Testbourne Ltd	18-214
TFP Hydrogen Products Ltd	18-322
Total Materia	18-342
The Graphene Council	18-723
The Sixth Element	18-111
Thermic Edge	18-625
Thermo Fisher Scientific	18-338
Therser (UK)	17-112
Transforming Foundation Industries Network+	18-617
Tri-Tech 3D	17-227
UK Atomic Energy Authority (UKAEA)	18-527
Ultrafine Industrial Ltd	18-425
Universal Science UK Ltd	18-328
University of Birmingham	18-613
The University of Edinburgh	18-536
University of Huddersfield	18-523
University of Manchester	18-510
University of Warwick	18-216
University of Wolverhampton	17-108
Verder Scientific UK	18-332
Vesta Si	18-232
Virtual Lab Inc.	18-624
Washington Mills Electro Minerals	18-716
William Blythe Limited	18-512
Withers and Rogers LLP	18-622
ZEISS Microscopy	18-623

EXHIBITOR **LIST**

Battery Cells & Systems Expo
Vehicle Electrifications Expo

A2mac1 Europe	17-722
Accelonix	17-308
Aceleron	17-637
Advanced Chemical Etching Ltd	17-322
Ansmann UK	17-330
Anton Paar Ltd	17-136
Arbin Instruments	17-419
ATC Semitec Ltd	17-735
ATEQ UK Limited	17-737
Atlas Copco	17-106
Austin Consultants	17-321
AZO GmbH & Co KG	17-515
BEST Mag	17-502
Binder	17-324
BioLogic	17-218
Bitrode	17-416
Bühler	17-629
Busch Vacuum Solutions	17-311
Caltest Instruments	17-429
Cambridge Energy Solutions Ltd	17-430
Camfil	17-704
Catax	17-228
Cellerate	17-314
Claytex	17-714
Compact Orbital Gears	17-821
Control Tech	17-627
Danecca	17-635
Delta Performance Automotive Group	17-512
Desiccant Rotors International Pvt. Ltd	17-725
Digatron	17-832
DST Humidity Control	17-412
Dräger Blyth	17-520
Dürr Megtec	17-707
EIRICH	17-621
Electric & Hybrid Vehicle Technology International	17-824
Electrolock, Inc	17-723
Electrovaya	17-727
Elis Cleanroom & Workwear	17-406
Emerson & Renwick Ltd	17-523
Entek Membranes	17-519
Euris	17-327
EVera Recruitment	17-312
Exponent	17-526
Faraday Battery Challenge/UK Battery Industrialisation Centre/ UKRI - Innovate UK/ The Faraday Institution	17-300
Fujipoly	17-633
H & T Battery Components	17-724
Haredata Electronics	17-610
Hauschild SpeedMixer	17-709
H.E.L Group Ltd	17-525
Hiden Analytical	17-516
INGUN (UK) Ltd.	17-318
Inseto	17-813
Invest in Coventry & Warwickshire	17-220
Invest in Northumberland	17-807
Italfim	17-720
JL MAG Rare-Earth Co. Europe B.V.	17-705
Julabo UK Ltd	17-328
Kemtile UK Ltd	17-529
LAUDA Technology	17-739
Leybold	17-224
Lithium Battery Recycling Solutions	17-407
Lubricant Expo/ The Bearing Show	17-514
Maccor	17-530
Martin's Rubber	17-522
MBraun	17-728
MDL Technologies	17-222
MEP Technologies	17-323
Mettler-Toledo	17-503
Micro-Epsilon	17-631
Micromeritics	17-226
Microncleaan	17-204
MIRA Technology Institute	17-619
Motorsport Industry Association	17-701
Munters Ltd	17-710
Nanotech Energy	17-214
National Physical Laboratory	18-229
Nefab Packaging UK	17-511
NETZSCH Mastermix	18-417
Neware	17-421
Newcastle Tool & Gauge Ltd	17-713
Nikon Metrology	17-216
Panasonic	17-415
Particulate Sensors	17-628
PEC	17-202
Plasmatreat UK Ltd.	17-302
Plastic Coatings Ltd	17-504
Potter Clarkson	17-319
Ridge and Partners LLP / HSSMI	17-814
Robafoam	17-617
Rockfort Engineering	17-634
S3 Process Ltd	17-636
Sempre Group	17-826
Schunk	17-116
Sierra CP Engineering Ltd.	17-331
SPAL Automotive	17-418
Stratagem Intelligent Income Strategies Limited	17-228
Tannlin Ltd	17-816
TECHNIA	17-714
Technotrans Group	17-827
Tecman UK	17-518
Techsil Ltd	17-423
Telonic Instruments Ltd	17-630
Telsonic UK Ltd	17-622
Tesa	17-518
The Peak Group	17-425
Thermal Hazard Technology	17-531
TÜV SÜD	17-329
UK Pavilion	17-402
Unico UK Ltd	17-431
Vector GB	17-708
Von Roll	17-534
Warwick Manufacturing Group (WMG)	17-506
Webasto UK	17-400
Weiss Technik UK	17-116
West Midlands International Trade LLP (Department for International Trade)	17-410
Wickeder Westfalenstahl	17-428
Würth Elektronik	17-836
Yokogawa UK Ltd	17-732
Zarges UK	17-501
Zeiss	17-424
Zinergy Power	17-430
ZwickRoell	17-230

For more information, download our show app

Download on the App Store

ANDROID APP ON Google play

SHOW **FEATURES**

Join us in our show features area for our different events through the two days, including the graphene round tables, IP session and drinks reception. This is an exclusive opportunity to sit down with peers and experts, whilst discussing barriers and opportunities within these sectors.

Tuesday 28th June

Viewing of UK BIC

Wednesday 29th June

Conference
(9:30am – 4:30pm)

Graphene Round Tables
(3:00pm – 4:30pm)

FIND OUT MORE

Drinks Reception
(4.30pm - 5.30pm)

Thursday 30th June

Conference
(9:30am – 4:30pm)

Withers & Rogers IP Session: Making your Innovations Work
(12:00pm – 1:00pm)

FIND OUT MORE

Register now: www.advancedmaterialsshow.com · www.ceramics-uk.com

CONFERENCE **INTRODUCTION**

Our four co-located expos feature four stages and four tracks of content focused on high-value manufacturing industries and their applications. These sector-leading expos feature four dedicated theatres with content focused on high-value manufacturing industries and their applications. These industries together represent billions of pounds worth of opportunity and market growth for both UK and international businesses.

The Advanced Materials Show and Ceramics UK conferences' blended programme features two tracks tackling the challenges and opportunities in materials innovation and materials industrialisation respectively. This includes sessions on composites, coatings, lightweighting materials, sustainability and additive manufacturing - with applications and case studies featured in aerospace, automotive, construction and semiconductors amongst others.

The co-located and concurrent Battery Cells & Systems Expo and Vehicle Electrification Expos conference has one theatre dedicated to battery development, with discussions on everything from cell chemistry and pack design to fast charging, recycling and second life. The second theatre is set to tackle broader electrification and manufacturing strategy - such as sustainability, supply chain and skills - alongside bus/ truck electrification and powertrain-focused design and development sessions, including electric motors, powertrain design and power electronics.

All our theatres will provide ample opportunity for interactive panel discussions, Q&A sessions and on stage interviews to allow attendees to ask questions and voice ideas. Attendees can expect to enjoy a lively and constructivet set of discussions at a time when these sectors are booming and look set to grow even further in the coming years.

Featured Speakers:

Dr. Geoff Mackey
Sustainability and Corporate Affairs Director
BASF

Dr. Laura Baker
Head of Product Development
Tata Steel

James Baker
Chief Executive Officer
Graphene@Manchester

Ms. Sarah Chapman
Chair, 3M EMEA Technical Women's Leadership Forum
3M

Jonathan Phillips
Leader - Global Material Centre of Excellence
Morgan Advanced Materials

Prof. David Nowell
Professor of Machine Dynamics and Director
Rolls-Royce University Technology Centre, Imperial College London

Dr. Ben Walsh
Deputy Director
Innovate UK

David Pearmain
Business Manager - Flash Sintering
Lucideon

Sherry Ghanizadeh
Materials Scientist
Manufacturing Technology Centre

Clare Sibley
Head of Quality & Manufacturing Engineering
Williams Racing

Rachel Timmins
Policy Manager
British Ceramics Confederation

Dr. Thomas Werninghaus
Senior Business Development Manager, FC Division
Kyocera

Landon Mertz
CEO
Cerion Nanomaterials

Alan Banks
UK Lightweight Innovations Manager
Ford

Dr. Johannes Homa
Chief Executive Officer
Lithoz

CONFERENCE **AGENDA**

DAY 1 - WEDNESDAY 29TH JUNE - MORNING

9.30am - 10.45am | Track 1

Placing Sustainability at the Heart of Advanced Materials Fabrication and Application

Frazer Barnes, Chairman and CTO, **Gen 2 Carbon Ltd** *(Chair)*
Annalisa Gigante, Executive Board Member, **Henry Royce Institute**
Dr. Bruce Adderley, Challenge Director Transforming Foundation Industries, **Innovate UK, part of UKRI**
Dr. Geoff Mackey, Sustainability and Corporate Affairs Director, **BASF**

11.15am - 12.30pm | Track 2

How Have the Past Two Years Impacted the Direction of Innovation?

Dr. Laura Baker, Head of Product Development, **Tata Steel**
Landon Mertz, Chief Executive Officer, **Cerion Nanomaterials**
Dr. Steven Harris, Head of External Partnerships & Programmes, **BAE Systems**
Tony Kinsella, Chief Executive Officer, **Lucideon**

DAY 1 - WEDNESDAY 29TH JUNE - AFTERNOON

13.45pm - 15.00pm | Track 1

The Role of Advanced Materials Innovation in Mitigating Carbon Emissions

Dr Ania Jolly, Head of Research and Business Engagement, **Henry Royce Institute** *(Chair)*
Dr. Jack Turner, Senior Technical Scientist, **Promethean Particles**
Dr. Michelle Lynch FRSC, Director, **Enabled Future**

13.45pm - 15.00pm | Track 2

Improving Agility in Materials Manufacturing Process Innovation

Dr David Pearmain, Business Manager - Flash Sintering, **Lucideon**
Prof. David Nowell, Professor of Machine Dynamics and Director, **Rolls-Royce University Technology Centre, Imperial College London**
Dr. Jibran Khaliq, Programme Leader and Senior Lecturer in Mechanical and Automotive Engineering, Department of Mechanical & Construction Engineering (MCE), **Northumbria University**
Daniel Steitz, Founder and CIO, **NovoMOF**

15.15pm - 16.30pm | Track 1

Developing Durable Non-Toxic Coatings for Corrosive Environments

Professor Allan Matthews, Director of the Digitalised Surfaces Manufacturing Network, **The University of Manchester** *(Chair)*
Dr. Stuart Lyon, AkzoNobel Professor of Corrosion Control, **The University of Manchester**
Michelle Buckland, Group Commercial Director, **Teknos**

15.15pm - 16.30pm | Track 2

Harnessing the Power of Additive Manufacturing in Advanced Materials

Sona Dadhania, Technology Analyst, **IDTechEx** *(Chair)*
Martin Mann, Head of Sales, **Lithoz**
Arnaud Roux, Sales Manager, **3DCeram**
Sherry Ghanizadehm, Ceramic Additive Manufacturing Technology Lead, **The Manufacturing Technology Centre - MTC**
Dr Glenn Lamming, Research Scientist, **UK-CPI**
Dror Danai, Chief Business Officer, **XJet**

CONFERENCE **AGENDA**

DAY 2 - THURSDAY 30TH JUNE - MORNING

9.30am - 10.45am | Track 1

Transportation Lightweighting for Planet and Profit

Dr Klaudio Bari, Principal lecturer in Mechanical and Material Engineering, **University of Wolverhampton** *(Chair)*
Clare Sibley, Head of Quality & Manufacturing Engineering, **Williams Racing**
Alan Banks, UK Lightweight Innovations Manager, Ford
John Phipps, Business Development Manager, Advanced Materials Division, North Europe, **3M**

11.15am - 12.30pm | Track 1

Sustainability and the Semiconductor dimension- Breaking the 'Smaller, Faster, Cheaper' Innovation Mantra

Andy Sellars, Strategic Development Director, **CSA Catapult**
Caroline O'Brien, Chief Executive Officer, **Kubos Semiconductors**
Dr. Anwesha Fernandes, Senior Materials Engineer, **Dynex Semiconductor Ltd**
Dr. Hugh Glass, Technology Owner, **Paragraf**

11.15am - 12.30pm | Track 2

Making Materials Manufacturing Sustainable

Dr. Andrew McDermott, Technical Director, **British Ceramic Confederation** *(Chair)*
Dr. Beenish Siddique, Founder and CEO, **AEH Innovative Hydrogel**
Dr. Ben Walsh, Deputy Director, **Innovate UK**
Dr. Thomas Werninghaus, Senior Business Development Manager, FC Division, **Kyocera**
Rob Munro, Innovation Management Consultant, **Institute for Manufacturing**

11.15am - 12.30pm | Track 2

The Growing Role of Digital Tools in New Materials Development and Commercialisation

Dr Sean Kelly, Senior Project Manager, **Nanotechnology Industries Association** *(Chair)*
Dr Joel Strickland, Materials Research Scientist, **Intellegens**
Andy White, Business Development Manager, **UK-CPI**
Jason Teng, Partner, UK and European Patent Attorney, **Potter Clarkson LLP**
Alexander Reip, Chief Technical Officer, **Oxford NanoSystems**

DAY 2 - THURSDAY 30TH JUNE - AFTERNOON

13.45pm - 14.45pm | Track 1

Enabling Durable Urban Development with Smarter Materials

Adrian Nixon, Director and Editor, **Nixene Publishing and Nixene Journal** *(Chair)*
Alexandre de Toledo Corrêa, General Manager, **Gerdau Graphene**
Aled Roberts, CEO, **Deakin Bio-hybrid Materials**
James Baker, Chief Executive Officer, **Graphene@Manchester**
Vighnesh Daas, Director - Innovation and Sustainable Construction, **JP Concrete**

15.15pm - 16.30pm | Track 1

Meeting Next-Generation Composites and Polymer Application Requirements

Dr James Myers, Head of R&D – Aerospace / Composite Applications, **Victrex**
Marc Jacobs, CEO, **Molecular Plasma Group**
Prof. Krzysztof Koziol, Professor of Composites Engineering, Head of Enhanced Composites and Structures Centre, **Cranfield University**
Rachel Weare, Lead Engineer | Automotive Composites Research Centre, **Warwick University**

13.45pm - 14.45pm | Track 2

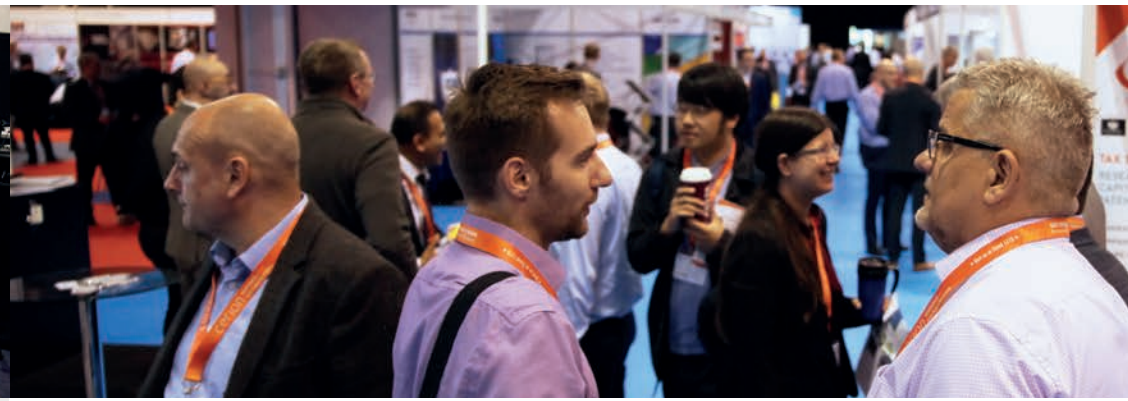
Building Better Investment, Innovation and Skills Partnerships

Dr. Andy Wynn, CEO, **TTIP Global** *(Chair)*
Dr Nessima Kaabeche, Coach for Women, **STEM**
Sarah Chapman, Chair, 3M EMEA Technical Women's Leadership Forum, **3M**
Rachel Timmins, Policy Manager, **British Ceramics Confederation**
Dr. Sarah Connolly, Innovation Technologist - Transforming Foundation Industries, **Innovate UK**

15.15pm - 16.30pm | Track 2

Developing Consistent Materials with Advanced Characterisation Innovation

Terrance Barkan CAE, Executive Director, **Graphene Council** *(Chair)*
Dr. Andrew Elliot, Materials Specialist, **Carl Zeiss**
Dr. Fernando Castro, Head of Materials Science, **National Physical Laboratory**
Mr. Robert Yeo, Technical Director, **Pro-Lite Technology Ltd**
Alex Van Den Bossche, Managing Director, **Grindosonic**



One Event for Four Connected Industries

The Advanced Materials Show, Ceramics UK, Battery Cells & Systems Expo and Vehicle Electrification Expo bring together four connected industries for two days of networking, lead generation and education at the NEC, Birmingham. A four-track, free conference featuring global experts covers the latest innovations and developments across these three exciting industries.

Cutting-edge, high-performance

The four shows will provide an essential procurement and learning experience for manufacturers looking to improve the performance of their products and optimise the manufacturing process at every step of production.

> "The Faraday Battery Challenge at UKRI is set to take part in the expo and the conference, and we expect the show to provide an outstanding platform for the UK's battery and vehicle sectors to gather with their international partners."
>
> **Jacqui Murray,** Deputy Director, **Faraday Battery Challenge**

Featured exhibitors:

3M, BOSCH, BRUKER, CDS GROUP, cerion nanomaterials, GoodFellow, The Graphene Council, HITACHI, Henry Royce Institute, IPS Ceramics, Kyocera, Olympus, Manchester 1824 The University of Manchester, Verder Scientific, williamblythe, Zeiss

For more information, download our show app

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EXHIBITOR **SPOTLIGHT**

LITHOZ

What technical Ceramic solutions do you specialise in?
Additive manufacturing of ceramics.

Please explain the benefits of your speciality.
Traditional methods have limitations in fabrication of complex geometries with controlled microstructural texture and architecture. Lithoz 3D printer (LCM-technology) technology is an additive manufacturing technique that works according to the principle of layer-by-layer printing, by selective curing of photosensitive formulation with the concept of digital light processing (DLP).

What do you believe to be the most important trend in technical ceramic solution and what is your company doing to contribute towards this?
Additive manufacturing serial production of ceramics is being continuously extended and has already reached industrial dimensions. On the other hand, more complex functions are designed into parts which demand new multi-material printers.

If attendees should know one thing about your company and experience, what would it be?
Quality and innovations leadership makes us the global market leader in ceramic 3D printing.

What has been your organisation's biggest achievement to date?
First 3D Multimateiral printer in UK, first 3D printer for ceramics in Africa (April 2022) and more than 100 3D printers of ceramic sold worldwide.

What will you be showcasing on your stand at Ceramics UK?
Multi-material parts, pure copper and ceramics, ceramic-ceramic parts and high-performance technical ceramic parts.

Who are you hoping to meet at Ceramics UK?
Academia and industry interested in ceramic innovation.

Visit Lithoz at Ceramics UK on Stand 18-528

CERAMICS UK

EXHIBITOR **SPOTLIGHT**

cntech
Analysis & Testing Instruments

What advanced materials do you specialise in?
We specialise in the characterisation and tribological applications of thin films and nanomaterials used in a variety of applications, ranging from fundamental research through to industrial use.

Please explain the benefits of your speciality.
We have over 25 years' experience in supplying businesses and research institutes around the world with a variety of testing and characterisation equipment, ensuring that they have the best resources available for their applications. We can provide advice, and guidance on the best practices using equipment, ensuring latest industry standards are met.

What do you believe to be the most important trend in Advanced Materials and what is your company doing to contribute towards this?
Over the last few decades, the general trend has moved towards functionalisation of smaller devices, and materials. To ensure that these materials can be synthesised and characterised, the use of specialised equipment is needed, along with the knowledge of how to use it effectively and efficiently. Our company is committed not only to the supply of testing and analysis instrumentation, but also to the development of best practices and development of techniques to ensure that we are always at the forefront of new developments and providing the best solutions to the customer's needs.

If attendees should know one thing about your company and experience, what would it be?
Our company has a wide variety of experience and the Director has been in the industry for over 25 years. He specialises in the use of AFM and stylus profilometry, and has built close relationships, in both academia and industry, to ensure that he has been kept up to date on the latest developments and techniques. Our Co-Director has a background in mechanical engineering and specialises in imaging techniques using electron microscopy and optical profilometry. Overall, our company can provide instrumentation solutions and advice for your desired applications.

What has been your organisation's biggest achievement to date?
CN Tech has continued to grow year on year and has managed to build more relationships with suppliers, most recently KLA and Rtec Instruments. KLA is very highly regarded in the industry, especially in Nano Indentation where Dr Warren Oliver has had an active role in developing reliable and affordable solutions to nanomechanical testing. KLA also offers a large range of Stylus and Optical Profilometers, and Thin Film measurement tools.

Rtec Instruments brings together an experienced team, each with over 20 years' experience of the world's top tribology and engineering experts, providing the most robust and versatile platform in the market for testing friction, wear, adhesion, hardness, roughness, and film thickness from nano to macro-scale.

What will you be showcasing at your stand at The Advanced Materials Show?
CN Tech will have a range of instrumentation available to view and demonstrate. This will comprise of Scanning Electron Microscope, Stylus & Optical Profilometers, Nanoindentation and Tribology instruments.

Who are you hoping to meet at The Advanced Materials Show?
Anyone who has an interest or requirement to test and characterise samples/materials from students, lab technicians and managers, all the way to up to company directors and CEOs. You are all welcome to stop by our stand to discuss your applications and to see how we can help aid your research and testing.

Visit **CN Technical Services Ltd** at Ceramics UK on **Stand 18-412**

CERAMICS UK

VISITOR INFORMATION

OPENING TIMES

Wednesday 29th June
Exhibition: 9:00am – 5:00pm
Conference: 9:30am – 4:30pm
Drinks Reception: 4:30pm – 5:30pm

Thursday 30th June
Exhibition: 9:00am – 4:30pm
Conference: 9:30am – 4:30pm

VENUE ADDRESS

Halls 17 & 18, National Exhibition Centre (NEC)
North Ave, Marston Green,
Birmingham, B40 1NT, UK

ACCOMMODATION

We have partnered with **Langham Travel** to offer our attendees preferential rates at a number of hotels in close proximity to the NEC. **Please visit the Accommodation page on our website for information.**

TRAVEL

By Rail - 5 minute walk from Birmingham International Railway Station.
By Road - Onsite parking available from £12.85 per day, pre-booking available.
By Air - 90 second air-rail link from Birmingham Airport to Birmingham International Railway.

SOCIAL MEDIA

The hashtags for the show are #AMS22 #CUK22. Please tag us on social and use the show's # to ensure we see the post and retweet/share.

Twitter

@MaterialsShow @CeramicsUK

Linkedin

The Advanced Materials Show
Ceramics UK

Facebook

The Advanced Materials Show
Ceramics UK

CONTACT

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MOST COMMONLY **ASKED QUESTIONS**

What is there to do at the event?

• Hall 18 - The Advanced Materials Show & Ceramics UK, The Advanced Materials Show and Ceramics UK two-track Conference
• Hall 17 - Battery Cells & Systems Expo & Vehicle Electrification Expo, Battery Cells & Systems Expo & Vehicle Electrification Expo two-track Conference
• Drinks Reception in Hall 17 & 18, 4.30pm – 5.30pm, Wednesday 29th June 2022
• B2B Meeting Area, Networking Lounge and a VIP Lounge
• Food & Beverage items will be available to purchase from the concessions at the rear of Halls 17 & 18

Will there be Wi-Fi available?

Yes, the NEC provides complimentary Wi-Fi service for visitors to the venue:
• Network = _NEC FREE WI-FI
• No code is required
• This network is for light browsing/usage only; connectivity is not guaranteed

If I have registered, can I attend more than one day?

Yes, your registration is valid for the duration of the event and will give you access to The Advanced Materials Show, Ceramics UK, Battery Cells & Systems Expo and Vehicle Electrification Expo, as well as a four-track, free conference.

How many exhibitors and attendees are expected to attend?

There will be 300+ exhibitors, and we are expecting 4000 attendees.

Is there disability access?

• The NEC aims to be fully user-friendly for visitors with access needs
• Wheelchairs are available free of charge for blue badge holders and £5 for all other visitors
• Assistance dogs are welcome
• Induction loop audio systems are fitted in various locations

Is there parking?

• Yes, there are over 16,500 parking spaces at the NEC
• When you arrive, please follow the digital road signage for ADV MATERIALS / BATT EV EXPOS
• Parking can be booked in advance or on the day
• All parking operations are cashless; only card/contactless payments will be accepted

How Germany’s “Battery Passport” project enables a sustainable and secure battery economy

Circulor Founder and CEO, Douglas Johnson-Poensgen, highlights the company’s contribution to the first-of-its-kind “Battery Pass” project

Q: Doug, tell us about the “Battery Pass” project that was recently announced. What is the German government looking to do here?

Johnson-Poensgen: Germany’s Federal Ministry for Economic Affairs and Climate Action (BMWK) recently announced its “Battery Pass” project and its 11 consortium members, including Circulor as lead on the project’s demonstrator work package.

This is a three-year, government-funded R&D global project including world-class market German leaders like acatech – Germany’s National Academy of Science and Engineering, AUDI AG, BASF SE, BMW AG, FIWARE Foundation e.V., Fraunhofer IPK, SYSTEMIQ GmbH, TWAICE Technologies GmbH, Umicore AG & Co KG, VDE Renewables GmbH (through subcontracting). In association with the Global Battery Alliance (GBA), GS1 Germany GmbH, RWE Generation SE, and more.

The goal for this group is to develop the technical standards and content for a “battery pass,” as well as demonstrate the integration of such data into a shared data space to provide transparency. Think of a “battery pass” as a digital ID for a battery—it tells important information about a battery, including where and how it was made, with what amount of CO2, and more. Knowing this information of batteries that are used in Germany and Europe will ensure we’re making responsible and sustainable batteries—and that we’re also setting the foundation for a circular battery economy.

Q: What is Circulor’s role within the consortium?

Johnson-Poensgen: Circulor offers one of the most complete and mature solutions for gaining visibility into complex industrial supply chains—we have proven technology that tracks high-risk and high-human impact materials. We have extensive experience in the electric vehicle space—tracking the provenance, production flow, and GHG emissions of critical materials like cobalt, nickel, lithium, manganese, mica, and more.

Circulor and the other consortium members have been selected by the German Federal Ministry on account of our track records. We’re ready to invest our knowledge and our experience in defining the digital content of battery passports and their data space. The aim is not only to define the technology but also to work together to set common standards and definitions. We have reason to hope that this project in Germany will influence and inform European policymakers, as well as global partners, on how “battery passports” can be developed and managed.

Our role within the consortium is to lead the “Battery Pass Demonstrator” work package – using the content and technical standards from the other work packages to simulate data flows and system transactions. Our team has already implemented battery passport management products for clients like Volvo Cars, Polestar, and Rock Tech Lithium, among others—and so we’re eager to bring insights we’ve learned to date and also learn from our consortium partners on how such efforts can be expanded and adopted more broadly.

Q: How does this project align with the Circulor vision?

Johnson-Poensgen: Today’s political and climate issues highlight the need for radical transparency in our supply chains. By bringing to light what’s occurring in the deeper tiers of these supply chains, we can take steps—with measurable results—to protect our people, our resources, and our planet.

Interestingly, the World Economic Forum published a report showing that only eight supply chains account for more than 50% of total global emissions. If we’re going to meet our target of the Paris Climate Accord, we have to drive emissions reductions in these sectors.

Together, we must ensure that the process of electrifying our transportation and power sectors is done safely, responsibly, and with the lowest levels of CO2 produced.

This initiative with the German Federal Economic Ministry and the “Battery Pass” consortium members aligns squarely with these drivers that are the foundation of Circulor’s mission and vision. Especially in advance of the forthcoming EU Battery Regulation, government and industry must set ESG criteria for batteries and build systems of transparency to prove that these criteria are being met. As a result of the BMWk project and the forthcoming Regulation, Germany and the EU market will build sustainable, responsible, high-performing, circular battery economies, and my company is pleased to play a part in striving toward these aspirations in concrete ways.

Q: Can a “Battery Pass” help ensure resource security?

Johnson-Poensgen: Batteries are valuable assets to our economies. Giving them digital identities can help countries achieve circular economies and enable pathways to second-life and recycling more quickly and efficiently.

With transparency and digital battery identities or “battery passports”, exact volumes of virgin and used materials on the market can be known, greater collaboration across diverse suppliers can be forged, and greater efficiency in production cycles can be created. Companies also have peace of mind and continuous proof that they’re meeting sustainability goals and regulatory policies.

By enabling all this, battery passes make it easier to create new economies in reuse and recycling, cutting dependence on raw material supplies that may come from other countries around the world.

About Circulor: *Circulor is the leading sustainable supply chain traceability provider. Headquartered in the UK, with a global footprint across Germany, the U.S., Singapore, and Australia, Circulor enables businesses to fully analyse, track, and manage their supply chains to ensure responsible sourcing and improve sustainability. Circulor does this by providing an enterprise software platform, which creates a reliable chain of custody of materials and attaches GHG emissions and other ESG data directly to the flow of materials.* ***To find out more visit www.circulor.com.***

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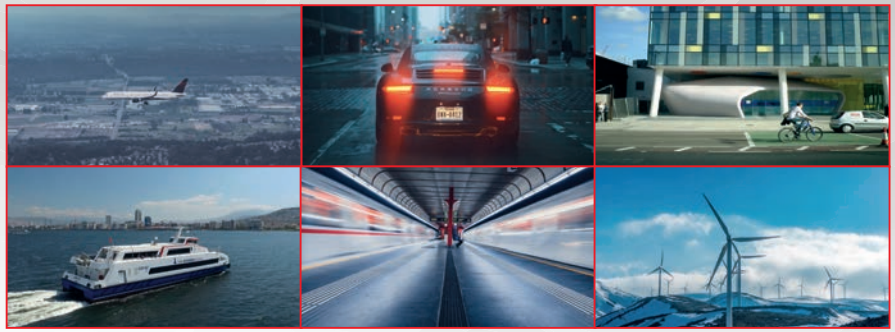

WHO WE ARE...

Composites UK is the trade association for the UK composites supply chain

Our membership spans manufacturers, material and equipment suppliers, designers, consultants, engineers, academics, service providers and OEMs/Tier 1s.

You can find out more about us at: www.compositesuk.co.uk

WHAT OUR MEMBERS SAY...

On our COVID-19 support: "*The webinar, information etc has been very useful. I found government guidance and all the other hundred sources did not involve enough in the detail. The information from Composites UK was comprehensive, practical and it gave a good understanding of legal concerns which gave me additional confidence in executing our plans for a return to working socially distanced."*

Rowan Carstensen, Prodrive

"Composites UK provides both a support network and marketing platform for its members. It facilitates connections, educates and campaigns, and encourages collaborative partnerships. It is a key enabler for growth for businesses large and small. Its work will be even more vital as the UK economy seeks to bounce back from the effects of the pandemic."

Samantha Bunyan, Cecence

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