



Masood
Entrepreneurship
Centre



2025

ELI & BRITT HARARI

Graphene Enterprise Awards



uommec

entrepreneurship.manchester.ac.uk



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WHAT ARE THE ELI & BRITT HARARI AWARDS?

The Eli and Britt Harari Competition is an annual award to help students, postdocs, and recent graduates launch companies using graphene or other 2D materials.

This award is all about helping applicants to take those crucial first steps to turn their research into a game-changing product or business.



Applicants submitted a comprehensive pitch deck and a one page business poster which were shortlisted by a panel of judges. The finalists then presented their pitch to a panel of graphene and innovation experts who awarded the prizes.



£50,000



£20,000





THE JUDGES



Professor Luke Georghiou

Deputy President and Deputy Vice-Chancellor

From 2010 to 2017 as Vice-President for Research and Innovation, Luke was responsible for the University's research strategy and its implementation and doctoral training. Prior to this he held the post of Deputy Dean and Associate Dean for Research in the Faculty of Humanities. He continues in his current role to be responsible for business engagement and commercialisation activities. He is active in research and policy advice to governments and businesses with work on innovation management, public procurement and foresight.



Aurore Hochard

Director, The Masood Entrepreneurship Centre

With a background as a teacher and tech entrepreneur in both the USA and UK, Aurore spent nine years as Head of Entrepreneurship Programmes at Bayes Business School in London, where she helped shape the futures of hundreds of aspiring entrepreneurs. Aurore is passionate about fostering a culture of entrepreneurship and aims to inspire students by embedding entrepreneurial thinking into education, driving innovation, and creating positive societal impact through entrepreneurship in Manchester.



Dr. Vivek Koncherry

CEO, Graphene Innovations Manchester

Vivek studied Textile Technology at UMIST before shifting to advanced composites. His work led to a PhD with Bentley Motors, a postdoc with the UK Ministry of Defence, and pivotal research at the University of Manchester's Graphene Engineering Innovation Centre. Now a CEO, he spearheads Graphene commercialisation, recently launching a \$1bn JV in the UAE. Vivek remains deeply connected to Manchester, driving sustainability and industry transformation.





THE JUDGES



James Baker

CEO, Graphene@Manchester

With over 25 years experience in the defence, aerospace and security market leading and managing high technology businesses, James is now The CEO for Graphene@Manchester. He is responsible for the development and delivery of the business strategy including commercialisation opportunities in partnership with industry together with the National Graphene Institute (NGI) and the Graphene Engineering Innovation Centre (GEIC) in The University of Manchester.



Dr. Ania Jolly

**Head of Research and Business Engagement,
Henry Royce Institute**

Ania has over 15 years' experience in research development, strategic research management, business development, and innovation. She has successfully developed and managed large research programmes and portfolios at national and international levels across a range of sectors including manufacturing, pharmaceuticals, chemistry and engineering in academic, commercial and clinical working environments.



Professor Aravind Vijayaraghavan

**Professor of Nanomaterials, Head of Internationalisation
& Business Engagement**

With a background spanning MIT, Karlsruhe Institute of Technology, and IIT Madras, his research focuses on graphene and 2D materials for composites, electronics, and biotech. He has published over 100 papers, holds seven patents, and founded two spin-outs, Atomic Mechanics Ltd. and Grafine Ltd. A leader in public engagement, he actively drives international collaborations and business engagement.



THE FINALISTS

Metamorph Materials

Metamorph Materials is pioneering sustainable battery innovation by transforming biomass into high-performance, carbon-negative graphite for lithium-ion batteries.



**METAMORPH
MATERIALS**

 Mas@metamorphmaterials.com

 www.metamorphmaterials.com

Their scalable, cost-effective solution provides an eco-friendly alternative to traditional synthetic graphite, reducing environmental impact while enhancing battery performance. Designed for EVs, electronics, and next-gen energy storage, their material integrates seamlessly with existing manufacturing processes. By bridging lab-scale research to industrial adoption, they are accelerating the transition to cleaner, more sustainable battery technologies. With strong industry interest and a clear roadmap, they are ready to scale and redefine the future of energy storage.

The Team



Mohammadhossein Saberian

PhD in Nano and Functional Materials
School of Natural Sciences (SNS)



Dr. Darren Hodgeman

CTO and Co-Founder
External to UoM



**METAMORPH
MATERIALS**

SUSTAINABLE GRAPHITE

Transforming Biomass into High-Performance Graphite for Li-ion Batteries.

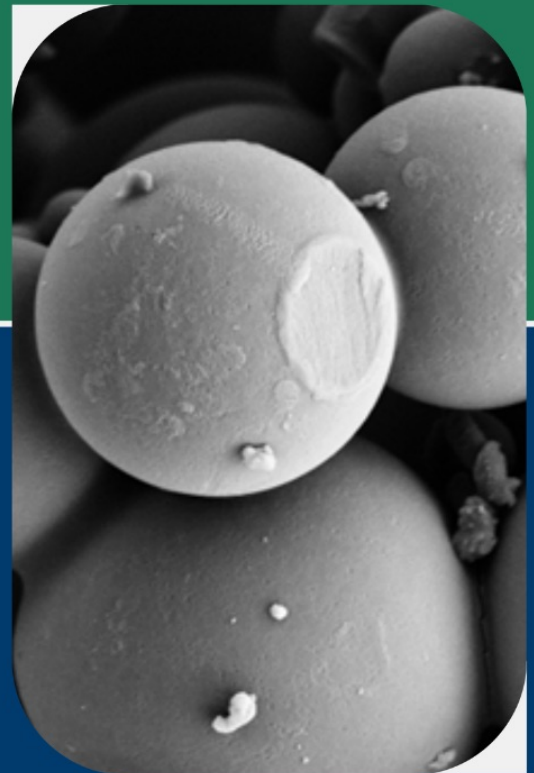


ABOUT US

Metamorph Materials pioneers sustainable, carbon-negative spherical graphite solutions for the battery industry.

WHY CHOOSE US:

- Sustainable & Carbon-Negative Graphite
- Scalable & Cost-Effective
- Customisable for OEMs



CONTACT US

✉ Mas@metamorphmaterials.com

🌐 www.metamorphmaterials.com



THE FINALISTS

Graphene Vision

Graphene Vision develops next-generation in-situ cells that significantly enhance the performance of existing materials characterization systems, enabling real-time atomic-level imaging in diverse environments.

Our technique is cost-effective and fully compatible with current setups, ensuring a low barrier to adoption. More importantly, it reduces research timelines and costs, accelerating breakthroughs in catalysis, energy storage, biomaterials, and beyond, providing affordable, high-resolution solutions for labs and industries worldwide.



GRAPHENE
VISION

✉ rui.zhang-3@manchester.ac.uk

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The Team



Dr. Rui Zhang

Founder
PDRA of University of Manchester
School of Natural Sciences (SNS)



Dr. Matthew Lindley

Co-founder
Senior Experimental Officer of
University of Manchester





Revolutionizing Atomic-Scale Imaging

Unlock the full potential of your in-situ TEM instrument with our graphene in-situ cell. Affordable and powerful, it generates groundbreaking discoveries while saving you time and research costs.

Key Benefits



Enhanced Imaging

80% less window scattering
Atomic resolution for
dynamic reaction studies



Seamless Compatibility

Integrates with existing in-situ
TEM systems without costly
upgrades



Multipurpose

Supports gas/liquid
flow, heating, and
electrical studies



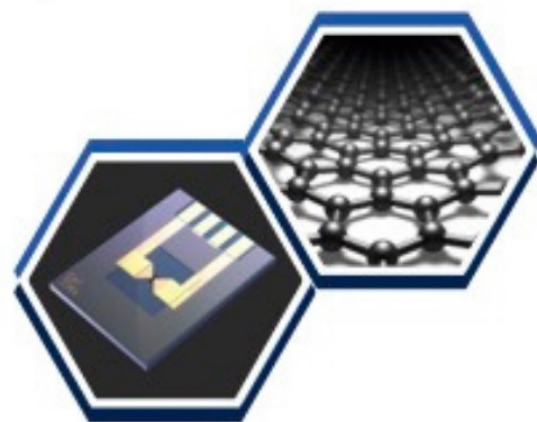
Versatile Applications

Ideal for research in catalysts,
batteries, biomaterials and
more.



Cost Effective:

Competitive price with
conventional in-situ
cells



Let's transform TEM capabilities together!

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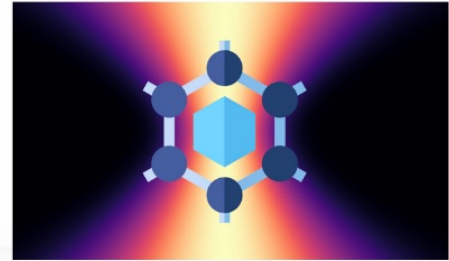
zhangrui.ep@gmail.com

THE FINALISTS


Sensium

Sensium is revolutionizing molecular diagnostics by delivering 90-95% accuracy in detecting infections, hydrocephalus, and STIs in under 5 minutes. Our MiniPointer and Dx Strip leverage Graphene-Enhanced Raman Spectroscopy (GERS) and Surface-Enhanced Raman Spectroscopy (SERS) to amplify biomarker signals in fluid samples.

With a \$1 per test cost—compared to traditional methods costing \$50-\$500—our portable device eliminates the need for expensive lab infrastructure. Targeting a \$31.34 billion global market, Sensium aims to bridge the diagnostic gap in low-income countries, helping 47% of the global population without essential diagnostic access.



 jorge.servertlerdodetejada@manchester.ac.uk

 0034662966400

The Team



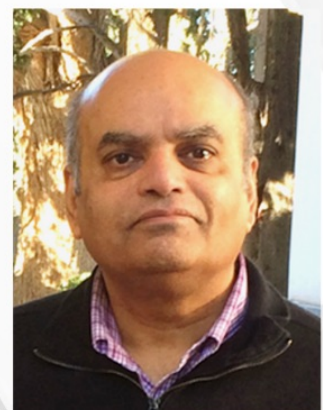
Jorge Servert

PhD Biomedical Imaging
Sciences, School of Biological
Sciences (SBS)



Dr. Derren Heyes

Senior Technical Specialist
at the Manchester Institute
of Biotechnology

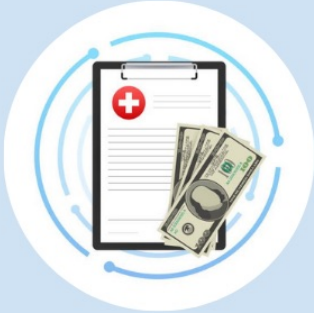


Dr. Jaleel Miyan

Senior Lecturer at the
University of Manchester



Bridging the diagnostic gap is the first step to health equity.



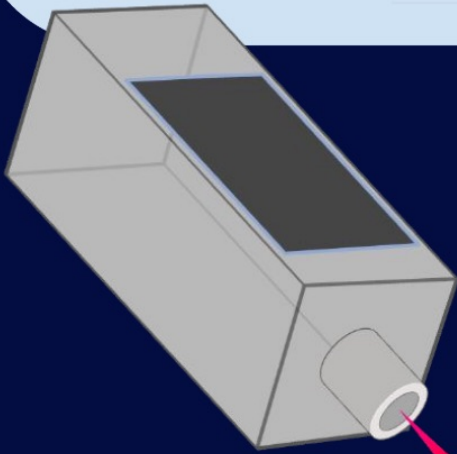
X100 Cheaper



More precise - 95%



X500 Faster

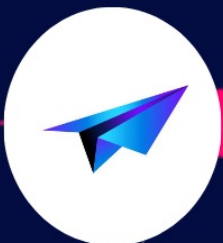


Sensium

Using Light and 2D
Materials for Low-Cost
Diagnosis



Awarded by:



Contact us:

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0034662966400



THE FINALISTS

Graphene Thermal

Graphene Thermal specializes in cutting-edge graphene heated floor panels that reach their target temperature in a matter of seconds while consuming over 50% less power than our underfloor heating competitors. We offer our users unmatched convenience and energy savings with our easy to install heated floor panel solution.

GRAPHENE THERMAL

- ✉ graphenethermal@gmail.com
- ✉ patrick.sarsfield@manchester.ac.uk

The Team



Patrick Johansen Sarsfield

Founder
Graphene NOWNANO CDT
School of Natural Sciences (SNS)



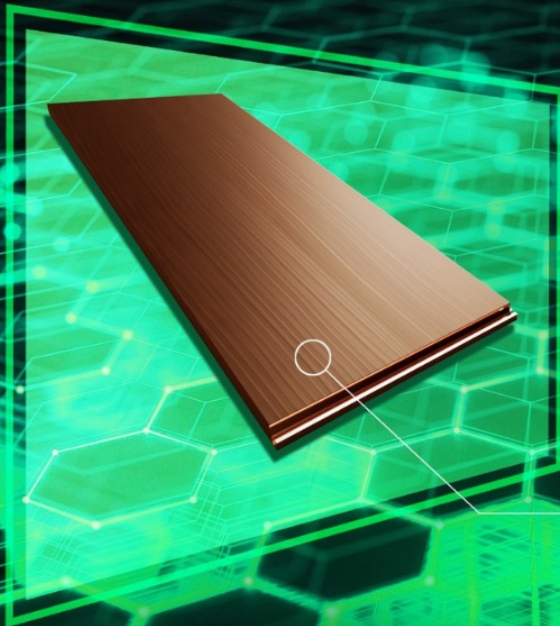
Daniel Mills

Co-founder
External to UoM



GRAPHENE THERMAL

RAPID FLOOR HEATING



INSTANT FLOOR HEATING

With the Graphene heating element, your floor reaches full temperature in a matter of seconds. No need to wait an hour for a warm floor.

ECO FRIENDLY WITH ENERGY AND COST SAVINGS

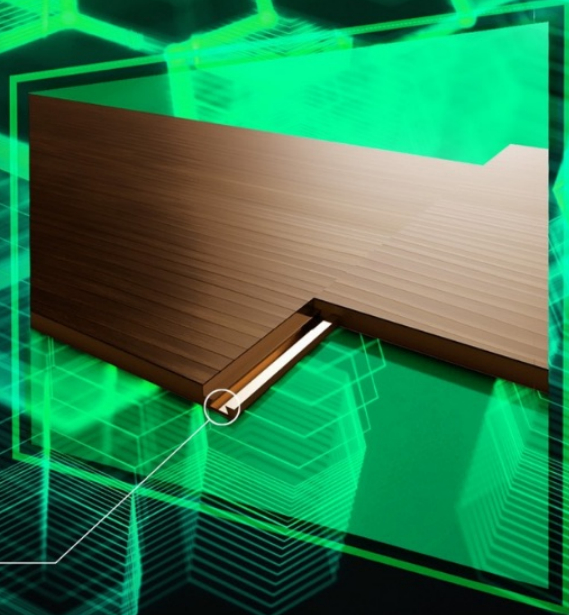
Over 50% less power consumption than electric underfloor heating.

HEATED FLOOR WITHOUT THE HIGH INSTALLATION COSTS

Our heated floor panels are self contained, modular and individually replaceable. Simply slide the panels together and you're ready to go.

NO NEED FOR ADDITIONAL INSULATION

The Graphene heating element is already insulated from the ground by the body of the floor panel.



CONTACT THE FOUNDERS FOR MORE INFORMATION
Graphenethermal@gmail.com