

NANOTECHNOLOGY

BRIDGING THE GAP BETWEEN IDEA, INNOVATION & ENTERPRISE



LEARN

APPLY & CREATE

SUSTAIN & DEVELOP

**ONE-WEEK INTERNATIONAL
INTERDISCIPLINARY WORKSHOP (ONLINE)**

18-22 JANUARY 2021



**UNIVERSITY OF
LINCOLN**

NANOTECHNOLOGY: BRIDGING THE GAP BETWEEN IDEA, INNOVATION & ENTERPRISE

is a one-week interdisciplinary workshop organised by four schools at the university of Lincoln:

School of Engineering

School of Maths & Physics

School of Chemistry

School of Pharmacy

The workshop will explore Nanotechnology, from fundamentals to innovation & enterprise, in the following fields:



HERITAGE & BUILT ENVIRONMENT

Architecture

Construction Engineering

Interior/Product Design (Smart Materials)



HEALTHCARE

Pharma Delivery

PPE (COVID-19)



OIL & GAS

Chemical Engineering

Petrochemical Engineering



ENERGY

Electrical Engineering

Mechanical Engineering

This international interdisciplinary workshop is designed for students & fresh-graduates from all engineering & built environment disciplines. It will include international key speakers from both industry & academia. The workshop consists of three consecutive phases:



Fees £200.00

(Few Scholarships are available)

For registration & enquiries, please contact:

Dr Ahmed Elseragy on aelseragy@lincoln.ac.uk

or Dr Dalila O'Grady on davdic@lincoln.ac.uk



UNIVERSITY OF
LINCOLN

INTERNATIONAL WORKSHOP PROGRAMME

18.1.21 Day 1 Introduction: Synthesis and Characterisation of Nanomaterials (Join the Microsoft Teams sessions on [here](#))

Time	Session	Speaker(s)
9:00	Introduction: Workshop Coordinator and Facilitator	Ian Scowen/Holly Roebuck - School of Chemistry
10:15	Developments of microscopy for nanomaterials characterisation	Peter Eaton - School of Chemistry
11:15	Break	
11:30	The Bridge	Holly Roebuck/Ian Scowen - School of Chemistry
12:30	Lunch	
13:30	Manufacturing nanofibres with electrostatics - the engineering viewpoint	Nick Tucker - School of Engineering
14:30	Computer simulations of interactions of antimicrobial peptides with membranes.	Manuela Mura - School of Maths and Physics
15:30	Virtual Tour – Isaac Newton Building - SoE	Dan Stones - School of Engineering
16:30	Activity	1-2 Slide presentation

19.1.21 Day 2 Powering the Future (Join the Microsoft Teams sessions on [here](#))

Time	Session	Speaker(s)
9:00	Introduction: Workshop Coordinator and Facilitator	Hatem Aqli
9:15	Dangers of fossil fuels and the promise of renewable energy	Iftikhar Boukari
10:15	Nanomaterials in batteries and the future of electric vehicles	Hatem Aqli
11:15	Break	
11:30	X-ray photoelectron spectroscopy for nanomaterials and Virtual Tour of Stephenson Institute for Renewable Energy (University of Liverpool)	Vin Dhanak
12:30	Lunch	
13:30	Energy from waste	Iftikhar Boukari
14:30	Nanotechnology for the oil and gas industry	Ehsan Nourafkin
15:30	Siemens Energy and School of Engineering Siemens collaboration with SoE and UoL.	Mike Gallimore – School of Engineering
16:30	Renewable Energy Quiz	Hatem Aqli 1-2 Slide presentation

20.1.21 Day 3 Transforming Health Care using medical devices, drug delivery systems and computational modelling (Join the Microsoft Teams sessions on [here](#))

Time	Session	Speaker(s)
9:00	Introduction: Workshop Coordinator and Facilitator	Claire McIlroy
9:15	Nanocarriers for drug delivery to cancer: challenges in design	Christy Hunter – School of Pharmacy
10:15	Roundtable Discussions: International PGT and PGR Opportunities at Lincoln.	Ahmed Elseragy and Hatem Amli
11:15	Break	
11:30	Virtual Tour - JBL Labs	Andy Gill – School of Chemistry
12:30	Lunch	
13:30	2D materials and their applications	Asad Sayed – University of Oxford
14:30	Developments of medical and surgical implants (Recorded talk)	Bambos Charalambos (Orthopaedic Consultant – Blackpool Hospital)
15:30	Activity	1-2 Slide presentation

21.1.21 Day 4 Nanotechnology in heritage and architecture + Smart materials for interior design (Join the Microsoft Teams sessions on [here](#))

Time	Session	Speaker(s)
9:00	Introduction: Workshop Coordinator and Facilitator	Ahmed Elseragy Dalila Avdic
9:15	Nanotechnology for construction and buildings + JBL work for construction materials	Amira Elnokaly/Adham Mokhtar
10:15	Roundtable Discussions: International cooperation and Joint-research opportunities	Ahmed Elseragy
11:15	Break	
11:30	Towards Sustainable Bricks using Nanotechnology	Ola Elhuofy <i>(last year participant)</i>
12:30	Lunch	
13:30	Nanomaterials for Interior Spaces <i>Nano-treated materials towards resilience within interior spaces.</i>	Mohammed Radwan
14:30	Intellectual Property and Enterprising Nanotechnology.	Charles Mycroft Dereck Palmer
15:30	Activity	1-2 Slide presentation

22.1.21 Day 5 Presentations and Prizes (Join the Microsoft Teams sessions on [here](#))

Time	Session	Speaker(s)
9:00 10:00	Group Preparations Group Presentations Group I Presentations Group II Presentations Group III Presentations	Coordinator: Ahmed Elseragy
13:15	Discussion and Feedback	Ian Scowen/Ahmed Elseragy
14:00	Break/Lunch	
15:00	Certificates	Libby John
16:00	Close	