

METRC

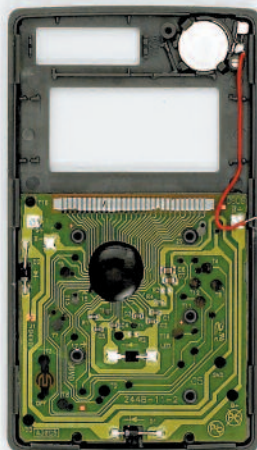
The N8 Molecular Engineering
Translational Research Centre

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Moving Forward:
The Northern Way



mETRC

The N8 Molecular Engineering
Translational Research Centre

The science of everyday things

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Who we are

METRC is a virtual lab, specialising in soft nanotechnology research and applying this to industry. We pool expertise from leading research centres at universities across the North of England to help you develop innovative new products and processes. We are the "R" to your "D".

Universities

Our university partners include the universities of: Bolton, Bradford, Durham, Hull, Lancaster, Leeds, Liverpool, Manchester, Manchester Metropolitan, Newcastle, Salford, Sheffield, Sheffield Hallam and York.

What is Soft Nanotechnology?

This is the science and engineering of soft materials. Examples of our soft materials expertise include polymers, organic materials and liquid crystals. Soft nanotechnology underpins a wealth of existing and new products - from soap to solar cells. Our business is in the science of everyday things.

Our market focus

We apply our research strengths to markets that include home and personal care, medicine and healthcare and energy.

What we can do for you?

We make it easy for you to work with universities.

We can help you to:

- develop new innovative products and processes
- reduce your time to market
- find experts to solve your problems
- access new technology developments

How we do this

We have a dedicated Knowledge Transfer Team who are here to help you. We can help set up collaborative projects for you with our university partners and assemble multidisciplinary teams with the right skills and experience to help you. They are also able to assist with funding projects and project management.



Our Research Strength

As we are a collaboration of the leading research based universities of the North of England we have combined research strength second to none in our chosen market sectors. Our strengths include:

1. Home and Personal Care

- Improved product formulations
- New sensors for the home, environment and personal care
- High throughput technologies
- Smart and responsive materials

2. Medicine and Healthcare

- Controlled drug delivery
 - targeted, smart and environmentally responsive systems
- New diagnostics, imaging, biosensors and point of care applications
- Pharmaceutical processing
- Formulation design

3. Energy

- Energy scavenging
 - organic photovoltaics
- Display and lighting applications
 - LCs, OLEDs, PLEDs
- Materials for fuel cells and fuel storage

Example Projects

Structural characterisation of anti-microbial formulations

Partners – Byotrol, the University of Sheffield and University of Manchester

Waterborne Acrylic Latexes with pH-Switchable Adhesion

Partners – Cytec Specialty Chemicals, the University of Sheffield and the University of Surrey

New Organic Semiconductors

Partners - SAFC Hitech, the University of Lancaster and the University of Manchester

Production of Natural Flavour and Fragrance Molecules using Benign Technologies

Partners – Critical Processes Ltd, Frutarom (UK) Ltd, the University of York and the University of Durham

A “one-pot” solution to switchable adhesion

Partners – Cytec Industries and the University of Sheffield

