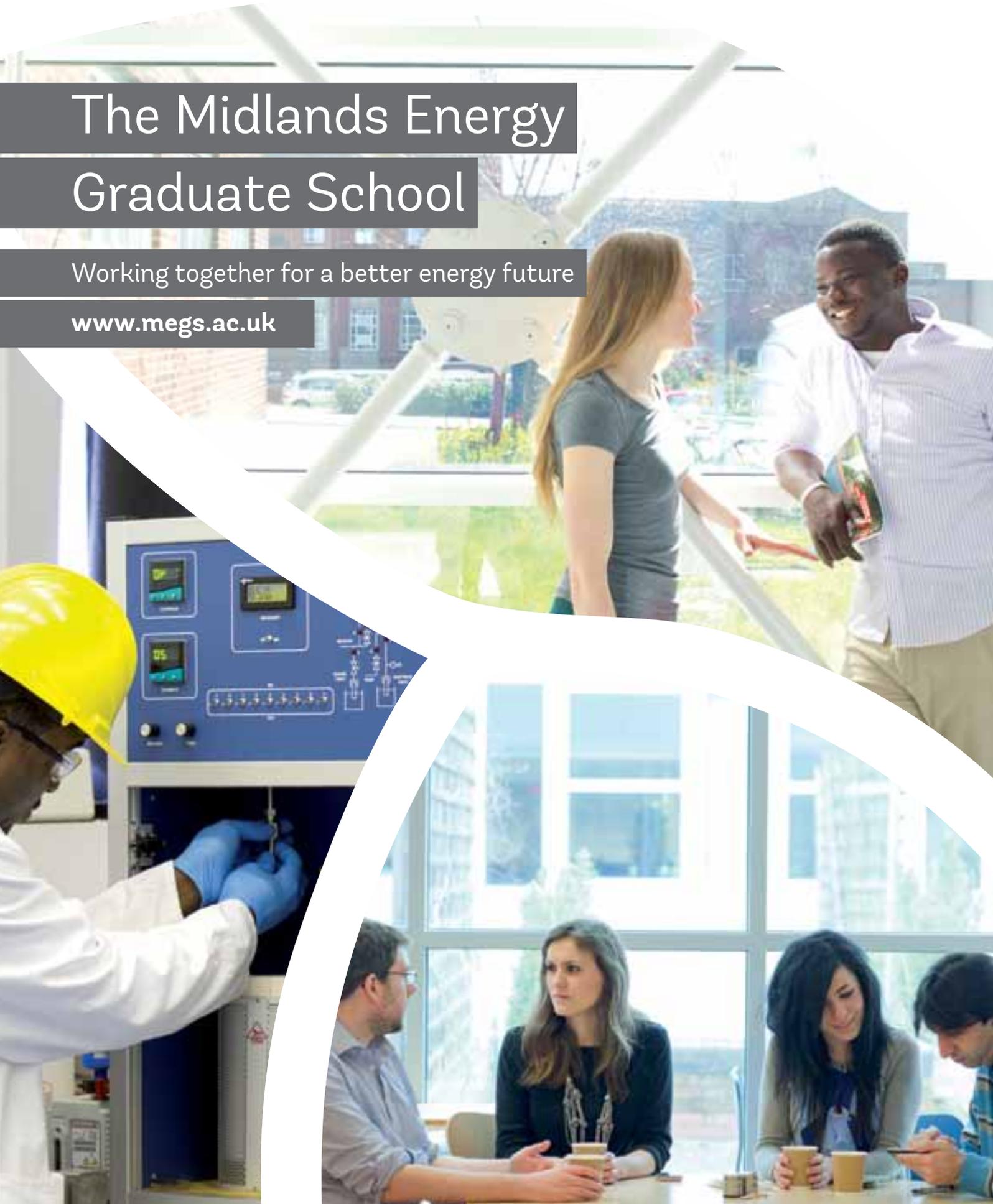


# The Midlands Energy Graduate School

Working together for a better energy future

[www.megs.ac.uk](http://www.megs.ac.uk)



# Contents

- 03 Who we are
- 04 How we're changing the world
- 06 MEGS benefits for students
- 10 MEGS benefits for industry
- 11 The details

# Who we are



University of Birmingham



Loughborough University



The University of Nottingham

The Midlands Energy Graduate School (MEGS) is a unique and powerful collaboration between three universities leading the way in energy research in the UK – Birmingham, Loughborough and Nottingham.

We bring together PhD students, graduates and academics from across the three institutions as well as industrial partners to create a dynamic learning network in the energy field.

Energy research continues to grow in profile and the demand for leaders in the low-carbon energy sector has never been higher.

Our aim is to help meet this demand by accelerating the supply of highly-trained, skilled postgraduates across the spectrum of energy research.

We do this by harnessing the strengths of our three institutions and combining resources to create an internationally leading research environment where our PhD students can access specialist training and academic expertise not available at a single university.

If you're a PhD student or recent graduate looking to get a head start in your energy career, membership of MEGS is vital. If you're an organisation looking to recruit the brightest energy researchers for your business, you'll find them at MEGS.

# How we're changing the world

The Universities of Birmingham, Loughborough and Nottingham are recognised internationally for energy research. Projects across the three institutions span the breadth of the energy sector.

## Here's just a few examples of how our universities are changing the world:

Researchers at Birmingham are developing novel fuels and technologies that will power our homes and vehicles in the future. They are investigating the production of new biofuels and hydrogen, the storage of fuels and energy, and the performance of biofuels in engines.

Researchers at Loughborough are tackling the challenges of reducing the energy demand of our built environment, increasing the role of renewable energy, and supplying remaining needs through improving the efficiency of conventional energy generation. For transport, novel engine technologies are being developed, and the potential for hydrogen as a fuel of the future is being explored.

Researchers at Nottingham are at the forefront of how we will cut carbon emissions by capturing carbon dioxide and making our power stations more efficient, storing energy so we can use it when we need it most and reducing energy demand through the use of digital technologies to help us all reduce energy consumption.

We promote multidisciplinary ways of working, offer easy networking opportunities between likeminded peers and ensure there is a constant conversation about energy research so crossovers and overlaps are identified and maximised.



Developing the next generation of energy researchers

We're all working to improve the world we live in – why wouldn't we work together?

*Gulcan Serdaroglu, PhD DTC student in Hydrogen, Fuel Cell and their applications, The University of Nottingham, entering the registration code for refuelling vehicles at the Nottingham Hydrogen Refueller.*

# MEGS benefits for students

If you're a PhD student at one of our institutions, MEGS is a ready-made network of people who could help you on your chosen career path.

We offer you access to additional specialist modules across the three universities, a virtual library of lecturers' recordings, travel grants, specially tailored events and joint conferences, career fairs, and an interactive website with a forum and careers section – all things that will help you build your knowledge, skills and experience and stand out from the crowd when it comes to your career progression.

What's more, membership is completely free.

## Modules

You will have a unique opportunity to study modules delivered by experts at our three world-class centres of research.

Over the last two years, we've offered 28 highly specialised modules covering topics including:

- energy efficiency in the built environment
- energy use in transport and electrical infrastructure
- power generation and carbon capture
- renewable energy

Delivered by state-of-the-art video conferencing technology, the modules are flexible and convenient.

## Events

We hold a number of events throughout the year including seminars, conferences, industrial site visits, summer school programmes, careers fairs and our annual Christmas social event.

All events are fully or partially sponsored for MEGS students.

## MEGS Travel Grant

Taking part in national and international conferences is an important part of PhD training, offering opportunities to meet fellow researchers and gain crucial experience of presenting and networking.

The MEGS Travel Grant offers up to £600 or 50% of the requested funding (whichever is the smaller) to cover conference expenses.

Since we began in 2009, we have awarded over 35 grants adding up to more than £25,000, helping our students travel to destinations such as Canada, China, Europe and the USA.



*Bayonle Kayode and Amhamed Assanosi, Chemical Engineering PhD students, the University of Birmingham, working with thermal production of 2,5 dimethylfuran from biomass derived sugars.*

# MEGS benefits for students

## Undergraduate students

If you're considering a PhD in an energy related area, choosing to study at the universities of Birmingham, Loughborough or Nottingham will mean you can access MEGS.

Joining a network of leading experts in the energy sector is a powerful statement about your commitment to a career in the field.

Through MEGS, you will meet the people who can prepare you for your future and help develop you and your research skills.

## MEGS masters programme

Our new masters programme in energy themes is designed and delivered by world-class researchers and specialists from all three of our universities.

New for 2013, the MSc in Efficient Fossil Energy Technologies provides the educational base required for future technology leaders in energy generation using fossil fuels, fuels which will continue to be required throughout our lives. Combining core modules on technology and contextual subjects, students will be able to choose from a wide range of options from all three MEGS universities, delivered in person and via state-of-the-art video lecture technology, before returning to their registered university for the major research project.

New for 2014, the MSc in Electrical Transport Systems and Infrastructure

delivers practical electrical engineering aspects of transportation systems, with a particular focus on automotive and rail vehicles and on power system infrastructure. Graduates of this programme will have a clear understanding of what is needed to design, build and operate these electrical transport systems.

Continuing Professional Development (CPD) modules are also available in:

- engineering
- science
- business
- economics
- social science subjects

All Masters and CPD students will have access to MEGS benefits, including annual and joint events and an opportunity to work with some of the best energy researchers and academics from around the world.



Anna Sammarco, Materials Engineering PhD/EngD student, Loughborough University, TEM Imaging

# MEGS benefits for industry

If you're an organisation in the energy sector, MEGS can help you connect with the best research students and academics in the industry.

Whether you're looking for a research team to solve a specific problem, specialist training for your staff or the brightest graduates for your business, we can help you. You can also participate in some MEGS events free of charge.

## **Research solutions**

If you have a specific problem with one of your processes or products and need a research team to work on a solution, we can help you find the right people. We have a wide group of people you can work with, as we have access to the expertise and skills of academics from the three leading universities

## **Training and development**

If you need specific training for your staff in an energy-related area, our academics might be able to deliver it.

## **Recruitment**

MEGS student members are the energy leaders of the future. We can help you recruit highly-trained graduates to fit your business. We provide all our members with the opportunities to learn, network, present and develop, so you can be confident that our graduates are equipped with the skills to make an immediate and valuable contribution.

We can also help you find the right students for internships and placements within your company. If you have a specific project in mind and want to discuss intern opportunities, please contact us.

# The details

## Who can join MEGS?

- PhD, MSc and MRes students at the Universities of Birmingham, Loughborough and Nottingham
- EPSRC Doctoral Training Centre (DTC/EngD) students at the Universities of Birmingham, Loughborough and Nottingham
- Recently graduated PhD students in energy-related disciplines from the Universities of Birmingham, Loughborough and Nottingham

## Our partners

MEGS cooperates with world-class research teams across all three universities, allowing students to participate in various projects and research opportunities including:

- The Midlands Energy Consortium
- EPSRC EngD Centre in Efficient Fossil Energy Technologies (The University of Nottingham)
- EPSRC Doctoral Training Centre in Hydrogen, Fuel Cells and their Applications (University of Birmingham)
- EPSRC Lo-Lo Centre for Doctoral Research in Energy Demand (Loughborough University)

For more information, please contact:

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