







Ysgoloriaeth Ymchwil PhD KESS Prifysgol De Cymru University of South Wales KESS PhD Studentship

PDC / USW MAXI 21096

The investigation of the use of 'Sterimelt' technology to recycle hospital polypropylene waste

PhD wedi'i gyllido yw hwn, sy'n cynnwys cyflog hael a ffioedd dysgu, gydag amgylchiadau sydd â digon o adnoddau ar gyfer ysgoloriaeth lwyddiannus.

This is a **funded PhD**, including a generous **stipend** and **tuition fees**, with **well-resourced** circumstances for a successful scholarship.

Here is an exciting opportunity to study a new technology which could inform future lead new approaches in Recycling clinical waste materials.

The selected candidate will apply their research, interpersonal skills and ambition to conduct research with the University of South Wales and Thermal Compaction Group Ltd. This research project will allow the student to develop transferable knowledge and skills in this most exciting and active field of recycling medical waste and the reuse of polypropylene.

This Knowledge Economy Skills Scholarship (KESS) project will be held in the Faculty Life Sciences at the University of South Wales. KESS is a programme funded by the European Social Fund (ESF) awarded by the Welsh European Funding Office (WEFO) in the Welsh Government. The PhD will be associated with University Health Boards in Wales. The project is to investigate the medical disposable products that have the potential for being recycled with the use of the 'Sterimelt' machine. The project will include the investigation of issues with infection control and procedures within the NHS. The student will also engage with companies that use or could use the recycled polymers to gauge their views on buying and use of recycled products. This project has global potential for the recycling of medical waste and improvement in the environment

The project is backed by Thermal Compaction Group Ltd. Thermal Compaction Group is a green business focused on sustainable waste solutions with a vast network of industry partners. We are a specialist group of companies offering unique patented products which offer cost effective solutions to waste management problems globally. Our processes can reduce disposal costs, and where possible, create a new revenue stream. Our national and international partners also collaborate with us on our shared commitment to environmentalism and a green industry that can uphold its responsibilities to its shareholders and the citizens of this planet simultaneously. We invite you to join us in creating a brighter, greener future, using sustainable solutions for a circular economy

Programme of research:

The project will run for 3 years. Under supervision and guidance, the student will investigate the literature to gain a sound understanding of issues surrounding recycling of medical waste and its cost of disposal and the potential impact on the environment. The project will include the investigation of disposable products that can be recycled, the reuse of polymers for new products.

The participant will be based at the University of South Wales although there will be scope to spend appropriate time at Thermal Compaction Group Ltd. Company training and induction will be provided as it is for all staff.

Thermal Compaction Group Ltd GPC will provide access to information, equipment and current collaborators to assist the exploration for the future of the 'Sterimelt' machine.

Ysgoloriaeth ymchwil:

Bydd yr ysgoloriaeth ymchwil yn cynnwys ffioedd ar gyfer rhaglen PhD llawn-amser am flwyddyn ac yn talu cyflog o oddeutu £14k y flwyddyn. Mae hefyd tua £9k o gostau cymorth ar gael i'r prosiect ar gyfer treuliau, teithio, mân offer, hyfforddiant (gan gynnwys Ysgol Raddedig KESS) a mynychu cynadleddau.

Mae'r swydd ar gael o 1 Hydref 2018.

Cymhwyster Myfyrwyr:

I fod yn gymwys i gael ysgoloriaeth ymchwil KESS, mae'n rhaid:

- cael cyfeiriad cartref yn yr ardal Gydgyfeirio (manylion isod)* ar adeg cofrestru.
- bod gennych hawl i ymgymryd â gwaith cyflogedig yn yr ardal Gydgyfeirio* ar ôl cwblhau'r ysgoloriaeth.
- bod y Brifysgol yn eich ystyried yn fyfyriwr 'cartref' neu 'UE' at ddibenion ffioedd dysgu yn unol â chanllawiau'r Brifysgol.
- eich bod yn bodloni meini prawf mynediad Prifysgol De Cymru: gweler isod, cymwysterau a phrofiad a'r broses ymgeisio

*Mae'r ardal Gydgyfeirio'n cynnwys Gorllewin Cymru a'r Cymoedd, ac yn cynnwys y 15 awdurdod lleol canlynol: Ynys Môn, Gwynedd, Conwy, Sir Ddinbych, Ceredigion, Sir Benfro, Sir Gaerfyrddin, Abertawe, Castell-nedd Port Talbot, Pen-ybont ar Ogwr, Rhondda Cynon Taf, Merthyr Tudful, Caerffili, Blaenau Gwent a Thorfaen.

Studentship:

The studentship will cover the fees for a 3-year full-time PhD programme and pay a stipend of circa £14k p.a. There is also around £9k project support costs available for consumables, travel, minor equipment, training (including the KESS Grad School) and conference attendance.

The position is available from 1st October 2018.

Eligibility of Student:

To be eligible to hold a KESS studentship, you must:

- have a home address in the Convergence area (details below)* at the time of registration.
- have the right to take up paid work in the Convergence area* on completion of the scholarship.
- be classified by the University as 'home' or 'EU' for tuition fees purposes according to the University's guidelines.
- satisfy University of South Wales's admissions criteria: see below, qualifications and experience and application process

*The Convergence area covers West Wales and the Valleys, and is made up of the following 15 local authorities: Isle of Anglesey, Gwynedd, Conwy, Denbighshire, Ceredigion, Pembrokeshire, Carmarthenshire, Swansea, Neath Port Talbot, Bridgend, Rhondda Cynon Taf, Merthyr Tydfil, Caerphilly, Blaenau Gwent and Torfaen.

Cymwysterau a phrofiad:

Bydd gan ymgeiswyr cymwys:

Qualifications and experience:

Eligible applicants will:

- Have a degree (2i or higher) in an appropriate electrical engineering or recycling discipline
- Possess a reasonable understanding of recycling processes
- Be highly self-motivated, with capacity to learn and develop understanding of the potential recycling techniques
- Have well-developed and positively collaborative interpersonal skills
- Have an ability to deliver technical reports and communicate findings
- Be willing to travel and work in industrial and clinical settings

Y Broses Ymgeisio:

I lawrlwytho'r pecyn ymgeisio, ewch i: Pecyn Ymgeisio Cyfranogwr

Am unrhyw ymholiadau ynghylch cymhwysedd, cysylltwch â: Tîm KESS, Gwasanaethau Ymchwil ac Arloesedd, Prifysgol De Cymru: kess@decymru.ac.uk Ffôn: 01443 482578

Ar gyfer ymholiadau anffurfiol neu ragor o wybodaeth am y rhaglen, cysylltwch â: Professor Joyce Kenkre (joyce.kenkre@southwales.ac.uk).

Dyddiad cau ar gyfer ceisiadau: Hanner nos Dydd Sul 1 Gorffennaf 2018 Cynhelir cyfweliadau yn ystod yr wythnos yn dechrau (i'w gadarnhau)

Mae Ysgoloriaethau Sgiliau Economi Gwybodaeth (KESS) yn fenter sgiliau lefel uwch ar draws Cymru a arweinir gan Brifysgol Bangor ar ran y sector AU yng Nghymru. Fe'i cyllidir yn rhannol gan raglen gydgyfeirio Cronfa Gymdeithasol Ewropeaidd (ESF) Llywodraeth Cymru ar gyfer Gorllewin Cymru a'r Cymoedd.

Application Process:

To download an application package, please visit: Participant Application Package

For any queries on eligibility, please contact: KESS Team at Research and Innovation Services, University of South Wales: kess@southwales.ac.uk Tel: 01443 482578

For informal enquiries or further programme information, please contact: Professor Joyce Kenkre (joyce.kenkre@southwales.ac.uk).

Closing date for applications: midnight Sunday 17th June 2018

Interviews will be held w/c (TBC)

Knowledge Economy Skills Scholarships (KESS) is a pan-Wales higher level skills initiative led by Bangor University on behalf of the HE sector in Wales. It is part funded by the Welsh Government's European Social Fund (ESF) convergence programme for West Wales and the Valleys.