

Research Newsletter

Vice President's Office for Research and Enterprise

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A Year of Research Success



This year we look back on the University's commitment to society, our extensive programme of philanthropic initiatives, and our partnership with governmental initiatives.



— **Prof. Mohamed Loutfi**
Vice-Chancellor and President
The British University in Egypt

In this first issue of 2023, the Research Newsletter looks back at a year of research success, leading up to the annual Recognition Awards held in March where the University's outstanding researchers were celebrated for their achievements and innovative output.

Working in line with Egypt's Vision 2030 and towards UN Sustainable Development Goals, The British University in Egypt's research community has over the past 12 months continued to identify national challenges and offer findings that can be translated into solutions to Egypt's needs. Funded by government and international bodies in addition to the University, this research, conducted by Academic and Research Centre Staff and Students, has led to the creation of an impressive number of prototypes addressing challenges in diverse fields including energy, safety, water management, industry and manufacturing, agriculture, the health sector and education.

To date, our researchers have managed to procure external funds reaching a combined total of 17,250 GBP, 1.1 million EUR, 28,000 USD and 33 million EGP, dedicated to 78 awarded projects in various fields. Meanwhile the University has provided seed fund for Young Investigator Research Grants with a focus on sustainability as well as the prestigious Mohamed Farid Khamis Award for Research Excellence, with the second round of winners announced at the end of 2022.

The University was also proud to have been selected to participate in last year's COP27 Research Innovation Pavilion where it showcased its research innovations serving sustainability and climate change.

On campus we have introduced our first IP policy, set up a solar panel station, hosted a portable ice factory and signed a number of MoUs to kick-start research and innovation. Our efforts have resulted in a rise in our ranking achievements and accolades including top citations, and national and global awards.

Allow me to thank our academics for their great efforts and look forward to continued research success.

— **Prof. Yehia Bahei-El-Din**

Deputy Vice-Chancellor and VP, Research and Enterprise

IN THIS ISSUE

- Mohamed Farid Khamis Award
- A Year of Successes
- Annual Research Awards
- Global Recognitions
- Ranking Achievements
- Recognition at Cairo Innovate
- BUE Scholar
- Externally Funded Grants
- Office of Enterprise Activities
- Research Centres

Mohamed Farid Khamis Award 2022

Winners of the MFK Research Excellence Award Announced



At the recent Graduation Ceremony, The British University announced the winners of the Mohamed Farid Khamis Award (MFK) for Research Excellence. A tribute to the University's founder, the late Mr. Mohamed Farid Khamis, the MFK Award was first launched in April 2021. The theme of this year's round was climate change and sustainability, and after a rigorous review process the MFK Chair Committee selected **Dr. Rania Rushdy** from the Faculty of Engineering to share the prize in Basic Science and Engineering with **Dr. Hani Nasser Abdel Hamid** from Assiut University.

Dr. Mahmoud Senousy, who is an Associate Professor at the Faculty of Pharmacy, Cairo University, has won the MFK Award in Health and Medical Sciences.

The MFK2022 winners have received 250,000EGP in seed funding to work on a sustainability-themed research project sponsored by The British University in Egypt, in addition to a monetary prize of 100,000EGP in recognition of their research achievements.

A Year of Successes

2022 Annual Recognition Awards



Research and Innovation

Ms. Farida Khamis, Chair of the Board of Trustees, Prof. Mohamed Loutfi, Vice-Chancellor and President, and Prof. Yehia Bahei-El-Din, Deputy Vice Chancellor and VP Research and Enterprise, congratulate winners of the 2022 Research Awards, national prizes and the COP27 Research and Innovation Pavilion team.

In early March the British University in Egypt celebrated a Year of Successes, recognising academic and staff members as well as students for their contributions to the University's achievements over the past year. Among the University's remarkable achievements are the successful COP27 Simulation, Run for the Climate, partnership on the national Hayah Karima initiative as well as participation in the 2022 United Nations Climate Change Conference held in Sharm El-Sheikh.



The Year of Success Awards also celebrated the achievements of the University's top researchers and authors, recipients of national prizes and global recognitions, in addition to winners of the annual Research Awards.

Students as well as non-academic staff were also thanked and recognised for their contributions to achieving the University's goals.

A Year of Successes



Run for the Climate

“ Today we celebrate a Year of Successes. This event is for you, about you and with you. ”

— **Prof. Mohamed Loufti**
Vice-Chancellor and President
The British University in Egypt



COP27 Simulation



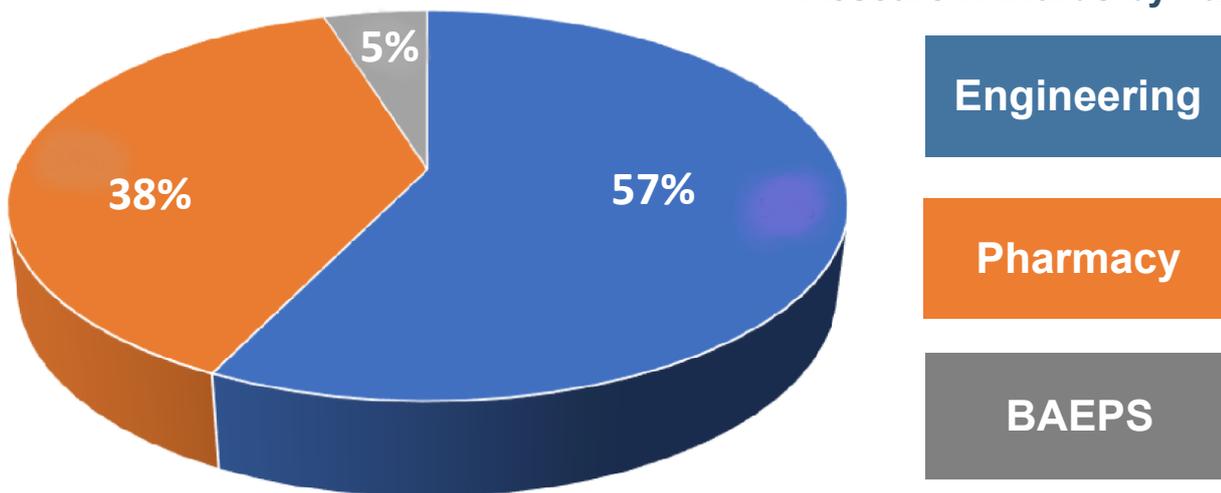
Hayah Karima



British University Annual Research Awards

The British University in Egypt recently announced the winners its Research Awards (RAW2022). This includes results of four awards (RAW1-4), which recognise research accomplishments of Academic Staff, and one award (RAW5), which recognizes the best post-graduate thesis for Teaching Assistants.

Research Awards by Faculty



Principal Researcher Award

- **Professor Elsayed Salama**, Basic Science Department, Faculty of Engineering.

Early Research Career Award

- **Professor Mohamed Mostafa Kamal**, Pharmacology and Biochemistry Department, Faculty of Pharmacy.
- **Dr. Islam Ahmed Al-Akraa**, Associate Professor, Chemical Engineering Department, Faculty of Engineering.

High Impact Researcher Award

- **Professor Iman El-Mahallawi**, Mechanical Engineering Department, Faculty of Engineering.
- **Dr. Rania Rushdy Moussa**, Associate Professor, Architectural Engineering Department, Faculty of Engineering.
- **Dr. Yasmeen Attia**, Associate Professor, Pharmacology & Biochemistry and
- **Dr. Marwa Hamza**, Associate Professor, Clinical Pharmacy Practice, Faculty of Pharmacy (Shared).

Best Publication Award

- **Professor Ayman Othman**, Architectural Engineering Department, co-authored by **Dr. Ahmed Osama Daoud**, Lecturer, Civil Engineering Department, Faculty of Engineering.
- **Professor Amany Micheal**, co-authored by **Dr. Rania Rushdy Moussa**, Associate Professor, Architectural Engineering Department, Faculty of Engineering.
- **Professor Gehan Nagy**, Architectural Engineering Department, Faculty of Engineering.
- **Professor Shereen Hassib Mowaka**, co-authored by **Ms. Manar El-Hassan**, Assistant Lecturer, Pharmaceutical Chemistry Department, Faculty of Pharmacy.
- **Professor Rania Miniesy**, Economics Department, Faculty of Business Administration, Economics and Political Science.
- **Dr. Ghada El-Nowihy**, Lecturer, Chemical Engineering Department, Faculty of Engineering.
- **Dr. Noha Badawi**, Lecturer, Pharmaceutics and Pharmaceutical Technology Department, Faculty of Pharmacy.

Best Postgraduate Thesis Award

- **Dr. Ahmed Osama Elsayed Daoud**, Lecturer, Civil Engineering Department, Faculty of Engineering.
- **Dr. Dalia Amer Ahmed Ali**, Lecturer, Chemical Engineering Department, Faculty of Engineering.
- **Dr. Mohamed Hussein Youssef Aly**, Lecturer, Pharmacology and Biochemistry Department, Faculty of Pharmacy.
- **Dr. Rasha Tawfiq**, Lecturer, Pharmacology Department, Faculty of Pharmacy.



The University has become one of the most recognised research-led higher education institutions in the region.



— **Prof. Yehia Bahei-El-Din**
Deputy Vice-Chancellor
VP, Research and Enterprise

Global Recognition For Our Scientists

Dr. Sara Abdelsalam

Has been awarded **The World Academy of Sciences Arab Regional Award for Science Diplomacy 2022** in recognition of her exceptional contributions and achievements in the field of Science Diplomacy. She shares the award with Prof. Yahya Tayalati from University Mohammed V, Morocco.

Dr. Abdelsalam has also been selected the **Next Einstein Ambassador** to represent Egypt. The Next Einstein Forum (NEF) aims at connecting science, society and policy in Africa and the rest of the world with the goal to leverage science for human development globally.

Dr. Abdelsalam is an Associate Professor of Mathematics and has won several awards in addition to her election as an Affiliate Member of the African Academy of Sciences.



Dr. Abdullah Gibriel

Has been selected for the Outstanding Researcher Award in Pharmaceutical field/Biochemistry from the Chamber of Asia Research Awards. The selection is run by the World Research Council (WRC) of Asia Research Awards (ARA). Dr. Gibriel is an Associate Professor at the Faculty of Pharmacy and is the recipient of the 2021 State Encouragement Prize.

Dr. Rania Rushdy

Has been elected an Affiliate Member of the **African Academy of Sciences (AAS) for 2022-2026**. The prestigious recognition is a reflection of Dr. Rushdy's achievements in Engineering and Applied Science.

Dr. Rania Rushdy is an Associate Professor of Architectural Engineering at the Faculty of Engineering and is the second Affiliate Member from the British University in Egypt elected

by the AAS. She joins five British University in Egypt Academic Staff members elected by the AAS as Fellows.



Professor Ayman Othman

Has been selected one of the **top 1,000 highly cited researchers appearing in Emerald and UCIC-SER databases**. Only 12 researchers from Egypt were named on the list as highly cited scholars with the most global influence in the field of Intelligent Manufacturing in 2021.

Prof. Othman is the Head of the Architectural Engineering Department and is an active researcher in the field of Construction Management. He publishes widely in national and international academic journals, is on the advisory board of a number of international academic journals and an elected member of the Council of Association of Schools of Construction in Southern Africa (ASOCSA).



The British University Ranking Achievements

Round University Rankings 2023

The British University in Egypt has climbed up on this year's World Round University Ranking (RUR), from 4th to 3rd place in Egypt and 505th globally (up from 719th) on its Research Ranking.

Using data from Clarivate Analytics and released in December, this year's RUR lists 54,000 university profiles and ranks 1150 leading universities across 85 countries around the world.

The RUR 2023 employs a number of parameters to rank research at institutions, including citations per academic and research staff, doctoral degrees awarded, normalised citation impact, papers per academic and research staff, and world research reputation.

Overall, the British University in Egypt comes in 3rd place in Egypt this year in the RUR's World University Ranking (up from 7th place) and holds a global rank of 601 (up from 918).

In addition to World University and Research Ranking, the RUR 2023 also surveys leading academic institutions to compile performance rankings in the areas of Financial Sustainability, Teaching and International Diversity.

In Financial Sustainability and Teaching, the British University ranks 10th and 4th (up from 10th) respectively in Egypt and 901-900 and 507 respectively in the world (up from 924 and 975).

When it comes to International Diversity, the University remains in 6th position in Egypt and ranks 628th (up from 664th) in the world. International Diversity is measured using indicators such as share of international students, share of international co-authored papers, and reputation outside region.



Overall, The British University in Egypt comes in 3rd place nationwide in this year's RUR's World University Ranking, up from 7th place last year.



The British University Recognised at Cairo Innovate



The British University in Egypt has won 3rd place at the 7th annual Cairo International Exhibition of Innovation's Patent Index of Egypt. Held under the auspices of H.E. President Abdel Fattah Al Sisi and organised by the Academy of Scientific Research and Technology, Cairo Innovate ran from February 13-14 at the St. Regis Almasa Hotel, New Administrative Capital.

President and Vice-Chancellor Professor Mohamed Loutfi received the award on behalf of the University from H.E. Professor Mohamed Ayman Ashour, Minister of Higher Education and Scientific Research, H.E. Major General Hesham Amna, Minister of Local Development, and Professor Mahmoud Sakr, President of the Academy of Scientific Research and Technology.

The annual exhibition brings together scientists, innovators, inventors, startups and venture capitalists with funding organisations from around the world to exhibit and share their experiences, innovations, and ideas. The British University in Egypt proudly presented 16 technologies at the event in fields of healthcare, drugs and medical supplies, engineering, new and renewable energy, education, culture and science communication.



The supported technologies are the outcome of The British University in Egypt's Business Incubator, Science and Innovation Park, Technology, Innovation, and Commercialisation Office, Faculty of Engineering, Faculty of Energy and Environmental Engineering, Faculty of Pharmacy, Center for Renewable Energy, Nanotechnology Research Center, and Center of Advanced Materials.

At the event the University Egypt showcased its R&D strategy, innovations and industrial support, while highlighting the solutions and professional services it offers to national and regional challenges. The prestigious award reflects the continuous efforts of The British University in Egypt's contribution to innovation and the projection of the scientific caliber frame of mind from professors and students in empowering the University's intellectual development and innovative strategy.

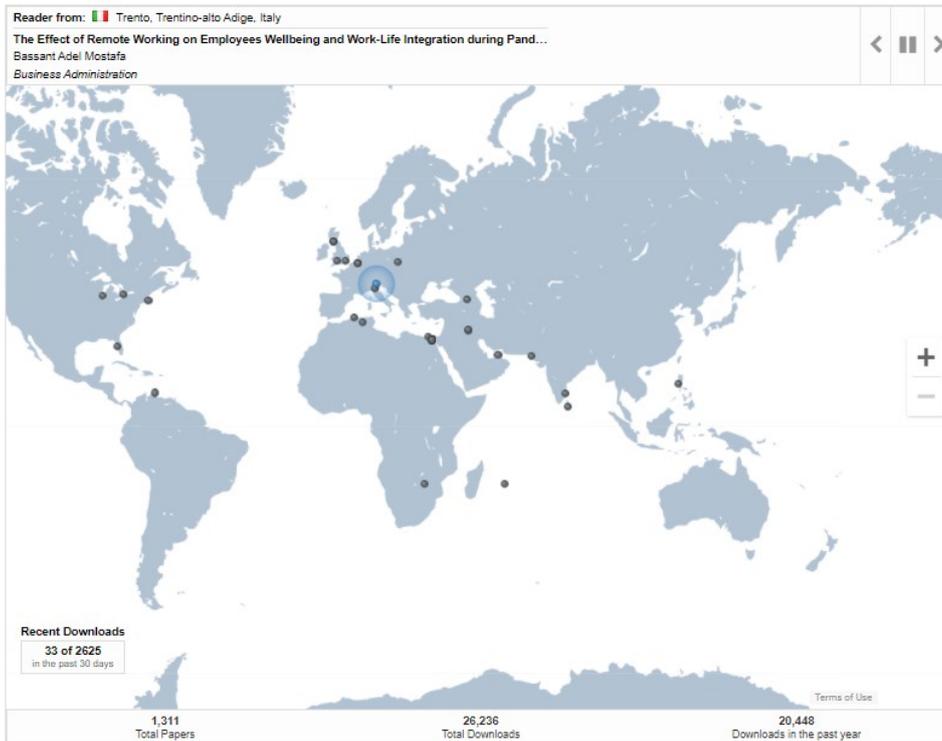


BUE Scholar Research Repository

Top 10 Downloaded Papers Posted on BUE Scholar (October 2022 to March 2023)

Research Paper Title	Downloads
<i>Bioactive lead compounds and molecular targets for the treatment of heart disease. Phytochemicals as Lead Compounds for New Drug Discoveries.</i> Dr. Maha Salama, Shahira Ezzat & Mohamed Salem	5050
<i>The Impact of Employee Engagement on Job Performance and Organisational Commitment in the Egyptian Banking Sector.</i> Dr. Maha Dajani	4497
<i>The Effect of Remote Working on Employees Wellbeing and Work-Life Integration during Pandemic in Egypt.</i> Dr. Bassant Adel Mostafa	2398
<i>Kinetic Study of Hydrolysis of Ethyl Acetate Using Caustic Soda.</i> Dr. Hany El Azab	1854
<i>The Impact of Motivation on Organisational Citizenship Behaviour (OCB): The Mediation Effect of Employees' Engagement.</i> Dr. Safaa Shaaban	1384
<i>The Role of HRIS in Gaining A Competitive Advantage: The Case Study of Telecommunication Industry,</i> Dr. Tarek Mohamed Ali	1074
<i>Impact of Sustainable Supply Chain Management Practices on Egyptian Companies Performance.</i> Dr. Ola Mamdouh, Khaled Adry & Bassam ElAhmdy	947
<i>The Impact of COVID-19 Pandemic on Egyptian Women Psychological Empowerment and Work-Life Balance.</i> Dr. Maha Dajani & Dr. Bassant Adel Mostafa	810
<i>The Effect of Talent Management on Organisational Success: A Comparative Study in the Petroleum Sector in Egypt.</i> Prof. Hadia Fakhreldin	800
<i>Patriarchal Ecocide: An Ecofeminist Reading of Rahul Varma's Bhopal and Henrik Ibsen's An Enemy of the People.</i> Dr. Rania M Rafik Khalil	743

BUE Scholar is a service of the university Research Office. Research and scholarly output included in the repository has been selected and deposited by the individual university departments and centres on campus.



The BUE Scholar interactive map shows the title of the research and the country in which the research is being downloaded in real-time.

The British University in Egypt's academics share their publications through BUE Scholar repository. Interested researchers may download research papers at

<https://buescholar.bue.edu.eg>

Externally Funded Grants

The British University in Egypt was awarded two externally funded grants in the period between October 2022 and March 2023, bringing the total number of awarded projects to 78 and funding to a combined total of 17,250 GBP, 17,250 GBP, 1.1 million EUR, 28,000 USD and 33 million EGP.

Prof. Ahmed El-Baz from the Faculty of Engineering and the Centre for Renewable Energy was awarded \$109,826 by the Partnership for Research and Innovation in the Mediterranean Area for his project, "Maximising Resource Use Efficiency within the Water-nutrient-energy Nexus for Sustainable Agriculture in Marginal Environments." **Prof. Iman El-Mahallawi** will act as Co-PI.

Dr. Amr Abdel Kader from the Centre for Advanced Materials was awarded 1,200,000 EGP by the Academy of Scientific Research and Technology for his project, Hybrid Reverse Osmosis-Flow Electrode Capacitive Deionization Small Pilot Unit Targeting Energy Efficient Zero Liquid Discharge Process for Rural and Arid Areas Development and Nature Conservation.

Office of Enterprise Activities

UNESCO Nanotechnology Entrepreneurship Business Bootcamp



and its potential industrial applications by offering training on both nanotechnology and entrepreneurship for scientists, graduates, and entrepreneurs in Africa. After careful review, 12 teams were selected from 10 African countries: Egypt, Sudan, Ethiopia, South Africa, Mauritius, Malawi, Republic of Congo, DR Congo, Zambia, and Mozambique, to participate in the training camp.

The Office of Enterprise hosted a UNESCO Nanotechnology Entrepreneurship Business Bootcamp from January 29th to February 2nd at its Science and Innovation Park facilities as part of the University's and UNESCO's capacity-building program in basic science and engineering and under the International Year of Basic Sciences for Sustainable Development (IYBSSD 2022). The Bootcamp was organized by The British University in Egypt and UNESCO along with six partners: The United Nations Economic Commission for Africa, ET Cube International, African Materials Research Society, Penn state university, University of South Africa and The University of Mauritius. The Bootcamp aimed at consolidating efforts to raise awareness of nanotechnology



In addition to the bootcamp, the event included interactive workshops, a tour of the laboratories of The British University in Egypt's Nanotechnology Research Centre and the NanoLab at Pennsylvania State University.



Office of Enterprise Activities

VentureWell Visit

At the end of November, Deputy Minister Dr. Yasser Refaat from the Ministry of Higher Education and Scientific Research joined Dr. Terik Tedwell, Director of Inclusive innovation at VentureWell, to visit The British University in Egypt's Business Incubator as part of the Fulbright program to support Science and Technology Parks.

The visit was organised by the Office of Enterprise and included a tour of the University's Enterprise resources and facilities followed by a round table at which arrangements for mutual collaboration were discussed.

The delegation visited the Financial Lab, the Science and Innovation Park, Business Incubator and ended their tour at the Fabrication Lab. Prof. Yehia Bahei-El-Din, Vice President for Research and Enterprise chaired the roundtable discussion around the University's enterprise strategy, action plans, current and future activities, achievements, and methodology.

VentureWell and National Innovation Network NSF have partnered to set in motion the National Innovation Network (NIN). The collaboration aims to pave the way for the University's researchers to fast-track their innovated technologies and pro-



mote them to target users. The collaboration also explores ideas and concepts to link the technology and innovation commercialisation of patenting by potential stockholders and partners.

From left: Dr. Terik Tedwell, Director of Inclusive innovation at VentureWell; Deputy Minister Dr. Yasser Refaat from the Ministry of Higher Education and Scientific Research; Eng. Islam Orban, Deputy Director of the Office of Enterprise; and Prof. Yehia Bahei-El-Din, VP Research and Enterprise.

Research Centres

Nanotechnology Research Centre

In January the Nanotechnology Research Centre (NTRC) at The British University in Egypt invited Prof. Rabeay Hassan to give a public academic lecture entitled “Biosensor Concept and Biomedical Applications and also welcomed a group of undergraduate students from Zewail City for Science and Technology for a tour of the centre’s research facilities and to learn about its ongoing projects. The tour follows the success of the Centre’s third biology workshop entitled “Applications of Nano-based Point-of-care Devices for Microbial and Cancer Diagnostics” under the supervision of Prof. Samah Loutfy. The four-day workshop provided hands-on training to participants from different universities and research institutions, and featured involved sessions about the applications of nanotechnology in the field of theranostics, the different preparation methods of nanomaterials for therapeutic and sensing applications, cell culture techniques, data analysis and results interpretation. NTRC also hosted a complimentary workshop on visual experiments publications by the Journal of Visualized Experiments (JoVE) MENA region's representatives to help researchers explore the unique publishing platform.



Research Centres

Centre for Renewable Energy



As a closing event to the British Council UK-funded project “Challenges for the uptake of renewable energy in Egypt,” CRE organised a three-day workshop with senior keynote presenters from the UK and Egypt including industry.

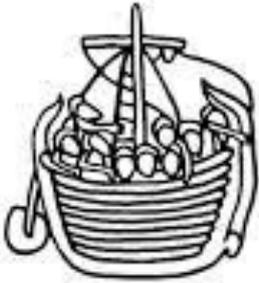
The purpose of the workshop was to address the challenges of renewable energy integration in Egypt and to investigate and integrate smart and sustainable solutions. The workshop was attended by about 60 participants showing diversity of staff members teaching and researching renewable energy and sustainability and other related topics.

The attendees were invited to visit 3M Farm, which uses solar, wind and biomass renewable energy sources for its activities. A Training session for early career engineers was also organised through the workshop to encourage students and early career engineers to work on technical obstacles to the uptake of renewable energy.



Research Centres

Research Centre for Irish Studies



IASIL

International Association for the Study of Irish Literatures

The Research Centre for Irish Studies (RCIS) obtained an international Grant of 1,800 Euros from Culture Ireland, Dublin on 21st November 2022 to support the research and cultural activities of its forthcoming international conference on Irish studies IASIL 2023: Sustainability, scheduled for July 2023 at the British University in Egypt.

In addition to the previous Grant, the RCIS recently received another International Grant (180,000 EGP) in early March 2023 from the Department of Foreign Affairs in Dublin - Irish Studies ESP Grant for 2022-2023.

Over the past year and half, the Research Centre for Irish Studies has been collaborating with a number of international scholars and entities to bring this conference back to Egypt after 30 years. The international conference is in partnership with Culture Ireland and the International Association for the Study of Irish Literatures (IASIL).



The
BRITISH UNIVERSITY
IN EGYPT



International Association for the Study of Irish Literatures

Egypt

17-21 July 2023

Sustainability



Cultúr Éireann
Culture Ireland

About the Research Newsletter

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