

Research Newsletter

Vice President's Office for Research and Postgraduate Studies

Message from the President

The British University in Egypt (BUE) has put research at the top of its priorities and at the centre of its strategic plan. At BUE, forward thinking, operational excellence and unparalleled expertise have enabled the translation of research into measurable outcomes that aim to reassure younger generations of a more sustainable future.

Research at BUE is aligned to both Egypt's national goals and the global issues that affect our lives. Our aim, at BUE, as a research led university, is to add to the existing scholarly output and guarantee, through research and innovation prosperity for mankind and the planet.



Prof. Ahmed Hamad

Welcome Note



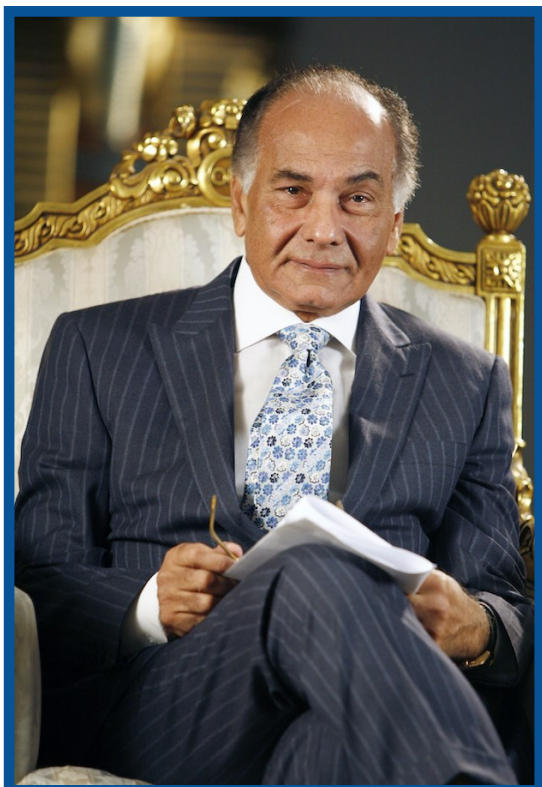
Prof. Yehia Bahei-EI-Din
Vice President for Research
and Postgraduate Studies

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BUE is launching its **First Issue** in a new series of newsletter publications about research activities and output, including awards, ranking, grants, innovations, events and much more. This special issue is a tribute to Mr. Mohamed Farid Khamis, BUE Founder and Chair of the Board of Trustees and a review of research for 2019-2020. We look forward to sharing successes and achievements of BUE community with Egypt and the world.

Tribute



This 1st Issue of BUE Research Newsletter is a tribute to the memory of

Mr. Mohamed Farid Khamis

Founder of The British University in Egypt (BUE) and Chairman of the Board of Trustees for his support for research over many years and his belief in its power to affect positive change in societies.

Ms. Farida Khamis elected Chair of BUE Board of Trustees

Ms. Farida Khamis pledged to continue the legacy of Mr. Mohamed Farid Khamis to ensure that BUE is the beacon of higher education and research in Egypt and beyond.

MFK Research Excellence Award

Mohamed Farid Khamis Award (MFK Award) was initiated by BUE University Board. The award is open to all Egyptian nationals to recognise excellence in research which advances knowledge and promises innovations, particularly among young researchers.



Ms. Farida Khamis

NATIONAL AWARDS

Nile Award in Advanced Technologies



Professor Yehia Bahei-El-Din, Vice President for Research and Postgraduate Studies won the Nile Award for 2019. The award is the top state science award in Egypt. As a winner of the Nile Award, Prof. Bahei-El-Din's research record is recognised as the best in his field in Egypt. Prof. Bahei-El-Din is renowned for his work in composite materials and structures and their applications in industry. Announcement of winners of the state awards was made on October 5 by the Minister of Higher Education and Scientific Research following a historic meeting of the Academy of Scientific Research and Technology Council.

Arab Archeologists Award

Professor Ahmed Yehia Rashed, Professor of Architecture Engineering at BUE and Director of Farouk Elbaz Centre for Sustainability of Future Studies won the Appreciation Award from the General Union of Arab Archeologists for his work on Civilisation Rights.



BUE AWARDS 2020

Principal Researcher Award

Prof. Mohamed Amin ElShahir Sadek, Chemical Engineering

Early Research Career Award

Dr. Sara Abdelsalam, Basic Science, Faculty of Engineering

Dr. Tarek Hatem, Faculty of Energy and Environmental Engineering

High-Impact Researcher Award

Dr. Walaa Salah, Architectural Engineering, Faculty of Engineering

Dr. Waleed El-Hanafy, Centre for Theoretical Physics

Best Publication Award

Prof. Khaled Nagaty, Faculty of Informatics & Computer Science

Prof. Shehabeldin Saber, Faculty of Dentistry

Prof. Maha Mahmoud Salama, Faculty of Pharmacy

Dr. Shady Aly Swidan, Faculty of Pharmacy

Dr. Marwa Adel & Dr. Walaa Esmail, Architectural Engineering

Dr. Mahmoud Mansour, Basic Science, Faculty of Engineering

Dr. Amr ElZant, Centre for Theoretical Physics

Dr. Mostafa AboelSeoud, Economics & Prof. Amany Ismail, Political

BUE AWARDS 2020

Best Postgraduate Thesis Award

Best PhD Thesis

Dr. Nessren Farrag, Chemical Engineering

Dr. Sameh Mahdy, Mechanical Engineering

Dr. Shady Salem, Civil Engineering

Dr. Sherif Shafik, Faculty of Dentistry

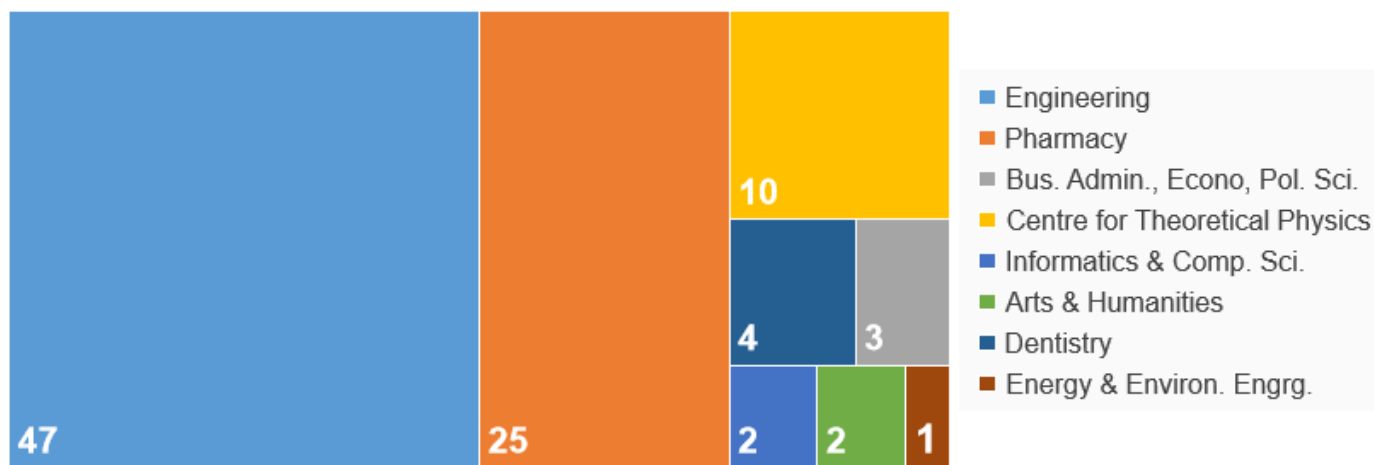
Dr. Shadwa Kabil, Faculty of Dentistry

Best Master's Thesis

Amgad Mahrous, Civil Engineering

Ahmed Abo Sekkien, Faculty of Pharmacy

BUE Awards by Faculty, 2015-2020



In Response to COVID-19

COVID-19 prompted educational institutions and industry to respond to the global crisis in different ways. BUE academic staff under lockdown remained active on a number of levels. The Faculty of Arts and Humanities in response to COVID-19 took the initiative of inviting 11 authors from 6 faculties across BUE to collaborate in writing a research paper for the virtual international conference ICERI 2020 in Spain showcasing the university's best practice in online teaching and learning during the pandemic. The co-authored research paper and virtual presentation are titled "Pedagogy of the Pandemic: A Case Study of Emergency Remote Education in a Private Higher Education Institution in Egypt."

This research paper was dedicated as a tribute to the memory of Mr. Farid Khamis, Chairman of the Board of Trustees at the BUE.

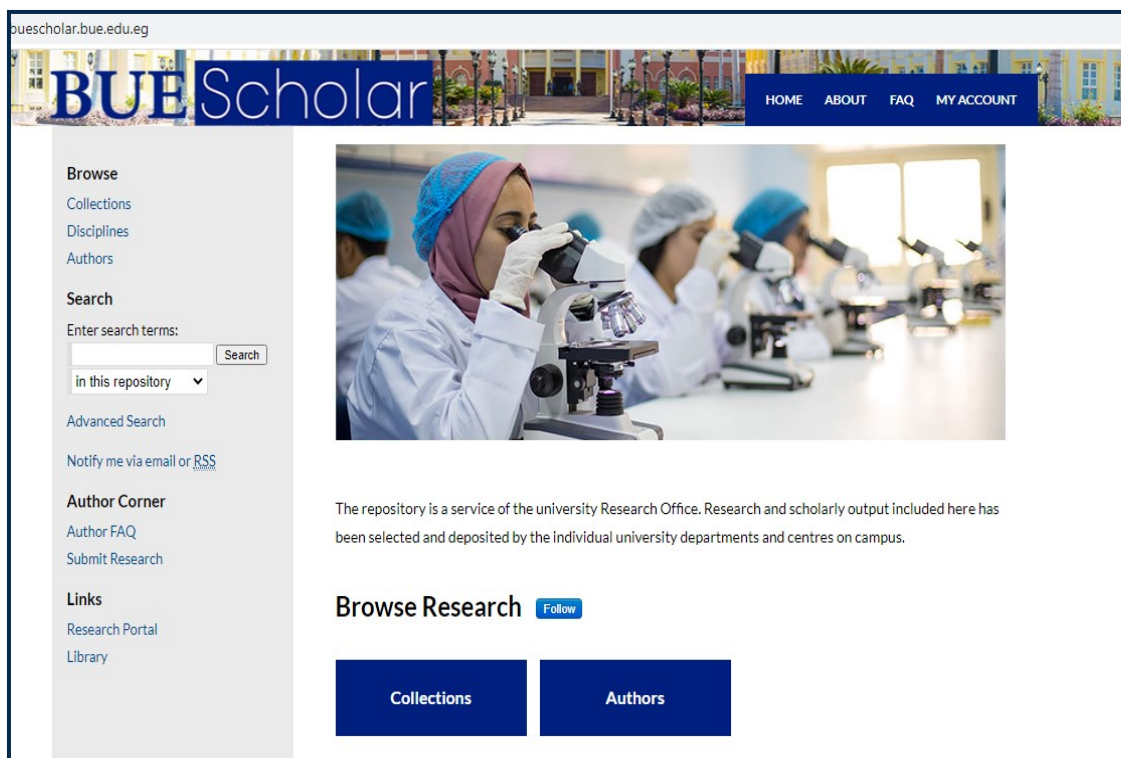


Faculty Deans who participated in ICERI2020 with Ms. Farida Khamis, Ms. Yasmine Khamis, Prof. Ahmed Hamad, and Prof. Yehia Bahei-El-Din

Authors of the Research Paper:

Prof. Hadia FakhrEIDin, Prof. Wadouda Badran, Prof. Omar H. Karam, Prof. Hani Ghali Amin, Prof. Maguid Hassan, Prof. Shadia Fahim, Prof. Attia M. Attia, Dr. Sarah Khalil, Prof. Hassan Abdelhamid, Dr. Yasmine AbddelMoneim, Dr. Rania M Rafik Khalil

BUE Scholar — Research Repository



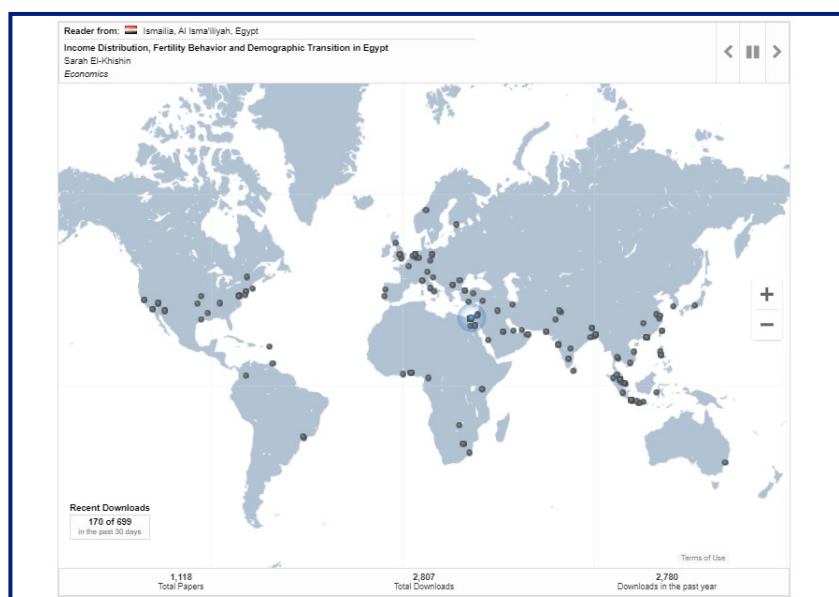
The screenshot shows the BUE Scholar website interface. At the top, there is a navigation bar with 'HOME', 'ABOUT', 'FAQ', and 'MY ACCOUNT'. Below this is a large banner image of a laboratory with scientists using microscopes. The left sidebar contains a 'Browse' section with links for 'Collections', 'Disciplines', and 'Authors', a 'Search' section with a search box and a dropdown menu set to 'in this repository', and an 'Author Corner' section with links for 'Author FAQ' and 'Submit Research'. The main content area features a 'Browse Research' section with a 'Follow' button and two large blue buttons labeled 'Collections' and 'Authors'. A text block below the banner explains that the repository is a service of the university Research Office, and research and scholarly output included here has been selected and deposited by the individual university departments and centres on campus.

BUE research is now brought together under **BUE Scholar Institutional Repository**. We are proud to announce that **2,800 research papers** have been downloaded this year from across the globe. Academic staff, graduate students and undergraduate students are encouraged to upload their research articles, theses, projects, book chapters and conference papers.

Upload link:

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

Interactive Map
of Real-time Downloads



Top Worldwide Downloads from BUE-Scholar

The Impact of Employee Engagement on Job Performance and Organisational Commitment in the Egyptian Banking Sector. Maha Dajani	405
Bioactive lead compounds and molecular targets for the treatment of heart disease. Phytochemicals as Lead Compounds for New Drug Discoverys. Maha Salama, Shahira Ezzat, Mohamed Salem	113
A Balanced Participatory Knowledge Management Strategy in International Development Organizations: The Case of CIDA Egypt. Hadia FakreDin	87
The International Financial Reporting Standards and Firm Performance: A Systematic Review. Wafaa Salah	70
Adoption, Importance and Barriers to the Implementation of Contemporary Management Accounting Practices: Evidence from Egypt. Amani Hussien	69
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Impact of Sustainable Supply Chain Management Practices on Egyptian Companies Performance. Ola Mamdouh Khaled Adry, Bassam ElAhmdy	59
Dietary Xanthonenes. Dina M. ElKersh, Mohamed Farag, Hesham ElSeedi, Omar ElKhatib	58
Workplace Gender Discrimination and Job Performance in Egypt: The Moderating Role of Equity Sensitivity. Mohamed Saad	48
Preprint (medicine & pharmacology, preprints.org): Avoiding COVID-19 Complications with Diabetic Patients Could Be Achieved by Multi-Dose BCG Vaccine: A Case Study of Beta Cells Regeneration by Serendipity. Bassam Ayoub, Nermeen Ashoush, Motaz Hendy, Mariam Tadrous, Eman Ramadan	45
Flash Flood Modelling of Ungagged Watershed based on Geomorphology and Kinematic Wave: Case Study of Billi Drainage Basin, Egypt. Mohamed AbdelHamid Ezzeldin, Omar ElMosalmeh	42
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Quantitative Analysis of Watershed Geomorphology and its Hydrological Implications Using GIS: Case Study of Billi Drainage Basin, Egypt. Mohamed AbdelHamid Ezzeldin, Omar ElMosalmeh	33
Strengthening Of Corroded Steel Structures Using CFRP. An Experimental Review. Ghada ElMahdy, Abdallah Yassin, Abdrahman Khaled	32

Publications in Scopus

2,300 research papers with BUE as affiliation have been published in Scopus.

In 2019 a total of 398 research papers were published in Scopus and in 2020, despite the dire circumstances of the Corona Virus pandemic and campus closure, 315 research papers have been published in Scopus to date.

Postgraduate Programmes



Engineering

⇒ Renewable Energy Engineering (M.Sc.)

⇒ Renewable Energy Engineering (M.Eng.)

⇒ Advanced Materials Science and Engineering (M.Sc.)

⇒ Advanced Materials Science and Engineering (M.Eng.)

⇒ Sustainable Engineering Design & Construction (M.Sc.)

⇒ Sustainable Engineering Design & Construction (M.Eng.)



BAEPS

⇒ MBA in Marketing

⇒ MBA in Applied Finance & Economics



Dentistry

⇒ Endodontics (M.Sc.)

NEW

⇒ Operative Dentistry (M.Sc.)

NEW



CMM

⇒ Digital Media (M.Sc.)

NEW



ICS

⇒ Web Science (M.Sc.)

Externally Funded Research Grants 2019-2020 | 31.25 M EGP

Academy of Scientific Research and Technology



أكاديمية البحث العلمي والتكنولوجيا
Academy of Scientific Research
and Technology

- ◆ **Prof. Hani Ghali, Centre for Emerging Learning Technology**
“Sustainable Interactive e-Agriculture Extension” EGP 1,693,335
- ◆ **Dr. Amal Kasry, Nanotechnology Research Centre**
“Development of a Novel Highly Sensitive Brucellosis Sensor Based on Surface Plasmon Resonance Spectroscopy” EGP1,299,690
- ◆ **Prof. Yehia Bahei-El-Din, Centre of Advanced Materials**
“Technology Innovation Commercialisation Office, TICO2” EGP 1,200,000
- ◆ **Dr. Tarek Hatem, Centre for Simulation, Innovation and Advanced Manufacturing**
“Defects Evolution in High-Efficiency and Reliability III-Nitride-on-Silicon for MJ-PV Cells”
EGP 1,000,000
- ◆ **Dr. Amal Kasry, Nanotechnology Research Centre**
“Antiviral Masks for the Specific Protection of Doctors and Patients against Coronavirus”
EGP 400,000
- ◆ **Dr. Mohamed Rashwan, Faculty of Business, Economics and Political Science.**
“E-Club” EGP 250,000
- ◆ **Prof. Sayed Salama, Faculty of Engineering**
“Properties of Heavy and Super Heavy Elements Studied by Mass Spektrometry and Isol
Method” EGP 240,000
- ◆ **Dr. Mohamed Kamal, Faculty of Pharmacy**
“Investigation of CRISPR-Cas9 Mediated Knock out of FOXO-1 in: Human Mesenchymal
Stem Cells as a Potential Novel Source for Diabetes Cell Therapy” EGP 224,900
- ◆ **Dr. Ziad Khalifa, Faculty of Engineering**
“High Performance Biofuel Cells Based on Novel Conducting Polymers Nanocomposite”
EGP 200,000
- ◆ **Dr. Islam Ahmed, Faculty of Engineering**
“Development of Cost-Effective New Catalyst Technologies for High Performance Polymer
Electrolyte Membrane Fuel Cell” EGP 200,000

Externally Funded Research Grants 2019-2020 | 31.25 M EGP

Science & Technology Development Fund



- ◆ **Dr. Gehan Nagy, Faculty of Engineering**
“Mitigation of Air Pollution Impacts on Heritage Buildings” EGP 1,919,000
- ◆ **Dr. Maha Abdollah, Faculty of Pharmacy**
“Anti-Angiogenic Potential of Cobalt-Ferrite/Fucoidan Natural Nanocomposite for VEGF Receptor Tumour Suppression” EGP 1,780,400
- ◆ **Dr. Hassan Nageh, Nontechnology Research Centre**
“Academic-Industrial Collaboration for Optimization of Antiviral, Cost-Effective Reusable Face Masks and Hospital Gowns” EGP 1,497,681
- ◆ **Prof. Sayed Akl, Faculty of Engineering**
“Manufacturing and Assessment of a Tribological Performance of Developed Automotive Nano Lubricant” EGP 1,169,960
- ◆ **Dr. Rania Rushdy, Centre for Simulation, Innovation and Advanced Manufacturing**
“The Role of Smart Streetscape Design on Reducing the Roads Carbon Emission In Egyptian Neighborhoods” EGP 840,656
- ◆ **Dr. Bassam Ayoub, Faculty of Pharmacy**
“Repositioning of Omarigliptin Based on Its Brain/Plasma Concentration Ratio After 21 Days Multiple Dose & Its Neuroprotective Effects in Experimentally- Induced Parkinson’s Disease In Rats” EGP 230,000
- ◆ **Dr. Maha Abdollah, Faculty pf Pharmacy**
“Turning The Immune System on Breast Cancer: The Immunomodulatory Effect of a Natural Seaweed in Combination With Anti-Programmed Cell Death (PD)-1 Antibody” EGP 100,000

European Union

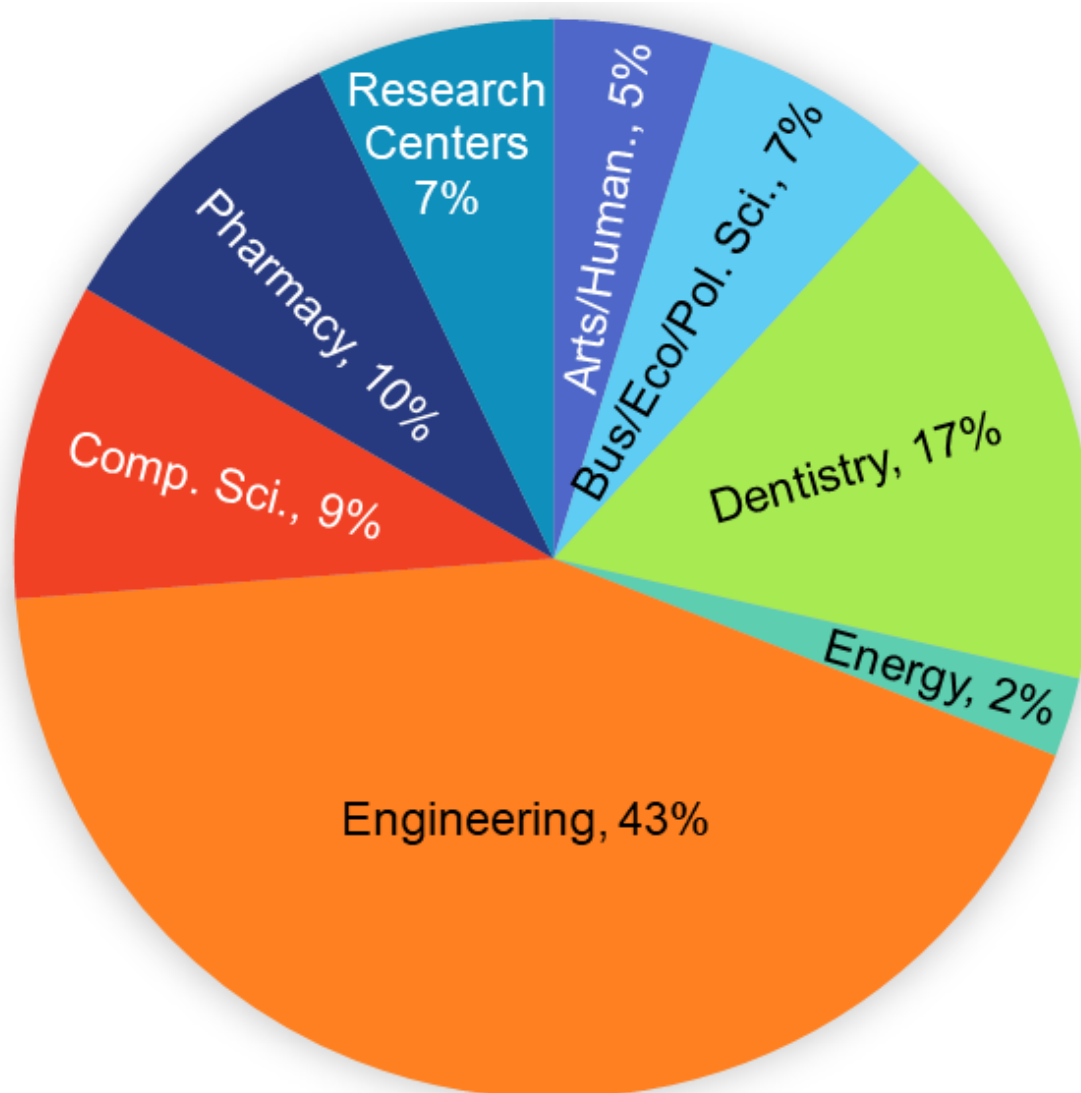


- ◆ **Prof. Yehia Bahei-EI-Din, Centre of Advanced Materials**
“Affordable Resources for Egypt’s Industrial Growth (RIndustry)” EUR 850,000

International Conference Grants - BUE

The International Conference Grant (ICG) is financial support allocated by BUE to fund participation in international conferences. A total of 1.47 M EGP has been awarded to 42 eligible academic staff at BUE who are research active.

The highly competitive grant was awarded to the different disciplines as follows:



Science and Innovation Park

BUE-Tus Science and Innovation Park (SIP) is the first university-linked science park in Egypt to offer a world-class environment to businesses, entrepreneurs and academics through its outstanding office spaces, facilities and services. It forms a perfect ecosystem that gives life to great ideas. We focus on bridging the gap between research and business, and supporting entrepreneurs and pioneers in different fields. SIP is managed by The British University in Egypt and was established in collaboration with China's Tus Holdings Co. The park and its facilities provide outstanding office spaces with choices that suit startups, medium and large enterprises, along with providing business support services in different fields. In addition, the science park's proximity to The British University in Egypt in El-Sherouk City allows for exposure to the university's experts, labs and research centers and library.

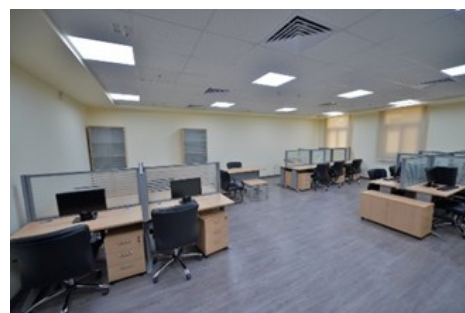


SIP building includes BUE Business Incubator, which offers a dynamic ecosystem that provides today's entrepreneurs with strong functional business knowledge and understanding through equipping them with the needed skills to accelerate their businesses. SIP also includes BUE Technology Innovation Commercialisation office (TICO), which aims to establish sustainable mechanisms to the development of science and technology solutions that are research-based, innovative and sustainable, and to maximize their economic and social impact.

<http://sp.bue.edu.eg/>

<https://www.facebook.com/buescienceandinnovationpark/>

<https://www.linkedin.com/company/19156422>



Nanotechnology Research Centre

The Nanotechnology Research Centre (NTRC) at the BUE was launched in 2016, inaugurated in December 2018, and started its operations in March 2019. The Centre has state of the art facilities contained in 8 laboratories, covering processes, characterisations, and applications. Some of the facilities are field-emission scanning electron microscope, X-Ray Diffraction Unit, synthesis lab, Electrospinner, spectroscopy unit, tissue engineering lab, microbiology, and virology lab.



The Centre currently offers more than 20 types of services for both academic staff and companies, with great benefits for the BUE staff that is saving them more than 85% of the usual total costs. For details visit:

<https://ntrc-info.wixsite.com/ntrc/services>



The NTRC offers training for postgraduate students through workshops, associated with some companies, and also for undergraduate students, where we offer training for both the nanotechnology and the biotechnology programs at the faculty of Science, Ain Shams University.

Research Centres (NEW)



Left to right: Dr. Rania M Rafik Khalil, Acting Director for BUE RCIS, Prof. Yehia Bahei-El-Din, Vice President for Research, Prof. Ahmed Hamad, BUE President, H.E. Ambassador Seán O'Regan, Irish Ambassador, Mr. Cathal O'Hagan, Second Secretary /Consul to Embassy of Ireland in Egypt.

BUE Research Centre for Irish Studies (RCIS)

H.E. Mr. Seán O'Regan, Irish Ambassador to Egypt and Mr. Cathal O'Hagan, Second Secretary/ Consul to the Embassy of Ireland in Egypt, met on November 26, 2020 with BUE President Professor Ahmed Hamad, Professor Yehia Bahei-El Din, Vice President for Research and Post-graduate Studies and Professor Leslie Croxford, Vice President for Teaching and Learning to discuss the future prospects of collaboratively supporting the newly established BUE Research Centre for Irish Studies (RCIS). Ireland's commitment to becoming a global innovation leader, its reputation as world leader in scientific research and increasing diplomatic influence make it an exceptional partner for collaboration.

BUE Research Centre for Irish Studies (RCIS) is the only one of its kind in Egypt, the MENA region and Africa. BUE RCIS aspires to become a hub for all matters Irish. The centre promotes transdisciplinary and interdisciplinary research in the social sciences, STEM, the creative arts and the humanities. It further aims to attract international collaboration, establish ties with Irish industries, activate international cultural activities and build a network with existing Centres for Irish Studies in Europe, North America, South East Asia and Australia. This bilateral cooperation between BUE and the Embassy of Ireland builds on previous successes.

A Grant of 3000 Euros from Culture Ireland in Dublin was obtained by the BUE in 2020 and a Fund of 1,700 Euros from the Embassy of Ireland was obtained by BUE in 2019.

Research Events

- ◆ **Cross Cultural Communication: Studies in Literature, Linguistics and Translation**
 - * 23-24 February 2020
 - * International Conference
 - * Organised by the Faculty of Arts and Humanities in collaboration with the Embassy of Ireland in Egypt.

- ◆ **A Virtual Think Tank on Civilization's Resilience Post the COVID-19 Crisis**
 - * 29 April 2020
 - * Virtual meeting
 - * Organised by Farouk El-Baz Centre for Sustainability and Future Studies

- ◆ **One Globe In Dentistry With No Borders**
 - * 17-18 July 202
 - * International Virtual Conference
 - * Organized by Faculty of Dentistry

- ◆ **BUE Innovate IV Boot Camp and Competition**
 - * 13 September - 4 October 2020
 - * Blended Event
 - * Organized by BUE Technology Innovation Commercialisation Office (TICO)

About BUE Research Newsletter

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