FACULTY OF ENGINEERING

ACADEMIC STAFF CAPACITY

SEPTEMBER 2014
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INTRODUCTION
The Faculty of Engineering at BUE is aiming at engaging, in collaborative research and consultation projects, with the industry in order to extend its services to support the engineering industry in addition to the community at large. This directory is developed to outline the current consultation and research expertise in the six engineering departments in addition to the basic sciences service department.

The collective expertise presented in this directory is capable of solving regular engineering problems in addition to providing innovative solutions using state-of-the-art technologies in addressing complex engineering challenges.

Multi-disciplinary experienced teams are trained to work seemingly together in order to solve cross boundary engineering problems.
# ARCHITECTURAL ENGINEERING

## Architectural Engineering

<table>
<thead>
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<th>Academic Staff Ranking:</th>
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<td>Professors</td>
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<td>Demonstrators</td>
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<th>Relevant Industries:</th>
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<td>Consulting Offices. [Design, Project Management, Supervision, Construction Management]</td>
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<td>NGOs [related to training for the construction industry]</td>
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<td>Ministries.</td>
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<tr>
<td>Architecture Academic Intuitions</td>
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</tbody>
</table>
**Name:** Khaled M. R. Dewidar

**Rank:** Professor, Head of Department

**Dept:** ARCH Engineering

**Email Address:** Khaled.dewidar@bue.edu.eg

<table>
<thead>
<tr>
<th>Educational Background</th>
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<tbody>
<tr>
<td></td>
<td>M.Sc. University of Pennsylvania, Philadelphia, USA</td>
</tr>
<tr>
<td></td>
<td>Ph.D. University of Pennsylvania, Philadelphia, USA</td>
</tr>
</tbody>
</table>

**Joined BUE since:** Sept 2008

**Background:**

Graduated from the Architectural Engineering department in 1983 from Cairo University, followed by M. Arch. in 1988 from the same school in Architectural Design. In 1990 he was awarded his M.Sc. from the University Pennsylvania in Philadelphia in History and Theories of Architecture. In 1993 he was awarded his Ph.D. from the University of Pennsylvania in the dialectics between Materials, Structures, Space and Architectural Style. He worked in several research projects and taught several engineering courses during his doctoral studies. He then joined Ain Shams University as a full time architectural staff member. After earning his Professorship Degree in 2003, Dr. Dewidar was awarded a teaching/research grant in 2004 at the University of Pennsylvania where he taught architectural theory and philosophy of technology for one academic year and conducted his research on architecture in the age of information technology.

**Research Interests:**

1. Building Technologies.
4. Architecture and Sustainability.
Consultation Expertise:

1- Architecture Design.
2- Site Supervision
3- Working and Shop Drawings
4- Detailing.

Top Publications:

- “Ecological Facades: A New Concept for Air Purification in Egypt.” World Green Roof Congress
**Background:**

Bio: Prof. Mohamed Esmat ElAttar Graduated June 1984 from Architectural Department, Faculty of Engineering, Assiut University, (Egypt), “Very Good”. Received Master degree in Urban Planning and Landscape Architecture titled “The Effect of Vegetation in Landscape Design of Egyptian Cities- An Analytical Study”, Assiut University, March 1990. Received Ph.D. in Environmental and Landscape Architecture, Assiut University, Faculty of Engineering (Egypt) and Duke University, School of Environment, North Carolina (USA), titled “Vegetation Role in Improving Environmental Performance in Egyptian City” February 1996. Worked as a Demonstrator and Teaching Assistant in Assiut University, Visiting Scholar, School of the Environment, Duke University, North Carolina, USA, (1993-1995). Professor and Head of the Architectural Department, Mansoura University (2009- 2011). Dean of the Higher Institute for Technology and Engineering (Oraby), (2011- 2012). At the present time working as a Professor of Architecture, British University in EGYPT (BUE). Published several research papers in Environmental Landscape, Architectural Heritage Conservation and Architectural Education. Attended, reviewed and presented scientific papers in national and international conferences. Supervising more than 10 Ph. D., and M. Sc. Students in Mansoura, Cairo, Assiut, Al Azhar, and Tanta University. A member of Scientific Committees for some national/international journals. Awarded the Second Prize in two Architectural Competitions: Mubarak Medical Institute for Cancer Treatment- Faculty of Medicine- Zigzag University. And Institute of Electronics, Academy of Scientific Research, and Ministry of Higher Education.
Research Interests:

1. Environmental Landscape.
2. Urban Design.
4. Urban Planning Education.
5. Sustainability Architecture.

Consultation Expertise:

2. Landscape Design.

Top Publications:

- “Effect of Natural and Urban Environment on Resident’s Quality of Life”- 2nd. International Conference Quality of life –A vision towards better future, MTI University, Cairo- Egypt- March 2012.
Name:  Samah M. El- Sayed El- Khateeb
Rank:  Lecturer
Dept:  ARCH Engineering
Email Address:  Samah.elsayed@bue.edu.eg
Educational Background:
- B.Sc.  Ain- Shams University
- M.Sc.  Ain- Shams University
- Ph.D.  Ain- Shams University
Joined BUE since:  Sep 2013

Background:
Samah Mohamed El-Khateeb was previously an Assistant Professor in Faculty of Engineering, Urban Planning & Design Department, Ain Shams University and she joined the BUE from September, 2013. She graduated in 2002, and she had her master degree & PhD in the field of Environmental Planning. She involved in designing many projects in Egypt and Arab Gulf as she worked as an executive manager for Engineering Consulting Company for 4 years. Her research work varied between environmental planning, sustainable design, ecotourism planning, informal areas in Egypt, and sustainable cities in Arab world, Eco cities and eco tourism. She prepared and supervised a successful international architecture competition (EZBET Competition - http://www.ezbet-competition.com/) that was funded by the DAAD for Egyptian and German students to design a community centre in Ezbet Abu Qarn, and now this project is into realization. She was the Egyptian coordinator of a short term research project called; "Ezbet Abu Qarn – Exhibition – Discussion" the project is funded by the German academic exchange program) DAAD and is organized by Ain Shams university. This research project contained several workshops and events in Germany and Egypt. In October 2013, she was also the Egyptian coordinator of a short term research project called; "eco-architecture & urbanism summer-school" the project is funded by the German academic exchange program) DAAD and is organized by Ain Shams university which is represented in Dr Samah El Khateeb as research coordinator and University of Stuttgart which is represented by Prof. Dr. Helmut Bott and 10th of Ramadan higher institute. She participated in different international & national conferences, and she shared
in the organization of two international conferences in Egypt. Beside that she was elected as one of the members of the higher council of the Egyptian engineering syndicate last may 2014 and she represented in this council the Egyptian architects. She also founder and member of Remal foundation for sustainable development (non-governmental organization) and she is also the student advisor of Alshanek Ya Balady NGO in Ain Shams University).

**Research Interests:**

1. Environmental Planning.
2. Eco- Architecture.
3. Eco- Cities & Sustainable.
5. Planning & Informal Areas.

**Consultation Expertise:**

2. Urban Planning & design.

**Top Publications**

- The pyramids plateau: a dream searching for survival, Tourism management journal. (http://ees.elsevier.com/jtma/), (Received 12 May 2008; accepted 23 December 2008. Available online 14 February 2009)
- “Empowering People in Egyptian Informal Areas by Planning: Towards an Intelligent Model of Participatory planning” , Cities to be Tamed conference, Milan, Italy, November 2012.
- Fayoum Oasis between Potentials and Constraints: Towards Enhancing Ecotourism in Egypt, URBENVIRON CAIRO 2011 , and 4th International Congress on Environmental Planning and Management
Name: Mustafa Refaat Ismail
Rank: Associate Professor
Dept: ARCH Engineering
Email Address: Mostafa.refat@bue.edu.eg

<table>
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<td>Ph.D.</td>
<td>University of Liverpool, UK</td>
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Joined BUE since: Sept 2010

**Background:**

Mostafa earned his B.Sc from Ain Shams University 1994 with distinction and honours, he hold his Ph.D. degree from the School of Architecture and Building Engineering, at the University of Liverpool, UK 2003. He worked at EPSRC funded projects and Lecturing at the University of Liverpool till 2006. He is teaching Acoustics, Building services, Design Studio, Workshop, and Working drawings as well as Graduation Project at the BUE. Mostafa taught many courses related to architectural Building Services and technical studies at many International and Egyptian Universities at Undergraduate and Postgraduate Levels. He served as the General Manager, at the Technical Affairs Department, NEW URBAN COMMUNITIES AUTHORITY NUCA, Ministry if Housing and Urban Development, EGYPT, for 2 years. He published many papers at international conferences and Journals, as well as contributions in books. He is a member of the higher scientific committee for developing the code of practice, Ministry of Culture, EGYPT. THE NATIONAL ORGANIZATION FOR URBAN HARMONY, Ministry of Culture, EGYPT. And a member of the executive committee of the INTERNATIONAL ARCHITECTURAL AND URBAN PLANNING COMPETITION FOR THE URBAN DESIGN OF RAMSIS SQUARE, THE NATIONAL ORGANIZATION FOR URBAN HARMONY, Ministry of Culture, EGYPT. He is partner in EPSRC funded research projects, with the University of Liverpool, UK. And TEMPUS projects with ILPO, Stuttgart University, Germany. He organized two conferences for Ain Shams University, and participated in organizing a conference for the BUE. He is a Visiting Scholar, Department of Architecture, and University of Liverpool. UK. Many postgraduate students have been successfully supervised by him for research towards the degrees of MPhil and PhD. He is an academic referee for several International and national journals in his area of research interest that involves Acoustics, sound transfer, room acoustics, outdoor noise propagation, Sustainable Design, Energy transfer
modelling, Computer Modelling of Building Performance, and Experimental modelling. His particular interest extends to the areas of Sustainable Urban Development, ECO Design, as well as Environmental monitoring. He served as external examiner for research and undergraduate graduation degrees at the University of Liverpool UK, Al-Elbeit University Jordan, and many Universities in EGYPT.

**Research Interests:**

1. Noise Measurements.
2. Noise Control.
3. Sound Scope.

**Consultation Expertise:**

1. Architecture Design.
2. Site Supervision.
3. Working & shop drawings.
4. Detailing.
6. Acoustical analysis and measurements, outdoor noise propagation prediction.

**Top Publications:**

- M.R.Ismail and D.J.Oldham. A Markovian approach to modelling the propagation of sound in long rooms. ICSV17. Cairo 18-22 July 2010, EGYPT.
**Background:**

Professor Husam Khalil has a long teaching experience, as he was involved in teaching since 1983, the year of his graduation. He taught at a number of academic institutes including Assiut University, Military Technical College, Helwan University, Jordan University, 10th of Ramadan Institute of Technology, King Abdul Aziz University, and finally British University in Egypt (BUE). He participated in teaching a number of courses including Architectural presentation, building construction, working drawings, architectural design, graduation project, computer applications in architecture (2D and 3D), environment & behavior, visual design, freehand drawing, 3D Max, web site design (front page), multimedia (Adobe director, flash), descriptive geometry, sciagraphy & perspective, sustainable building design using Autodesk EcoTect analysis, and scientific research methods in architectures. He supervised a number of master thesis and Doctorate dissertations. He reviewed a number of research papers for different conferences and research periodicals.

Professor Husam was awarded a number of research and teaching grants including teaching assistantship Grant from Jordan University, Peace Fellowship grant at Georgia Institute of Technology, and Joint Supervision Grant. He held a number of academic and administrative responsibilities including academic advisory, lab equipment specifications, and preparation of graduate program curriculum. He participated in a number of committees including committee for academic affairs, committee for health and safety, committee for research and graduate studies. Professor Husam’s research...
Research Interests:

1. Post Occupancy evaluation of Building and Urban Spaces.
2. Spatial analysis of the built environmental using space syntax.
4. Built Environment and Behavior.
5. Integrating of informal settlement.
6. Architectural Education.

Consultation Expertise:

1. Architectural Design.
2. Working Drawings.
4. Spatial analysis of buildings, urban spaces and cities using space syntax.
5. Urban Conservation.
6. Integrating informal settlements with surrounding.
7. Environmental Simulation.
Top Publications:

- www.saudigis.org/FCKFiles/File/23_E_HussamKhalil_KSA.pdf.
Background:

Dr. Nessim obtained his B.Sc. in Architectural Engineering from Ain Shams University, Cairo, Egypt in 2000. He was ranked among the top 5 out of 240 students in his class; thus, he was appointed as a teaching assistant at the same Architectural Department. Dr. Nessim is no stranger to the higher education field, having spent ten years as a Demonstrator and a Lecturer Assistant at the Department of Architecture (FEDA), Faculty of Engineering, Ain Shams University, which taught him the importance of being up-to-date regarding the scientific material and various course contents. Dr. Nessim’s Master of Science was related mainly to the environmental studies with special focus on Day lighting. He was granted his M.Sc. degree in 2006 from Ain Shams University. On the other hand, his Philosophical Doctorate main theme was the exterior lighting of heritage buildings and the surrounding environment. He was granted his Ph.D. degree in 2011. Currently, Dr. Nessim is a Lecturer in the Architecture Field and holds his Ph.D. degree from Ain Shams University, Cairo, Egypt. As for his professional practice, Dr. Nessim worked, since he graduated, as a part-time expert with two national architectural firms for several projects located in Egypt, U.A.E., and Sultanate of Oman. He also collaborated with several international firms. Dr. Nessim attended several training courses of which: Effective Teaching, Modern Directions in Teaching, University Lecturer Preparation Course, Research Preparation, Writing, and Publishing in International Journals, Effective Presentation, and LEED GA preparation course. Dr. Nessim has several published scientific researches, participated in organizing several international conferences and workshops, and attended a number of architectural related conferences. Dr. Nessim joined the British University in Egypt (BUE) in 2014.
Research Interests:

2. Environmental Control
3. Day lighting in building and its impact on other Environmental aspects
4. Artificial lighting with special focus on façade & landscape lighting.
5. Integration of natural and artificial lighting
6. Sustainability and the built environment
7. Building Services

Consultation Expertise:

1. Façade and landscape lighting studies
2. Daylighting studies for different projects
3. Design and site supervision for LEED NC Gold Certified administrative buildings
4. Design of multi-use buildings
5. Technical review of the design drawings for several new universities

Top Publications

- “Painting with Light: A Comprehensive Approach for The Façade Illumination”, Journal Of Al-Azhar University Engineering Section (JAUES), Volume 6, Number 20, July 2011, pp.813-821
- “Day lighting Techniques in Ecologies”, Second Ain Shams University International Conference On Environmental Engineering, Cairo, April 2007, pp.72-85, Volume II
**Name:** Ayman Ahmed Ezzat Othman  
**Rank:** Associate Professor  
**Dept:** ARCH Engineering  
**Email Address:** Ayman.othman@bue.edu.eg

**Educational Background:**  
- **B.Sc.** Assiut University, Egypt  
- **M.Sc.** Heriot-Watt University, UK  
- **Ph.D.** Loughborough University, UK

**Joined BUE since:** Sept 2009

**Background:**

He obtained his B.Sc. in Architectural Engineering from Assiut University, Egypt in 1991. Since then he worked as an architect and project manager in different national and international architectural design firms and governmental authorities in Egypt, Saudi Arabia, and the United Arab Emirates. He earned his M.Sc. in "Human Resources Management in Construction" and Ph.D. in "Value and Risk Management in Construction" from Heriot-Watt University and Loughborough University, UK in 1999 and 2004 respectively. During the period from 2006 till 2009, Dr. Othman joined the University of KwaZulu-Natal (UKZN), South Africa as a Senior Lecturer at the School of Civil Engineering, Surveying & Construction. He was involved in developing and teaching up-to-date Construction Management curriculum. In addition, he acted as a member of the Faculty Higher Degree Committee and School coordinator for research development. Since he joined the British University in Egypt (BUE) in 2009, Dr. Othman was involved in developing and teaching state-of-the-art Construction Management related modules in Architectural and Civil Engineering Departments. He successfully, supervised and graduated a number of Ph.D., Masters and Honours research students in Egypt and South Africa.
In September 2012 and 2013, Dr. Othman was appointed the Deputy-Director of the Centre of Sustainability and Future Studies (CSFS) and the Director of the Architectural Engineering Programme respectively. Furthermore he is a Member of the Faculty Teaching and Learning Committee as well as Member of the Faculty Research Committee. Dr. Othman is an active researcher in the field of Construction Management. He publishes widely in national and international conferences and academic journals. To date he published 8 books and book chapters, 26 refereed journal papers and 44 conference papers. He is the Deputy-Editor of the Journal of Construction (JoC) and a registered referee and member of advisory board of a number of international academic journals. In July 2013, Dr. Othman was elected as a member of the Council of Association of Schools of Construction in Southern Africa (ASOCSA). Dr. Othman is an external examiner to a number of universities in Egypt, South Africa and Malaysia. He is a member of the Egyptian Engineering Syndicate, Egypt; Project Management Institute (PMI), USA; Society of American Value Engineers (SAVE), USA and Member of Board of the Arab Society for Computer Aided Architectural Design (ASCAAD).

**Research Interests:**

1. Mega Construction Projects.
2. Value and Risk Management in Construction.
3. Construction Management Education.
4. Lean Construction.
5. Leadership in Construction.
6. Sustainability
7. Waste Management.
8. Health and Safety in Construction
9. Customer Satisfaction in Construction
10. Knowledge Management in Design and Construction

**Consultation Expertise:**

1. Project Management.
2. Architecture Design.
Top Publications:

Background:

Bio: Professor and the former head of Architecture Department at the British University in Egypt, and the founding director of the Centre of Sustainability and Future Studies (CSFS). His profession is Architecture and Urban Planning/Design. Prof. Ahmed Rashed was the chair of Architectural Engineering Department, Mansoura University, Egypt from July 2004 to September 2008. Got his Ph.D. January 1995, in Architecture Planning and Conservation, University of York, Institute of Advanced Architectural Studies, UK. Graduated from Assiut University, Egypt 1984. M.Sc. in Architecture from Assiut University, Egypt 1990. He worked as professor at different universities in Egypt, Saudi Arabia and the United Arab Emirates. Prof. Rashed published about 60 academic papers in international conferences and magazines. Nowadays Prof. Rashed is the initiator of the three international competition for Luxor Governorate: the Olympics ideas of Luxor Governorate and prepared by the (CSFS) the titles of the competitions are: Luxor Civilization, Branding Luxor and the Copyright and Luxor Tales. Prof. Ahmed was COMPETITION CHAIRMAN: TAKING LEAVE ...............An International Competition 25 January “The City of the Egyptian Dream” Writing the History of our Future. Organised by The Centre for Sustainability and Future Studies of the British University in Egypt, in conjunction with the M. Farid Khamis Foundation for Social Development and in partnership with governmental and non-governmental organizations. CONFERENCE CHAIRMAN: THE FIRST INTERNATIONAL CONFERENCE AND COMPETITION ON SUSTAINABILITY AND THE FUTURE, THE BRITISH UNIVERSITY IN EGYPT (NOVEMBER 2010). Prof. Rashed is the president of (AGTBE) The Association of Graduates & Trainees from Britain in Egypt from March 2013, the Vice President of the Arab Academic Architects Society and Egypt representative since May 2013 and the Member Board of The Egyptian Society of Architects June 2011 Awarded the best paper prize for
the Fifth Gathering Egyptian Engineering in Riyadh: engineering Strategies to Support the Development, Riyadh, 15 -17 May, 2013. The paper titled: Strategic Planning, Youth Empowerment and Scientific Research: An Approach for Sustainable Development in Egypt. Awarded the best Paper titled “Modelling of VLS-PV Community for Desert Sustainable Development; the Case of Development Corridor, Egypt”, 10th International Conference for Enhanced Building Operations (ICEBO 2010), Kuwait, October 26 - 28, 2010. The Centre of Sustainability and Future Studies is one of four centres of the BUE. CSFS has emerged as a Research and Development (R&D) Centre to address future sustainability in terms of environmental, economic, and social challenges through the engagement of students, academic staff and researchers. The CSFS is envisioned to propose a suit of creative comprehensive solutions that tackle the future from a sustainable point of view. The centre is playing a challengeable role after the 25th revolution with seeking to have a better future for Egypt through sustainable development.

**Research Interests:**

1. New Communities & Sustainability.

**Consultation Expertise:**

1. Sustainable issues & future studies (the Green Environment).
2. Public Participation and Youth Enabling.
3. Architecture & Heritage Documentation.
4. New approaches for Urbanization.

**Top Publications:**

- Rashed. A, El Attar M, paper titled “Strategic planning and enabling of Youth and scientific research: as an approach towards the sustainable development in Egypt. How to write the history of the future, the fifth Conference of Egyptian Engineers in the Kingdom of Saudi Arabia, Riyadh, 15-17 May 2013.
2011 international conference, 2011 INTERNATIONAL CONFERENCE ON EARTHEN ARCHITECTURE IN ASIA, Mokpo, Republic of Korea, October 11th – 14th, 2011


- Rashed. A Soudani, M and Sheta, S Paper titled “Modelling of VLS-PV Community for Desert Sustainable Development; the Case of Development Corridor, Egypt”, 10th International Conference for Enhanced Building Operations (ICEBO 2010), Kuwait, October 26 - 28, 2010. This paper was chosen as the best paper of the conference.
Background:

Dr. Samar Sheweka received her B.Sc. in Architectural Engineering in 2004 from Cairo University, with Very Good degree. Then she received her M.Sc. in Urban Design in 2006 from the same University. She started her Ph.D. in 2007 and received the degree two years later, to become the youngest architect who received the Ph.D. in Architectural Engineering from Cairo University that year. She worked on different research projects and taught several courses in Architecture during her doctoral studies. She was appointed as an assistant lecturer at one of the private higher education institutions in Egypt. She then joined the British University in Egypt in September 2008. Dr. Samar has several international published journal and conference papers. She also worked as an architect in several successful projects such as Madinaty, Al-Rehab, King Saud University (Riyadh, Jeddah) and Porto Marina, affiliated with famous consultant offices such as Space Consultant and Dar al Handasa.

Research Interests:

1- Sustainability Studies.
2- Urban Design and Development.
4- Digital Architecture.

Name: Samar Mohamed Sheweka
Rank: Associate Professor
Dept: ARCH Engineering
Email Address: Samar.sheweka@bue.edu.eg

Educational Background:

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Joined BUE since: Sept 2008
5- Adaptive Re-use for historical buildings with new technologies and concepts.

Consultation Expertise:

1- Architecture Design.
2- Interior Design.

Top Publications:

## Basic Sciences

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<th>Academic Staff Ranking</th>
<th>Professors</th>
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<tr>
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<td>Demonstrators</td>
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</table>

### Relevant Industries

- Glass Manufacturing
- Solar Cells Manufacturing (semi Conductor Devices)
- Crystal growth & Topography
- Optical Manufacturing.
- Radiation Applications in Medicine and Industry
**Name:** Amer Abdullah El- Korashy

**Rank:** Professor

**Dept:** Basic Science Department

**Email Address:** Amer.el-korashy@bue.edu.eg

**Educational Background:**

<table>
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<td>Joint Degree, Assuit University &amp; AUC</td>
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<tr>
<td>Ph.D.</td>
<td>Joint Degree, Assuit University &amp; Strathclyde University in Glasgow</td>
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</table>

**Joined BUE since:** Oct 2009

**Background:**

Bio: Dr Amer El-Korashy graduated his B. Sc. In Physics in 1976 from Assiut University. He earned his M. Sc. In 1980 on the study of simple technique to fabricate a solar cell through a cooperation between Dr Sorour Res. Lab. in Assiut University and Semiconductors Lab. in the American University in Cairo under the supervision of Professor H. Omar. Under a channel scheme between Assiut University and Strathclyde University in Glasgow he got the Ph. D. on Crystallography and physical characterization of single ferroelectric crystals. He joined many projects in Strathclyde University on topography and studding the batch crystallizations process using on line analytical techniques, measuring the nucleation of several crystal materials in Heriot Watt University and also a projection structural modeling of phase transitions in tetrahedral compounds. He was invited as a visiting science to Heriot Watt University and also joined many conferences as a member of British Crystallographic Association and British Association for crystal growth Annual meeting. In addition he was an organizer of many conferences on thin films, physics Education, crystallography and new materials and nanotechnology. He is a reviewer in many physics Journals such as Physica B, Thin solid films, Optical communication, Turkish Physics and surface Physics. He has good experiences in high vacuum technology and thin film in addition to optical and electrical measurements techniques. He also has an experience in x-ray topography and crystal growth technologies. Recently Dr Amer holds a research funding (Million LE in two years) STDF from the academy of scientific research on optical bandpass filters application on solar cells. Also He Elected as a member in
Egyptian Material Research society (EgMRS) for three years and he is a member in the Egyptian committee for crystallography of the Academy of Scientific and Research. In the Education field he work as an expert and reviewer (Ministry of Education office) for science and physics books.

**Research Interests:**

1. Optical and Electrical properties, bandpass filters (STDF ID 5001).
2. Thin films techniques deposition and characterization (thermal evaporation, sputtering).
3. Ferroelectric Crystals.
5. Glass characterizations and applications.
6. Optical and electric properties of semiconductors.
7. Material Physics.

**Consultation Expertise:**

1- Physics consultant in many Universities in KSA, Jordan, Iraq and Yaman.
2- Expert and consultant in Science and physics Education books in the ministry of Education (Curriculum Development Center).
3- Reviewer and consultant of Material physics projects.

**Top Publications:**

Dr. Zaher Hassanein obtained a PhD. and M.Sc. in Pure Mathematics, major in Functional Analysis, from Ain Shams University, Egypt in December 2009 and March 2003 respectively. Also Dr. Zaher got a B.Sc. in Pure and Applied Mathematics from Assuit University, Egypt in 1993. His graduation grade was excellent and he ranked the first. Dr. Zaher has been affiliated with The British University in Egypt (BUE) from September 2009 to January 2010 as an Assistant Lecturer and from February 2010 until now as a Lecturer.

Research Interests:

1. Function Analysis.
2. Cyclic Operations.
Top Publications:

Background:

Dr. Ahmed Morsy graduated from the department of Mathematics with major in pure and applied mathematics from the faculty of science Ain Shams University, his graduation grade was excellent with honor and he ranked the first. After graduation he joined the mathematics department at the faculty of science Ain Shams University as a demonstrator and then as an assistant lecturer till he had been affiliated with the British University. Beside his work in mathematical analysis, functional analysis, difference and differential equations, he had some work concerning some applications of computational mathematics related to engineering applications, Also he is a member of the Egyptian Mathematical Society since 2008 and he had been involved in many of its activities.

Research Interests:

1- Functional Analysis.
2- Difference and Differential Equations.

Top Publications:

- A.E. Hamza, A. Morsy, On the recursive sequence $x_{n+1} = \alpha + \frac{x_{n-1}}{x_n^k}$, journal of Applied Mathematics Letters, 22 (2008) pp. 91-95.
- N. Faried, Awad.A. Bakery and A. Morsy, Mappings of type generalized Cesáro sequence space defined by weighted means, to appear.
Name: Elsayed Salama

Rank: Associate Professor

Dept: Basic Science Department

Email Address: Elsayed.salama@bue.edu.eg

Educational Background:
- B.Sc. Ain-Shams University
- M.Sc. Ain-Shams University
- Ph.D. Ain-Shams University

Joined BUE since: Oct 2012

**Background:**

Dr. Elsayed Salama obtained his PhD. in physics from Faculty of Science, Ain Shams University, Egypt in May 2006 in nuclear radiation dosimeter. Dr. Elsayed also obtained his BSc. and MSc. from Ain Shams University. Dr. Salama had his associated professor degree in November 2013. Dr. Salama has been affiliated with The British University in Egypt (BUE) since October 2012. Moreover, Dr. Salama acting as WP4 coordinator for EENP2 (Egyptian European Network for Particle Physics) and participating in the CERN research work.

**Research Interests:**

1. Nuclear Radiation Dosimeter.
2. Radiation Protection.
4. Radiotherapy.

**Consultation Expertise:**

Certificate of radiation protection expert from ministry of medicine.
Top Publications:

**Background:**

Prior to joining The British University in Egypt, Dr. Khaled Salem had been affiliated with Cairo University as a demonstrator, assistant lecturer, and lecturer in the area of Operations Research.

**Research Interests:**

1. Graph Theory.
2. Computer Simulation (Discrete-Event Simulation).

**Consultation Expertise:**

Dr. Khaled Salem developed a discrete-event simulation model of the Ophthalmology unit of El-Hussein hospital, Cairo, using the technique of learning from examples. In particular, the C4.5 induction algorithm was used.
**Top Publications:**

CHEMICAL ENGINEERING

<table>
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<th>Chemical Engineering</th>
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<tr>
<td><strong>Academic Staff Ranking</strong></td>
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<tr>
<td>Professors</td>
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<td>Associate Professors</td>
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<td>Lecturers</td>
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<tr>
<td>Assistant Lecturers</td>
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Background:

Prof. El-Deab received his B.Sc. (Honours) in 1990 from the Faculty of Science at Cairo University (Chemistry Major). He was appointed as a demonstrator, TA, Lecturer of physical chemistry in the Chemistry Department at Cairo University on 1990, 1994 and 1999, respectively. He received his MSc (Hydrogen production at porous flow-through electrodes) and PhD (Wastewater treatment at porous flow through electrodes) from Cairo University, respectively in 1994 and 1999. In 1997, he joined the Catalysis Research Centre, Hokkaido University, Japan as a JICA fellowship for 6 months. Also, he joined the research team at the Department of Electronic Chemistry, Tokyo Institute of Technology (Japan) for two years (2001-2003) as a JSPS post-doc fellow. He joined the same institute for several periods as a research associate in collaboration with Matsushita Electric Company (R&D) and as a visiting professor during 2004-2011. He received the prestigious Alexander von Humboldt research fellowship at Ulm University (Germany) for two years (2008-2009). In September 2010, he was promoted to a full Professor at the Chemistry Department, Faculty of Science, and Cairo University. In Dec. 2012, he joined the British University in Egypt as a professor in the Department of Chemical Engineering.

Research Interests:

1. Nano Technology and Metal Characterization.
4. Electrocatalysis.
5. Wastewater Treatment.

Name: Mohamed Saada El-Deab
Rank: Professor
Dept: Chemical Engineering
Email Address: Mohamed.eldeab@bue.edu.eg

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<td>Ph.D.</td>
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Joined BUE since: Dec 2012

**Consultation Expertise:**

1- Corrosion Protection.

**Top Publications:**

Name: Mohamed M. El-Desouky
Rank: Professor
Dept: Chemical Engineering
Email Address: Mohamed.eldosoky@bue.edu.eg

Education Background:
- B.Sc. Military Technical College
- M.Sc. Military Technical College
- Ph.D. INP, Toulouse, France.

Joined BUE since: Oct 2012

**Background:**

Prof. Mohamed El-Dessouky earned his B.Sc. in Chemical Engineering in July 1977 from Military Technical College (MTC). Mohamed El-Dessouky earned his Ph.D. in Mars 1982 from the INP, Tolouse, France, in Analytical and radiation chemistry. He then joined Military Technical College, in Egypt, where he worked as lecturer, associate professor 15/12/1986, and professor in 1992 in the Chemical Engineering Branch. He obtained also the Prof. Degree on 3/8/2000, from the permanent committee of chemical engineering of Egyptian supreme committee of Universities. He worked as visitor professor in High Technological Institute of Benha, High Technological Institute of 10th of Ramadan, environmental consultant in the Science Center for Detection and Remediation of Environmental Hazards (SCDREH) in Al-Azhar University and a member for putting standards in Egyptian Organization for Standardization and Quality Control (Ministry of Industry), and in Atomic Energy Authority. Prof. Mohamed El-Dessouky was retired from army as major general in 2000. Prof. Mohamed El-Dessouky joined the MTC in the Chemical Engineering Branch till 2001. He made 61 publications in the domain of decontamination and protection of environment. The Egyptian Engineering Syndicate supreme technical committee approved on 21/3/2000 for him to be consultant engineer in the field of environmental engineering, sub No.: 164/5. He worked as consultant, auditor and lead auditor for ISO 9001, ISO 14001, BS OHSAS 18001, ISO 17025, ISO 17020, ISO 17021, ISO 22000 from 2002 to 2013. IRCA registered Auditor Card# 01190769 in Quality ISO 9001. Auditor in EGAC for ISO 17021 & 17025. Prof. Mohamed El-Dessouky has joined the BUE as Prof. at October 2012 in Chemical Engineering Department till now.
**Research Interests:**

1. Applied Complex study of Pharmaceutical.
2. Radiation protection.
3. Adsorption studies.
5. Management systems of quality.
6. Environment occupational health, safety, food safety and laboratories.
7. Trend approach to lean management and six sigma.
8. Environmental assessment and control of significant aspects & hazards.

**Consultation Expertise:**

1. Qualifications for accreditation to ISO management systems.
2. Environmental remediation.

**Top Publications:**

Dr. Gadalla graduated originally with a B.Sc. with honours in chemical engineering from Cairo University in 1994. He served in military as a First Lieutenant for two years, after which he worked as a research assistant at the Agency for Atomic Energy in Egypt. In 1997, Dr. Gadalla joined UAE University as a teaching assistant in the chemical and petroleum engineering department, for two years during which he obtained his masters in chemical process design for environment. Dr. Gadalla completed his PhD in Process Integration at the University of Manchester, England (2003). During his stay at Manchester, he participated in teaching a number of postgraduate courses with Professor Smith and Professor Jobson besides the execution of several research projects for international oil refining companies. After completing PhD, Dr. Gadalla was appointed as a Post-Doctoral Researcher at Delft University of Technology (Holland), where he worked on a European project on distillation development for better efficiency. During this stay, Dr. Gadalla contributed much to the literature in developing new approaches for design of new distillation equipment with zero energy consumption. From 2005 till 2010, Dr. Gadalla joined Universitat Rovira i Virgili URV, Spain as a visiting professor and then as a Professor Lector, where he taught and supervised students in both undergraduate and postgraduate levels. In addition, he initiated an international collaboration between Cairo University and URV leading to a bi-lateral agreement for collaboration. In Spain, Dr. Gadalla received the accreditation of Professor Lector and Professor Agregado given by the Catalan Agency for Higher Education in Universities. He also achieved the recognition of an Active Researcher, a 6-year research experience and a 10-years teaching experience from the Catalan Agency for Research and Universitat Rovira i Virgili. In 2009, he was invited as a visiting researcher at Pretoria University, South Africa by Professor Majozi. Dr. Gadalla published 63 research contributions to international journals, proceedings and international conferences. Dr. Gadalla is a reviewer for several international journals in chemical and environmental
engineering, including Environmental Science and Technology, Industrial & Engineering Chemistry Research, Brazilian Journal of Chemical Engineering, Journal of Cleaner Production, and Asia-Pacific Journal of Chemical Engineering. He supervised the completion of two PhD theses and five masters’ theses, and more than 6 masters’ studies are underway.

**Research Interests:**

1. Revamping of Refinery distillation.
2. Distillation Development.
3. Optimization, design of Chemical Industries.
5. Process integration and energy savings.
6. Integrated Gasification Combined Cycles IGCC.

**Consultation Expertise:**

1. Design of energy efficient crude oil distillation plants.
2. Retrofit of preheat trains for industrial applications.
3. Optimization of chemical and refining processing units.
4. Training courses for simulation process design using Aspen-Hysys simulators.
5. Environmental studies of chemical process industries.

**Top Publications:**

- Gadalla M, Internal heat integrated distillation columns (iHIDiCs) – new systematic design methodology, Chemical Engineering Research and Design, 87: 1658-1666 (2009)
### Background:

Ahmad M. Mohammad received his BSc in 1995 from the Faculty of Science at Cairo University (Chemistry major). At that time, he was appointed as a TA in the Chemistry Department at Cairo University. He was awarded his MSc (Surface Chemistry) and PhD (Nanotechnology) from Cairo University, respectively in 1999 and 2004. In 2001, he joined The Pennsylvania State University as a Research Assistant for two years. In 2005, he received a research fellowship for two years from Tokyo Institute of Technology in collaboration with Sanyo Electric Co., Ltd. He joined Qassim University in Kingdom of Saudi Arabia as an Assistant Professor of Chemistry from 2007-2009. Next, he promoted from Cairo University to an Associate professor. In 2011, He joined the British University in Egypt as an Associate professor in the Department of Chemical Engineering.

### Research Interests:

1. Nano-fabrication.
2. Characterization & Applications of Nanomaterials.
4. Electrocatalysis.
5. Quantum Calculations.
8. Self- Assembling of Nanoparticles.
Consultation Expertise:

1. Fuel cells.
2. Electrocatalysis.
4. Wastewater treatment

Top Publications:

**Background:**

Professor Mostafa Radwan was born on 29\textsuperscript{th} of July 1953 in Cairo, Egypt. He obtained his Bachelor of Science in Chemical Engineering in 1976 from the Military Technical College (MTC), Cairo, Egypt, with grade Excellent with honours. He was awarded his M.Sc. in 1985 from the same school in the field of polymer applications in pyrotechnic compositions after submitting a thesis titled "Preparation of New Illuminant Compositions Based on Polyurethane". In 1991, he was awarded his doctoral degree from Department of Chemistry and Applied Chemistry, University of Salford, UK. The thesis was in the field of polymer solutions. As a Ph.D student Professor Mostafa Radwan earned the "Overseas Research Student Award". Since 1981 Professor Mostafa Radwan worked in several funded projects in different polymer applications in the military field to produce lower vulnerability and high performance energetic materials. Before joining the British University in Egypt (BUE) in September 2005 Professor Mostafa Radwan was the head of one of the Chemical Engineering Branch departments in the MTC, the head of the education council of this department and a member of the research committee of the Chemical Engineering Branch. Professor Dr. Radwan worked in the Chemical Engineering Branch in the MTC as a teaching assistant, lecturer, senior lecturer and finally as a full professor. He taught several courses for postgraduate and undergraduate students, developing laboratories and courses, supervising M.Sc. and Ph.D. students. Since 2005 Prof. Mostafa Radwan worked as the professor of chemical engineering in the Basic Science Department in the BUE and in March 2011 he became the acting head of the chemical engineering department till September 2012. Dr. Radwan obtained the professorship degree in Chemical Engineering from the Supreme Council of Egyptian Universities in 2006. Professor Mostafa Radwan published

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**Faculty Community Services Committee**
more than 40 scientific papers in different conferences and international polymer journals and he has supervised 20 PhD and M.Sc. students

**Research Interests:**

1. Energetic Materials.
2. Applications of Polymers in energetic materials.
3. Preparation and characterization of composite polymer and polyester.

**Consultation Expertise:**

1. Polymer Chemistry.
2. Polymer Engineering.

**Top Publications:**

- “Selective Adsorption of Potassium Thiocyanate to a Zwitterionic Polymethacrylate”, Malcolm B. Huglin and Mostafa A. Radwan, Macromolecules, 25, 999-1002, 1992
- “Polyethylene Glycol Compounds As Corrosion Inhibitors for Aluminium in 0.5 M Hydrochloric Acid Solutions” By M.Abdalla, H.E.Megahed, M.Radwan and E.Abdfatrah In Journal of American Science, 2012, 8 (11),P 49.
Background:

Prof. Shahir earned his B.Sc. in Chemical Engineering in 1971 from Military Technical College (MTC), followed by minimum CSc. in 1977 from Brno Academy (VAAZ), CSSR.

Prof. Shahir Sadek then joined the University of Orsay, Paris, France, in 1978 as a PhD Student. Prof. Shahir earned his Ph.D. in June 1981 from the University of Orsay, Paris, France, in Organic chemistry. He then joined Military Technical College, in Egypt, where he worked as lecturer, associate professor and professor in the Chemical Engineering Branch. Prof. Shahir was retired from army as major general in 1996. Prof. Shahir joined the Higher Technological Institute – 10th of Ramadan City (HTI) in September 1996 as Professor of Chemical Engineering. He led the chemical Engineering Department from 1997 to 2004. During this period, he was involved in the establishment of the Chemical Engineering Department, through the development of an up-to-date curriculum. In September 2004, Prof. Shahir was appointed as Associate Dean for October branch of HTI. He continued to lead the branch until August 2010. In September 2010, Prof. Shahir was appointed Associate Dean for Education & student affairs in HTI. In September 2011 he was appointed as Dean of HTI till October 2012. In September 2013 Prof. Shahir joined the BUE as Head of Chemical Engineering Department.

During his affiliation with HTI, Prof. Shahir was assigned tasks at Institute. These tasks included; Education & Student Affairs Coordinator for the Institute, Member of the Administrative Council, Member of the Academic Council, Member of Organising Committee of international conferences, in addition to the Administrator of a training and collaborative research schemes with industry.
Research Interests:

1. Polymer from natural resources.
2. Polymer based composite materials.
3. Rocket Propellants.

Consultation Expertise:

1. Polymers.
2. Chemical & Petrochemical Engineering.

Top Publications:

- T.Z.wafy, M.A.Sadek, M.S.Fayed, and M.M.Ismail, “The synthesis and Characterization of 3-Nitro-1,2,4-Triazol-5-one (NTO) and some selected salts”", 40th International Annual Conference OF ICT, 50, june23-June 26,2009, Karlsruhe, GERMANY.
**Background:**

Bio: Prof. Soliman earned his B.Sc. and M.Sc. from Cairo University in 1964 and 1968, respectively and his Ph.D. from the University of Waterloo, Canada in 1971, all in chemical engineering. Prof. Soliman then joined the University of Leeds, England in 1971 as a Postdoctoral Fellow, where he studied modelling, stability and control of fixed bed catalytic reactors, and assisted in supervision of research students. In 1973 he joined the State University of New York at Buffalo, USA as a Research Associate, In this period he engaged in the application of parameter, and state estimation techniques in dynamic metallurgical systems. In 1974 he joined the University of Kentucky, Lexington, USA, where his research was in the search for economic closed thermochemical cycles for hydrogen production from water. In 1975 he joined King Saud University, Riyadh, Saudi Arabia as Assistant Professor. In 1977 he spent two months at the University of Wisconsin-Madison, USA doing research in optimal control theory. He became Associate Professor in 1977 and Full Professor in 1981. In September 2012 Prof. Soliman joined the BUE as Professor of Chemical Engineering. During his affiliation with King Saud University, Prof. Soliman obtained 5 United States Patents in the field of catalysis and chemical reactor design, authored two books and published more than 150 research articles in international journals and conferences, and supervised 10 M.Sc. and Ph.D. students. He had several grants from King Saud University, King Abdulaziz City for Science and Technology (KACST) and Saudi Basic Industries Corporation (SABIC)
Research Interests:

1. Catalysis and chemical reactor design.
3. Simulation.
4. Optimization and Control.
5. Optimal planning of petrochemical industries.
6. Desalination.

Consultation Expertise:

4. Modeling of direct reduction iron plants.
5. Simulation of Polystyrene Plants.

Top Publications:

**Background:**

Dr. El-IDreesy received his B.Sc. (Distinction with Honors) in 1996 from the Faculty of Science, Cairo University (Chemistry Major) where he was appointed as a TA at the Department of Chemistry at the same university. He received his Ph.D. (Dr. rer. nat.) in 2005 from the University of Cologne, Germany (Distinction with Honors, summa cum laude). He is also the recipient of the Kurt-Alder Award for the best Ph.D. thesis in Chemistry in 2005 from the University of Cologne, Germany. In 2005, he was promoted to Assistant Professor of Organic chemistry at the Faculty of Science, Cairo University. In 2006, he joined the University of California at Davis, USA as a postdoctoral fellow and in 2009; he received the prestigious Fulbright Scholarship to join the University of Wyoming, USA as Fulbright visiting scholar. In recognition of his academic achievements, Dr. El-IDreesy received several awards such as the Cairo University Award in Basic Sciences (Chemistry) in 2009 and the Egyptian State Award in Chemistry in 2010. In 2012, he was promoted to Associate Professor and joined the British University in Egypt at the Department of Chemical Engineering.

**Research Interests:**

1. Synthesis of antimalarial and antiviral pharmaceutical compounds.
2. Photochemistry of singlet oxygen and carbonyl compounds.
3. Photoelectron transfer sensitizers.
4. Heterocyclic synthesis for medicinal goals.
5. Green chemistry and solvent free approach using catalysis bound to polymer Nano-particles in organic synthesis.
Consultation Expertise:

1. Organic Photochemistry.
2. Organic Chemistry.
3. Heterocyclic Chemistry for medicinal goals.

Top Publications:

## CIVIL ENGINEERING

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<td>Construction Industry</td>
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<td>Cement Manufacturing Industry</td>
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<td>Construction Management Firms</td>
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**Background:**

Dr. Sherif earned his B.Sc. in Civil Engineering in 2004 from Cairo University, followed by M.Sc. in 2007 from the same school in Geotechnical Engineering. During the first three years of his career he practiced civil engineering through working for a consulting firm as a designer of concrete and steel structures, a geotechnical engineer, and a site-supervisor on various projects. Meanwhile, he was working as a part-time teaching assistant at the American University in Cairo (AUC). Dr. Sherif then joined Iowa State University (ISU), USA, in 2007 as a research assistant studying towards his PhD. During his doctoral studies, he worked with a team on writing research proposals, and the team was granted a fund (around $1 million) from Iowa Highway Research Board (IHRB) and Iowa Department of Transportation (DOT) – research project TR-573. Over the past four years, Dr. Sherif published over ten technical papers. Six of them are journal papers published in top ranked, prestigious, international journals in Civil Engineering such as the ASCE Journal of Bridge Engineering; the ASTM Geotechnical Testing Journal; the ASCE Journal of Geotechnical and Environmental Engineering; and the Journal of the Transportation Research Board (TRB). Recently, he joined in the ASCE Journals peer review panel. From the professional activities perspective, Dr. Sherif served as the module leader responsible of teaching several modules (generally related to soil mechanics and geotechnical engineering) in the Faculty of Civil Engineering at the British University in Egypt (BUE), since 2010 until now. Although the relative recent join to the BUE, he was assigned several administrative tasks such as the Teaching and Learning Coordinator for the department, the Staff Development Coordinator, in addition to other administrative contributions that are...
Faculty related such as Staff development workshops etc. As of September, 2013, he was promoted to Civil Engineering Programme Director. In addition to the previous, Dr. Sherif is still keeping his industrial experience updated via conducting consultation works that are generally related to the field of Civil Engineering. From the social activities perspective, he served as an elected treasurer of the Egyptian Student Association (ESA) under the ISU Chapter in 2009. In 2010, he was voted for the Graduate and Professional Student Senate (GPSS) to represent the Department of Civil, Construction, and Environmental Engineering department in the graduate collage at ISU.

**Research Interests:**

2. LRFD for deep foundations.
3. Repair & Sustainability of foundations.

**Consultation Expertise:**

Executive Director for SAAB Engineering Consulting Office, where the consultation works included design and revision on Structural works, Geotechnical, Hydraulic, Sanitary, and other Civil Engineering related works for different types of structures and sub-structures. A sample of previous works is as follows:

- Structural designs for El-Khan and Tamr-Henna mega malls, Makadi Bay Resort. Project for Orascom for Development and Management (ODM), Hurghada, Egypt.
- Civil engineering works for water pump station, El-Masraf El-Katee, including survey, structural, and hydraulic designs. Project for Arab Contractors & Co., Al-Fayoum, Egypt.
- Structural designs for a 400 KV (high voltage power line) steel towers along 1000 km. Project for the General Electric Company (cost of 650 million EGP) Sirt - Agdabia - Benghazi, Libya.
- Retrofit of a tilted 16 stories residential tower using underpinning with micropiles and raft, Somoha, Alexandria, Egypt.
- Studying the soil excavation, retaining walls, and construction of “Al-Abassya” Metro Station – part of the Egyptian Metro 3rd line – on the surrounding buildings by utilizing PLAXIS 3-D. Project for National Authority for Tunnels, Cairo, Egypt.
- Structural analysis, repair, and extension of the Historical “Sidi Abdel-Rahmaan” five star Hotel. Project for “Egos” National Holding Comp., Al-Alameen, Egypt.
Top Publications:

Name: Yehia Ahmed Bahei-El-Din

Rank: Professor

Dept: Dean of Engineering

Educational Background:

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Joined BUE since: Sept 2007

Background:

Prof. Bahei-El-Din earned his B.Sc. in Civil Engineering in 1972 from Cairo University with distinction and honours. He earned his M.Sc. in 1976 and Ph.D. in 1979 from Duke University at Durham, NC, USA with a major in Civil Engineering and specialty in Solid Mechanics. While a graduate student Prof. Bahei-El-Din worked in several funded projects in composite materials and structures and his Ph.D. was among the first in the U.S. to contribute to constitutive modelling of advanced composites. Before joining BUE in September 2007, Prof. Bahei-El-Din was a tenured professor at Cairo University and visiting professor at Duke University, Rensselaer Polytechnic Institute, NC State University and the University of Utah in the USA. Prof. Bahei-El-Din is renowned for his work in composite materials and structures which earned him recognitions and awards from the Academy of Scientific Research and Technology in Egypt, and NASA and the National Academy of Sciences in the USA. Prof. Bahei-El-Din is the founding director of the Centre for Advanced Materials at BUE.

Research Interests:

1. Smart Composite Structures.
Consultation Expertise:

Prof. Bahei-El-Din served as Principle Investigator on joint projects in design and manufacturing of composite structures with the Military Production Organization, the Arab Organization for Industrialization and Misr for Environmental Technologies, a subsidy of MCV group. Projects included wind turbine blades of length 6-25m, and composite armors.

Top Publications:

1. Characterization of sandwich Panels for Indentation and Impact  
M. Shazly, Y. Bahei-El-Din, S. Salem  
Journal of Physics: Conference Series  

2. Modified Sandwich Structures for Improved Impact Resistance of Wind Turbine Blades  
Y. Bahei-El-Din, M. Shazly, I. El-Habbal, Y. Elbahy  
European Wind Energy Conference and Exhibition, EWEC 2010  
Vol. 5, 2010

3. Multiscale Transformation Field Analysis of Progressive Damage in Fibrous Laminates  
Yehia A. Bahei-El-Din, Ritesh Khire, Prabhat Hajela  
International Journal for Multiscale Computational Engineering  
Vol. 8, No. 1, 2010, pp. 69-80, DOI: 10.1615/IntJMultCompEng.v8.i1  
Impact Factor: 0.768, H5-index: 12  
Total Citations: Scopus 2, Google Scholar 3

4. Modeling Electromechanical Coupling in Woven Composites Exhibiting Damage  
Y.A. Bahei-El-Din  
Proceedings of the Institute of Mechanical Engineers, Part G: Journal of Aerospace Engineering  
Impact Factor: 0.4  
Total Citations: Scopus 1, Google Scholar 2

5. Enhancement of blast resistance of sandwich plates  
Y.A. Bahei-El-Din and G.J. Dvorak  
Composites Part B: Engineering  
Vol. 39, No. 1, 2008, pp. 120-127  
Impact Factor: 2.143, H5-index: 30  
Total Citations: Scopus 13, Google Scholar 13
Name: Ahmed Farouk Deifalla

Rank: Lecturer

Dept: Civil Engineering

Email Address: Ahmed.deifalla@bue.edu.eg

Educational Background:

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<td>Ph.D.</td>
<td>McMaster University, Hamilton, Canada</td>
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Joined BUE since: Sept 2012

Background:

After graduating with a bachelor degree with distinction from Cairo University, Dr Deifalla was appointed as a teaching assistant in the structural engineering department. In addition, during the first three years of his career, he practiced engineering across several capacities in both the design and the construction of either structural steel or reinforced concrete buildings. He then joined McMaster University, Hamilton, Canada, in 2001 as a teaching assistant and research assistant studying towards his PhD. As a teaching assistant, he assisted in teaching several engineering courses in Canada at the 200 and 400 levels. As a research assistant, he worked on several research projects including behaviour and analysis of RC T-beams in torsion and shear, and Behaviour and analysis of strengthened RC beams in shear and torsion. In 2008, Dr Deifalla returned back to Egypt where he joined one of Egypt most prestigious consulting firms (TCB). He led various team designing cement plants all over the world. In addition, Dr Deifalla developed various spread sheets for both concrete and steel design using various design codes. In 2009, he...
joined Elshourouk Academy as a lecturer and in May 2010, joined the CIC as a lecturer, where he taught over 13 courses in the field of civil engineering and acted as head of program. He was the founder and coordinator for the weekly Engineering seminar. In addition, he acted as the head for several committees established for the quality accreditation. Dr Deifalla taught at several private institutes including the American University in Cairo. Dr Deifalla joined the BUE in 2012. Since then, he has sat in various committees regarding Post graduate studies, research, IT, Website, and health and safety. He taught over 9 courses with the curriculum of civil engineering.

**Research Interests**

1. Behavior of RC Structures with FRP.
2. Behavior of Steel Structures with FRP.
3. Buckling of Concrete filled tubes.
5. Seismic Analysis of Structures.

**Consultation Expertise:**

Dr Deifalla occupied have continued to work in the area of engineering consultation, while being a scholar and researcher. He climbed the hierarchy of consultation starting in 1998 as a junior structural engineer for the “ARAB CONSULTING ENGINEERS, MOHARAM-BAKHOUM” in Egypt up till a Team Leader for the “TCB” in Egypt back in 2010. He worked on various projects including but not limited to residential, commercial, and industrial buildings. Dr. Deifalla design concrete, steel, masonry, and FRP building. In addition, he is an expert in the area of rehabilitation, repair and strengthening of the structures. Moreover, Dr Deifalla is handling small construction projects in the form of cost plus with an engineering value design granting minimum cost with the most efficient performance.

**Top Publications:**


Name: Mohamed Hussein Hegazy

Rank: Lecturer

Dept: Civil Engineering

Email Address: Mohamed.hegazy@bue.edu.eg

Educational Background:
- B.Sc. Cairo University
- M.Sc. Cairo University
- Ph.D. Cairo University

Joined BUE since: Sept 2007

**Background:**

Dr. Mohamed Hegazy joined the higher technological institute, HTI, Egypt, in 2001 as a teaching assistant. He taught several engineering courses. In 2007, Dr. Hegazy joined the British university in Egypt, BUE, as an assistant lecturer, he gained a very good experience in teaching and dealing with a British system educational program. Dr. Hegazy worked as a Designer and Consultant Engineer in the ECC (private Consulting office) in Cairo, from 2000 till 2006. He had a good experience in the design of water and wastewater treatment networks including fully design of all treatment units. Also he is more skilful in making an Environmental Impact Assessment Reports and auditing for any project.

**Research Interests:**

Environmental engineering, water and wastewater processing, sustainability, solid waste management, water and wastewater systems, environmental impact assessment (EIA), water reuse, environmental quality auditing.

**Consultation Expertise:**

Sanitary works (design and construction supervising and management):

1. Water distribution systems.
2. Wastewater collection systems.
3. Water and wastewater treatment systems.
4. Water and wastewater treatment and analysis.
5. Environmental management.

**Top Publications:**

- Mohamed H Hegazy, Ezzat A Shafi, Mohamed I Sadawi, Mohamed M Kamel. Treatment of a slaughterhouse wastewater using combined anaerobic aerobic system. Azahar University. 1/(2011)
Name: Amr Ibrahim I. Helmy  
Rank: Associate Professor  
Dept: Civil Engineering  
Email Address: Amr.helmy@bue.edu.eg  

Educational Background:  
B.Sc.  Ain Shams University  
M.Sc.  Ain Shams University  
Ph.D.  University of Toronto, Ontario, Canada

Joined BUE since: Sept 2009

**Background:**

Worked in several research projects and taught several engineering courses during his postgraduate and post-doctoral studies. Since 1998, he joined the structural Engineering Department at the Faculty of Engineering, in Ain Shams University, in Egypt. Dr Helmy helped develop the curriculum of the structural engineering department. Dr Helmy had earned his associate professorship in Feb. 2004. Dr. Helmy is still strongly engaged in the teaching of structural engineering courses in the heart of structural engineering academic curriculum for both undergraduate and post graduate degrees. Dr. Helmy has extensive experience in the field of “Geopolymer”, “Nano technology in concrete”, “properties and testing of materials”, “manufacturing and testing of advanced composite materials”, “the application of FRP in the retrofitting and rehabilitation of RC structures”, “concrete durability”, and “production of Nano cement and Nano mineral admixture”. Dr. Helmy is a member of the Egyptian Engineering Syndicate (since 1984), and eligible for the Membership of the “Professional Structural Consulting Engineers” Dr. Helmy is also a member of the Egyptian Standard Specification Committee on the Structural Use of (uPVC), HBRC and is eligible for the Membership of the “Egyptian Engineers Association”, Cairo, Egypt. Dr. Helmy is a board member of the “Material Research Centre, Faculty of Engineering, Ain Shams University. Reviewed technical papers for publication in International Journals & Conferences.
Research Interests:

1- Geopolymer, Production, Testing and Properties.
2- The use of quarry products as sand replacement in concrete.
3- The use of Palm agricultural products as concrete reinforcement.
4- Nano- materials in Concrete Technology.
5- Nano- cements using sonication technique in Concrete Construction.
F a c u l t y  o f  E n g i n e e r i n g  A c a d e m i c  S t a f f  C a p a c i t y

Name: Maged S. Morcos
Rank: Professor of Project, Construction and Operations Management
Dept: Civil Engineering, Head of Department
Email Address: Maged.morcos@bue.edu.eg

| Educational Background | | |
|-----------------------|----------------|
| B.Sc. | Ain Shams University -1981 |
| M.Sc.(Eng) | University of Leeds, England, UK -1990 |
| Ph.D. | University of Leeds, England, UK -1995 |

Joined BUE since: February 2010 as Part time then September 2010 till Present as Full time.

Background:

Professor Maged S Morcos, PhD, MMES, Fulbright Alumnus (USA), FHEA (UK) is a Professor of Operations and Project Management at the British University in Egypt. Prof Morcos holds a Ph.D. in Project Management (1995) and MSc.(Eng.) in Construction Management (1990) from the University of Leeds, UK. He also holds a Fulbright scholarship from the USA since 2003 as well as he is a fellow of the Higher Education Academy (FHEA) from the UK since 2009. He conducted several programs and taught courses for different private and public companies and universities in project management, operations management and systems management. He worked locally since 1995 and then internationally in the USA (Maryland University 2002-2003) and then the UK from 2005 till 2010 (Nottingham and Loughborough University). In 1996, he worked as a public utility expert with the UN conducting the economical and technical feasibility study of the crossing structures in the Suez Canal region. He is also working as a management consultant and training in project and operations management. In January 2005, Prof Morcos worked in the UK as a research and lecturing fellow at the University of Nottingham and then moved to Loughborough University to work in systems engineering research in a EPSRC and BAE systems funded project. In 2009 he became a fellow of British higher education academy (FHEA). His main research theme includes looking into project portfolio prioritization, selection and management of projects, multi-criteria decision-making for R&D project, project failures and delays and systems engineering and management. He has a number of publications in refereed journal and conferences, industrial professional articles, and wrote official reports in engineering and management. He also taught courses in construction and project management, operations management, management science, decision making, capability management module and concurrent engineering. Prof. Morcos had supervised over than 50 MSc
dissertations and PhD students. He has a number of publications in refereed journal and conference papers, industrial professional articles, and has contributed chapters in risk analysis and project management in published books and co-authored a manual for risk analysis. Prof. Morcos is an active member of the Engineering Management Association in Cairo Egypt and the Performance Management Association, PMA at Cranfield - UK. The professional experience of Prof. Morcos is over 30 years has encompassed a varied range of activities, including construction and project management with Laing/CRC and Bechtel, academic teaching, and specialized professional teaching and training.

**Research Interests:**

1. Project Management.
2. Reliability & Construction Management.
3. Operation & Supply Chain Management.
5. Decision criteria & making.
6. Concurrent Engineering.
7. Risk Management.
8. Performance measurement and management

**Consultation Expertise:**

**Public Utilities Expert with United Nations Regional / Infrastructure Planning Project**

**Infrastructure Planning Project Consultancy**

- Conducting the economical and technical feasibility for the crossing structures on the Suez Canal central and northern sections] – The study was under the supervision of the Ministry of Planning in Egypt to comply with Egypt’s long term development plan until year 2017.

Conrad International Hotel – Cairo

**OCT. 2000 – NOV. 2000**  
**Empowered Management Consultancy**

- Defining problems of empowerment within the Hotel departments and finding the means for increasing customers’ satisfaction.
- Identifying and providing a list of some remedy actions to improve business performance

Santeon Software Consulting Company

**SEP. 2003 – DEC. 2004**  
**General Management Consultancy**

- Defining Problems of transforming the company from a friendly small business to a professional medium size.
• Helping managers of the company to improve the business planning process of the company.
• Giving training to employees to increase their: Communication skills and Leadership and Management Skills

Top Publications:

Academic Publications:

# Electrical Engineering

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<th>Academic Staff Ranking:</th>
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</tbody>
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Background:

In 1986, Dr. Abou-Chadi joined the Department of Electronics and Communications Engineering, University of Mansoura, as a Lecturer, in 1991 became an Associate Professor and a Professor in 1996. Her scientific interests and current research work include Biomedical Signal Processing, Medical Imaging and Information Technology. She has exceptional knowledge in digital signal processing and time-series analysis, and has become very interested in information technology in biomedicine, with over 95 technical publications. Dr. Abou-Chadi is a Senior Member of the Institute of Electrical and Electronics Engineers – IEEE since 1995, and a Member of the Society of IEEE Women in Engineering since 2000. She was the Chairwoman of the Department of Electronics & Communications Engineering, Faculty of Engineering- Mansoura University (2005-2011), the Executive Manager of BS credit-hour program in Communications and Information Engineering, Faculty of Engineering- Mansoura University (2006-2011), and the dean of the Faculty of Computers & Information Sciences, Mansoura University (2007-2012). Dr. Abou-Chadi is currently a Professor in the Department of Electrical and Communications, Faculty of Engineering, BUE, a member of the Steering Committee of Computers and Informatics-(IT-Sector) since 2007, and a member in the Specific Council of Information Technology and Communications- Academy of Scientific Research and Technology since 2009. She was the recipient of the IEEE Region 8 Clementina Saduwa Award for Year 2013.
Research Interests:

1. Iris Recognition
2. Automatic analysis and classification of electromyography records.
3. Analysis of EEG signals during anesthesia and sleep.
6. Data Encryption.
7. Image Registration Technique.
10. A context-aware mobile framework.
11. Video Matting of complex scenes.
14. Processing and Classification of CT Lung Images.

Consultation Expertise:

1. Technical specifications of Electronics and Communications labs, Multimedia, Microprocessors and Digital circuits’ labs.
2. ICT-Based Telemedicine systems
3. Biometrics Systems
4. Information Security Systems
5. Green Information Technology
6. Spatio-temporal analysis of Disease Epidemics

Top Publications:

Name: Hani Amin Ghali  
Rank: Professor, Vice Dean for Teaching & Learning  
Dept: ELEC Engineering  
Email Address: Hani.amin@bue.edu.eg  
Educational Background:  
B.Sc. Ain Shams University  
M.Sc. Ain Shams University  
Joined BUE since: Sept 2007

Background:

Prof. Ghali earned his B.Sc. in Electronics and Computer Engineering in 1983 from the Faculty of Engineering, Ain-Shams University, followed by M.Sc. in 1988 from the same University in “Analysis and Design of Fine-Line Circulator”. During the period 1983-1988 Prof. Ghali was appointed as teaching assistant in the Electronics and Communications Engineering Department, Faculty of Engineering, Ain-Shams University. In 1989 he got a study leave from Ain-Shams University and joined the National Institute of Applied Sciences, Rennes, France studying towards his PhD degree in planar electromagnetic systems. In 1992 Prof. Ghali earned his Ph.D. in “Dynamic Analysis of Two and Three Dimensional Discontinuities and Interconnections using the Integral Equation Technique”. Since 1992 Prof. Ghali is with the Electronics and Communications Engineering Department, Faculty of Engineering, Ain-Shams University as an assistant professor, then as an associate professor and finally, in March 2005, as a full professor in microwave systems and antennas. Since September 2005 Prof. Ghali is in leave from Ain Shams University, where he joined Akhbar Elyom Academy leading the Electrical Engineering Department for two years. In September 2007 Prof. Ghali joined the BUE to establish the Electrical Engineering Department, where he was involved in the establishment of the Electrical Engineering Department, through the development of an up-to-date curriculum. As the founding Head of the department, he led the efforts towards the validation of the Electrical Engineering programme by Loughborough University, and continued to lead the Department until August 2011. In September 2011, Prof. Ghali was appointed Associate Dean, and in September 2013 was appointed as the Vice Dean for Teaching and Learning.
Research Interests:

1. Electromagnetic Education Platforms.
3. RF MEMES.
4. Fractal and space filling curves in Electromagnetic and Antennas.

Consultation Expertise:

1. Shielding design for magnetic field radiation
2. Design of MIMO antennas for wireless communications
3. Design of Multiband/Ultra wideband antennas for wireless communications
4. Trainer: COMSOL Multiphysics

Top Publications:

Name: Galal Ezz El-Din Mahmoud Nadim

Rank: Associate Professor

Dept: ELEC Engineering

Email Address: Galal.nadim@bue.edu.eg

Educational Background:
- B.Sc. Ain Shams University, Cairo, Egypt
- M.Sc. University of Manitoba, Winnipeg, Canada
- Ph.D. Cairo University, Giza, Egypt

Joined BUE since: Sept 2013

Background:

1- CT International certified Trainer and HRD (Human resources development) consultant – December 2008. [http://www.ibct-global.com](http://www.ibct-global.com)

2- Professional Telecommunication Engineer, from 1978-1984
3- ICT project, Web development and E-learning project manager.
4- BPO (Business process outsourcing) Trainer and consultant.

Research Interests:

1- Signal processing applications
2- Digital Communication and its applications.
3- Detection and Estimation.
4- GPR and Buried Objects recognitions.

Consultation Expertise:

- RTS GROUP- real time system solutions (System Integrator & Special Systems Contractor, Specialized in Computer based solutions and automatic control systems).
- Electrical Manufacturing Company (Feasibility study for manufacturing of thermal heater and thermostats).
- AIITEC Engineering & Industrial Consultation, (BBS for different organizations, Distance Education systems alternatives, Office Automation and Networking Solutions for Educational Institutes, Proposed Electronic Design Center, Tele-medicine- and Tele-radiology Systems, and Health Care projects). In assisting
the Egyptian IT Cluster Workforce Development to evaluate the IT association and IT vendors needs to leverage their human resources capabilities, in cooperation with PriceWaterhouseCoopers under USAID fund.

- Egyptian Ministry of Education, in networking their governorate sites and the schools, in video and teleconferencing, Tele-learning, video-streaming and distance education projects. Member in the national committee of the Nile-Sat interactive education channels from the ministry side.
- Ministry of Administrative Development, E-Government programs and projects.
- Information Technology Institute, ICT projects and training.

**Top Publications:**

Name: Adham Naji
Rank: Lecturer
Dept: ELEC Engineering
Email Address: Adham.naji@bue.edu.eg

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<tr>
<td>B.Sc.</td>
<td>University of Damascus, Syria.</td>
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<tr>
<td>M.Sc.</td>
<td>University of Bath, UK.</td>
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<tr>
<td>Ph.D.</td>
<td>University of Bristol, UK.</td>
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</table>

Joined BUE since: Sept 2012

**Background:**

Dr. Naji is a Lecturer at the Faculty of Engineering, the British University in Egypt, and an Honorary Research Fellow at the University of Bristol, UK. Between March 2009 and July 2011 he was a Research Officer with the Department of Electronic and Electrical Engineering at the University of Bath, UK. He then joined the Arab International University, Damascus, as a lecturer while being a research collaborator with the University of Bristol, UK. He was also invited as a visiting and part-time academic at a number of universities in Damascus, Syria, for teaching and supervising research projects in undergraduate and postgraduate programmes, and helped designing course contents for such programmes. In September 2012, he joined the British University in Egypt. From June 2013, he was accorded the status of an Honorary Research Fellow with the University of Bristol, UK. Dr. Naji has published a number of journal papers in world-leading journals, in addition to other technical reports and conference proceedings. He received the 'Award for Outstanding Contribution' in research from the Mobile Virtual Centre of Excellence, MobileVCE (which comprises leading British universities and European industrial partners, such as BT, Vodafone, Bell-Labs Europe, Philips, Nokia, Sony, Orange, and others). He holds two patents (granted) and one patent application (filed) in reconfigurable resonator design. Dr. Naji is a member of the IEEE (MTT, AP), a referee for the journal IEEE Transactions on Microwave Theory and Techniques (T-MTT), and active alumnus of the University of Bristol and the University of Bath, UK.
Research Interests:

1. Electromagnetism.
2. Wave Theory.
4. Reconfigurable RF resonators and EM resonator theory.
5. Advanced and novel radio architectures.
6. Cognitive Radio (CR) and software-defined radio architectures.
7. Perfect lenses, sub-diffraction limit resolution, and transformation optics.
8. Antenna design and wave propagation.
10. Coupling and filter theory.

Consultation Expertise:

1. Design and optimization of Antenna systems for various applications.
2. Design and optimization of RF/Microwave Front-Ends for various applications.
3. Design and optimization of RF/Microwave Resonators and Filters.
4. Design and optimization of advanced reconfigurable radio systems, including antennas, filters, and RF Front-Ends.
5. Optimization of special radio links.
7. Complex simulation and optimization using HFSS software.
8. Electromagnetic analysis and optimization.
9. Teaching practical courses in the above topics.

Top Publications:

• ‘UWB Antennas for Communications and Ground Penetrating Radar’; S. Pennock, A. Naji, Q. Zhang, P. Shepherd and M. Redfern, published in the 4th European Conference on Antennas and Propagation, 2010 EuCAP.

Name: Tarek Saad Abdel-Salam
Rank: Associate Professor, Acting Head of Department
Dept: ELEC Engineering
Email Address: Tarek.saad@bue.edu.eg

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<td>Ph.D.</td>
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Joined BUE since: Sept 2008

**Background:**
Got his B.Sc. and M.Sc. from Ain Shams University, Cairo, Egypt on 1980 and 1986 respectively. Got his Ph.D. degree from University of Windsor, CANADA in the area of power loss reduction on Distribution Systems. Participated in many paper refereeing, nationally and internationally. He has more than 40 publications in local and international conferences, local and international periodicals. Supervised many PhD and Master Degrees in the areas of Power Systems, EMF exposure and Wind Energy. Working as a consultant Engineer for many Electrical Installation projects.

**Research Interests:**
2. Wind Energy.
3. Power Loss Reduction.
5. Exposure to Electromagnetic Field.

**Consultation Expertise:**
1- Design of Low & Medium Voltage Networks.
2- Supervising the Electrical Installation Process.
3- Design of light current system (fire alarm, surveillance systems).
4- Measurements of Electromagnetic field exposure and determination of hot areas.
Top Publications:

**MECHANICAL ENGINEERING**

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<td>Manufacturing and Services Industries.</td>
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Dr Abbas joined the BUE in 2006 to co-establish the Mechanical Engineering Programme. Since then, he was involved in the establishment of an up-to-date curriculum and its continuous review and development. Together with the Head of Department, their efforts culminated in the successful validation of the programme by Loughborough University, according to the QAA regulations which was achieved in August 2007 and sustained ever since. He acted as the departmental Teaching and Learning Coordinator since validation. During his affiliation with BUE, Dr Abbas was assigned several developmental tasks at the Faculty, as well as, the University levels. These tasks included; Student Transfer Coordinator for the Faculty, member of the University IT Committee, member of the university eLearning committee, in addition to the Manger of the BUE website. In September 2013, Dr Abbas was appointed Programme Director for Mechanical Engineering. Dr Abbas has extensive experience in the areas of design education, kinematics and dynamics of machines and robotics and automation studies. Over the years he has developed tailored software applications using a wide variety of software environments including Artificial Intelligence techniques. He has several published journal and conference papers in these fields. Dr Abbas also acted as an initiator for Robot Contests in Egypt and has supervised teams successfully on the local, regional and international levels. He also is actively engaged in industrial consultancy.
Research Interests:

1- Robot Mobility.
2- Behavior based Control for autonomous robotics and innovative.
3- AI in Robotics.
4- Design Education.

Top Publications:

Background:

I am working in the field of teaching and research since my graduation in 1992. I started as a teaching assistant at Shoubra faculty of engineering where I promoted my master degree in 1997.

Three years later I awarded a governmental scholarship to prepare my Ph.D. for two years. I joined Wayne State University on November 2000 as a visiting scholar and working in the Center of Automotive Research (CAR) towards my Ph.D. which was titled “An Experimental Investigation for the Use of the Spark Plug as an Ion Probe with Negative Polarity”. During my stay at Wayne State University I was offered a research assistant position to work on a new project funded by the US army to cover the topic of using ionization current in Diesel engines. I offered also a position of part time faculty during my stay which extended to 2004.

I returned back to Egypt in 2004 to join Shoubra Faculty of Engineering as an assistant professor in 2004. I was full time faculty till 2009 where I joined the British University in Egypt as a full time faculty till now.

Based on my experience in engines, most of my research and my teaching interest were focused on this area of energy production.

Few years ago, since 2007, and because of the limited resources in the field of ICE and because of the increasing interest in the field of renewable energies in Egypt, I started my research in the...
field of solar energy to build my next stage of my carrier based on this field of energies (Cooperation with others in the field of engines research still in progress).

Towards this objectives and as a part of my professional work I was able to achieve the following:

- Supervising 42 graduation projects.
- Supervising 14 M.Sc. And Ph.D. students.
- Publishing 21 technical articles in different peer reviewed journals and International conferences.
- Attending different workshops and training programs such as: Train-the-trainer workshop on solar thermal, organized by RENAC-OASIS Solar Academy Egypt (ROSAE) in collaboration with the Solar Energy Development Association of Egypt (SEDA) and supported by the German Development Cooperation, Private Sector Development Programme (GIZ-PSDP). (13.04. – 16.04.2014 & 15.06. – 18.06.2014). Also, attending a researcher links workshop which is organized by the University of Nottingham and held in London under the support of the British Council, UK, March 31st to April 3rd 2014.

On the same level, as teaching and research activities, I have a good experience in consulting and managing USAID projects in Egypt for over twelve years. Also, I am a registered trainer at different organizations.

**Research Interests:**

My research plan is focusing on two main streams; internal combustion engines and solar thermal energy applications.

My research activities include some other topics in the field of combustion where experimental and theoretical investigations are applied.

Consultation Expertise:

Consultant in different USAID projects in Egypt.

Solar thermal applications.

Installation & Commissioning of Boilers, Heat Exchanger and Engines.

Fuel Combustion.

I have a good experience in establishing and constructing experimental work on test rigs. I have the experience in selecting sensors, measuring devices, signals, control methodologies, and
troubleshooting of devices. This experience was collected through my work in the research field and from the projects conducted in the industry.

**Top Publications:**


Name: Amr Abdel- Kader Abdel- Fattah

Rank: Senior Academic Staff

Dept: Mechanical Engineering Dept

Email Address: Amr.abdelkader@bue.edu.eg

Educational Background:
- B.Sc. Aeronautical Engineering 1973, Cairo University
- M.Sc. Aeronautical Engineering 1978, Cairo University
- Ph.D. Mechanical Engineering 1984, Cairo University

Joined BUE since: Nov 2012

Research Interests:

1. Process control applications in process industries.
2. Model predictive control applications.
3. Control of Renewable Energy systems.
4. Control of reverse Osmosis desalinations plants.

Consultation Expertise:

1. Industrial Automation systems in process industries.
2. Performance enhancement of process control loops in Oil & Gas industries.
3. Condition monitoring and Diagnosis of final Control elements.
4. Design of RO Water desalination units.

Top Publications:


• Development of the following software packages for Industrial Automation Training:
  c. COVAT Control Valve analysis and troubleshooting software.(1994-1996)
  d. VALSAN Control Valve signature development and analysis software. (1997-2000)
  e. Loop View A software package for adjusting and simulating process control loops with integrated OPC data logging.(2009-2010)
Name: Tamer Adel Mohamed

Rank: Associate Professor of Industrial Engineering, Director of the Centre for Community and Consulting Services

Dept: Mechanical Engineering

Email Address: Tamer.mohamed@bue.edu.eg

Educational Background:

<table>
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<th>Institution</th>
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<td>1998</td>
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<td>Ain Shams University, Cairo, Egypt</td>
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<tr>
<td>Ph.D.</td>
<td>Industrial and Manufacturing Engineering, Wichita State University, Kansas, USA</td>
<td>2004.0</td>
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Joined BUE since: Sept 2007

Background:

Dr. Mohamed graduated from the Design and Production Engineering Department, Ain Shams University in 1998. In 2000, he finished a graduate diploma in Operations Research from ISSR at Cairo University and a Masters degree in Quality Management from Ain Shams University. In 2001 he went to USA to pursue his Doctorate degree in Industrial and Manufacturing Engineering Department, where he finished it in 2004 and went back to Egypt to start a Lecturer position at Ain Shams University. In 2006, he went to Qatar University to work as Lecturer until 2007. In September 2007, he resigned from Ain Shams University and joined The British University in Egypt. In 2011, he got promoted from the Egyptian higher supreme council as Associate Professor.

Research Interests:

1. Quality Management.
2. Quality Control & Improvement.
5. Experimental Design.
6. Industrial Safety.
Consultation Expertise:

1. Quality Management Systems
2. Lean Manufacturing → Enhancing Performance Through Waste Elimination
3. Lean-Six Sigma → reduction of Rejected production Units through Dedicated Improvement Projects
4. Maintenance Management → Establishing an RCM-Based Maintenance Plan to Optimize Reliability and Availability
5. Material Management → Applying Inventory Control Models to Minimize Inventory Costs
6. Designing Facility Layout to Optimize flow and Material Handling

Top Publications:

Background:

Dr. Sayed Akl obtained his B.Sc. in Mechanical Engineering from Military Technical College, Grade Excellent, in 1970. He also obtained his MS from Cairo University in 1979. Then he moved to France where he got his Ph.D. in 1983 and Diploma of higher Studies in 1981. Employment Background 2010-Present: Academic Staff Member, Mechanical Department, Engineering Faculty, British University in Egypt. 2008-2009: Dean of Technical Institute For Developed Industries, Military Production, Egypt. 2007-2008: Chairman of Research, Design and Technology Development Center, Military Production, Egypt. 1996-2006: Head of R&D, Factory 200, Military Production, Egypt. 1970-1996: Egyptian Armed Forces.

Research Interests:

1. Wear.
3. Lubrication.
5. Vehicle Power pack, transmission & Suspension.
Consultation Expertise:


These activities have been experienced inside and outside country, in USA, England, France, Germany, Poland, Belgium, Holland, Finland, Turkey, UAE, Kuwait, Austria, South Africa, South Korea, China, and Russia.

Top Publications:

Dr. Osama Badr obtained his B.Sc. in Mechanical Engineering from Cairo University with Distinction and Honor’s Degree in 1971. He also obtained his MS from the same University in 1973. Then he moved to Canada where he got his Ph.D. from the University of Calgary in 1977. He was promoted to Associate Professor Rank in 1987 and Professor in 1993. For the last 36 years he has been working with Auburn University (Alabama, USA), Lehigh University (Pennsylvania, USA), United Arab Emirates U. (Al-Ain, UAE), Qatar University (Doha, Qatar), and the British University in Egypt. He has been the ME Department Head at UAEU for 4 years, Qatar U. for 5 years, and the BUE since 2011. He published more than 70 articles in International reviewed journals and conferences and he was the Principal and Co-Principal Investigator of 12 sponsored research projects. He has participated in teaching international workshops and short courses such as Atmospheric Pollution Monitoring (UN Environmental Program), Design and Operation of Combustion Equipments (UAE University), State of the Art in Pulse Combustion Technology (Energy Research Centre, PA, USA), Improving Energy Efficiency in Commercial Buildings and Industrial Plants (Alabama Department of Energy, USA). His professional activities included: A member of the United Nations TOKTEN Developing Program “Transfer of know-how Through Expatriate Nationals”, Editor of the Engineering Journal of Qatar University and Associate Editor and referee of many other journals, Vice-Chairman of the Emerging Energy Group of the American Society of Mechanical Engineers (ASME), USA, and the founder of the SAE section in the Lehigh Valley Zone, Pennsylvania as well as SAE student chapter at Lehigh U. and ASME student chapter at BUE.
Research Interests:

5. Energy Conversion & Sustainability.

Consultation Expertise:

1- Gas-Fueled Engines.
2- Alternative Fuels and their Combustion.
3- Environmental Impact Assessment (EIA- Air Pollution).

Top Publications:

Name: Ahmed M. Reda El- Baz

Rank: Associate Professor

Dept: Mechanical Engineering

Email Address: Ahmed.elbaz@bue.edu.eg

Educational Background:

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<td>Ph.D.</td>
<td>University of Manchester, UK</td>
</tr>
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</table>

Joined BUE since: Sept 2013

Background:

Dr Elbaz graduated in 1984 from the Energy and Automotive department at Ain Shams University. He joined the same department as a demonstrator and finished his MSC in Mechanical engineering from the same department in 1987. He then joined the University of Manchester Institute of Science and Technology (UMIST) as PhD student. He worked with one of the key scientists in turbulent flow modelling, Brian Launder from 1987 to 1992. Having obtained his PhD he joined Ain Shams University in 1992 as a Lecturer. He stayed at Ain Shams University till 2013 when he joined the British University in Egypt as an Associate Professor. He is working in the field of thermofluid engineering. He has more than 25 articles and supervised more than 20 MSC and PhD students. Recently, his interest is focussed on research work in the wind energy conversion systems.

Research Interests:

1- Fluid Mechanics.
2- Wind Energy.
3- Computational Fluid Dynamics.
4- Wind Turbine Simulations.
5- Solar Energy Systems Simulation.
6- Flow Control Systems Design & Simulation.
7- Turbulent Flow Modeling.
8- Computational Fluid Dynamics.
Consultation Expertise:

1- Design of water transmission pipelines.
2- Design of pipeline water hammer protection systems.
3- Design of mechanical systems in water treatment plants.
4- Computational modeling of water intakes.

Top Publications:

Name: Iman Salah El- Din El- Mahlawi

Rank: Professor, Renewable Energy Center Director

Dept: Mechanical Engineering Dept

Email Address: ielmahallawi@bue.edu.eg

Educational Background:

B.Sc. Cairo University

M.Sc. Cairo University

Ph.D. Leeds University, Leeds, UK

Joined BUE since: Sept 2006

Background:

Dr El-Mahallawi is currently the Director of the Centre for Renewable Energy at the British University in Egypt which is contributing to the teaching and education and research activities at BUE and nationally in Egypt. Dr Iman works with several groups on research and industrial topics focusing on materials issues, with particular reference to the following research areas: developing current materials performance via modern technologies in manufacturing and alloy design, material, quality and energy efficiency in metallic industries, thermal solar selective absorbers, introducing new technologies and advanced materials to Egyptian society via research and capacity building of engineers and researchers; e.g moderna and advanced casting techniques, surface treatment and thin film technologies, etc. as well as being incorporated in social projects aiming at implementing renewable energy resources for subserviced and ruler areas in Egypt. She has also contributed in a number of field projects in production by rolling and casting, thermo-mechanical treatment, failure analysis, manufacturing of spare parts, as well as continuous industrial education projects for engineers and workers. She is also the coordinator for the National Standardization committee for non-ferrous industries, and a member of the Foundry auditing Team for the Egyptian Water and Drainage Authority.

Research Interests:

2- Engineering Metallurgy.
3- Modeling for Metallurgical field.
4- Conventional casting and continuous casting.
5- Semi- Solid casting and metal matrix composites produced by Semi- Solid casting.
6- Using NANO- material for re-enforcement of nano-structured materials.

**Consultation Expertise:**

1- Developing the foundries of Hadidsolb Company and Hawamdia Sugar Industries.
2- Design and Building of Tempcore Cooling Lines for the rebar steel industry.
3- Failure Analysis investigations for a number of accidents and failure cases.
4- Training of engineers and technicians in areas of: steel industries, foundries, and heat treatment.
5- Design of programmes and courses for technical programmes in steel and aluminium industries.

**Top Publications:**

**Name:** Nabil Said Mohamed El-Tayeb  
**Rank:** Professor, PGS- Programme Director, and Academic advisor  
**Dept:** Mechanical Engineering  
**Email Address:** Nabil.eltayeb@bue.edu.eg

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<th>Educational Background</th>
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<tr>
<td>B.Sc.</td>
<td>Helwan University</td>
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<tr>
<td>M.Sc.</td>
<td>Aston University in Birmingham, UK</td>
</tr>
<tr>
<td>Ph.D.</td>
<td>Leeds University, UK</td>
</tr>
</tbody>
</table>

**Joined BUE since:** January 2010

**Background:**

Professor Nabil El-Tayeb gained his PhD from Leeds University in Leeds, UK (1986), attended his MSc at Aston University in Birmingham, UK (1982), and received his first degree “BSc” distinction with honor from Helwan University-Cairo (1977). Previously, he worked as a Lecturer, Senior Lecturer, Assistant Professor, Associate Professor, and Professor at Faculty of Engineering (Helwan University-Cairo), Technical Military collage (Defense Ministry- Cairo), Automobile High Industrial Institute Wadi Hoef (Ministry of higher education- Cairo), Industrial Education collage in Bani-Suif (Ministry of higher education-Egypt), Mechanical department (Leeds University-UK), and Faculty of Engineering & Technology (Multimedia University – FET, MMU, Melaka, Malaysia), The British University in Egypt (BUE), Mechanical Engineering Department, Faculty of Engineering, University of Malaya (UM) Kuala Lumpur, Malaysia. Currently, he is a full professor at The British University in Egypt (BUE).


ICT (ICEI 2007), Melaka-Malaysia), 8th International Conference on Production Engineering and Design for Development (PEDD8, 2010),

In addition to the above publications, there are more than 50 other National and International publications (before 2000) at Conferences and Bulletins: 17th AMME 1997 Conference (Third International) on Applied Mechanics and Mechanical Engineering, Military Technical College, 26th Leeds-Lyon Symposium on Tribology, Leeds University, 14th-17th September 1999. Engineering Research Bulletin, Faculty of Engineering and Technology, Helwan University, Mataria, Cairo, Egypt, Scientific Bulletin, Faculty of Engineering, Ain Shams University, Egyptian Society of Tribology, EGTRIB'89/91, Faculty of Engineering, Cairo University, Cairo, Egypt1989, 4th International Conference on Production Engineering and Design for Development (PEDD4 1993, 1997, 2010), Faculty of Engineering, Ain Shams University, Cairo, Egypt, The 10th International Colloquium Tribology, Stuttgart / Ostfildern, Germany, January 9-11, 1996

Development of Research Themes: Natural fibers reinforced polymers: (On the development and evaluation of new polymeric composite Materials reinforced with natural fibers for Tribological applications, Fabrication and characterization of Sugarcane, Coconut, rice husk, Bamboo, Oil palm (continuous and chopped) fibers reinforced polymers (epoxy and polyester), Brake/pads: (Friction induced vibration in lining braking system, Dry and wet sliding performance of commercial and non-commercial brake pad/lining materials) Polymer (On the behavior of running-in time, interface temperature, and transfer film of sliding polymeric materials, (Or On the study of running-in time and friction induced temperature in sliding contact between flat/circular composite materials), Dynamic characteristics of polymeric material flat/circular contacts under normal forces, Determination of Contact Temperature During Sliding Surfaces

Cryogenic and Tribo-Machining Processes: Cryogenic Friction Behavior and Wear Mechanisms of Modified titanium alloys, and polymeric composite Materials,
Burnishing Process: Tribological characteristics of cylindrical contacts burnished surfaces (or the formation of wear debris in burnished surfaces: a comparative study with polished surfaces). The potential of using burnishing process to improve the characteristics of polymeric surfaces.
Modelling and prediction of material properties: Implementation of RSM methodology to predict material properties and describe their behaviour, Utilizing ANN approach to estimate the characteristics and behaviour of composite materials
Professor El-Tayeb has been supervised undergraduate students (more than 92 FYPs and 24 ITPs) and postgraduate students (5-PhD and 8-MSc students).

Curriculum Development: At FET-MMU, He developed and modified the curriculum for several engineering modules, including; Engineering Design 1&2, Engineering Graphics 1&2, Engineering Tribology, and Fluid power.

Also I have been deeply involved in the exercise of out-come base syllabus and syllabi re-look for mechanical program for LAN, FET-MMU.

At FE-HU, I have shared in preparing and developing the syllabi for many engineering subjects such as; Tribology, Design of Machine Elements, Machine Design, Engineering drawing, Mechanical drawing, Strength of materials, and properties of materials. Teaching Ability & Academic Evaluation.

Prof El-Tayeb has been rewarded about 20 appreciation certificates for excellence teaching ability plus several Achievement Certificates from MMU. He has been assigned as a teaching observer to observe and evaluate teaching performance of new MMU lecturers.

Published Text Books: Published more than 6 undergraduate text books in Mechanical design, Engineering Tribology, strength of Materials, engineering graphics, Mechanical drawing, and Metrology

Establishment of Tribo Lab and Lab Supervision: he established a Tribology lab at FET-MMU, Melaka (2003), designed and fabricated several Tribo test machines for research and undergraduate teaching experiments. These test machines are currently used by FYP students as well as PG students. The process of upgrading the Tribology lab is continued until 2007 by designing and fabricating new devices and various test machines to enhance the work efficiency and research facilities at the lab.

Technical Projects and Research Grants: Prof. El-Tayeb published more than 6 technical reports including:
- “A Study On the resistance of treated polymeric surfaces to a single pass scratching action” Tribology Laboratory, 30-3-2007, Funded by Telecom R&D Funding, Project Account Number: PR/2005/0531.

committee of ICOMAST2006, Malaysia, • Keynote Speaker at Int. Conf. on Intelligent Science and Technology (2009) India, • Chairing Sessions ICOMAST2006 Malaysia, • Chairing sessions at (IIST2009) India, • Technical Reviewer in external Committees: Advanced Materials and Nano- Technology. Technical Science Fund projects, UM, a referee for Research product and innovation competition in Engineering and Technology. UTeMEx Exhibition 2008 (UTeMEX'08) at Melaka International Trade Center (MITC) on 27th -30th March 2008, a member of a technical committee MTDF to evaluate Applied Sciences applications for Science fund, • Chairperson of MMU Promotion Criteria Cluster Committee (Engineering), • Member of MMU Promotion Criteria Coordinating Committee

**Research Interests:**

1- Mechanical and Tribological characterization of Polymeric composite materials involving synthetic and natural fibers.
2- Tribological Design and Cryogenic Tribology
3- Tribology and machinability of non-conventional materials.
4- Mechanical treatment of non-ferrous and polymeric materials.
5- Diagnosis of surfaces deterioration.
6- Applications of response surface methodology (RSM) and Artificial Neural Network (ANN).

**Consultation Expertise:**

1- Mechanical and Tribological Characterization.
2- Design of tribo components.
3- Failure Analysis & Engineering Surfaces.
4- Mechanical Design of Machinery
5- Nano composite based natural fibres

**Top Publications:**

Background:

Hany Fayek received his B.Sc. degree in Mechanical Engineering from the American University in Cairo, with Honors, in the year 2000 with double specialization in 1- Mechanical Design and 2- Materials and Manufacturing. In 2002, Hany received his M.Sc. in Mechanical Engineering from the American University in Cairo pursuing the Mechanical Design path. Upon receiving his M.Sc. degree, Hany enrolled in a private family business till the end of 2004. In 2005, Hany registered in the Mechanical Engineering Ph.D. program at Cairo University while continuing his private business but mostly as part timer. In 2009, Hany received his Ph.D. degree in Mechanical Design from Cairo University with distinction. During his Ph.D. enrollment, Hany published seven research papers in several eminent highly specialized journals. In 2009, Hany was appointed as full time faculty in the American University in Cairo till the year 2013 where he was officially nominated four times for the AUC Excellence in Teaching Award. During his career at the AUC, Hany successfully co-supervised two M.Sc. students and one M.Sc. student from Cairo University. Currently, Fayek is co-supervising one M.Sc. student and one Ph.D. student at Cairo University.

Awards:

Certificate of Merit from Cairo University. Awarded in 2012.
Research Interests:

1- Shakedown and limit load analysis of pressure Vessels and Piping networks.
2- Design of nuclear reactor components.
3- Design of aerospace components.
4- Failure analysis & prevention.
5- Continuum mechanics.
6- Computational analysis of sheet metal forming process.
7- Energy harvesting.

Consultation Expertise:
National:
1- Collaboration with "Chicago Bridge & Iron" design office. Determination of shakedown limit loads for local thinned wall pipe branch connections. (Engineer\ Youssef A. Hafiz)
2- Collaboration with "Uhde" design office. Determination of local thinned wall pipe bends subjected to low cycle fatigue. (Engineer\ Amr Oda)
3- Collaboration "Enppi" (Engineering for the petroleum and process industries). Design of pressure vessel saddles and spacing. Dr. Mahmoud Nagi Shatla (former pressure vessel section head).
4- Collaboration with "Pertojet". Design of pipe branch components subjected to low cycle fatigue loading. (Engineer\ Amr Oda).

International:
1- Collaboration with Dr. Ihab Fanous Z. Fanous from CANDU (CANada Deuterium Uranium) Reactors in design of nuclear reactor cores, piping networks, and pressure vessel components.
2- Collaboration with the Department of Mechanical and Aerospace Engineering at Missouri State University under a grant offered from Boeing Aerospace to simulate via computer aided design the possible manufacturing of aircraft wing structural components via the deep drawing process.

Top 5 Publications:


**Background:**

Mohammed Hussein is a Professor of IE at the Faculty of Engineering, Helwan University. He is on-leave to the Faculty of Engineering, The British University in Egypt (BUE). His research interests include industrial engineering, operations management, work scheduling, visual inspection, supply chain management, and maintenance management. Also, he has some work in lean manufacturing with an emphasis on using various optimization techniques. He supervised several M. Sc. and Ph.D. works. Also, he reviewed a lot of research papers for international and local scientific journals. He has consultation work for public and privat agents.

**Research Interests:**

1- Quality systems design.
2- Visual inspection
3- Materials management, supply chain.
4- Manufacturing system enhancement (lean manufacturing & 6- sigma).
5- Maintenance management systems design.

**Consultation Expertise:**

1- Lean Manufacturing → Enhancing Performance Through Waste Elimination
2- Lean-Six Sigma → reduction of Rejected production Units through Dedicated Improvement Projects.
3- Maintenance Management → Establishing an RCM-Based Maintenance Plan to Optimize Reliability and Availability
4- Material Management → Applying Inventory Control Models to Minimize Inventory Costs
5- Designing Facility Layout to Optimize flow and Material Handling
6- Designing quality assurance systems

Top Publications:

**Background:**

Dr Osama A. Montasser, Mechatronics, Industrial Control and Instrumentations.

**Qualifications:** 1- Guest Researcher, Oct. 1994 to Oct. 1995, The Energy Technology Research Institute, Tokyo Gas Company, Tokyo, Japan. 2- Associate Professor, Ain Shams University, Cairo, Egypt., 2005.


**Honours and Awards:** 1. Excellent research works prize of the Ain Shams University, 2002 2. Certificate of Merit and money reward from the faculty dean, 2002.

**Consultation Areas:** 1. Control Solutions in Industrial Plants. 2. Hydraulic and Pneumatic Control In Industry. 3. Instrumentation Solutions in Industrial Plants. 4. Replacement of conventional control systems with the modern PC based Ones.


**Main contributions and activities:** 1- Since I have returned from Japan, Oct. 1995 up to now, I involved myself in the teaching and research in the field of the instrumentation, control theory and process control. As it is my original field, I can also teach topics in thermal science such that, Heat transfer, Thermodynamics, Refrigeration and Air conditioning. 2- I initiated the teaching of Mechatronics Engineering Art to the under graduate students in my Mechanical Engineering department, Faculty of Engineering, Ain Shams University. 3- I initiated the First Mechatronics Laboratory in the faculty. The laboratory is being used now for teaching the Mechatronics:

<table>
<thead>
<tr>
<th>Name:</th>
<th>Osama Abdel- Mohaymen Montasser</th>
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<tbody>
<tr>
<td>Rank:</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>Dept:</td>
<td>Mechanical Engineering Dept</td>
</tr>
<tr>
<td>Email Address:</td>
<td><a href="mailto:Osama.montasser@bue.edu.eg">Osama.montasser@bue.edu.eg</a></td>
</tr>
<tr>
<td>Educational Background:</td>
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<tr>
<td>B.Sc.</td>
<td>Ain- Shams University</td>
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<tr>
<td>M.Sc.</td>
<td>Ain- Shams University</td>
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<tr>
<td>Ph.D.</td>
<td>University of Tokyo, Japan</td>
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<tr>
<td>Joined BUE since:</td>
<td>Sept 2011</td>
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</table>
Control courses and to perform many research works in the field. 4- I got a Certificate of Merit and money reward from the faculty dean for my effort in reactivating and modernized an unused old fashion laboratory for process control that was one of the Electrical Communication Dept. Laboratories. The lab was transferred to be added to my department laboratories. The laboratory becomes fully automated through personal computers provided with data acquisition cards. The required interfacing digital electronic circuits were constructed by my students under my supervision. 5- I am a member of the Ain Shams University team in the Tempus Grant JEP-32050-2004-MEKATRON, an European community project, to establish Mechatronics Courses & labs of the new department. From Sep., 2011, I will be transferred to be a member of the new proposed Mechatronics Department,

**Teaching activities:** I am teaching the Measurement, instrumentation, Control, theory and applications, and Mechatronics subjects to the post and the undergraduate students at my department.

I am on leave to join the Mechanical Engineering Dept. at the British University in Egypt, from September, 2011.

**Research Interests:**

1- Industrial Control Applications.
2- Industrial Automation.
3- Industrial Mechatronics.
4- Industrial Instrumentation.
5- Digital Industrial Control.
6- Computer Vision based Measurement Systems.
7- Pneumatic and Hydraulic Control.

**Consultation Expertise:**

1- Control Solutions in Industrial Plants.
2- Instrumentations Solutions in Industrial Plants.
3- Replacement of Conventional Control Systems with the Modern PC based ones.

**Top Publications:**

- “Laboratory Testing of a Novel Float-Type Sea Wave Energy Converter Using a Smart Wave Generator”, Ahmed M. R. El-Baz, Osama A. Montasser, and Alaa H.
El-Feky, presented in the Ninth European Wave and Tidal Energy Conference (EWTEC2011), University of Southampton, UK, 5–9 September 2011.


Name: Talat Fawzy Refai

Rank: Professor, Head of Basic Sciences Dept
      Preparatory Year Director

Dept: Mechanical Engineering Dept

Email Address: Talat.refai@bue.edu.eg

Educational Background:

<table>
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<tr>
<td>B.Sc.</td>
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<td>M.Sc.</td>
<td>Catholic University of America, Washington, USA</td>
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<tr>
<td>Ph.D.</td>
<td>Catholic University of America, Washington, USA</td>
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Joined BUE since: Sept 2009

**Background:**

Talat Refai is a Professor of Engineering Mechanics and Head of the Basic Science Department and Prep Year Director at the British University in Egypt. He obtained his BSc Degree (Physics and Mathematics) in 1967 from the faculty of Science, Ain Shams University and was assigned as a TA of Mathematics at the faculty of Engineering, Ain Shams University. In 1975 he was granted a scholarship from the Catholic University of America (CUA) to obtain both the MSc degree, (1978), and the PhD degree, (1980). During his study he was assigned to aid in teaching physics, mathematics, and mechanics to science, nursing, and engineering students in addition to doing research work. From 1980 to 1981 he worked as a research assistant at Iowa State University, Ames - Iowa – USA on an energy project funded by NASA. On his return back to the Faculty of Engineering, Ain Shams University, He was promoted to the rank of Assistant Professor in the Engineering Physics and Math. Dept. In 1987 he was promoted to the rank of Associate Professor and became the acting engineering mechanics module leader. In 1991 he was promoted to the rank of full professor of Engineering Mechanics and hence assumed the professorship post of the Mechanics Course. During his service at Ain Shams faculty of Engineering, Dr Refai held several responsibilities such as; Vice president of the Faculty exam and time tables office (1984-1992), Designing the first computer program to manage prep year exam control work (1987-1988). Coordinator of the faculty of engineering student union (1992-1995), President of the prep year exam control (1995-2008), Member of the supreme council for Universities committee for promoting associate professors and professors in the fields of Engineering Physics and Mathematics (2001-2006). In 2006 he assumed the title of emeritus professor of Engineering Mechanics. In 2008 he joined the BUE as a full staff member.
Research Interests:

2- Solid State Physics.
3- Superconductivity.
4- PERT methods and Techniques.
5- Computer Programming.

Consultation Expertise:

1- Engineering Mechanics and Mathematics
2- Superconductivity
3- Computer Programming
4- Project Management (PERT Methods)

Top Publications:

Name: Bahy Saad Abdalla Abdel- Mesih
Rank: Lecturer
Dept: Mechanical Engineering Dept.
Email Address: Bahy.saad@bue.edu.eg

Educational Background:

<table>
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<th>Degree</th>
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<tbody>
<tr>
<td>B.Sc.</td>
<td>American University in Cairo</td>
<td>Cairo, Egypt</td>
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<tr>
<td>M.Sc.</td>
<td>Carl von Ossietzky Universitat Oldenburg, Germany</td>
<td>Germany</td>
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<tr>
<td>Ph.D.</td>
<td>Universitat de Lleida, Spain</td>
<td>Lleida, Spain</td>
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Joined BUE since: December 2010

**Background:**

**PhD (Concentrated solar-thermal power)** Universitat de Lleida, Lleida, Spain. April 2010


**BSc (Physics)** American University in Cairo (AUC). Cairo, Egypt. February 1997.

**Research Interests:**

2. Photovoltaic.
3. Wind Energy.
4. Desalination.

**Consultation Expertise:**

Solar electrification for workers campsite in Toshka

Solar pumping in the agricultural zone of Al-Wadi al Gadeed governorate.

Solar Energy for Brackish Groundwater Desalination
Top Publications:

**Background:**

Dr. Mostafa Shazly received his B.Sc. and M.Sc. in Mechanical Design and Production Engineering from Faculty of Engineering, Cairo University in 1996 and 1999, respectively. Dr. Shazly received Case Prime Fellowship from Case Western Reserve University, OH, USA. And completed his Ph.D. in Mechanical Engineering in 2005 from Case School of Engineering, Case Western Reserve University, OH, USA. His work focused in developing novel experimental techniques to characterise third generation of gamma titanium aluminide alloys for aerospace applications. Prior to his appoint at BUE, Dr. Shazly was a Research Associate at Mechanical and Aerospace Engineering Department, Case Western Reserve University. He participated in efforts led by NASA Glen Research Centre to classify and characterise different sources of takeoff debris that led to the catastrophic failure of Shuttle Columbia in 2003. These efforts led to obtain full characterisation of ice at high impact velocities. He was then a Senior Research Engineer at Goodyear Tire and Rubber Company, Akron, OH, USA where he became a team member working for Tyre Physics Department supporting NASCAR racing teams. He was an Assistant Professor at Faculty of Engineering, Cairo University before joining BUE in 2007. He is a member of the American Society of Mechanical Engineers and participates in industrial consultations and training through BUE and Cairo University.
Research Interests:

1. Dynamic deformation of materials.
2. Fracture Mechanics.
3. Composite Materials and Sandwich Structure.
4. Finite Element applications to welding and metal forming.
5. Friction Stir welding experimentation & Simulation.

Consultation Expertise:

1. Machinery Failure Analysis.
2. Mechanical Design of Machinery.

Top Publications:

- Yi Liu, Mostafa Shazly and John J. Lewandowski, “Microstructural Effects on Crack Path Selection in Bending and Fatigue in a Nb-19Si-5Cr-3.5Hf-24Ti-0.75Sn-1W Alloy”, Materials Science and Engineering A 527, 1489–1500, 2010
# Petroleum Engineering & Gas Technology

<table>
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<td>Professors</td>
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<td><strong>Relevant Industries:</strong></td>
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<td>Petroleum and Gas Industry</td>
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<tr>
<td>Mining Industry</td>
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</table>
Dr. Atef Abdelhady is Academic staff in the British University in Egypt. He holds a B.SC. and M.S degree in Petroleum Engineering. He holds a PhD degree in the specialty of Petroleum Production Engineering. He has 37 years in oil and gas industry as a manager for all activities associated with treatment and processing of oil and gas onshore and offshore locations. Also during my carrier in oil and gas business was responsible to transfer field experience to all engineers and others. I represent Egypt in oil and gas conferences outside Egypt as speaker. An SPE active member for more than 29 years. During his career, he has authored several technical papers in Egypt and USA. He has been selected as a qualified candidate for inclusion in the 1998 edition of International Who’s Who Membership. He has training skills and experience inside and outside Egypt.

**Research Interests:**

1- Enhanced Oil and Gas Wells recovery.

2- Real time production optimization.

3- Gas processing facilities.

4- Consultation Expertise:

5- Field Experience to Optimize Artificial Lift wells
6- Design Production facilities for oil and gas system
7- Pipeline maintenance program
8- Operating gas plant by glycol to meet gas specifications
9- Improved oil recovery by surfactant/polymer flooding

**Top Publications:**

- Gas lift optimization in oil field
- Real time optimization to enhance oil recovery
- Pipeline maintenance programme for offshore line
- Disposal well to save and eliminate waste water in offshore platform
- Overview of enhanced oil recovery in Egypt
Name: Attia Mahmoud Attia
Rank: Professor, Programme Director
Dept: Petroleum Engineering & Gas Technology
Email Address: Attia.attia@bue.edu.eg

Educational Background:
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<td>Ph.D.</td>
<td>Suez Canal University</td>
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Joined BUE since: Sept 2009

Background:

2009 to 2014 Professor of Petroleum Engineering, British University in Egypt (Head of Department from 2010 to 2012, Program Director from 2013)

2007 - Vice Dean. Faculty of Petroleum & Mining Engineering, Suez Canal University, Egypt.

2007 - Professor. Faculty of Petroleum & Mining Engineering, Suez Canal University, Egypt.

2003 - Visiting Associate Professor. Petroleum Engineering Department, Louisiana State University, USA.

2001 - Associate Professor. Faculty of Petroleum & Mining Engineering, Suez Canal University Egypt.

1995 - Assistant Professor. Faculty of Petroleum & Mining Engineering, Suez Canal University Egypt.

1985 - Demonstrator. Faculty of Petroleum & Mining Engineering, Suez Canal University Egypt.

External Examiner and Evaluator from 2005 - present
Research Interests:

Current research interests include Waterflooding and Enhanced Hydrocarbon Recovery using Nanotechnology, Reservoir Heterogeneity, Hydrocarbon Reserves and Field Development Plan and Natural Gas

Consultation Expertise:

Consultant at Kuwait Oil Company, (2012)

Halliburton Consultant in the Middle East from 2011- present

I have experience of quality assurance in education as a reviewer at the Ministry of Higher Education and National Authority for Quality Assurance & Accreditation of Education-Egypt.

Additionally I have developed and maintained strong links with the petroleum industry in Egypt and throughout the Middle East through consultancy and professional training

Top Publications:

- Attia M.Attia "Relative Permeability and Wettability of Rocks Obtained From Their Capillary Pressure and ELECTRICAL RESISTIVITY Measurements" SPE 106642, SPE Production and Operations Symposium in Oklahoma, USA. March / 3 APRIL 07.
- S. Fadel,M.Ibrahim, A. Attia, H.Khattab and N.A.ELhady" Carbonate flow Characteristics and Log Response for Effective Reservoir Management Miocene Carbonates, the Gulf of Suez, Egypt" This paper presented at the petroleum society 7" Canadian internatial conference , Calgary , Alberta, Canada, June 13-15,2006.
Name: Mohamed Elwageeh  
Rank: Professor  
Dept: Petroleum Engineering & Gas Technology  
Email Address: Mohamed.elwageeh@bue.edu.eg  

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<td>B.Sc. Mining Engineering- Cairo University- 1966</td>
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<td>M.Sc Mining Engineering- Cairo University- 1970</td>
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<tr>
<td>Ph.D. Mining Engineering- Petrosani University 1975</td>
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</table>

Joined BUE since: September 2009

**Background:**

Dr. Elwageeh received his Ph.D from Faculty of Mining Engineering, University of Petrosani, 1975. He received his M.Sc and B.Sc. from the Department of Mining, Petroleum and Metallurgy, Cairo University in 1970 and 1966 respectively.

Dr. Elwageeh has involved in teaching several courses in surveying, mining engineering, rock mechanics, design of mine operations, ventilation and environmental control, safety and industrial hygiene, modeling and simulation, engineering economics, evaluation and mining economics, and engineering geology. These teaching activities have been carried out in different governmental and private Egyptian universities and institutes.

**Research Interests:**

Dr. Elwageeh's research interest are in: rock mechanics, mining engineering, analysis of complex ventilation networks, optimization of mining operations, evaluation and classification of Egyptian mineral deposits, geostatistics, modeling and simulation, environmental impact of mining industry, computer- aided mineral evaluation and feasibility, mining investment decision making and risk analysis. His research publications are around 35 papers published in local and international periodicals and proceedings of conferences.

Dr. Elwageeh has supervised more than 40 B. Sc. projects, 10 M. Sc and 4 Ph.D. degrees in different fields of: mining engineering, mathematical modeling and simulation, mine ventilation and environmental control, rock mechanics, risk analysis, mineral appraisal and feasibility, industrial safety and hygiene.

Dr. Elwageeh has examined more than 15 students for master and doctorate degrees in Egyptian, Arabian and European universities.
Consultation Expertise:

Dr. Elwageeh has contributed in a number of field projects in surveying both surface and underground, surface and underground mining, evaluation and feasibility studies of mining projects, consultations, as well as continuous industrial education projects for engineers and geologists both in Egypt and outside especially in Saudi Arabia.

Top Publications:


- "New Technique- One Three/ One Two (13/12)- In Ultimate Pit Limit Heuristic Algorithms", The 45th International October Conference on Mining and Metallurgy 16-19 October, 2013, Bor Lake, Bor (Serbia).