



Ministry of Military Production



أكاديمية البحث
العلمي والتكنولوجيا
Academy of Scientific
Research & Technology



46th International Conference of (AEAS) Association of Egyptian American Scholars “Sustainable Development in Egypt Tomorrow's Innovative Advancements”

Cairo, Egypt, Dec. 24-26, 2019

الأكاديمية المصرية للهندسة والتكنولوجيا المتقدمة





ينعقد المؤتمر السادس والأربعون لرابطة العلماء المصريين في أمريكا وكندا تحت
رعاية السيد الدكتور رئيس مجلس الوزراء وباستضافة وزارة الإنتاج الحربى

Conference Topics

Engineering and Technology

Basic & Medical Science and Public Health

Business and Commerce

Green Technology

Industry 4.0

Smart Cities

Recycling



**In Partnership with Egyptian Academy for Engineering and
Advanced Technology (EAE&AT)**

Under the patronage of honorary



Dr. Mohamed Said Al-Assar

**Minister of State for Military Production
EAE&AT Board President**



Dr. Hassan Abdel Magied

**Vice President of National
Organization for Military
Production**



Prof. Mahmoud M. Sakr

**President of Academy for
Scientific Research and
Technology (ASRT)**



Prof. Wahied G. Ali Abdelaal

**Dean of Egyptian Academy for
Engineering & Advanced
Technology (EAE&AT)**



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Dr. Naser El-Shemy
University Of Calgary

Past President



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University of Illinois



Conference Organizing Committee

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Prof. Naser El-Shemy ,

AEAS President

Conference Co-Chair (USA)

Prof. Mohamed Attalla

AEAS Treasurer and Past President

Conference Co-Chair (Egypt)

Prof. Wahied G. Ali Abdelaal,

*Dean of Egyptian Academy for Engineering
& Advanced Technology*

Chair of Financial Affairs

Dr. Adel Talaat,

AEAS Vice President



EAE&AT Organization Committee

President

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Planning and development Coordinator

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Mr. Waleed Salah

Public Relations

Mr. Amer Elbadry

Ms. Nancy Abdel Hameed

Media coordination

Mr. Mohamed Bakr



The Association of Egyptian American Scholars (AEAS)

The idea of creating the Egyptian-American scholars association started by a discussion between Dr. Mohamed El-Wakil of Wisconsin and Dr. Ahmed Shouman of New Mexico in 1968. They both pursued the formalization of the group supported in Cairo by the Egyptian government and the Society of Friends of Egyptian Scholars Abroad. In 1971, fifteen Charter members were declared, and by 1972 the registration list reached 62 members. In 1973, the Association of Egyptian-American Scholars in the United States and Canada was formally established, and by 1974 it was officially incorporated in the State of Wisconsin, with Dr. Mohamed El-Wakil as its President. Through the years close to 600 scholars have joined the Association, very many are still active and supportive.

Since 1974, the Association of Egyptian-American Scholars has contributed abundantly to the scientific and cultural development of Egypt on one hand, and to the academic collaboration of its members in North America. A few examples of these achievements are highlighted below:

- Through the affiliation of several members with research centers in US and Canada, an important link has been established between them and Egypt.
- Since its birth, the AEAS has maintained strong ties with Friends of Egyptian Scholars Abroad (FOESA) in Cairo, which helped reunite them occasionally with the local scholars.
- So far, AEAS has participated in ten of the biannual Cairo conference on "Egypt - The Year 2000," held by FOESA delivering most of the papers there from overseas and has regularly published those conference proceedings.
- Several libraries in Egypt were supplied with books, scientific periodicals and microfilms. Some members donated their own personal libraries.
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- Through distinguished members, AEAS has placed Egypt under a program that benefit twelve nations in family planning; has helped Egypt to benefit from several applications of the American satellite research and development; and has placed Egypt among six countries receiving technical information from the American Institute of World Resources.
- Members gave several gifts (i.e. needed equipment/spare parts) to Egyptian Universities and centers; and others donated money to cultural and charitable organizations, pharmaceutical chemicals were donated to the Cairo National Research Center, a bilingual computer/printer were offered to FOESA to assist in preparing Cairo conference.
- AEAS contributed to the reconstruction of ancient library of Alexandria, and



established a special fund to its project of "Dar EI-Adeeb EI-Misri" where great Egyptian writers can be displayed. This effort amount to over \$10,000 cash donation to the Bibliotheca Alexandrina.

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- AEAS has invited the two top students among Egyptian Secondary School graduates to visit US major cities and historic sites, hosted by Egyptian-American families.
- Several members participated in a study tour visiting main Egyptian cities and meeting with some dignitaries there. Besides, AEAS has donated a few scholarships to Egyptian-American students to take summer courses in Egypt.
- Some grants and research fellowships have been offered to college graduates in Egypt through AEAS members; and a pattern has been initiated to recognize and honor distinguished scholars among our members.
- AEAS has maintained a periodic newsletter including member news, opinions, abstracts, budget updates, and other concerns. The newsletter mailing list has been updated and enhanced to reach over 500 names.

For more information about AEAS, you can visit the site below.

<http://www.aeascholars.org/>

<http://www.aeascholars.org/AEAS-Directory-Full.pdf>



EAE&AT Board President's Message



Dear Conference participants,

I'd like to personally welcome each of you to The Association of Egyptian American Scholars (AEAS) 46th Annual International Conference *about* ***“Sustainable Development of Egypt, Tomorrow's Innovative Advancements”***.

It is my honour to extend a warm welcome to the Association of Egyptian American Scholars (AEAS), for the first time is being hosted by Egyptian Academy for Engineering & Advanced Technology (EAE&AT). I am glad that you, as leading scientists and experts from Canada and USA, have come together here to share the options and possibilities to enhance the Egyptian economics.

Ministry of Military Production strives to achieve the objectives of sustainable development with its distinct human and technological capabilities through the integration of industry and production system of about (17) facilities in military production with the system of education and scientific research in the ministry. The Ministry of Military Production has a distinguished education system to support the industry, including technical and technological education in Helwan and El - Salam, as well as engineering education represented by the Egyptian Academy of Engineering and Advanced Technology (EAE&AT).



There is also Science & Technology Center of Excellence (STCE), which works to turn research outcomes into industrial products and supports the process of product development. There is also an Information System & Computer Center (ISCC) to provide IT technical support with its expertise in the field of information technology.

Ministry of Military Production with its all capabilities is already in cooperation with Egyptian scientists to solve research and industrial problems of adding values to achieve the goals of sustainable development and strategic plans of the State 2030. We hope that every one of you will enrich the activities of this conference with scientific discussions and exchange of experiences to come up with recommendations that contribute to solve problems and support the knowledge-based economy.

Finally, we thank the Prime Minister for sponsoring the conference and we hope that this conference will be a successful and fruitful conference that will achieve its objectives and come up with distinct results and recommendations.

Dr. Mohamed Said El-Assar

Minister of State for Military Production



The Academy of Scientific Research and Technology (ASRT)



The Academy of Scientific Research & Technology (ASRT) is established in September 1971 by the Presidential Decree No 2405 as the national authority responsible for science & technology in Egypt. In 1998, ASRT was reorganized by the Presidential Decree No 377 that defined its mission, function and activities. ASRT is the Egyptian house of expertise and the main governmental supporter of complete cycle of innovation, IPR, technology transfer and commercialization. It brings together outstanding Egyptian scientists and experts from universities, research institutions, private sector, NGOs, policymakers and prominent Egyptian scientists in Diaspora to deliberate country problems, propose technological solutions, out future strategic studies and support the implementation of the proposed action plans to tackle these problems.

ASRT adopts a comprehensive plan for developing Egyptian S&T to support relevant national ministries and research institutions in creating an integrated system of scientific research together for increasing the number of trained scientists in Egypt, and giving science a leading role in the country's development and knowledge based economy. ASRT also promotes science and society, encourages female and youth participation in S&T and scientific leadership.

Our vision is to be an Effective National Academy, cooperates with other entities of STI, to improve scientific and economic status of Egypt

Our mission is to nurturing enabling environment for STI and supporting the complete cycle of innovation



We are very keen to collaborate with highly effective stakeholders to strengthen our networks and serve our objective, that's why we have a long lasting collaboration with AEAS network.

Bringing our eminent experts in diaspora together with our local scientist has been one of our main targets and it is the core objective of JESSOR Development Program "one of ASRT programs" to tackle national challenges with our master minds in diaspora.

This has said, for the third year in row we open a special call within this program for AEAS members believing in their abilities in high quality research, transfer knowledge and their genuine interest in advancing and enrich scientific communities in Egypt.

Wish you best of luck and fruitful event

Prof. Mahmoud Sakr

President, Academy of Scientific Research and Technology



The Egyptian Academy for Engineering & Advanced Technology (EAE&AT)



Egyptian Academy for Engineering & Advanced Technology (EAE&AT) is a non-profit Engineering institute affiliated to Ministry of Military Production (MOMP) and under supervision of Ministry of Higher Education and Scientific Research in Egypt.

EAE&AT adopts an educational policy based on the shift from teaching to learning through activities and developing students' skills to graduate an engineer who fulfills the requirements of the 21st century labor market. To graduate an engineer capable of solving problems and creativity and decision-making and accommodating the growing technological development at a rapid pace in the era of the fourth industrial revolution. Therefore, despite the recent start of study in 2015/2016, the Academy has been interested in achieving the following strategic goals:

Paying attention to the quality of the educational process and developing it to produce distinguished engineers capable of meeting the needs of the labor market.

Interest in research outcomes and linking scientific research with industry.

Interactive and positive participation in the community through a set of protocols with Egyptian and International universities and modern technological companies.

EAE&AT's Vision is to be a distinguished institute in engineering sciences and advanced technology in local, regional, and international levels aiming to achieve sustainable development through the improvement of manufacturing and production systems.



EAE&AT's Mission is to graduate distinguished engineers capable of satisfying the needs of the labor market to develop the national manufacturing and production systems. Achieve continuous development and quality assurance through an integrated system to compete in local, regional, and international levels.

EAE&AT Learning Objectives:

1. Prepare distinguished graduates with excellent ability in problem solving and engineering design.
2. Acquire behavioral standards and ethics for engineering profession.
3. Learn advanced technologies and carry out research, innovation, and discovery.
4. Contribute in the community service and work to resolve the industrial, economic and developmental problems.

The Engineering disciplines in EAE&AT involve:

- 1- Electrical Engineering (Electronics & Communications Engineering Program - 170 C.HRs)
- 2- Mechanical Engineering (Mechatronics Engineering Program -170 C.HRs)
- 3- Chemical Engineering (Chemical Engineering Program - 170 C.HRs)

There are three research groups in EAE&AT:

- Water treatment research group
- Renewable energy research group
- Manufacturing technology research group

For more information about EAE&AT, you can visit the site below:

<https://www.eaeat.edu.eg>

Prof. Wahied G. Ali Abdelaal

**Dean of Egyptian Academy for Engineering
& Advanced Technology (EAE&AT)**



AEAS President's Message



Dear Colleagues,

On behalf of the Association of Egyptian American Scholars, I am honored and delighted to welcome you to the 46th Annual Conference, Association of Egyptian American Scholars (AEAS) on “Sustainable Development of Egypt, Tomorrow's Innovative Advancements”

Our technical program is rich and varied with many speakers from the USA, Canada and Egypt. As for any conference, the success depends ultimately on the many people who have worked hard in planning and organizing both the technical program and supporting social arrangements. I would like to thank my colleagues for the effort in planning and organizing the conference. Our hosts and colleagues from Egypt are certainly what makes us all want to come and participate. Special thanks to Professor Mohamed Attalla and Professor Wahied G. Ali Abdelaal for their effort in making this event happen. I also would like to thank all my colleagues of the authors for their effort in having a scientifically sound meeting.

This year, we have special thanks to our host H.E Dr. Mohamed Said El-Assar, Minister of Military Production Minister, for the tremendous support in hosting the conference.

Certainly, I hope that we can all take this opportunity to maintain and increase our interaction and continue to build bridges of collaboration among us in many different ways. Our beloved Egypt will have a better future when we all work together towards higher aspirations and goals.

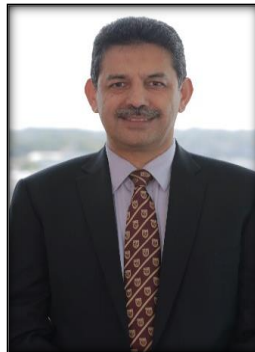
Many Thanks to All,

Professor Naser El-Sheimy, PEng

The University of Calgary
President, Association of Egyptian American Scholars
Established in Canada and USA in 1974



AEAS Conference Organization Co Chair



Dear Colleagues,

I wish to welcome you all, your contributions and your collaborative efforts to the 46th Annual Conference of the Association of Egyptian American Scholars (AEAS). AEAS was established 46 years ago in Canada and the United States of America. The AEAS mission is to create a forum for North American Egyptian Scholars that facilitates dialogue and promotes partnerships with Egyptian counterparts to implement beneficial scholarly endeavors.

Over the past 46 years AEAS members and affiliates have lead many partnerships and research endeavours that aimed at Egypt's Social, Scientific, and Economic developments. Contributions included Higher Education Enhancement Programs, Code developments, manufacturing as well as Engineering and Medical research.

Organizing our annual conferences in Egypt has never been an easy task. This year AEAS is fortunate to have the major sponsor and partner as the ministry of Military Production under the leadership of H.E. Dr. Major General Mohamed Said El-Asaar. Also our host the Egyptian Academy for Engineering and Advanced Technology under the leadership of Dr. Wahied Gharieb Ali Abdelaal as our host has made this year's conference a great success. Their support to the conference and organize its activities are highly appreciated.

This year we have the pleasure of the presence of 26 colleagues from USA and Canada are participating in this conference and are joined by 28 conference papers that are presented by colleagues in research institutions inside Egypt. This is including topics such as the Fourth Industrial Revolution, Water Resources in Egypt, Smart Cities, Digital Transformation Skills in Education, etc.

I wish you all a wonderful and enjoyable scientific event.

Thank you,

Dr. Mohamed Attalla, P.Eng., MBA

Executive Director, University of Illinois

Treasurer and Past President, Association of Egyptian American Scholars

Established in Canada and USA in 1974



AEAS History

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auspices of President Mohamed
Anwar Sadat, December 1974

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- AEAS has maintained a periodic newsletter including member news, opinions, abstracts, budget updates, and other concerns.



AEAS Presidents

Dr. Mohamed El-Wakil

1975-1978

Dr. M. Cherif Bassiouni	1979-1980
Dr. Mohamed El-Wakil	1981-1984
Dr. Ibrahim Oweiss	1985-1988
Dr. Mohamed Selim	1989-1990
Dr. Badr El-Din-Ali	1991-1994
Dr. Wagih Taylor	1995-1998
Dr. Badr El-Din-Ali	1999-2002
Dr. Ayman El Mohandes	2003-2006
Dr. Amer El Ahraf	2007-2008
Dr. Mohamed Attalla	2009-2012
Dr. Tawfik Ayoub	2013-2014
Dr. Adel Elmaghraby	2015-2018
Dr. Nasr El-sheimy	2019-Present



Conference Program (46th AEAS)

Tuesday, December 24th, 2019. El-Salam Theater



Time	Event	
16:00 - 17:00	VIP Welcome	
17:00 - 18:00	National Anthem	
	Opening Talks: <ul style="list-style-type: none"> • Prof. Mohamed Attalla (AEAS Conference Co-Chair) • Prof. Naser El Sheimy (AEAS President) • Prof. Wahied G. Ali Abdelaal (EAE&AT's Dean) • Prof. Mahmoud Sakr (ASRT President) • Dr. Khaled Abdel Ghafar (Minister of Higher Education & Scientific Research) • Dr. Nabila Makram (Minister of State for Immigration and Egyptian Affairs Abroad) • Dr. Mohamed Said El-Assar (Minister of Military Production) 	
18:00 – 19:30	Keynote Speakers	
	Title	Speaker
	"The Role of sensors in Smart Cities"	Dr. Naser El Sheimy Professor, Dept. of Geomatics Engineering, The University of Calgary, Canada
	"Personalized Learning, AI and Education Technology: Digital Transformation Skills Challenges Today and in the Future"	Dr. Mohamed Elhabiby President of RoboGarden and Executive Vice President of Micro Engineering Group, Alberta, Canada
	"Smart Manufacturing - The 4 th Industrial Revolution"	Dr. Waguhi El Maraghy Professor, Dept. of Mechanical, Automotive & Materials Engineering, University of Windsor, Canada
Honoring (Sponsors)		



Wednesday, December 25th, 2019. Triumph Hotel

Date Time	Title	Speaker
8:00 – 9:00	Registration	
9:00 – 10:15	Session (A) : Engineering & Technology (1) Session Chair: Prof. Ahmed Mohamed (USA) & Prof. Hany Monieb (Egypt)	
	"Improving the Energy Efficiency of the Transportation Sector: Practical Experiences from the New York City Case"	Ahmed Mohamed , Assistant Professor, Grove School of Engineering, , City College of the City University of New York, USA
	"Attenuation Effectiveness of Double Phase Stainless Steel Alloys for Fusion Reactor System"	Noha Mohamed Ali , Lecturer assistant at Egyptian Russian University, Egypt .
	"Behavior of RC Beams with Openings Strengthened with CFRP Laminates"	Ghada Gamal , Assistant professor at the construction Department Egyptian Russian University (ERU), Egypt .
	"Estimating Ultimate Recoveries of Unconventional Reservoirs: Knowledge Gained from the Developments Worldwide and Egyptian Challenges"	Omar Mahmoud , Assistant Professor at the Future University in Egypt (FUE), Former Reservoir Engineer at Apache Corporation, USA
	"Nanoparticle-Based Drilling Fluids as Promising Solutions to Enhance Drilling Performance in Egyptian Oil and Gas Fields"	Ahmed Samy Mady , Teaching Assistant at the Future University in Egypt (FUE), Egypt .
10:15 – 11:45	Session (B) : Industry 4.0 Session Chair: Prof. Hoda El Maraghy (Canada) & Prof. Gamal Mohamed Ali (Egypt)	
	"Sustainable Manufacturing: Opportunities and Challenges"	Dr. Hossam Kishawy , Associate Dean, Faculty of Engineering, Ontario Tech University, Canada
	"Computational Research, AI and the Digitized Economy: A look into the future"	Dr. Abdel-fattah S. Yousif , Director, Advanced Research Computing University of Calgary, Canada
	"Blockchain-Architecture for Secured Data Storage"	Dr. Tarek Saadawi , Director, Center for Information Networking & Telecommunications, City University of New York, City College, USA
	"Survey of Apache Spark Optimized Job Scheduling in Big Data"	Walaa Ali , Computer Science dept.El-Gazeera High Institute for Engineering and Technology Cairo, Egypt
	"Image authentication Technique based on advanced encryption standard (AES), Secure Hash Algorithm and steganography"	Hosam Eldin Fawzan Elsyied , Asis.Lecture in Faculty of Engineering Collage at Sinai university, Egypt
	"Remote sensing technologies for sustainable developments"	Ahmed Shaker AbdElrahman , Associate Professor, Civil Engineering, Faculty of Engineering and Architecture Science, Ryerson University, Canada



Date Time	Title	Speaker
11:45 – 12:30	Coffee Break	
12:30 – 13:45	Panel Discussion(1) "Water Resources in Egypt"	
	(Microbial Desalination Cells (MDCs): "Performance Assessment and Potential Practical Applications for Wastewater Treat"	Dr. Mohamed Gamal El-Din , University of Alberta , Canada
	"Earth observations and data science addressing water issues in Egypt "	Dr. Hesham M. El-Askary , Chapman University , USA
	"Utilization of deposited sediment in Aswan High Dam Reservoir"	Dr. Tarek Abdel Aziz , Director of Survey Research Institute, National Water Research Center, Ministry of Water Resources and Irrigation, Egypt
13:45 -15:15	Session (C): Green Technology Session Chair: Prof. Amer El-Ahraf (USA) & Prof. Mohamed El Sobky (Egypt)	
	"Design and Development of a Small Scale Vertical Axis Wind Turbine"	Ahmed Elsayy , Professor - Manufacturing & Engineering Technology- Tennessee University Tech , USA .
	"Research and Innovation in Green Technology"	Maisa Salah El-Din , General Manger of Quality Control & Environment Alexandria Water Company, Egypt .
	"The Role of Environmental Health in Attaining a Sustainable Development in Egypt"	Amer El-Ahraf , Professor of Health Sciences and Vice President Emeritus, California State University, Dominguez Hills, USA
	"Detection of Islanding Phenomenon for Renewable energy systems"	Yasser Elshrief , Teaching Assistant, Electrical Engineering, Egyptian Academy for Engineering and Advanced Technology, Egypt .
	"Exploring Inclusiveness In Green Hotels For Sustainable Development In Egypt."	Mai Eid Khalil , Assistant Professor Architectural Engineering Department Aswan University, Aswan, Egypt
	"Magnetized water: New green technology tool for improving Egyptian agriculture sector"	Mahmoud Hozien , Field Crops Research Deptment, Agricultural & Biological Research Division, National Research, Egypt .
15:15- 16:45	LUNCH	
16:45 – 18:00	Session (D): Smart Cities Session Chair: Prof. Adel Elmaghraby (USA) & Prof. Essam Khalefa (Egypt)	
	"Crowd-Sensing based Road Information System"	Dr. Aboelmagd Noureldin Youssef , School of Computing, Queen's University, Canada
	"Recent Advances in Accelerated Bridge Construction (ABC)"	Dr. Khaled Sennah , Chair & Professor Civil Engineering, Ryerson University, Canada
	"Practical Challenges in Delivering Infrastructure Rehabilitation Projects"	Tarek Hegazy , University of Waterloo, Canada, Mohamed Attalla , University



Date Time	Title	Speaker
		of Illinois, USA & Ehab Kamarah , York University, Canada
	"Smart practices of biodiversity, present and future of ecosystem-Educational Approach"	Fatma Salem , Associate Professor, Faculty of Education, Ain Shams University, Egypt
	"Artificial Intelligence Tracking of Healthcare using Social Networks"	Adel Elmaghraby , Professor and Chair of the department of Computer Sciences, University of Kentucky, USA
Thursday, December 26th, 2019		
9:00 – 10:30 Big Hall	Session (E) : Engineering & Technology(2) Session Chair: Prof. Khaled El Rayes (USA) & Prof. Nagwaa Badr (Egypt)	
	"Optimizing Emissions from Business Employees Sharing Multiple Work Locations"	Moatassem Abdallah , Assistant Professor, Department of Civil Engineering, University of Colorado Denver, USA
	"Optimization Model for Repetitive Construction Projects with Multiple Crews and Multiple Options of Construction Methods"	Khaled El Rayes , Professor, Civil Engineering, University of Illinois, USA & Moatassem Abdallah , Assistant Professor, Civil Engineering, University of Illinois, USA
	"Effect of Processing and Alloy Composition on Microstructure and Wear Resistance of α/β Titanium Alloys for Aviation Applications"	Shimaa El-Hadad , Associate Professor Department of Casting Technology Central Metallurgical R&D Institute, Cairo, Egypt
	"30 years success story of casting technology at CMRDI"	Khaled M. Ibrahim , Central Metallurgical R&D Institute-CMRDI Head of Casting Technology Dept. Vice Head of Manufacturing Technology Dept., Cairo, Egypt
10:30 -12:00 Big Hall	Session (F) : Recycling Session Chair: Prof. Mohamed Gamal El-Din (Canada) & Prof. Mohamed Amin El-Shahir (Egypt)	
	"Renewable Energy Production from Municipal Solid Wastes: Current Status and Techniques for Improvement"	Elsayed Elbeshbishy , Assistant Professor, Civil Engineering, Faculty of Engineering and Architectural Science, Ryerson University, Canada
	"Green Star-shaped Polymeric Membrane for Water Treatment"	E. G. ZAKI , Doctor in applied chemistry Egyptian Petroleum Research Institute (EPRI) Cairo, Egypt .
	"Converting the conventional activated sludge treatment system to tertiary treatment using an innovative hybrid system "Full-scale case study"	Ahmed M. Noureldin , Housing and Building National Research Center(HBRC), Cairo, Egypt
	"Reduction of Pollution Load into the Receiving Environment in Enhanced Primary Treatment of Municipal Wastewater under Wet Weather Flow Conditions"	Mohamed Gamal El-Din , Professor; Civil & Environmental Eng. Depart. University of Alberta, Canada



Date Time	Title	Speaker
9:00 – 10:40 Small Hall (Parallel session)	Session (G) : Basic & Medical Sciences Session Chair: Prof. Abdel Rahman (USA) & Prof. Laila M.M. Bidak (Egypt)	
	"Classification of Medical Ultrasound Transducer Using Neural Network"	kamel kamal kamel mohamed tawfic & Prof.Laila mohamed abdelhalim aboughazala. Center of Studies, Alazhar University, Medical School, Egypt
	"Portfolio Assessment in Medical Education"	Mostafa Abdel Nasser ,Faculty of Medicine, Al-Azhar University, Egypt
	"Study Gut Microbiota in HCV Patients Responders and Non Responders"	Reda M. El badawy , professor Gastroenterology, Hepatology and Infectious disease Banha University , Egypt
	"Conservation of Posidonia oceanica (L.) Delile in the coastal habitat, western Mediterranean region, Egypt"	Laila M.M. Bidak , Professor of Plant ecology, Botany & Microbiology Department, Faculty of Science, Alex. University, Egypt , Hesham M. Al-Aksary , Professor of Remote sensing & Earth system Science Schmid College of Science & Technology, Chapman University, USA , & <i>others</i>
	"Is Reticulocyte Hemoglobin Content a Sensitive Index of Iron Status"	Eman elbostany , Pediatric Department, National Research Centre, Giza, Egypt
10:40 -12:00 Small Hall (parallel session)	Session (H) : Business and Commerce Session Chair: Prof. Wagiha Taylor (USA) & Prof. Eman EL-Azyzy (Egypt)	
	"Creating Nearby Markets"	Ghada Farouk Naiem Elsayed. Assistant professor, AUC university, Electronics department, Egypt
	"Egypt's Nationally Determined Contributions to Paris Agreement: Review and Recommendations"	Lamiaa Abdallah , Alexandria higher Institute of Engineering & Technology (AIET), Egypt
	"China's Balance of Payments Evolution from Deficit to Sustainability Surplus"	Doaa Wafik , Vice Dean for Education & student affairs; School of Business and Economics, (BUC), Cairo Egypt
	"Exact Minimum Lower Bound Algorithm for Traveling Salesman Problem"	Mohamed Eleiche , Lecturer Geomatics, Phd, Eng. Egyptian Russian University, Egypt
	Research on Inclusive Education in Egypt; Can it be a factor in enhancing Sustainable Development?	Hadeel EL-Ahraf , Adjunct Professor, Department of Psychology, American University in Cairo, Egypt
12:00-12:45	Coffee Break	



Date Time	Title	Speaker
Panel Discussion (2): Smart Cities		
12:45-14:15 Big Hall	"A Cost-Effective Viable Strategy for Gradually Transitioning Egypt's Cities into Truly IoT-enabled Smart Cities"	Dr. Ahmed Mohamed, Dr. Tarek Youssef, & Dr. Mohamed Ali, USA
	"Smart Cities in the 21 st Century"	Dr. Mohamed Attalla, Executive Director, University of Illinois, USA
	"Smart Cities Sustainable Development"	Dr. Mohamed El-Bostany, the head of the Real Estate Developers in New Cairo, Egypt
14:15 -15:45	LUNCH	
15:45 –17:30 Big Hall	JESOR Session:	
	<ul style="list-style-type: none"> Dr. Amro Radwan (ASRT – JESOR Director), Cairo, Egypt Mrs. Salma Essawi (ASRT – JESOR Coordinator), Cairo, Egypt 	
	Conference Recommendations:	
	<ul style="list-style-type: none"> Prof. Naser El Sheimy (AEAS President), Canada Prof. Mohamed Attalla (AEAS Conference Co-Chair), USA Prof. Wahied G. Ali Abdelaal (EAE&AT's Dean), Egypt 	



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