Events for promoting conservation and sustainable utilization of land

1. Conference on Sustainable Development of Livestock Production Systems





Invitation

During November 7-9, 2017 the Department of Animal and Fish Production, Faculty of Agriculture, Alexandria University will host the 3rd International Conference themed "Sustainable Development of Livestock Production Systems". We would like to invite you and your colleagues to participate in the conference and looking forward to having you here in Alexandria during the nice weather of November 2017.

Objectives

The conference aims to encourage participation and interaction among scientists and stakeholders involved in livestock production industry; offering a platform for academics as well as entrepreneurs to mutually exchange the thoughts and ideas in the area and to discuss the challenges facing this industry in the developing nations.

Topics

- 1) Alternative feed resources.
- 2) Manipulation of rumen fermentation.
- 3) Methane mitigation in ruminants.
- Climate changes and productivity of livestock.
- The nexus among nutrition, fertility and environment in ruminants.
- Bio & Nano-technology approaches in livestock production.
- Animal welfare, products and food security.
- 8) Fish farming and aquaculture aspects.
- Marketing and economics of various livestock production systems.
- Reproduction and Breeding systems.

2. Conference on "Role of Engineering Towards Better Environment" RETBE'21

Towards achieving the 2030 vision, the Faculty of Engineering at Alexandria University is hosting the 12th International Conference "Role of Engineering Towards Better Environment" RETBE'21. The theme of the conference this year will be "Vision 2030: Engineering Challenges in the Midst of the Pandemic".

The conference will be held from 20 to 22 December 2021 in Alexandria, Egypt. It continues to uphold the mission of the preceding successful series of RETBE conferences that started over 20 years ago, emphasizing the challenges facing the environment and the need for innovative actions and policies.

RETBE'21 conference is to bring together innovative Academia, Industry and Government in the fields of: Engineering, Technology and Environment to a common platform where researchers, scientists, and engineers can exchange their findings with global experts and officials.





Within the 2030 vision, the conference provides attendees and participants with the opportunity to share their experiences and ideas with peers from various parts of the world with the purpose of helping delegates to foster business and research relations for collaboration in the future



	Day 1: Monday, December 20 th , 2021	
08:30 am	Registration (all day)	Faculty of Engineering
09:00 am - 10:45 am	Opening Ceremony: Prof. Rawya Kansoh, Conference Coordinator, Faculty of Engineering, Alexandria University Prof. Essam Wahba, Vice Dean, Faculty of Engineering, Alexandria University Prof. Said Allam, Dean, Faculty of Engineering, Alexandria University Prof. Abdelaziz H. Konsowa, President, Alexandria University	Hall A1
11:00 am - 12:00 pm	Keynote Speech Water Scarcity Research and Education in the Eras of Climate Change and Sustainable Development Prof. Hani Swelliem, RWTH Aachen University, Germany	
12:00 pm - 01:00 pm	Coffee Break	
01:00 pm - 01:15 pm	Delta Building Systems	
01:15 pm - 03:00 pm	Panel Discussion hosted by RETBE 21 Climate Change and Global Warming « Getting ready for UN COP 27 » Session Moderator Prof. Rawya Kansoh, Faculty of Engineering, Alexandria University	

	Technical Virtual Meetings v Coordinators: Dr Yousry Taha, Dr	
04:00 pm - 05:30 pm	Session #1: Water Issues *Chair Person: Prof. Haytham Awad *Co-chair: Dr Mohamed R. Torkomany Meeting ID: 976 2365 8279 Password: RETBE21	Session #2: Sustainable Urbanism *Chair Person: Prof. Hassan K. Abdel Salam *Co-chair: Dr Dina Saadallah Meeting ID: 860 7787 8928 Password: RETBE21
	Critic comparative analysis approach for Alexandria port – Alexandria city – Egypt, Mona Sayed Seifelislam, Amira. A Fathi, Ali Bakr.	Assessment of Livability in the Urban Built Environment in Alexandria, Egypt, Heba M. Affara, Hany M. Ayad, Dina M. Saadallah .
	Assessment of The Long-Term Shoreline Changes of El Alamein Coastal Area, Egypt, Ahmed Slama. Elstohey, Maysara Khairy El-Tahhan, Walid E. Reda, Hossam M. Moghazy.	Coastal Cities' Blue-Green Infrastructure Model (BGIM) The Case of New El-Alamin City, Egypt, Tasneem Amr, Asmaa Hassan, Khalid El Hagla .

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	Risk management and cost analysis of treated wastewater reuse: Proposal for the New Al-Alamein city, Egypt, Sara AbdelMoula, Mohamed T. Sorour, Samia A. Aly.	Creating Sustainable Cities: Biomimicry as Conducive Approach, Sherouk Seif, Walid abdelal, Ali Bakr
	The Performance of Novel Draw Solutions in Brackish Water Desalination Using Forward Osmosis, T. M. Zewail, M.A. Dawod, S. M. Abd Elrazik, S.E. Elalfy, M. A. Saad, El-Sh. Ibrahim	The Influence of Urban Economics on The Growth of Historic Cities (Case Study: Alexandria), Rahma Hassan, Hassan Abdel Salam, Asmaa E. Hasan
		Effects of Vertical Densification on the built environment in the city of Alexandria, Walaa Khaled Helal, Dina M. Saadallah, Dina Taha.
		<u> </u>
06:00 pm - 07:30 pm	Session #3: Renewable Energy *Chair Person: Prof Wael Elmaghlany *Co-chair: Dr Mohamed Elhelw Meeting ID: 922 7832 3650 Password: RETBE21	Session #4: Sustainable Architecture *Chair Person: Prof Dina M. Nassar *Co-chair: Dr Ingi A. El Cherif Meeting ID: 835 5232 7943 Password: RETEE21
	Can Egypt achieve its target of 20% of electric energy from renewables by 2022? Tarek ElShennawy .	Architectural Programming and physical Sustainability: Optimizing Adaptability in the Pre-Design Phase, Sarah Essam, Hassan Abdel Salam, Asmaa E. Hasan
	Optimization of Green Hydrogen Utilization for Power Generation and Liquefaction for Export, A. Saleh, D. AbulMaaty, M. Mohsen, R. ElAdawy, Y. Mohamed, D. ElGayar, S. Haddara, H. Warda.	Morphology of Architectural Structure: An Approach to Assess Quality of Spaces and Performance of The Resulted Built-Forms, Yara H. Helmy, Ibrahim E. Ma'arouf, Asmaa E. Hasan
	Validation and Optimization of a Three Floats Wave Energy Converter, A. R. Bassiouny, Y. Welaya, Khaled A. Geba, T. M. Ahmed.	Biomimicry Principles as a Tool for Evaluating Buildings, Basma M. Abdel Aleem, Mohamed A. Fikry
	Influence of the variations of the geometrical parameters on the flanged diffuser augmented wind turbine performance, Amr M. Abdelrazek, Ahmad O. Abdelrazek, Sadek Z. Kassab.	Enhance the Environmental Performance of Existing Office Building Using Passive Cooling Techniques, Engy F. M. Ishak, Alessandro Rogora, Ibrahim H. Salch, Zeyad M. Elsayed
	The Effect of Endplate Addition on the Perf Wind Turbine: A 3-D study, Sadek Z. Kassab, Chemengich S. Jamar, Eslam R. Lotty.	Improving Energy consumption in social housing by using different levels of retrofitting, Allaa M. Abu Eldahb, Zeyad M. Elsayad, Ali F Bakr.

^{*} Faculty of Engineering, Alexandria University

Mass transfer Behavoir for a Gas Sparged rotating Cylinder electrode, H. K. Ali, S. A. Nosier, I. H. Mohamed, G. H. Sedahmed, M. A. El-Naggar

Behavior of Reusable T-Stub Beam Column Connection, Mohaymen Moustafa, Ahmed M.Khalifa, Ahmed Shamel Fahmy.

Achieving resilience in COVID-19's New Normal: Changes in office buildings and workspaces design according to social distancing and teleworking parameters, Mohammed S. Ali, Tarek A. Farghaly, Dina M. Saadallah.

	Day 2: Tuesday, December	21 st , 2021
06:00 pm – 07:30 pm	Session #7: Energy *Chair Person: Prof. Mohamed Teamah *Co-chair: Dr Ahmed Elwardany Meeting ID: 939 6738 1304 Password: RETBE21 Numerical Investigation of Planning Hull Resistance Using Different Turbulence Models, Alsmoual A. Alhassan, Adel A. Banawan, Yasser M. Ahmed, Tamer. M. Ahmed, Maged M. Abdelnaby	Session #8: Technology in Architecture *Chair Person: Prof Dina S. Taha *Co-chair: Dr Asmaa El Sayed Meeting ID: 847 4126 5750 Password: RETBE21 (VIRTUAL HERITAGE) Digital Documentation and conservation of heritage, Heba Slumah, Mohamed Fikry, Waled Abdel Aal.
	Sustainable retrofits for high-rise building envelopes in North America: A communication, H. M. Teamah, M. Teamah. Reducing Carbon Footprint of Thermal Natural Gas Power Plants Using Cryogenic Carbon Capture Technology, Abdurrahman A. Alsanousie, Abdelhamid E. Attia, Mohamed Elhelw, Osama A. Elsamni.	Retrofitting Historical Buildings for Fire Resistance, Renal Salama, Mohamed Anwar Fikry, Ibrahim Marof A Holistic Approach for the Digital Documentation of Urban Cultural Heritage Using HBIM, Lara A. Awad, Khalid S. M. Al-Hagla, Dina M. Nassar
	COVID-19 & the Nuclear Industry: Review of Impacts and Implications for Newcomer Countries, Mohamed H. M. Hassan .	Acoustic Environment and Architectural Characteristics of learning spaces via its Soundscape, Ayat K. Kamal, Mostafa R. Ismail, Mohammed S. Mayhoub.
	Spotlight on the influence of various parameters, related to the inlet injection region, on an air-water air lift pump performance, Sadek Z. Kassab, Abdelrahman A. Abdelrazek, Eslam R. Lotfy.	Designing Low Rise Green Buildings in Iraq with Emphasis on Structural Design Optimization and Thermal Performance, Shaymaa Mohammed Abass, A.Shamel Fahmy, Zeyad M.ElSayad, Shreen Moustafa Sewilm.
	Performance evaluation of a MOF-801 packed in copper foams- based adsorption cooling and desalination system, Mohamed Rezk, Mahmoud Elsheniti, Osama A. Elsamni.	Biomimetic Adaptation Techniques in Facades in Coastal Hot Climates, A.W. Mariam, H. Asmaa, E.H. Khaled.

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3. Alexandria University – A Green University

Alexandria University is a pioneering University in changing many societal and environmental beliefs and practices that could negatively affect climate changes and carbon emissions. It has an important role in as a leader university and is committed to participate to developing environment friendly infrastructure, arranging universities according to sustainable development processes and adherence to green environment standards.

The university took an initiative towards to implement the state's general policies launched to ensure the role of universities to implement sustainability and a green environment through the university's unity and activities and the product of scientific research and its application.

The implementation green university is in line with of the goals of the United Nations to achieve true sustainable development, whether for the university community or the surrounding community. It is also in line with Egypt's 2030 Sustainable Development Plan and is compliant with the recommendations of the United Nations on the necessity of campus sustainability.

Sustainability indices for green universities is based on 10 basic axes that represent the basic concepts of the principles of preserving the environment, sustainability, environment friendly infrastructure and fulfilling the standards for both energy, climate exchange, waste management, water management, internal transport, environmental quality, and sustainability compliance with environmental laws and legislation.

Alexandria University adopted a set of integrated standards on strategies, tools and resources that the university should adopt and use in order to achieve the principle of sustainability. Such standards should bring about a positive change on the environmental aspect of the university campus, its buildings, reduce environmental impacts, work to reduce the environmental footprint of Alexandria University and raise the positive environmental footprint of the university.

Green economy as a context of sustainable development is one of the important tools available to achieve the areas of development, and it contributes to eliminating waste of resources, achieving economic growth, promoting social inclusion, improving human conditions, creating job opportunities and providing decent work for all. At the same time, this will ensure the sustainability of ecosystems' goods and services and a clear understanding of the interdependence between environmental sustainability and good political practices and effective institutional mechanisms, so that this will be decisive criteria for setting an effective national policy and making a fundamental contribution to the international efforts to achieve sustainable development.

Foundation of a green university has the following objectives:

- spreading the culture of sustainability in Egyptian universities.
- To contribute to having environment friendly buildings in Alexandria University

- Promote university-led social change in relation to sustainability goals.
- Contributing to achieving global goals for preserving the environment.

The criteria to achieve the principle of green sustainability in Alexandria university are as follows:

- 1. Energy and Climate Change (EC). Using solar energy as a clean source of electricity as an alternative to electricity based on fuels.
- 2. Providing green spaces on campus.
- 3. Transfer within the university. Adopting means of transportation inside and outside the university campus for students, staff and faculty members that do not pollute the environment.
- 4. Waste Management (WS).
- 5. Water (WR).

Smart Green University Proposal Indicators:

1. Energy and Climate Change (EC)

According to this indicator, solar energy is relied on as a clean and renewable source of electricity instead of relying on traditional sources of electric energy that depend on fossil fuels and pollute the environment. In this context, we suggest:

- The use of lighting poles inside the university campus equipped with solar cells for night lighting.
- Putting solar energy cells on the roofs of buildings inside the campus to provide those buildings with electric energy

during work periods.

- Supplying cafeterias on campus with solar energy cells to generate electricity instead of the traditional sources of electric energy
- Adopting the use of LED lighting that save electrical energy inside the campus buildings instead of the traditional lighting that use more electrical energy.
- Taking into account the use of devices that help to save electricity as much as possible on the campus.
- Establishing a mechanism to save
 - the use of electric energy inside the university campus that ensures the ideal use of electric energy inside the classrooms, as well as administrative offices during non-working hours, to prevent energy waste and achieve optimal use of it while continuing to maintain the efficiency of the educational process.
- Adopting the concept of the smart building in order to accommodate the use of all devices energy saving which means using internet-connected technology, as an integral part architecture engineering to monitor and control structural design elements to share information between users, systems and buildings.







2. Providing green spaces on campus

Designing open spaces inside the university campus in a way that provides the largest possible amount of green spaces and trees, which would reduce the rate of carbon dioxide emissions resulting from activities on the campus.



3. Transfer within from /to the University university

The transportation system plays an important role on the level of carbon emissions and pollution sources in the university. The transportation policy encourages reducing the number of cars in universities, and the use of campus buses and bicycles which collectively create a healthy environment. Also, this policy encourages students, staff, and faculty to walk around, and to avoid using private cars. The use of environmentally friendly public transportation will reduce the carbon level on campus.

- Providing bicycle parking in suitable spaces allows students and workers to use them to move within the university campus effectively as an alternative to traditional means of transportation.
- Providing mass transportation (buses) for staff and faculty members to travel to and from the university campus instead of using private cars as a single means of transportation, which will reduce carbon dioxide emissions.



- Adopting the state's initiative to provide bicycles announced by the Ministry of Youth and Sports under the slogan "Your bicycle is Your Health" for students and workers with supported prices to expand the base for practicing sports and play sports a lifestyle

4. Waste Management (WS)

According to this indicator, a policy is adopted to recycle waste by separating it from the source into four types:

• Organic waste and food residues.

- Plastic waste and plastic bags.
- Mineral waste and carbonated water cans.
- Paper waste

This allows for the recycling and utilization of as much of that waste as possible instead of disposing of it in landfills, which will eventually lead to its burning and the consequent pollution of the environment and the increase in emissions of greenhouse gases.

Alexandria University adopted a mechanism for healthy food and beverage within university dorms (providing healthy, balanced foods, a mechanism for packaging food and drinks, storing them, and a mechanism for maintaining a healthy atmosphere for dining places on campus).

5. Adoption of a preservation mechanism for water.

Water use in the campus is an important indicator in the sustainability scale. The aim is to urge universities to reduce water use, increase water conservation programs, and protect the environment.

The steps taken are: a water conservation program, a recycling program Water, Using Water-Saving Equipment, and Treating Wastewater. This was carried out through:

- Water-saving appliances are used instead of traditional appliances. This indicates the extent to which water-saving devices are used (for example, using a sensor-controlled automatic hand washing faucet, and highly efficient bathroom appliances.
- Supplying water taps with water saving units.
- Adopting a mechanism for maintaining water pipes to prevent waste resulting from leaks.
- Adopting plans and mechanisms to maintain the university's internal supply networks and taps to prevent water wastage.
- Providing a wastewater treatment plant in the university to make it suitable





for irrigation of green spaces and gardens located within the university campus