

Ministry of Defence
Military Technical College



Conference Program



The International Scientific Conference of
Military Technical College

2025



Program of International Scientific Conference of the Military Technical College 2025

Allocated Rooms and Halls for Sessions, Workshops, and Seminars of the International Scientific Conference of the Military Technical College 2025

S - Building:

- Ibraheim Abd El-Naby Hall
- Abd El-Hameed Shawky Hall

College Library:

- Registration
- 10th of Ramadan Hall**
- Opening the Conference & Closing Session
- Medhat Mustafa**

C - Building:

- ACG- Hall
- Comp. & AI. Hall
-

E - Building:

- E06 Hall
- E07 Hall

PG - Building:

- From Room 4 to Room 13
- Poster Session Hall
- Abdelaziz Seif Hall



AMME-22

International Conference
on Applied Mechanics and
Mechanical Engineering



ASAT-21

International Conference on
Aerospace Sciences & Aviation
Technology



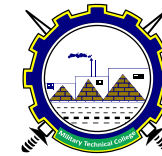
ICEENG-15

International Conference on
on Electrical Engineering



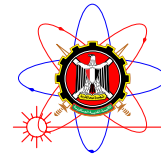
ICCAE-16

International Conference
on Civil and Architecture
Engineering



ICEE-13

International Conference on
Chemical and Environmental
Engineering



ICMEP-13

International Conference
on Mathematics and
Engineering Physics



The 13th International Conference of Chemical and Environmental Engineering (ICEE-13)

Monday 12 May 2025 - Day 1

Time	Hall	Session Name
08:00 - 09:00	College Library	Registration
09:00 - 11:45	10 th of Ramadan Hall	Opening the Conference & Opening Lecture
12:00 - 14:00	Medhat Mustafa	Biomedical Applications of Electrospun Nanofibers in Drug Delivery and Antimicrobials Prof./Mona Abdel Latif Director of the City for Scientific Research and Technological Applications
		Peaceful Applications of Nuclear Sciences in the Service of Society Prof./Amr El-Haj Ali Chairman of the Egyptian Atomic Energy Authority
		Challenges Governing the Egyptian Nuclear and Radiological Regulatory Authority in the Egyptian Nuclear Project Prof./ Sami Shaaban Atallah Chairman of the Egyptian Nuclear and Radiological Regulatory Authority
14:15 - 15:30		Nanomaterials and Nanotechnology for Chemical Engineering Applications (NCA)





The 13th International Conference of Chemical and Environmental Engineering (ICEE-13)

Tuesday 13 May 2025 - Day 2

Hall \ Time	8:00 - 08:45		09:00 - 10:30		10:45 - 12:00		12:15 - 13:30		13:45 - 15:30
Medhat Mustafa	The Egyptian Nuclear Project: Challenges and Current Developments in the Technological Infrastructure Dr. Mohamed Sayed Dowidar Nuclear Power Plants Authority for Electricity	Break	Workshop 1 Challenges of the Nuclear Egyptian Project Prof. / Hamed Mira Head of the Nuclear Materials Authority Prof./Yasser Lashin Nuclear and Radiological Regulatory Authority Prof./Mahmoud Ali Nuclear and Radiological Regulatory Authority	Break	Nuclear Reactor Engineering and Applications (NRE)	Break	Polymer Processing and Technology	Break	Workshop 2 Friendly Sources of New and Renewable Energy Dr. Maysa Salah El-Din Director of the Research and Development Sector at the Alexandria Drinking Water Authority Maj.Gen./ Ahmed Baraka Military Technical College





The 13th International Conference of Chemical and Environmental Engineering (ICEE-13)

Wednesday 14 May 2025 - Day 3

and Industrial

Hall \ Time	8:00 - 08:45		09:00 - 10:15		10:30 - 11:45		12:00 - 13:30		13:15 - 15:30
Medhat Mustafa	Sustainable Applications and Waste Management - Past, Present, and Future Prof./ Mohamed Mustafa El-Khayat Chairman of the New and Renewable Energy Authority	Break	Renewable Energy and Sustainability (RES)	Break	Environmental Protection and Control (EPC)	Break	Workshop 3 Integration of life sciences to meet contemporary Biological Engineering challenges Prof. / Abeer El-Sayed Dean of the Genetic Engineering and Biotechnology Research Institute Prof. / Ahmed Shalaby Center of Scientific and Technological Excellenc Prof. / Doaa Gharib Faculty of Science - Alexandria University	Break	Chemical, Petrochemical, chemical Engineering (Processes, Catalysis, Simulation & Modeling) (CPI)

Thursday 15 May 2025 - Day 4

Hall \ Time	08:30 - 09:15		09:30 - 11:30
Medhat Mustaf	Workshop 4 New Trends in applying the energetic materials in civilian applications Maj. Gen./Mohamed Amin El-Shaheer Deputy Dean of the Faculty of Engineering - BUC Maj. Gen./ Reda Edward Assistant Director of the Military Engineering Department	Break	Energetic Materials Technology (EMT)



Session No 1

**Nanomaterials and Nanotechnology for Chemical Engineering
Applications (NCA)**

Room: Medhat Mostafa Hall

Date : Monday, 12/05/2025

Time : 14:15 – 15:30

Board: General (R) Prof. Dr. / Said Hassanin
Prof. Dr. / Karim AlAdham

MTC
EAEA

ICEE-29	Cellulose Nanocrystals and Nanofibers: A Review on Synthesis, Characterization, and Military Applications <u>Waleed M. Gebreel, Ahmed M. Maraden and Hosam E. Mostafa</u>
ICEE-33	Supramolecular Coordination Polymer Nanotube Additive for Enhanced Performance and Reduced Emission in Diesel Engines Using Biodiesel/Diesel Blend Fuels <u>Mona M. Fouda, Safaa E. H. Etaiw, Dina M. Abd El-Aziz, Medhat Elkelawy, Hagar A. Bastawissi</u>
ICEE-35	Fabrication and Characterization of an NBR-Based Nano Composite Shield for Protection Against Nonthermal Effects of Radar Electromagnetic Radiation <u>Ahmed El-Sayed Azzazy, Sayed Bakri Ahmed, Ahmed Abdel Nazir Ahmed, Omar Mohamed Siddiq Al-Minshawy, Yassin Abdelbaset, Ahmed Elbeih, Hosam E. Mostafa, Mahmoud Abdelhafiz</u>
ICEE-40	Removal of Trinitrotoluene Traces from Water using Graphene Oxide Nanosheets <u>Waleed F. Khalil, Yassin Abdelbaset, Mahmoud Abdelhafiz, Ahmed Elbeih, Hosam E. Mostafa</u>

Session No. 2
Nuclear Reactor Engineering and Applications (NRE)

Room: Medhat Mostafa Hall

Date : Tuesday, 13/05/2025

Time : 10:45– 12:00

Board: Prof. Dr. / Hamed Mira

Brigadier Prof. Dr. / Ahmed F. Tawfik

NMA

MOEE

ICEE-10	Uranium and associated element detection of the carbonaceous shale and dolostone, Southwestern Sinai, Egypt <u>A H Bishr, H I Mira</u>
ICEE-17	Photochromic Zirconium-Based Coordination Polymer for Colorimetric Dosimetry of Absorbed Gamma Radiation Dose. <u>Karim Gado, Ramy Abdlaty, Osama Abuzalat, Hesham Ramzy Tantawy, and Ahmad Baraka</u>
ICEE-19	Efficient Uranium (VI) Extraction from Aqueous Solutions Using Commercial Anion Exchange Resin: Advanced Analysis of Kinetics, Adsorption Models, and Thermodynamic Behavior <u>El Sayed A Haggag, Walid M Youssef, Ahmed M Masoud, Ahmed E M Hussein, Mahmoud M Elmaadawy, Mohamed H Taha, and Yasser M Khawassek</u>
ICEE-23	Geological and Mineralogical Studies of Uraniferous Microgranites from Ras Abda Area, North Eastern Desert, Egypt <u>G M Saleh, H. I. Mira, M. Dawoud, A. A. Omran, S. H. El Sawy, R. M. Saker and M S Kamar</u>
ICEE-42	Environmental Impact of Under Construction and Planned Nuclear Power Plants Projects in Egypt, Qatar, Saudi Arabia, United Arab of Emirates and Bahrain <u>Emad El-Din Sharouda</u>

Session No 3
Polymer Processing and Technology (PPT)

Room: Medhat Mostafa Hall

Date : Tuesday, 13/5/2025

Time : 12:15 – 13:30

Board: General (R) Prof. Dr. / Ahmed Baraka
Prof. Dr. / Mohamed Elkordy

MTC
Zewail City

ICEE-21	A Mini Review on Recent Advances in Luminescent Coordination Polymers as Sensors for Dichromate Detection <u>Marwa Gaber*</u> , Basem Zaghloul, Ahmad Baraka, and Osama Abuzalat
ICEE-36	Assessment of the mechanical functioning and robustness of geopolymer cement incorporating chloro-brine sludge waste <u>Fayza S. Hashem*</u>
ICEE-38	Studying the Effect of Polymer Solution Composition on Membrane Morphology and Performance <u>Ayman El-Gendi*</u> , S.A.R Ahmed, H.A. Talaat, N. M. A. EL-Monem

Session No 4

Renewable Energy and Sustainability (RES)

Room: Medhat Mostafa Hall

Date : Wednesday 14/5/2025

Time : 09:00 – 10:15

Board: Prof. Dr. / Mona Osman
Prof. Dr. / Sayed Bakry

SRTA-City
Al-Azhar University

ICEE-09	Impact of Used Cooking Oil Contamination in Kitchen Waste on Black Soldier Fly as a Bio-recycling Agent <u>Eman Alaaeldin Abdelfattah</u>
ICEE-25	Economic, environmental and technical recycling of plastics in the Automotive Industry <u>Hassan Abozeid*</u> , Zyad Mohamed, Ibrahim Mohamed, Karim Mansour, R.M. Zarraa, Reham Mohamden, and Ehssan Mohamed Reda
ICEE-28	Optimization of Process Parameters for the Valorization of Crude Glycerol into Triacetin <u>Zeinab Ahmed Elbhnsawi*</u> , Ziad Ezzat and Nessren M. Farrag
ICEE-44	Understanding Customer Demand for Activated Biochar in The Egyptian Water Treatment Sector <u>Diana S. Raie*</u> , Hanan H. Shaat, Enas Amdeha
ICEE-31	Sustainable Recycling of Thermoset Polymers: A DOE-Based Approach to Optimize Solvolysis of Glass Fiber-Reinforced Epoxy Composites <u>Omar Youssef*</u> , Mostafa Shazly, Mamdouh A. Gadalla, Nessren Farrag

Session No. 5
Environmental Protection and Control (EPC)

Room: Medhat Mostafa Hall

Date : Wednesday 14/5/2025

Time : 10:30 – 11:45

Board: Prof. Dr. / Ehsan Nassef
Prof. Dr. / Nessreen Farag

Faros University
BUE

ICEE-05	Mini-Review: Removal of organic pollutants from wastewater using modified agriculture wastes <u>Nour W. Sabry*</u> , Seed A. Hassanin, Ibrahim Naeem and Ahmad Baraka
ICEE-20	Optimization of Nuclear Energy for Sustainable Development and Climate Change Mitigation in Egypt <u>Nahla A. Ismaiel*</u> and A.F. Farrag
ICEE-43	Dual System for Treating Water and Generating Green Hydrogen Using Environmentally Friendly Techniques <u>Maisa SalahEldin Ismail Ahmed*</u> and Mohamed Attia Abd El-Latif
ICEE-45	From Waste Chitosan to Hybridized Scheme Thermal Energy Storage Facility: Numerical Process Optimization <u>Maha A. Tony*</u>

Session No 6
Chemical, Petrochemical, and Industrial chemical Engineering
(Processes, Catalysis, Simulation & Modeling) (CPI)

Room: Medhat Mostafa Hall

Date : Wednesday 14/5/2025

Time : 13:15 – 15:30

Board: Prof. Dr. / Fatma Ashour
Prof. Dr. / Maha Tony

Cairo University
Menoufiya University

ICEE-04	Effects of Sodium Fluoride Additives on Reactivity and Heat Transfer in a Molten Salt Fast Reactor <u>Marwa M. Emam*</u>
ICEE-08	Enhancing oil recovery of sandstone core samples using an innovative surfactant blend fighting severe reservoir conditions <u>Samah A.M. Abou-alfitooh*</u> , Mohamed A.S. Ragallah and Osama M. Elnaggar
ICEE-26	Selective Bromination of p-Xylene via Homogeneous Catalysis: Influence of Reaction Parameters on 2,5-Dibromo- p-Xylene Formation <u>Ahmed Fayoud*</u> , Mahmoud Y. Zorainy
ICEE-30	Agglomeration of Fine-Grained metallurgical and Petroleum Coke Kholoud Madih and <u>Nehal A. Erfan*</u>
ICEE-32	Leveraging Thermoelectric Coolers for Solar Distillation: A Review of Design and Distillate Yield <u>A. H. Omar*</u> , A. A. Abdel Aziz, A. A. Abdel-Rehim

Session No 7
Energetic Materials Technology (EMT)

Room: Medhat Mostafa Hall

Date : Thursday 15/5/2025

Time : 9:30 – 11:30

Board: General (R) Prof. Dr. / Mohamed Alshaheir BUE
Brigadier Prof. Dr. / Ahmed Elbieh MTC

ICEE-12	Extraction And Post-Explosion Trace Analysis of Inorganic Explosions <u>Mahmoud M. ElMorsy*</u> , Mohamed Helmy, Hosam E. Mostafa, Mahmoud Abdelhafiz
ICEE-14	Application of Insensitive Energetic Materials in Shaped Charge (Analytical and Numerical) <u>Ahmed Nabil*</u> , T Elshenawy, T. Z. Wafy and Ahmed Elbeih
ICEE-16	Infrared Obscuring Potential of Selected Red Phosphorous (RP)/Potassium Nitrate (KNO₃)-Based Smoke Compositions <u>Mohamed Said Goda*</u> , Mohamed Raafat Ibrahim, Mohamed Saad Aly, Ramy Sadek and Hesham Ramzy Tantawy
ICEE-18	Phase-Stabilized Hexa (Imidazole) Nickel (II) Nitrate Complex/Ammonium Nitrate Composite: Eco-Friendly Chlorine-Free Oxidizer with High Energy Density and Superior Decomposition Kinetics <u>Mohamed Attwa*</u> , Affaf K. Al-Oufy, Ahmed Maraden, and Sherif Elbasuney
ICEE-22	Effect of Cross-Linking Bonding Agent on The Ballistic Characteristics of Composite Solid Rocket Propellant at High Operating Pressure <u>Ahmed Abdelwahab*</u> , Ali M.abd Elall, Amir Elsaidy, H.E. Mostafa, Mahmoud Abdelhafiz
ICEE-39	Microreactor Based Flow Synthesis of 3-Nitro-1,2,4-triazol-5-one: A Novel Approach for Low-Sensitivity High Explosive <u>Mohamed Elnegoumy*</u> , Charles Dubois, Etienne Comtois, Ahmed Elbeih