













# **Conference Program**

### **Conference Day 1**

Tuesday, December 27<sup>th</sup>, 2022

Location: Ain Shams University, Faculty of Medicine, Al Mahalawy Building

|         |         |  | _ 0      |
|---------|---------|--|----------|
| From    | То      | Event  | Location |
| 3:00 PM | 4:00 PM | Registration   | TBD      |
| 4:00 PM | 4:05 PM | Dr. Mohamed Attalla                                      |          |
|         |         | Conference Chair, City University of New York            |          |
| 4:05 PM | 4:10 PM | Dr. Mohamed Hegab  |          |
|         |         | California State University                              |          |
|         |         | AEAS President   |          |
| 4:10 PM | 4:15 PM | Dr. Ali Masoud (Online)                                  |          |
|         |         | Director of Egyptian Cultural Office, Washington         |          |
| 4:15 PM | 4:25 PM | Dr. Rami Galal,  |          |
|         |         | Chair, the External Affairs Committee, Egypt Senate      |          |
| 4:25 PM | 4:35 PM | H.E. Ambassador Howayda Essam (Online)                   |          |
|         |         | Egypt Council General, New York                          |          |
| 4:35 PM | 4:45 PM | H.E. Dr. Mahmoud Elmetini                                |          |
|         |         | President, Ain Shams University                          |          |
| 4:45 PM | 4:55 PM | H.E. Ambassador Suha Gendy                               |          |
|         |         | Minister of Immigration and Egyptians Abroad             |          |
| 4:55 PM | 5:05 PM | H.E. Dr. Ayman Ashour                                    |          |
|         |         | Minister of Higher Education and Scientific Research     |          |
| 5:05 PM | 5:15 PM | Recognitions   |          |
| 5:15 PM | 5:30 PM | Dr. Salah Hassan   |          |
|         |         | George Washington University                             |          |
|         |         | The Future of Eco-Smart Cities and the Transformation of |          |
|         |         | Universities   |          |
| 5:30 PM | 5:50 PM | Dr. Ayman Elbaz  |          |
|         |         | University of Louisville, USA                            |          |
|         |         | "Role of Big Data and AI in Personalized Medicine"       |          |
| 5:50 PM | 6:10 PM | Dr. Adel Elmaghraby                                      |          |
|         |         | University of Louisville, USA                            |          |
|         |         | "Technology Trends for Behavioral Health"                |          |
| 6:10 PM | 6:30 PM | Dr. Mohamed Elmasry                                      |          |
|         |         | University of Waterloo, Canada                           |          |
|         |         | "Can Egypt join the world of manufacturing microchips?"  |          |
| 6:30 PM |         | Networking   |          |
|         |         |  |          |















### Conference Day 2 Wednesday, December 28<sup>th</sup>, 2022 Location I Hub

| From     | То  | Event   | Location |  |  |
|----------|---|---|----------|--|--|
| 8:00 AM  | 9:00 AM   | Registration  | TBD      |  |  |
|          | Plenary Session (9:00 AM – 11:00 AM)<br>Moderator: Dr. Tarek Saadawi, City University of New York |   |          |  |  |
| 9:00 AM  | 9:20 AM   | Plenary Talk: Alaa E. El-Sharkawy Lawrence Technological University, USA "Engineering Education and Future Opportunities in the Development of Hybrid and Electric Vehicles."     |          |  |  |
| 9:20 AM  | 9:40 AM   | Plenary Talk: Dr. Moeness Amin Villanova University, USA "Defining and Building the Engineering Workforce of the Future."   |          |  |  |
| 9:40 AM  | 10:00 AM  | Plenary Talk: Dr. Ayman Mossalam University of California, USA "Next Generation Scada for Disaster Mitigation of Water & Wastewater Network Infrastructure."                      |          |  |  |
| 10:00 AM | 10:20 AM  | Plenary Talk: Dr. Ahmed Mohamed and Dr. Mohamed Attalla City University of New York, USA "Power Grid Decarbonization and Modernization: The New York City Case."                  |          |  |  |
| 10:20 AM | 10:40 AM  | Plenary Talk: Dr. Moatassem Abdallah University of Colorado, USA "Electricity Peak Shaving for Commercial Buildings using Machine Learning and Vehicle to Building (V2B) System." |          |  |  |
| 10:40 AM | 11:00 AM  | Plenary Talk: Dr. Khaled Elgazzar<br>Ontario Tech University, Canada<br>"Internet of things recent Evolutions and Scientific<br>applications"                                     |          |  |  |















| AND SCIENTIFIC RESEARCH  |  |  |  |  |  |
|--|--|--|--|--|--|
| 11:00 AM   | 11:15 AM   | Coffee Break   |  |  |  |
|  | Round Table Discussion (11:30 AM – 1:00 PM) Ain Shams University Leadership and North American Delegates |  |  |  |  |
| 1:00 PM  | 1:30 PM  | Break  |  |  |  |
|  | Plenary Session (1:30 PM – 3:10 PM)<br>Moderator: Dr. Iman Abou Elfetouh, Rutgers University             |  |  |  |  |
| 1:30 PM  | 1:50 PM  | Plenary Talk: Dr. Naser Elsheimy<br>University of Calgary, Canada<br>"Navigation Technologies for Future Autonomous<br>Vehicles."  |  |  |  |
| 1:50 PM  | 2:10 PM  | Plenary Talk: Dr. Hanaa Rezk<br>Smith MacCoy & Associates, California, USA<br>"Decent Life Initiative for A Climate Resilient Africa:<br>A Case Study"                                     |  |  |  |
| 2:10 PM  | 2:30 PM  | Plenary Talk: Dr. Elsayed Elbeshbishy<br>Toronto Metropolitan University, Canada<br>"Organic Wastes: Is It Really WASTE?."   |  |  |  |
| 2:30 PM  | 2:50 PM  | Plenary Talk: Dr. Ahmed Mohamed and Dr.  Mohamed Ali  City University of New York, City College, USA  "On the Use of Wayside Energy Storage to Rescue  Subway Trains During Power Outages" |  |  |  |
| 2:50 PM  | 3:10 PM  | Plenary Talk: Dr. Alaa E. El-Sharkawy<br>Lawrence Technological University, USA<br>"Thermal Management and Development of Electric<br>Vehicles for Improved Environmental Quality"         |  |  |  |
| 3:10 PM  | 3:50 PM  | Lunch  |  |  |  |
| Plenary Session (3:50 PM – 5:30 PM)  Moderator: Dr. Mohamed Aziz, University of Louisville |  |  |  |  |  |

49<sup>th</sup> Annual International Conference for the Association of Egyptian American Scholars in Partnership with Ain Shams University















|           | Plenary Talk: Dr. Adel El shahat                   |  |
|-----------|--|--|
|           | Purdue University, USA                             |  |
| 4:10 PM   | "Sustainable E-mobility Transportation Feasibility |  |
|           | Study for Integrated Solar Roads with Wireless     |  |
|           | Charging and Applicability of Vortex Bladeless"    |  |
|           | Plenary Talk: Dr. Mohamed Elhalwagy                |  |
| 4.20 DM   | Pioneer Food Consulting, Toronto, Canada           |  |
| 4.50 PIVI | "Technologies to Help Make the Food System         |  |
|           | Carbon Neutral"                                    |  |
|           | Plenary Talk: Dr. Ashley Ansara                    |  |
| 4:50 PM   | Regency holding, Medical Development, Florida, USA |  |
|           | "Privatization and Foreign Debt Equity Swab (FDES) |  |
|           | is the Key to Solve Egypt Economic Challenges"     |  |
|           | Plenary Talk: Dr. Mohamed Aziz                     |  |
| 4.20 DM   | Professional Psychiatric Services, USA             |  |
| 4.50 F W  | "UAV mapping in support of high throughput         |  |
|           | phenotyping"                                       |  |
|           | Plenary Talk: Dr. Tarek Sayed                      |  |
| 5·10 PM   | University of Britch Colombia, Canada              |  |
| J.10 1 W  | "Towards A Sustainably Safe Urban Network: The     |  |
|           | Role of Advanced Technologies and Big data"        |  |
| 5:30 PM   | Networking   |  |
|           | 4:30 PM<br>4:50 PM<br>4:50 PM                      | 4:10 PM  "Sustainable E-mobility Transportation Feasibility Study for Integrated Solar Roads with Wireless Charging and Applicability of Vortex Bladeless"  Plenary Talk: Dr. Mohamed Elhalwagy Pioneer Food Consulting, Toronto, Canada "Technologies to Help Make the Food System Carbon Neutral"  Plenary Talk: Dr. Ashley Ansara Regency holding, Medical Development, Florida, USA "Privatization and Foreign Debt Equity Swab (FDES) is the Key to Solve Egypt Economic Challenges"  Plenary Talk: Dr. Mohamed Aziz Professional Psychiatric Services, USA "UAV mapping in support of high throughput phenotyping"  Plenary Talk: Dr. Tarek Sayed University of Britch Colombia, Canada "Towards A Sustainably Safe Urban Network: The Role of Advanced Technologies and Big data" |















## Conference Day 3 Thursday, December 29<sup>th</sup>, 2022

#### I-HUB

| From     | То  | Event   | Location |  |  |
|----------|---|---|----------|--|--|
|          | Plenary Session (9:00 AM – 11:20 AM)<br>Moderator: Dr. Ahmed Elsawy |   |          |  |  |
| 9:00 AM  | 9:20 AM   | Plenary Talk: Dr. Adel El Shahat Purdue University, USA "Cost-effective Al-Power Conversion Framework for Hydrogen Generation based on Waste-to-Energy Integrated System."              |          |  |  |
| 9:20 AM  | 9:40 AM   | Plenary Talk: Dr. Iman Abou Elfetouh<br>Rutgers University, USA<br>"Bloom's Taxonomy."  |          |  |  |
| 9:40 AM  | 10:00 AM  | Plenary Talk: Dr. Gamal El Afandy Tuskegee University, USA "Identifying Adaptation Strategies for Mitigating Climate Change Impacts on Soybean Yields: Case Study from Alabama, USA."   |          |  |  |
| 10:00 AM | 10:20 AM  | Plenary Talk: Dr. Ahmed ElSawy Tennessee Technological University, USA "Improving the Yield of Biodiesel Production Using Waste Vegetable Oil Considering the Free Fatty Acid Content." |          |  |  |
| 10:20 AM | 10:40 AM  | Plenary Talk: Dr. Tarek Saadawi<br>City University of New York, City College, USA<br>"Transpacific Testbed for Real-Time Cybersecurity<br>Experimentation                               |          |  |  |
| 10:40 AM | 11:00 AM  | Plenary Talk: Dr. Mohamed Hegab<br>California State University, USA<br>"Construction Projects: Creating a Holistic<br>Performance Index"  |          |  |  |
| 11:00 AM | 11:20 AM  | Plenary Talk: Dr. Ayman Habib<br>Purdue University, USA<br>"UAV mapping in support of high throughput<br>phenotyping"   |          |  |  |

49th Annual International Conference

for the Association of Egyptian American Scholars in Partnership with Ain Shams University















| 11:20 AM   | 11:45 AM   | Break   |    |
|------------|------------|---|----|
|            |            |   |    |
|            |            | Breakout Sessions (11:45 AM – 2:00 PM)  |    |
|            | Mo         | oderator: Dr. Ayman Habib, University of Purdue Dr. Adel Elshahat, University of Purdue |    |
|            |            | Dr. Prof. Wahied Gharieb Ali Abdelaal   |    |
|            |            | Ain Shams University  |    |
|            |            | "Sustainable Development in Egypt: Challenges and                                       | L1 |
|            |            | Opportunities"  |    |
| 11:45 AM   | 12:00 PM   | Dr. Hadeel Elahraf  |    |
|            |            | The American University in Cairo  | L2 |
|            |            | "Giving Parents a Voice: Views of Inclusive   | L2 |
|            |            | Education In Egyptian Schools"  |    |
|            |            | Dr. Hebatullah Ashraf   |    |
|            |            | German University   |    |
|            | 10.15.514  | "Nanomaterials Rule in Increasing Water thermal   | L1 |
|            |            | properties of Decentralized solar still"  |    |
| 12:00 PM   | 12:15 PM   | Dr. Mona A. M. Abo-Zeid   |    |
|            |            | National Research Centre  |    |
|            |            | "Prohibition of Chemokine Gene Marker Declines  |    |
|            |            | Cancer Cell migration and Invasion: In Vitro Study"                                     |    |
|            |            | Dr. Mahmoud Elgamal   |    |
|            |            | Ain Shams University  |    |
|            |            | "Chronic Kidney Disease Prediction a Comparative  | L1 |
|            |            | Analysis using K-Nearest Neighbour, Logistic  |    |
| 12:15 PM   | 12:30 PM   | Regression, and Optimized XGBoost"  |    |
| 12.13 FIVI | 12.50 FIVI | Dr. Nasr, Amal / Abouhamad, Mona / ElSaid,  |    |
|            |            | Moheeb  |    |
|            |            | Cairo University  | L2 |
|            |            | "Life cycle emissions assessment for buildings in                                       |    |
|            |            | Egypt"  |    |
|            |            | Dr. Nermeen Aboelkhair, Mohammed El Nadi, Omar  |    |
| 12:30 PM   |            | El Hossieny   |    |
|            | 40 45 51 5 | Banha University  | L1 |
|            | 12:45 PM   | "Model Prediction for The Modified Dynamic Dual   |    |
|            |            | Mixed Media Filter"   |    |
|            |            | Dr. Ghada Farouk Naiem Elsayed  | L2 |
|            |            | MTI University  |    |















|          | E 1 E 31    |  |     |
|----------|-------------|--|-----|
|          |             | "(1) FPGA Design and Implementation for Adaptive     |     |
|          |             | Digital Chaotic Key Generator (2) Optimizing         |     |
| _        |             | Techniques for using MATLAB HDL CODER"               |     |
|          |             | Dr. Ragaa Abd El-Hakim / Sherif El-Badawy            |     |
|          |             | Tanta University                                     |     |
|          |             | "International Roughness Index Prediction for        | L1  |
|          |             | Continuous Reinforced Concrete Pavements using       | 3   |
|          |             | Artificial Neural Networks"                          |     |
| 12:45 PM | 1:00 PM     | Dr. Fathya Abdelrazek                                |     |
|          |             | Suez Canal University                                |     |
|          |             | "Work Hazards Training Program and Its Effect on     | 1.2 |
|          |             | Quality of Work Life and Turnover Intention among    | L2  |
|          |             | Staff Nurses during COVID-19 Pandemic: A Quasi-      |     |
|          |             | Experimental Design"                                 |     |
|          |             | Dr. Sarah Elnekhaily                                 |     |
|          |             | Suez University                                      | 1.4 |
|          |             | "Evolution of matrix cracks from fiber/matrix        | L1  |
| 4 00 514 | 1:15 PM     | debonds in unidirectional fiber composites"          |     |
| 1:00 PM  |             | Dr. Eman Sharawy                                     |     |
|          |             | Ain Shams University                                 | L2  |
|          |             | "Digital Transformation, Responsible Artificial      |     |
|          |             | Intelligence and Cybersecurity in Oncology"          |     |
|          |             | Dr. Amr Salem  |     |
|          |             | Ain Shams University                                 |     |
|          |             | "Tracing and assessment shoreline dynamics on the    | L1  |
|          |             | New Alamein City, Mediterranean Coast of Egypt,      |     |
| 4.45.514 | 4 20 514    | applied geomatics technique"                         |     |
| 1:15 PM  | 1:30 PM     | Dr. Amer El-Ahraf & Dr Shokry El- Kantiry California |     |
|          |             | State University & Aswan University                  |     |
|          |             | "Climate Change and Children's Health: Public        | L2  |
|          |             | Health, Moral, Legal, Language and Cultural          |     |
|          |             | Considerations"                                      |     |
| 1:30 PM  |             | Ahmed Haleem Hussien Abd Alaziz                      |     |
|          |             | Helwan University                                    |     |
|          |             | "Unconventional solutions in architectural design to | L1  |
|          | 4 4 5 5 5 6 | meet the challenges of climate change"               |     |
|          | 1:45 PM     | Dr. Samah Metwally                                   |     |
|          |             | National Research Center                             |     |
|          |             | "Climate change effect on appearance of dangerous    | L2  |
|          |             | agricultural pests and how we can face that"         |     |
|          | I           | 1 0 11 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1              | l   |















| 1:45 PM  | 2:00 PM    | Dr. Asaad Mater Armanuos Tanta University "Fossil Groundwater Reserves in Egypt: Optimal Exploitation Approaches for Sustainable Use" | L1 |
|----------|------------|---|----|
|          |            | Dr. Amany Sayed Maghraby<br>National Research Center<br>"Climate Change and Autoimmunity"   | L2 |
| 2:00 PM  | 2:15 PM    | Break   |    |
|          |            | Breakout Sessions (2:15 PM – 3:20 PM)   |    |
|          | М          | oderator: Gamal Alafandy, Tuskegee University   |    |
|          |            | Dr. Ayman Mossalam  |    |
|          |            | Dr. Amr Mohamed   |    |
|          |            | Ryerson Cairo   |    |
|          |            | "Transactive Energy System Platform, under the  | L1 |
|          | 2:30 PM    | stream of Climate Action, Energy Conservation and   |    |
| 2.45.004 |            | Renewable Energy"   |    |
| 2:15 PM  |            | Dr. Fathya Abdelrazek   |    |
|          |            | Suez Canal University   |    |
|          |            | "Critical thinking skills and dispositions among  | L2 |
|          |            | nursing students applying problem based learning:   |    |
|          |            | An analytical research study"   |    |
|          |            | Dr. Lamiaa Abdallah   |    |
|          |            | Alexandria higher Institute of Engineering &  |    |
|          |            | Technology  | L1 |
|          |            | "Future of Renewable Energy in Egypt: Challenges  |    |
| 2:30 PM  | 2:45 PM    | and Opportunities"  |    |
|          |            | Dr. Mostafa Abdelnaser  |    |
|          |            | Al-Azhar University   | L2 |
|          |            | "Problem Based Learning (PBL); Five Years of  |    |
|          |            | Application in Al-Azhar Medical School"   |    |
| 2:45 PM  |            | Dr. Abdelazim M. Negm<br>Zagazig University   |    |
|          |            | "Stand Alone Agricultural Greenhouse to Mitigate  | L1 |
|          | 3:00 PM    | Climate change and Helps Facing IWRM Challenges   |    |
|          | 3.33 1 111 | in Egypt"   |    |
|          |            | Dr. Hadeel Elahraf  |    |
|          |            | The American University in Cairo  | L2 |
|          | •          | •   | •  |















|           | 1         | T  |    |
|-----------|-----------|--|----|
|           |           | "Giving Parents a Voice: Views of Inclusive          |    |
|           |           | Education In Egyptian Schools"                       |    |
|           |           | Dr. Amany Ibrahim                                    |    |
|           |           | International Islamic University Malaysia            |    |
|           |           | "The Impact of the Quality of Scientific Research on | L1 |
|           |           | processing the Phenomena of Climate change In        |    |
| 3:00 PM   | 3:15 PM   | light of Vision 2030"                                |    |
|           |           | Dr. Brinc Ghatas                                     |    |
|           |           | Assiut University                                    | L2 |
|           |           | "Improving Grean Accounting Methods for              | LZ |
|           |           | Sustainable development"                             |    |
|           |           | Dr. Fathya Abdelrazek                                |    |
|           |           | Suez Canal University                                |    |
|           |           | "Concept Mapping and Enhancement of Problem          | L1 |
|           |           | Based Learning Practices among Nursing Students:     |    |
| 3:15 PM   | 3:30 PM   | A Quasi-Experimental Design"                         |    |
|           |           | Dr. Reda Albadawy                                    |    |
|           |           | Banha University                                     | L2 |
|           |           | "Role of Science, Technology and Innovation (STI) in |    |
|           |           | Achieving Sustainable Development Goals – 2030"      |    |
|           |           | Dr. Baha Abulnaga                                    |    |
|           |           | Mazdak International Inc., Washington, USA           | L1 |
|           |           | "Weather Modification and Sediment Management        |    |
| 3:30 PM   | 3:45 PM   | for Egypt and Sudan"                                 |    |
| 3.30 FIVI | 3.43 FIVI | Dr. Reda Amer  | L2 |
|           |           | Lamar University, USA                                |    |
|           |           | "A Geospatial Method for Quantifying Coastal Land    | LZ |
|           |           | Loss: An Example from the Mississippi River Delta"   |    |
|           |           | Dr. Hussam Fatahalla                                 |    |
| 3:45 PM   |           | SamNabil.com, Washington, USA                        | L1 |
|           |           | "Small Steps with Big Results for the individual and | LI |
|           | 4:00 PM   | the state Essential Communication Skills"            |    |
|           | 4.00 FIVI | Dr. Nagi Mekhiel                                     |    |
|           |           | Toronto Metropolitan University, Canada              | L2 |
|           |           | "Introducing Multidimensional Parallel Decoder For   | LZ |
|           |           | Exascale Data Storage Devices"                       |    |
|           |           | Conclusion   |    |
|           |           |  |    |