

Conference Program

Wednesday 3rd of February

08:00-09:00	Registration
	Opening Session Chairman: Mohamed Farhat
09:00-09:10	Welcome by the organizers <i>Salah S. A. Obayya , Shaimaa A. M. Ahmed Daniel A. M. Egbe</i>
09:10-09:50	Plenary Lecture: " One- and Two-Dimensional Conjugated PAE-PAV Copolymers: Effect of Laterally Grafted Alkoxy Side Groups on Charge Transport and Photovoltaic Properties" by <i>Daniel A. M. Egbe</i>
09:50-10:30	Plenary Lecture : "Trends in Optical Fiber Sensors for Industrial Applications by <i>Kenneth T. V. Grattan</i>
10:30 -11:00	Activities of the Science and Technology Development fund (STDF)
11:00-11:15	Coffee Break
	Renewable Energy I Chairman: Prof. Ashraf Shamseldin
11:15-12:00	Invited talk: Teaching Sustainable Energetics by <i>Dieter Meissner</i>
12:00-12:30	Invited talk: Potential of Photovoltaic Industry in Egypt: The Role of R&D by <i>Osama Tobail</i>
12:30-12:45	Design of a pyrolysis reactor for biochar production for 'motocharcoal' briquettes by <i>Musaida Mercy Manyuchi</i>
12:45-13:00	Design, simulation and economic analysis of PV power plant with a new technique for solar tracking system using solar-powered Stirling engine by MATLAB by <i>Ahmed Zakaria Hafez</i>
13:00-13:15	Hybridization and Storage of Renewable Energy Sources: Photovoltaic, Wind and Fuel Cells by <i>Claus Fischer</i>
13:15-14:30	Lunch Break

	Energy Conversion & Energy Storage II Chairman: Rouabah Zahir
14:30-15:15	Plenary Lecture: Silicon photonics by <i>Azizur Rahman</i>
15:15-15:30	" Eco-Friendly Synthesis of Graphene Nano-sheets" by <i>Ahmed Ghanem</i>
15:30-15:45	Online Self-Calibration Active Feedback Control System for Heliostats in a Solar Power Plant by <i>Mohamed A. A. Elgammal</i>
15:45-16:00	Analysis of a Sustainable System for Producing Motive Power and Refrigerating by <i>Lakdar Kairouani</i>
16:00-16:30	Coffee Break & poster session (Topic I)
	Photovoltaic Materials, Devices and Application III Chairman: Mabrouk El Mansy
16:30-16:45	Fabrication of Nanostructured Organo-Metal Halide Perovskite as Light Harvesting Active Layers for Low Cost Production of Solar Cells Energy by <i>Ahmed M. Elseman</i>
16:45-17:00	Rectification Performance at Optical Frequencies using Geometrically Asymmetric Tunneling Junctions by <i>Ahmed R. Aboul-Fotouh</i>
17:00-17:15	Novel Design of High Efficiency Silicon Nanowire Solar Cell by <i>Mohamed Hussein</i>
17:15-17:30	Analysis of Five Parameters model of Photovoltaic cells by <i>Md Tofael Ahmed</i>
17:30-18:30	Poster Session

Thursday 4th of February 2016

08:00-08:45	Plenary Lecture:" 5 Years ANSOLE: What Next?" + ANSOLE Best Fellow Award 2016 Ceremony by <i>Daniel A. M. Egbe</i>
	Chairman of Session I: Samir Romdhane
08:45-09:00	"Solar Cell based on Solution-Process Technology" by <i>Shaimaa A. Mohamed</i>
09:00-09:15	Comparative Study of Different Silicon Photovoltaic Technologies under Sudano Sahelian Climate by <i>Alain Tossa</i>

09:15-09:30	Synthesis and investigation of the photophysical and electrochemical properties of AnE-PV polymers bearing linear and /or branched alkoxy side chains” by <i>Nassima Bouguerra</i>
09:30-09:45	Study of the electrical and optical processes in organic photovoltaic devices by <i>Amel Ben Fredj Romdhane</i>
09:45-10:00	Structural and Optical characterization of Tin Oxide codoped with Aluminum and Sulphur by <i>Victor Odari</i>
10:00-10:15	Exergetic analysis and optimization regime of temperatures for absorption chiller single stage H ₂ O-NH ₃ by <i>Mohamed Izzedine S. Adjibadé</i>
10:15-10:30	Performance of P3OT:% CdSe hybrid photovoltaic cells by <i>A. Ben Chaabane</i>
10:30-10:45	Characterization of Connelina Erecta leave based Dye – Sensitized Solar Cell by <i>Adenike Boyo</i>
10:45-11:00	Coffee Break & poster session (Topic II)
	Chairman of Session II: Mona H. Abdel Rehim
11:00-11:45	Invited Talk: Solar Energy Conversion Using Powder Materials: A New Technology to Save Our Climate” by <i>Dieter Meissner</i>
11:45-12:15	International Science Programme at Uppsala University: support to postgraduate education and research capability strengthening for a sustainable development by <i>Carla Puglia</i>
12:15-12:30	The Photovoltaic Solar Energy in Algeria: the Reality and Prospects by Rouabah Zahir
12:30-12:45	Potential of household waste and its valorization in Cameroun by <i>Claude Vidal Aloyem Kaze</i>
12:45-13:00	Light soaking effect on the conversion efficiency in solar cells based on In(OH) _x Sy/Pb(OH) _x Sy by <i>Robinson Juma Musembi</i>
13:00-14:30	Lunch break
	Chairman Session III: Amel Ben Fredj Romdhane
14:30-14:45	Synthesis of a New Hybrid Based Polyphosphazine Backbone for Direct Methanol Fuel Cell Applications by <i>Amina Ouadah</i>

14:45-15:00	Novel Proton Exchange Membrane based on Hyperbranched Polyester/ TiO ₂ Nanocomposites by Mona H. Abdel Rehim
15:00-15:15	Analysis of the ac response of an organic bulk-heterojunction solar cell based on AnE-PVstat:PCBM by Moufid Radaoui
15:15 15:30	Valorization of wastes and Photovoltaic use in Chad by Yacoub I. Halawlaw
15:30-17:00	5 th Anniversary of Celebration and ANSOLE General Assembly III
17:00 - 22	Nile Cruise trip (Payment available through registration disk)

Friday 5th of February 2016

	Renewable Energy I Chairman: Yacoub I. Halawlaw
09:00-09:45	Invited talk “Macroscopic Optical Antennas with Glassy Disordered Dipolar Composites” by Mady Elbahri
09:45-10:00	<i>Network Operation System for Renewable Energy Resources with Added Capabilities via an Immersive Virtual Environment</i> by Amr Elsaadany
10:00-10:15	Statistical analysis of hourly wind speed data from some Burundian stations using beta probability density functions by Bashahu Mathias
10:15-10:30	Developing an Off-Grid Model for Power Supply and Wastewater Treatment in the 1.5 Million Feddan Project in Egypt by Hala Mohamed Raslan
10:30-10:45	Photovoltaic Solar Water Pumping: A Complement to Usual Irrigation Systems in the Ziz Valley (South East of Morocco) by Ismail Mekkaoui Alaouia
10:45-11:00	Coffee Break & poster session (Topic III)
	Energy Conversion & Energy Storage II Chairman: Sait Eren San
11:00-11:15	Enhanced Biomethane production from Industrial Waste Stream Using Anaerobic Biofilm Bioreactors by Ahmed Elyasti

11:15-11:30	A study into the power system impact of new power plant by <i>Houria Smail</i>
11:30-11:45	Configuration Consideration in Low Concentrating Photovoltaic Systems by <i>Sylvester Hatwaambo</i>
11:45-13:00	poster session (Topic III)
13:00-14:30	Lunch break
	Photovoltaic Materials, Devices and Application III Chairman: Dieter Meissner
14:30-15:15	Employment of Liquid Crystals, Conducting Polymers and Nanoparticles for some Organic Electronics Applications by <i>Sait Eren San</i>
15:15-15:30	Effect of Substrate Orientation on the Solar Efficiency and the Electrical Properties of Sulfonated Polyaniline (SPAN), Grown on (100) and (311)A GaAs by <i>Dler Jameel</i>
15:30-15:45	An approach to constructing permanently porous platforms of ruthenium-tris(2,2'-bipyridyl) with controllable surface areas and backbone functionality by <i>Mohamed H. Alkordi</i>
15:45-16:00	Error Function Analysis of Five-Parameter Model of Photovoltaic Cell by <i>Masud Rana Rashel</i>
16:00-16:14	Fabrication of aluminium microstructures in PEDOT:PSS buffer layer by using ultrasonic ablation technique for improving organic solar cell efficiency by <i>Yasser A. M. Ismail</i>
16:15-16:30	Influence of Deep Levels on the Efficiency of InGaAs Quantum Wire Intermediate-Band Solar Cells by <i>Noor Alhuda Al Saqri</i>
16:30-16:45	Hybrid solar cells : Research progress, challenges and perspectives by <i>Ikram Anefnaf</i>

Saturday 6th of February 2016

Energy Conversion and Energy Storage II Chairman: Robinson J. Musembi	
09:00 -09:45	Invited talk: Prospects of Solar Photovoltaic (PV) Technology for a Greener Earth by <i>Nowshad Amin</i>
09:45– 10:00	study of Solar Tracking Step Size Optimization for Heliostats in a Central Receiver Solar Power Plant by <i>Ahmed Mohamed Elsayed</i>
10:00 -10:15	Power System Protection by <i>Houria Smail</i>
10:15- 10:30	Biomass Energy and Sustainable Development in Georgia by <i>Kakha Nadiradze</i>
10:30- 10:45	Solar cavity design for a Central Receiver System by <i>Yao M. Seshie</i>
10:45-11:00	Coffee Break
10:45-11:00 Modeling and Simulation Chairman: <i>Nowshad Amin</i>	
11:00-11:30	Computational Liquid Crystal Photonics by <i>Mohamed Farhat</i>
11:30-11:45	Treatment of Piggery Wastewater using an Acti-zyme (Bio-catalyst) and Papermill Biochar Compound Co-capturing Biogas by <i>Mercy Manyuchi</i>
11:45-12:00	Comparison Analysis of the Gaussian Beam on a Planer and Corrugated Dielectric Interfaces by <i>Adel Shaaban</i>
12:00-12:15	High efficient Nano structured Thin Film Solar Cell by <i>Muhamed H. Muhammad</i>
12:15-12:30	Synthesis fuel Production from Catalytic pyrolysis of polyethylene high density by <i>Asmaa Hamouda</i>
12:30-12:45	Three-Dimensional Analysis of Quantum Tunneling Through Metal-Vacuum-Metal Junctions Using Transfer Matrix Method by <i>Mohammad El-Sayed Khalifa</i>
12:45-13:00	MnO ₂ Nanoflowers from Spent Batteries to Supercapacitors Application:

	Waste to Wealth by <i>Gomaa A.M. Ali</i>
13:00-14:30	Lunch break
14:30-15:00	Award of Certificates of Attendance and Closing Remarks
Poster Presentation	
<i>Topic I: Renewable Energy</i>	
RE-01	Opportunities and Challenges in Egyptian Electric Power Framework by <i>Ahmed M. S. Attia</i>
RE-02	Development strategies of renewable energy for poverty reduction in Central Africa case of Chad by <i>Aimadji Moudarinan</i>
RE-03	Renewable Energy Mapping Using Weather Data & Sensors by <i>Amr Abdel-Naby Ahmed Sherif</i>
RE-04	Economic analysis of a stand-alone reverse osmosis desalination unit powered by photovoltaic for possible application in the northwest coast of Egypt by <i>Dalia E. Abozaid</i>
RE-05	Improving Electricity Access in Africa through Smart Grid by <i>Faith Natukunda</i>
RE-06	Assessment of the potential for utilization of PROSOPIS JULIFLORA as a renewable energy resource for syngas production in small household in Kilifi County, Kenya by <i>Gift Kirigha Gewona</i>
RE-07	Using MLP neural networks for predicting global solar radiation, case study by <i>Laidi Maamar</i>
RE-08	Experimental Analysis of Elevated Temperature Wire Drawing Using Non – Conventional Oil as Lubricants by <i>Mamud Muhammad</i>
RE-09	Self-sustainable chicken farm by <i>Reem M. Sobh</i>
RE-10	Renewable Energy Technologies, Technical and Educational Concepts for the Sustainable Use of Energy- Practical Results from the Center of Electronics and Renewable Energies at Pedagogical University by <i>Rosa J. Chilundo</i>
RE-11	The Role of Human Resource Management Strategies in the Development of Working Women’s Behaviours toward the Use of Renewable Energy: Company (A) as Study Case by <i>Sodfa El Taher</i>

RE-12	Effect of collector- chimney junction on the flow by natural convection in a solar chimney by <i>Tahar Tayebi</i>
RE-13	Cost Effected Environment Friendly Sustainable Model by <i>Safdar Hussain</i>
RE-14	Renewable Energy and Sustainable Development of Africa- Interlink by <i>Safiatou Nana</i>
RE-15	Adoption of Solar Photovoltaic System by Small and Medium scale Enterprises in an energy challenged environment – Ghana by <i>A. Amo-Aidoo</i>
<i>Topic II: Energy Conversion and Energy Storage</i>	
EC-01	Electrodeposited Cobalt Oxide Nanoparticles on Carbon Nanotubes as an Efficient Electrocatalyst for Oxygen Reduction Reaction (ORR) in Alkaline Media by <i>Ahmed Z. Al-Hakemy</i>
EC-02	Concentrated Solar Power - A Pathway to Clean and Sustainable Energy Development in Nigeria by <i>Nathan T. Awuapila</i>
EC-03	Wind speed forecasting in three different regions of Morocco,using a multiple regression by <i>Soukaina Barhmi</i>
EC-04	Experimentally studied on the thermal performance of a Solar Water Heating using a surface concentrator by <i>Benabdallah Simohamed</i>
EC-05	Structural, electronic, optical and elastic properties of the complex K ₂ PtCl ₆ -structure hydrides ARuH ₆ (A = Mg, Ca, Sr and Ba): ab initio study by <i>Boudrifa Ouassila</i>
EC-06	Design, Construction and Installation of Solar Water Heating System for Bayero University Kano, New Campus Clinic by <i>Isa Garba</i>
EC-07	Decontamination Of Liquid Effluent By Photocatalytic Reaction by <i>Khennaoui Badis</i>
EC-08	Novel Approach towards the Production of Reduced Graphene Oxide by <i>Ahmed F. M. Ghanem</i>
EC-09	Microbial Fuel Cell for Electricity Generation and Waste Water Treatment by <i>Marwan Ghanem</i>
EC-10	Technical Study of a Photovoltaic Site in Bouira- Algeria by <i>Mohamed Rezki</i>

EC-11	The effect of pH solution precursor of TiO ₂ /FTO thin film electrodeposited on their morphological, optical and photoactivity properties by Rahal Foudil
EC-12	Stability and degradation of polyethylene-based anion-exchange membrane for alkaline fuel cell and electrolyser application by Richard Espiritu
EC-13	Study of the Effect of Construction Parameters on the Operation of a Solar Distiller to Greenhouse Effect by Yassaad abdelbaki
EC-15	Convective heat transfer between co-axil rotating cylinders by Mohamed A. Nasr
EC-16	Wind Turbine near Wake Instigation by Omar G. Amer
EC-17	Near-Field Focused Arrays for Energy Harvesting Applications by Boules A. Mourisa
Topic III: Photovoltaic Materials, Devices and Application	
PV-01	Characterization of Cobalt Doped TiO ₂ and Cu:In ₂ S ₃ Nanocomposite Thin Films Deposited by ILGAR Technique for Photovoltaic Applications by Wafula B. Henry
PV-02	Study on Optical and Structural Properties of Electrospun PS/PES Blended Fibers by Rania M. Ahmed
PV-03	Enhancement of the photoluminescence properties of hybrid nanostructures of conjugating polymers with inorganic nanoparticles by Aliaa Mohamed Sayed Salem
PV-04	Phase-Change, structural and magnetic studies on the annealed Mg _{0.15} Sr _{0.05} Mn _{0.8} Fe ₂ O ₄ nanoferrites by Amina I. M. A. Ghoneim
PV-05	ZnO thin films prepared by spray Pyrolysis by Belkhir Ouarda
PV-06	Effect of [Ga] / [Ga] + [In] molar ratio on structural, optical, and electrical properties of electrodeposited CIGS thin films by Chihi Adel
PV-07	Transparent conductive electrode PVK/Ag/PVK as anode in solar cells by Joseph Datte
PV-08	A two-step approach for electrochemical deposition of Cu–Zn–Sn and Se precursors for CZTSe solar cells by Meriem Hamla
PV-09	Fabrication and characterization of porous TiO ₂ /Nb ₂ O ₅ composite film photoelectrodes for application in dye-sensitized solar cells by John N.

	<i>Nguu</i>
PV-10	Optical and thermal properties of Perylene /Polycarbonate composite Used in the greenhouse application by <i>Tarek Y. Elrasasy</i>
PV-11	SURFACE PLASMON RESONANCE Pour LES CELLULES photovoltaïques du ZnO by <i>Khaled Ayadi</i>
PV-12	Effect of acetic acid on ZnO:In transparent conductive oxide prepared by spray pyrolysis by <i>Toufik Mahdaoui</i>
PV-13	Silicon Silver Layered Structure For Energy Harvesting Applications by <i>Mahmoud A. Elrabiaey</i>
PV-14	Temperature dependence of H-aggregate emission and spectral diffusion in an E-PVstat thin film by <i>Mariem Guesmi</i>
PV-15	Optical absorption enhancement in thin film solar cell using asymmetric grating structures by <i>Mohamed Abdelwahab</i>
PV-16	Synthesis and Optical Dispersion of Partially Reduced Graphene Oxide With Enhanced Photostability by <i>Asmaa Fahiem Mansour</i>
PV-17	Fabrication of Thin Film Silicon Solar Cells using Plasma Enhanced Chemical Vapour Deposition Technique by <i>Nour Elhoda M. Elmahdy</i>
PV-18	Modelling of the power output of a PV module under outdoor conditions by <i>Mohamed Ahmed Abdelraouf Bakr</i>
PV-19	Exciton diffusion lengths of polymer measured by Forster theory by <i>Saaidia Asma</i>
PV-20	Plasmonic effect of metallic nanoparticles in organic solar cells by <i>Dalila Salem</i>
PV-21	Ex-Situ synthesized CuI in PVA Polymer Stabilized with TMED ligand and optimized with NaI salt by <i>Shaimaa A. Mohamed</i>
PV-22	Characterization of the Nd _{1-x} Sr _x Fe _{1-y} Co _y O ₃ -perovskite oxides as cathode materials for intermediate temperature solid oxide fuel cells by <i>Shaimaa.I. Elkalashy</i>
PV-23	Evidence of a continuous trap distribution by <i>Soraya Bachaoui</i>
PV-24	A Theoretical Study of Structural, Electronic and Stabilities Properties of PbX (X= Si, Ge and Sn) by <i>Yassine Chibane</i>
PV-25	Broadband Absorption enhancement in a hybrid diamond-silicon nanowire arrays for photovoltaics applications by <i>Yara M ElSebaai</i>

PV-26	An approach to constructing permanently porous platforms of ruthenium-tris (2,2'-bipyridyl) with controllable surface areas and backbone functionality by <i>Youssef S. Hassan</i>
PV-27	Passivated Silicon Wafer Carriers Lifetime Enhancement by Annealing for Solar Cells Applications by <i>Amany Osman</i>
PV-28	Interaction Analysis of the Gaussian Beam on a Planar Dielectric Interface by <i>Adel Shaabana</i>
PV-29	Wavelength Separation on Dielectric Interface based on Angular and Lateral displacement by <i>Adel Shaabana</i>
PV-30	Post-deposition annealing effect on surface passivation of thermal and plasma Atomic Layer Deposited Al ₂ O ₃ ultrathin films on Si substrates by <i>Asmaa Shaaban Ahmed Ali</i>
PV-31	How to Optimally Detect Hyperentangled Photons by Salem F. Hegazy