

## Research plan for Energy and Renewable Energies Technology Center for the academic year 2015-2016

<b>No.</b>	<b>Researcher name</b>	<b>Research name</b>
1	Mohamed Abdulridha Husien Ali H. Al-Hamdani Nibras Saleh	Broadband and wide angle Antireflection coating for solar cell applications
2	Ali H. Al-Hamdani Yasmeen Z. awood Wisam K. Hamdan	Spectral properties for mixed liquid of rodamine (6G &3GO) dyes dissolved in chloroform
3	Ali H. Hamdani	Acceptance Angle Effectiveness of Micro lens Arrays solar concentrator efficiency
4	Rajaa Nader Ali H. Al-Hamdani Slafa I. Ibrahim Ruqayah Abdul-Wali Abdullah	Non -linear properties for Membrane of Rhodamine tincture by using Z- scan Technique.
5	Ali H. AL-Hamdani Hussein T. Hashim Hayfa G. rashid	Design and Evaluation of Non- polarizing plate beam splitter using ZEMAX
6	Ali H. Al-Hamdani Aya H. Maki Mohamed Abdulridha Husien	Dopant effect the nonlinear optical properties of TiO <sub>2</sub> -PMMA nanocomposit
7	Jaafar A. Khadim Kareem K. Jasim	Economic evaluation of a suitable wind turbine work in Iraq weather
8	Jaafar A. Khadim	Study the effective design parameters in wind turbines performance
9	Asst. Lect. Roshen T. Ahmad Hamdi Lect. Dr. Mahdi A. Abdul-Hussain	Modeling and simulation of wind turbine generator using Matlab- Simulink
10	Asst. Prof. Miqdam T. Chechan Lect. Eiman A. Ehsan Sheet Asst. Lect. Wahab Khudair	Biodiesel production from fry oil using catalysts
11	Lect. Eiman A. Ehsan Sheet Asst. Prof. Miqdam T. Chechan Lect. Khalel Ibrahim	Practical study of performance and emissions of DI-CIE fueled with heavy oil-water emulsion
12	Wahab Khudair Ahmad Dheya Najim Abdul-Amir Miqdam T. Chechan	Investigation the influence of weather situation and material kind on the performance of Flat plate solar collector
13	Asst. Prof. Miqdam T. Chechan	The effect of operating of the engine on PM and Lead for SIE fueled with Gasoline-Ethanol blends
14	Asst. Prof. Miqdam T. Chechan	Using ternary blends GEM as an alternative to Iraqi Gasoline to surbrus the sulfur and Lead emitted to environment

15	Asst. Prof. Miqdam T. Chechan	Evaluation of the particulate emitted from the multi cylinder Diesel engine fueled with biodiesel
16	Asst. Prof. Miqdam T. Chechan Hussain Abdul-Zahra Khadim	The effect of humidity on the performance of photovoltaic cell based on experimental study
17	Asst. Prof. Miqdam T. Chechan Hussain Abdul-Zahra Khadim	The effect of physical properties of dust on the performance of PV system on northern Oman
18	Asst. Prof. Miqdam T. Chechan	Enhancing productivity of concentrating solar distillation system Accompanied with PCM at hot climates
19	Lect. Dr. Mahdi A. Abdul-Hussain Asst. Lect. Roshen T. Ahmad Hamdi	Power electronics and control of renewable energies system
20	Asst. Prof. Kareem K. Jasim Jaafar A. Khadim	Development of Photovoltaic Modules and System Performance Under Deferent Climate Conditions in Iraq
21	Asst. Prof. Kareem K. Jasim	Effect of Humidity and Dust on the PV Performance in Iraq
22	Lect. Dr. Raid Salih Jawad Asst. Lect. Safa Nayef Abdul-Jabar Lect. Dr. Mahdi Abdul-Hussain	Study the ability to use the light materials to light the street
23	Lect. Dr. Raid Salih Jawad Dr. Mahdi Abdul-Hussain Asst. Lect. Khalid Sadiq Asst. Lect. Safa Nayef Abdul-Jabar	Enhancement of nanoparticles in Lithium – ion batteries
24	Lect. Dr. Raid Salih Jawad Asst. Lect. Safa Nayef Abdul-Jabar Asst. Prof. Dr. Abdul-Hadi Khadim	The production of flow ash bricks and compared with ordinary bricks
25	Dr. Jamal Mohamed Hamad Dr. Raid Salih Jawad	The Uses of Nanoparticales in Lithium –Ion Batteries Performance
26	Dr. Jamal Mohamed Hamad Dr. Raid Salih Jawad	Study Corrosion Behavior of Alloy Stainless Steel 316L Used in orthopedic Operations
27	Safaa N. Raid Salih Jawad	The Relation of Fibonacci sequence with the other number
28	Abdilhadi kadhim Raid S. Jawad	Improvement the Fatigue Resistance and Increase its Life of Specimens of Naval Brass Alloy Using Laser Shock Wave Processing

29	<b>Raid Salih Jawad</b>	<b>Al-NPs Enhancement the Thermal transport Properties of the Aqueous and Ethylene Glycol</b>
30	<b>Lect. Eiman A. Ehsan Sheet Asst. Lect. Wahab Khudair</b>	<b>Comparison quality and quantity of biogas production from different kind of vegetables</b>
31	<b>Asst. Lect. Wahab Khudair Lect. Eiman A. Ehsan Sheet</b>	<b>Critical design of thermodynamic pump</b>
32	<b>Asst. Prof. Sanaa Abdul-Hadi Hafidh Asst. Prof. Ali H. Al-Hamdani Eng. Maytham Tariq</b>	<b>Development of modern construction materials to provide solar get healthy economical constructions</b>
33	<b>Asst. Prof. Sanaa Abdul-Hadi Hafidh Asst. Prof. Abdul-Khaliq Fawze Hmood Asst. Prof. Awfa Abdul-Rasool Abdulah</b>	<b>Low coast building simulations by using solar cell</b>
34	<b>Asst. Prof. Sanaa Abdul-Hadi Hafidh Lect. Dr. Mahdi A. Abdul-Hussain Asst. Lect. Wahab Khudair Ahmed</b>	<b>Anti static coating manufacturing to protect the surface of flooring exposed to sun shine waves</b>
35	<b>Asst. Prof. Sanaa Abdul-Hadi Hafidh Asst. Lect. Wahab Khudair Ahmed Eng. Maytham Tariq Mahdi</b>	<b>Manufacturing higher efficiency of concrete polymer slabs</b>
36	<b>Asst. Prof. Sanaa Abdul-Hadi Hafidh</b>	<b>Improvement some mechanical and physical properties of cement with ceramics materials</b>
37	<b>Asst. Prof. Sanaa Abdul-Hadi Hafidh</b>	<b>Study of thermal insulation and some mechanical properties for hybrid composites (cement-Wood sawdust)</b>
38	<b>Asst. Prof. Sanaa Abdul-Hadi Hafidh</b>	<b>Effect of natural condition on the mechanical properties of different types of concrete</b>
39	<b>Lect. Dr. Mahdi A. Abdul-Hussain Lect. Dr. Raid Salih Jawad Asst. Lect. Khalid Sadiq</b>	<b>Performance of hybrid power system consisting of wind turbine, PV, storage battery and diesel</b>
40	<b>Yasameen K. Al-Majedy Dunya L. Al-Duhaidahawi Khalida F. Al-Azawi Ahmed A. Al-Amiery Abdul Amir H. Kadhum Abu Bakar Mohamad</b>	<b>Coumarins as Potential Antioxidant Agents Complemented with Suggested Mechanisms and Approved by Molecular Modeling Studies</b>

41	Ahmed A. Al-Amiery Fatin A. Binti Kassim Abdul Amir H. Kadhum Abu Bakar Mohamad	Synthesis and characterization of a novel eco- friendly corrosion inhibition for mild steel in 1 M hydrochloric acid
42	Khalida F. Al-Azawi Talib K. Abed Wahab K. Ahmed Ahmed A. Al-Amiery Adul Amir H. Kadhum Abu Bakar Mohamad	New Corrosion Inhibitions Derived from Quinazolin for Mild Steel
43	Lect. Shayma Basim Lect. Dr. Farah Noori Asst. Lect. Wahab Khudair Asst. Prof. Ahmed Abdul-Amir	Thiadiazolo as a potential corrosion inhibitor for mild steel in 1M HCL
44	Lect. Dr. Raid Salih Jawad Asst. Lect. Safa Naief Abdul- Jabar Asst. Prof. Ahmed Abdul-Amir	Complete study on Flow batteries and its uses
45	Asst. Prof. Abbass Zgayer Salman	The investigation of the effecting aerodynamic load on the flutter phenomena
46	Asst. Prof. Abbass Zgayer Salman	The study of effecting parameter on thermal loss coefficient in solar collector
47	Asst. Prof. Abbass Zgayer Salman	Numerical evaluation of the journal bearing design