

**Research plan for Energy and Renewable Energies
Technology Center for the academic year 2016-2017**

No.	Research name	Researcher name
1	design of an economical vehicle drive by solar energy	Dr. Jaafar A. Khadim
2	Design and construction of a Tracking device for solar electrical systems	Dr. Jaafar A. Khadim
3	Compurgation treatment methods of High FFA waste fry oil to producing biodiesel	Lect. Eman A. Ihsan
4	Hybrid power System Modeling and Simulation	Asst. Lect. Roshen T. Ahmed Hamdi
5	Solar cell system simulation using Matlab-Simulink	Asst. Lect. Roshen T. Ahmed Hamdi
6	Investigation of new type of solar collector for greenhouse water heating	Asst. Prof. Abbas Z. Salman
7	Experimental and theoretical study to invest solar energy for operating water coolers	Asst. Prof. Abbas Z. Salman
8	Experimental study of the effect of reflection mirrors orientation on the performance of solar still	Asst. Prof. Abbas Z. Salman
9	Numerical simulation for a novel Model Bipolar Plate in fuel cells	Asst. Lect. Ahmed Q. Salam
10	Performance and emission evaluation of diesel engine fueled with diesel and bioethanol and EGR, experimental study	Asst. Lect. Ahmed Q. Salam
11	Acetamidocoumarin as a based eco-friendly corrosion inhibitor	Ahmed Q. Salam Ahmed Y. Essa Khalid S. Reda Ahmed Abdul-Amier
12	Synthesis and characterization of coumarin-3-amine as a green organic inhibitor complemented with good inhibitive performance	Wahab K. Ahmed Khalid S. Reda Ahmed Abdul-Amier Ahmed Q. Salam
13	The effect of oil prices fluctuations on the wide spread of sustainable energies in GCC	Hilal Almamari Hussain A. Khadim Miqdam T. Chaichan
14	The effect of nanomaterial on ion-lithium batteries performance	Raid S. Jawad Miqdam T. Chaichan

**Research plan for Energy and Renewable Energies
Technology Center for the academic year 2016-2017**

		Jaafar A. Khadim
15	The environmental hazards of transportation in Baghdad city-Iraq	Miqdam T. Chaichan Hussain A. Khadim Talib A. Abid
16	Using Al₂O₃ with PCM (Paraffin wax) to improve single slope solar distiller	Miqdam T. Chaichan
17	The impact of adding Nano- graphite oxide on cross-linking properties of nitrile biota dine rubber	Miqdam T. Chaichan Raid S. Jawad Rasha M. Hussain
18	Thermal conductivity enhancement by adding nano-Al₂O₃ to Iraqi paraffin wax	Miqdam T. Chaichan Rasha M. Hussain Aayda M. Jawad
19	The impact of solar radiation intensity and temperature of solar cell on its performance	Miqdam T. Chaichan Ahmed Q. Salam Tamador M. Abbas
20	Manufacture of thermal insulation of natural materials and their use in the production of biofuel	Dr. Sanaa A. Hafidh Dr. Abdul-Khalik F. Hmood Eman A. Ihasn
21	Improvement thermal insulation of concrete supported by natural waste	Dr. Sanaa A. Hafidh Khalid S. Reda Maytham N. Jasim
22	Optimal use of the green left buildings improvement thermal insulation	Dr. Sanaa A. Hafidh Eman A. Ihasn Ahmed Q. Salam Maytham Tariq
23	Use of electric power plant waste to improve thermal insulation of green bricks	Dr. Sanaa A. Hafidh Dr. Raid S. Jawad Safaa N. Abdul-Jabar
24	The environmental impact of using electrical generators in the university of technology	Wahab K. Ahmed Talib A. Abid Maytham T. Mahdi
25	Techniques for Linking Photovoltaic System to Supply Homs and Connected to the Local Utility Grid	Mahdi A. Abdul-Hussain
26	Impact of linking fuel cells with public grid	Mahdi A. Abdul-Hussain
27	Non –linear properties measurement of liquid solution of α-chlorophyll dissolved in acetone	Dr. Ali H. Abdul-Muniam Slafa I. Ibrahim Mustafa Mohamed Dri Adnan

**Research plan for Energy and Renewable Energies
Technology Center for the academic year 2016-2017**

28	Spectroscopic properties of Rhodamine C in different solvents	Slafa I. Ibrahim Dr. Jaafar A. Khadim Khalid S. Reda Dri Adnan
29	Investigation of the Non-linear properties of hybrid chlorophyll a doped TiO₂ Nano	Dr. Ali H. Abdul-Muniam Slafa I. Ibrahim Dr. Hanaa Flayah Dri Adnan
30	Exploitation of solar energy in the process of purification and disinfection of the land surface water	Dr. Jaafar A. Khadim
31	Effect of Nano particles implantation on porous silicon solar cell	Asst. Lect. Marwa K. Abood Khalid S. Reda
32	The impact of air mass on the photovoltaic panel performance	Khalid S. Reda Ali A. Al-Waele Khadim Al-Asade