

**Research within plan for Energy and Renewable Energies  
Technology Center for the academic year 2014-2015**

<b>No.</b>	<b>Researcher name</b>	<b>Research name</b>
1	Dr. Jaafar Ali kadhum	Utilization of exhaust waste energy of electrical generator for house heating and hot water supply
2	Dr. Jaafar Ali kadhum	Performance evaluation of a new designed solar desalination system
3	Asst. Prof. Kareem Khadim Jasim Dr. Mahdi Ali Abdul-Hussain Eng. Mahdi Sarhan	Design of hybrid solar PV diesel mini grids in Iraq
4	Asst. Prof. Kareem Khadim Jasim Dr. Jaafar Ali kadhum Eng. Mahdi Sarhan	Cooling system for solar housing in the Iraqi buildings
5	Asst. Prof. Kareem Khadim Jasim	Study and design of PV thermal solar collector and their potential in Iraq
6	Asst. Lect. Roshen Tariq Ahmed	Smart photovoltaic system
7	Asst. Lect. Roshen Tariq Ahmed	Obtaining and analyzing the characteristics curves of a solar cell
8	Asst. Lect. Dheya Najim bdulamer Asst. Lect. Wahab Khudhair Ahmed Asst. Prof. Abbass Z. Salman	Effect of different insulation materials on the characterization of lining of thermal furnace
9	Asst. Prof. Abbass Z. Salman Asst. Lect. Wahab Khudhair Ahmed Asst. Lect. Dheya Najim bdulamer	Thermal performance of a new type solar collector
10	Dr. Jamal Mohamed Hamad	Improvement performance of fuel cell power plants through development design of cell
11	Dr. Jamal Mohamed Hamad	Performance evaluation of deep cycle battery
12	Dr. Raid Salih Jawaad Eng. Waled Khalid Husain	Study the effect of nano-particles on the heat transfer
13	Dr. Raid Salih Jawaad Eng. Waled Khalid Husain	Design and implementation a small laboratory bag to clean the water
14	Dr. Raid Salih Jawaad Eng. Waled Khalid Husain	Design and implementation of a laboratory system to separate the metal and ions from the liquids by using membrane
15	Asst. Prof. Ali Hadi Abdul-Munaim Lect. Slafa Ismael Ibrahim Asst. Lect. Marwa Kasim Abood	Effect of fluorescence dye coating on characteristics of porous silicon solar cell
16	Lect. Eiman Ali Ehsan Sheet	Relative change in SI engine emission and performance

		parameters using new locally made Octane enhancer
17	Lect. Eiman Ali Ehsan Sheet	Study of DI engine performance and emission work by fuel emulsion water/black oil
18	Asst. Prof. Ali Hadi Abdul-Munaim Lect. Slafa Ismael Ibrahim	Effect of some solvent (Ethanol, Methanol, 2-Propanol, Acetone, distilled water, and Ethylacetate) on spectroscopic properties of Rhodamine 3GO dye
19	Asst. Prof. Ali Hadi Abdul-Munaim Lect. Slafa Ismael Ibrahim	Spectroscopic properties of mixed Rohamine (6G, B, 3GO, C) dyes in different concentration doped in .polymethylmethacrylate
20	Asst. Lect. Wahab Khudhair Ahmed Asst. Prof. Abbass Z. Salman Asst. Lect. Dheya Najim bdulamer	The use of thermal energy for heating homes
21	Dr. Mahdi Ali Abdul-Hussain	Hybrid power system to supply remote communication towers in Iraq
22	Lect. Eiman Ali Ehsan Sheet Asst. Lect. Wahab Khudhair Ahmed	Biogas production from the waste

### Research off-plan for Energy and Renewable Energies Technology Center for the academic year 2014-2015

No.	Researcher name	Research name
1	Emad Yousif Yab Fu Win Ali Hadi Al-Hamdani Ahmed Alameri Abdul-Amir Khadim Abu-Baker Mohamed	Furosemide as an environmental friendly inhibitor of corrosion of zinc metal in acid medium: experimental and theoretical studies
2	Rafah Abdul-Hadi Al-Jafari Ali Hadi Abdul-Munaim Tasnem Hassan Mahmood	Construction study for (10.6 $\mu\text{m}$ ) CO <sub>2</sub> Laser reciever
3	Asst. Lect. Dheya Najim bdulamer	Simulation effect of brick materials on the micro thermo behavior of electrical furnace
4	Asst. Prof. Abbass Z. Salman Asst. Lect. Dheya Najim bdulamer	Experimental and theoretical study to invest solar energy for operating water coolers
5	Dr. Raid Salih Jawaad Asst. Lect. Dheya Najim bdulamer Asst. Prof. Ali Hadi Abdul-	Improvement the mechanical properties of polyester by using nano-powder

	<b>Munaim Asst. Lect. Senan Salman Hamdi</b>	
<b>6</b>	<b>Dr. Rana Afif Majed Lect. Majed Abdul-Majeed Hind Al-Atraqchi Lect. Slafa Ismael Ibrahim Mohanad Sadiq</b>	<b>Effect of cigarettes smoking yields on corrosion behavior of amalgam in artificial saliva at pH=6.2 and 37°C</b>
<b>7</b>	<b>Asst. Prof. Abbass Z. Salman Asst. Lect. Dheya Najim bdulamer</b>	<b>The investigation of a new type of solar collector for green house water heating</b>
<b>8</b>	<b>Asst. Prof. Ali Hadi Abdul-Munaim Raja Nader Rafah Abdul-Hadi</b>	<b>Spectral properties of Rodamine B dissolved in chloroform</b>
<b>9</b>	<b>Asst. Prof. Ali Hadi Abdul-Munaim</b>	<b>Nonlinear characterization of mixture ( Rodamine 3GO and B) dyes doped PMMA for potential application in optical limiting</b>
<b>10</b>	<b>Dr. Kareem Khadim Jasim Asst. Lect. Hayder Shareef Mahdi Eng. Mahdi Sarhan</b>	<b>Improvement of the performance of self cleaning solar panel</b>
<b>11</b>	<b>Dr. Hayder Abd Dhahid Dr. Hayder Sabah Abdul-Amir Lect. Eiman Ali Ehsan</b>	<b>Modeling and control of PEM fuel cell using neural networks</b>
<b>12</b>	<b>Asst. Lect. Roshen T. Ahmed Asst. Lect. Kanar R. Tariq</b>	<b>Reduce Interference In Wireless Communication System By Using Adaptive transmit power control-ATPC</b>
<b>13</b>	<b>Asst. Prof. Ali Hadi Abdul-Munaim Adeeb Mansoor Kasim Hussain Ali Al-Hamdani</b>	<b>High power laser concentration systems</b>
<b>14</b>	<b>Asst. Prof. Ali Hadi Abdul-Munaim</b>	<b>Structural and optoelectronic properties of nanostructured ITO thin films deposited by chemical spray pyrolysis technique</b>
<b>15</b>	<b>Asst. Prof Kareem Khadim Jasim</b>	<b>Design and calculation of a solar PV system for the university of technology.</b>
<b>16</b>	<b>Asst. Lect Wahab Khudair Al-Ithawi</b>	<b>Development and Test of the condensation heatutilizer</b>
<b>17</b>	<b>Asst. Prof. Majed Hamed Abdul-Majed Lect. Slafa Ismael Ibrahim Lect. Eiman Ali Ehsan Sheet</b>	<b>Corrosion effective of condensed synthetic automotive solution containing selective organic component mixtures on al-alloys</b>
<b>18</b>	<b>Wesam A. A.twej Ali H.Al hamdani Abdul kareem A.alkhafaji Falah H.ali</b>	<b>Photo catalytic activity of iron doped TiO<sub>2</sub> for indoor applications via SOL-Gel technique.</b>

19	<p style="text-align: center;"><b>Ali H. Alhamdani Slafa I.Ibrahim Shaimia Khyoon</b></p>	<p style="text-align: center;"><b>Effects of luminous solar concentrator parameters dyes mixture host type and Lsc thickness on the si solar cell performance efficiency.</b></p>
20	<p style="text-align: center;"><b>Dr. Raid Salih Jawaad Asst. Lect. Dheya Najim bdulamer Senan Salman</b></p>	<p style="text-align: center;"><b>Study of Nano powder for Improvement the mechanical properties of Armor.</b></p>
21	<p style="text-align: center;"><b>Lect. Eiman Ali Ehsan Sheet</b></p>	<p style="text-align: center;"><b>Performance and sensitivity analysis of factors affecting NO<sub>x</sub> emission from hydrogen fuelled SI engine</b></p>