

**Research plan for Energy and Renewable Energies
Technology Center for the academic year 2018-2019**

No.	Research name	Researcher name
1	Effect of Reinforced concrete by adding Iraqi Natural Materials immersed with Chemical Solution.	Sanaa Abdul Hadi Hafad Fanar Ghanm Thamer Adnan Abdulha
2	Chemical and Mechanical properties of glass concrete containing recycled fibers	Sanaa Abdul Hadi Hafad
3	Influence excess Air on the Efficiency of furnace	Wahab K. Ahmed Asst. Prof. Fouad S. Taher
4	Optical Characteristics of Vitamin D3 Soft Gel	Slafa I. Ibrahim Hanna M. Yaseen Rajaa Nader
5	Experimental analysis for torsion fatigue	Abbas Z. Salman
6	Effect of Renewable Fuels and Injection Strategy on Gaseous Emissions in Diesel Engines	Mohammed Ali Fayad
7	Renewable Sources of Energy by Changing Nanostructure of Carbon	Hind A. Al-Salihy Mohammed Ali Fayad Bashar R. Al-Ogaidi
8	Investigation the Effect of Nano Clay Particles on Shear Strength of Composite Materials	Bashar R. Al-Ogaidi Hind A. Al-Salihy
9	Case study on solar water heating for flat plate collector	Wala Musa Ali Talib Hassan Ali Tayser Mohammed Abdulamer Kadhum Ahmed Abdulamer
10	Recent investigations in polyurethane based Nano composite	Tayser Mohammed Ahmed Abdulamer
11	Macro Coumarins as Novel Antioxident	Dunya Al-Duhaidahawi Yasameen Al-Majedy Hiba Ibraheem Abdulamer Kadhum Ahmed Abdulamer
12	Inhibitive impacts extract of	Rifat Dakhil

	exitrus aurantium leaves of carbon steel in corrosive media	Tayser Gaaz Ahmed A. Al-Amiery Abdulamier Kadhum
13	Experimental investigation of using Nano-PCM/Nano fluid on photovoltaic thermal system (PVT) from technical and economics viewpoints.	Al-waeli A. H. Sophain K. M. T. Chaichan Khadim H. A. Ibrahim A. M. H. Ruslan
14	Artificial neural network modeling of Nano fluid and Nano-PCM photovoltaic/thermal (PV/T) system	Al-waeli A. H. Sophain K. Yousif J. H. Khadim H. A. Boland J. Chaichan M. T.
15	Modeling and experimental validation of a PV/T system using Nano fluid coolant and Nano-PCM	Al-waeli A. H. Sophain K. Kasem H. A. Mahmood H. B. Khadom A. A. Chaichan M.T.
16	Use bio kerosene as an alternative to Iraqi diesel	Noora Salih Ekaab Noor Hussein Hamza Miqdam T.Chaichan
17	Using Bio kerosene effect on particulate matters of a compression ignition engine	Noor Hussein Hamza Noora Salih Ekaab Miqdam T.Chaichan
18	Experimental investigation of effecting parameter on the efficiency of solar cells	Abbas Z. Salman Ahmed K. Salam
19	Numerical technique of flow heat through various configuration of steel shapes	Abbas Z. Salman Roshen T. Ahmed Hamdi
20	Humidity impact on photovoltaic cells performance: A review	Roshen T. Ahmed Hamdi Sanaa A.Hafad Miqdam Tariq Chaichan Hussain A. Kazem
21	Using Incremental Conductance for Modeling of Maximum Power Point Tracking of a Photovoltaic cell in Baghdad-Iraq	Roshen T. Ahmed Khaleel I. Abass Sanaa A.Hafad Aida M. J. Mahdi
22	Dust impact on the photovoltaic	Roshen T. Ahmed Hamdi

	outcomes	Sanaa A.Hafad Miqdam T. Chaichan Hussain A. Kazem
23	Corrosion protection of steel by Eco-friendly coating	Majid H. Abdulmajeed Hiba anwer Abdullah Slafa Ismael Ibrahim
24	Study the Non-Linear properties of Rhodamine C Dye Dissolved in Different solvents	Slafa I.Ibrahim Ahmed Al-Amiery K. S. Rida
25	Study of the optical properties of solar concentrators using two layers of organic dyes	Shaima K. Abud Alrda Slafa I.Ibrahim Umer A. Abd-alrazak Gamal Humud Saud
26	Advanced optimal for DC motor	Salam Waley Shneen
27	Utilization of DC motor-AC generator system to convert the solar direct current into 220v alternating current	Dr. Jaafar Ali Kadhum Dr. Mahdi Ali Al-Obaydi Dr. Salam Waley Shneen
28	Application of LFAC {16(2/3)hZ} .for electrical power transmission system. A comparative simulation study	Dr. Salam Waley Shneen Dr. Jaafar Ali Kadhum Dr. Mahdi Ali Al-Obaydi
29	Project practice in Iraq for house use of 6KW power system by solar source	Dr. Mahdi A. Al-Obaydi Dr. Salam Waley Shneen Dr. Jaafar Ali Kadhum
30	Investigation the morphological and nanostructure characteristics of soot particulate from the oxygenated fuels combustion in diesel engine	Dr. Mohammed A. Fayad Bashar R. AL-Ogaidi
31	Effect of Biodiesel with Diesel Fuel on CI Engine Performance and Energy Availability	Eiman Ali Eh.Sheet Dr. Jehad A.Yamin
32	Relative Change in SI Engine Performance Using Hydrogen and Alcohol as Fuel Supplements	Dr.Jehad A. Yamin Eiman Ali Eh. Sheet
33	Effect of ammonium concentration on structural ,optical and morphological properties of H-Nb₂O₅ thin film Anovel study	Evan T. Salim M. K. Abood J. A. Saimon
34	Mathematical models of combustion in furnace by Mat lab.	Wahab K. Ahmed

35	Theoretical Investigation of Buoyancy-driven Cavity Flow by Using Finite Element	Dr. Abass Z. Salman Ahmed Q. Salam Dr. Mohammed A. Fayad
36	Thermal and structural simulation for Bipolar plate in fuel cell	Ahmed Q. Salam Miqdam T. Chaichan Ali H. Al-Waaly K. Y. Ahmed
37	The impact of pollution resulted from using diesel generator	Wahab K. Ahmed Ahmed K. Salam Talib K. Abed Miqdam T. Chaichan, Maitham T. Mahdy
38	Design of the new solar collector including thermal properties compared with traditional solar collectors	Moafaq K. S. Al-Ghezi
39	The effect of dust on the performance and thermal efficiency of the photovoltaic panels	Moafaq K. S. Al-Ghezi
40	ANN and DOE analysis of corrosion resistance inhibitor for mild steel structures in Iraq	Eiman A E Sheet Dr. Jehad A A Yamin Dr. Ahmed A. Al-Amiery
41	Comparison of granulated and powdered activated carbon in the removal of organic matter from river water	Amera Abbas Radhi
42	Efficiency of River water Treatment Using Aeration and Double Media Filter from Carbon, Sand	Amera Abbas Radhi
43	Experimental investigations for the Schiff base as corrosion inhibitor.	Dr.Abdul Hadi K. J. Talib H. A. Dr. Sanaa A. H. Dr. Ahmed A. Al-Amiery Khalid S. Rida
44	Improvement physical properties of natural rubber blend with carbon black	Dr. Sanaa A. Hafad