

**Research plan for Energy and Renewable Energies
Technology Center for the academic year 2017-2018**

No.	Research Name	Researcher
1	Synthesis and characterization of a novel tetrazin as organic corrosion inhibitor for mild steel in 1M hydrochloric acid	Mohammed H. Othman Ahmed, Ahmed A. AL-Amiery, Abdul Amir H. Kadhum, Yasmin K.AL-Majedy, Abu Bakar Mohamad
2	Electrochemical and DFT studies of novel corrosion inhibitor as corrosion inhibitors for mild steel in 1M hydrochloric acid	Ahmed A. AL-Amiery, Abdul Amir H. Kadhum, Abu Bakar Mohamad
3	Antioxidant activities of structurally motivating scavengers	Ahmed A. AL-Amiery, Dunya L. AL- Duhaidahawi, Ahmed E. Abdel Moneim, Abdul Amir H. Kadhum
4	Antioxidant activities for some synthesized Schiff bases	Dunya L. AL- Duhaidahawi, Majid S. Jabir, Ahmed A. AL-Amiery, Ahmed E. Abdel Moneim, Abdul Amir H. Kadhum
5	Investigation of biodiesel-diesel blends startability and emissions during cold, warm, and hot conditions	Miqdam Tariq Chaichan, Nahedh Mahmood Ali
6	GEM Ternary Blends: Testing emitted NOX-smoke trading off when EGR is applied to the engine	Miqdam Tariq Chaichan
7	Investigation of the combustion and emission characteristics of E85 and diesel blend in conventional diesel engine operates in PPCL mode	Miqdam Tariq Chaichan
8	Connect the wind farms to the electrical grid and indicate their effect on improving the characteristics of the network	Mahdi A. Abdul-Hussain Roshen T. Ahmed

9	Low frequency alternating current 16 2/3 to transport the electrical power	Mahdi A. Abdul-Hussain
10	Calculate the houny solar radiation on the aperture area of a parabolic trough solar collector	Moafaq K.S. Al-Ghezi
11	Accumulation of the heat system in the solar power plants with the parabolic trough concentrates	Moafaq K.S. Al.Ghezi
12	Characterization of Nano filtration membrane (RE 1812-50, NE 1812- 70, HPA 150 & PPT 9908)	Raid salih jawad S.K. Sharma safaa N. abdul jabbar
13	The relation of Fibonacci sequence with the other number	Raid salih jawad, safaa Nayyef abdul jabbar, Najat Hamid Sibit
14	Numbers seven relevance with six & other ranks	Safaa nayyef abdul jabbar Raid salih jawad, Najat Hamid Sibit
15	Effect of Reinforced concrete by adding Iraqi Natural Materials immersed with Chemical Solution	Sanaa Abdul Hadi hafad Fanar ghanm Thamer Adnan Abdulha
16	Chemical and Mechanical properties of glass concrete containing recycled fibers	Sanaa Abdul Hadi hafad
17	Bioethanol extraction from microalga	Amera Abbas Radhi Eiman Ali Eh. Sheet Slafa I. Ibrahim
18	Potato peel as a source of biofuel production	Eiman Ali Eh. Sheet Amera Abbas Radhi Slafa I. Ibrahim
19	Exergy Analysis of Biodiesel Fuelled Direct Injection CI Engines	Jehad A. Yamin Eiman Ali Ehsan Sheet Ismail Hdaib
20	Solar cell modeling using mat lab software	Roshen T. Ahmed
21	Solving differential equations using mat lab-Simulink	Roshen T. Ahmed Mahdi A. Abdul-Hussain
22	Heating system construction using solar thermal boilers in Iraq	Wahab K. Ahmed

23	Technical design calculation of tube furnaces used in oil manifesting	Wahab K. Ahmed
24	Experimental and theoretical studies of benzoxq zines as corrosion inhibitor	Ahmed Q. Salam Ahmed A. Al-Amiery
25	New coumairn derivative as corrosion inhibitor experimental and theoretical investigation	Ahmed Q. Salam Khalid S. Reda Ahmed A. Al-Amiery
26	Enhancement heat transfer technology in tube heat exchanger	Ahmed Q. Salam
27	Conversion of waste plastic into liquid fuels by use thermal degradation	Amera Abbas Radhi Slafa I. Ibrahim Eiman Ali Eh. Sheet
28	Formyl hymecromone and formylurabellifeon as;lqh]hj jh;g corrosion inhibition	Abdul-Hadi K. Hayran Ahmed K. Al-Rekabee Khalid S. Redha Ahmed Abdul-Amier
29	Carbethoxy thiazide as corrosion inhibition	Dalia M. Jamel Ahmed A. Hussain Ahmed K. Al-Rekabee Khalid S. Redha
30	Study the Non-Linear Properties of Rhodamine C Dye in Different Solvents	Slafa I. Ibrahim
31	Study the Non-linear Properties of some Alimentative Oil by Using Z-Scan Technique	Slafa I. Ibrahim
32	The impact of natural gas addition to liquefied petroleum gas on the CO emission of a spark ignition engine	Khalid S. Reza Wahab K. Ahmed Eiman Ali Eh. Sheet
33	Low temperature preparation condition of niobium pentoxide thin films employing simple colloidal suspension	Marwa Kasim abood Evan tarq salim Jehan admon saimon
34	Utilization of DC motor-AC generator system to convert the solar direct current into 220V	Jaafar A. Kathum

	alternating current	
35	Exploitation of electrical generator waste energy for house heating and hot water supply	Jaafar A. Kathum
36	Theoretical technique for studding the effecting factors or loss coefficients in solar collectors	Abbass Z. Salman
37	The investigation of the effect of solar radiation on housing and building facades	Abbass Z. Salman
38	Experimental analysis for torsion fatigue	Abbass Z. Salman
39	Effect of Renewable Fuels and Injection Strategy on Gaseous Emissions in Diesel Engines	Mohamed A. Fayad Hind A. Al-Salhi Bashar R. Younis
40	Renewable Sources of Energy by Changing Nanostructure of Carbon	Hind A. Al-Salhi Mohamed A. Fayad Bashar R. Younis
41	Investigation the Effect of Nano Clay Particles on Shear Strength of Composite Materials	Bashar R. Younis Mohamed A. Fayad Hind A. Al-Salhi
42	Advanced Optimal for Three Phase Rectifier in Power Electronic System	Salam W. Shnayen
43	Advanced Optimal for Three Phase Invector in Power Electronic System	Salam W. Shnayen
44	New Multi-Stage Centrifugal Turbines For Small-Scale Kalian Cycle Power Plant Driven By Solar Energy	Ayad M. Salman
45	Low Power Organic RanKine Cycle Driven by Low-Grade Waste Heat	Ayad M. Salman