

History of Funded Researches

Project	Budget	Duration	Investigators	Sponsor
Investigation of Flow Behavior of Different Types of Saudi Crude Oils Through Porous Media	99,500	1985-1990	Dr. Tariq F. Al-Fariss	KSU
A New Method to Stop Circulation Losses in well Drilling	117,000	1985-1990	Dr. Tariq F. Al-Fariss	KSU
Hydrogen Production by Solar Energy	35,000,000	1985-1995	Dr. Tariq F. Al-Fariss	KACST
Pilot plant studies on the Production of Phosphoric Acid from Saudi Phosphate Ore	2,690,000	1987-1991	Dr. Tariq F. Al-Fariss	KACST
Mass Transfer in Porous Catalyst	211,000	1987-1996	Dr. Tariq F. Al-Fariss	KACST
Lab-Electrolyzer Test system	89,500	1987-1996	Dr. Tariq F. Al-Fariss	KACST
An Evaluation of the Current Status of Research and Technology for Polystyrene Manufacture	60,000	1990-1991	Dr. Tariq F. Al-Fariss	SABIC
Effect of Vibration and Roughness on Mass Transfer	20,000	1990-1994	Dr. Anees Fakeeha, Dr. Farag Abdulaleem	KSU
Modeling and Simulation of Acrylonitrile Production from Propane Using Circulating Fluidized Bed Reactor	20,000	1996-1998	Dr. Anees Fakeeha, Dr. Mustafa Suliman	SABIC grant to KSU
The Application of Powder Technology and/or Electroplating Technique in Preparation of Hydrogen Evaluation electrode	20,000	1996-1998	Dr. Anees Fakeeha, Dr. Farag Abdulaleem	SABIC grant to KSU
Modeling and Simulation of Chemical Processes: A Book	20,000	1997-1998	Dr. Khalid alhumaizi Dr. Abdulhamid Ajbar Dr. Emad ALi	KSU
Experimental Application of Model Predictive Control on a pH neutralization Tank	90,000	1998-1999	Dr. Emad Ali Dr. Mostaf Suliman	KACST
Application of Model Predictive Control to Single Stage Flash Desalination Unit- An Experimental Study	47,000	1998-1999	Dr. Khalid alhumaizi Dr. Abdulhamid Ajbar Dr. Emad Ali	KSU
Oxidative dehydrogenation of isobutene	1997-2001	1,200,000	Dr. Ahmed AbaSaeed Dr. Saeed M Al-Zahrani	SABIC

Development of Catalyst for production of acetic acid and ethylene from ethane gas. Phase (1) Phase (2) Phase (3) Phase (4)	800,000 1,620,000 1,422,000 1,052,250	1992-1994 1995-1997 1998-2002 2002-2003	Dr. Anis Hamza Fakeha, Dr. Yusuf S. Al-Zeghayer Dr. Mustafa Suliman	SABIC
Oxidative dehydrogenation of propane	670,000	1999-2002	Dr. Ahmed AbaSaeed Dr. Saeed M Al-Zahrani	SABIC
Preparation of Electrode for Hydrogen Evaluation by Electroplating Technique	20,000	1999-2001	Dr. Anees Fakeeha	KSU
Mathematical modeling and simulation of DR shaft furnace at Hadeed DR plant. Phase (1) Phase (2)	500,000 400,000	2000-2002 2004-2006	Dr. Khalid Al-Humaizi, Dr. Saeed Al-Zahrani Dr. Mustafa Suliman	SABIC
Dynamic Modeling and control of Polyethylene reactor.	250,000	2000-2002	Dr. Khalid Al-Humaiza, Dr. Emad Ali Dr. Abdulhamid Ajbar	SABIC
Instrumentation Upgrading an Existing Liquid-phase Chemical Reactor	20,000	2001-2002	Dr. Emad Ali	SABIC grant to KSU
Preparation of nickel catalyst by electrolysis technique to produce Hydrogen	40,000	2001-2004	Dr. Anis H. Fakeeha Dr. Farag A. Abdelaleem	SABIC grant to KSU
Simulation of Gas-liquid flow in packed columns using computational fluid dynamics	50,000	2002-2003	Dr. Ibrahim al-Mutaz Dr. Mohammad Asif	SABIC grant to KSU
Dynamic analysis and control of ethylene oligomerization reactors	300,000	2002-2005	Dr. Khalid Al-Humaizi Dr. Mustafa Suliman	SABIC
Investigation of linear alpha olefins in two-phase systems in bubble column reactors	2,000,000	2003-2005	Dr. Waheed Al-Masry Dr. Yusuf S. Al-Zeghayer Dr. Saleh A. Alshebeili	SABIC
Techno-Economic-Environmental study on Utilization of Saudi Wheat Straw	948,000	2003-2005	Dr. Anis H. Fakeeha Dr. Ahmed Abasaeed	KSU (National Research Projects)

Characterization of Copper Electro deposition	430,000	2003-2005	Dr. Maher Alodan Dr. Faraj abdulsalam Dr. Fahad Almubaddel	KACST
Natural Gas Utilization: Effect of Methane to Carbon dioxide Ratio on Synthesis gas production in Petrochemical Industries	45,000	2004-2005	Dr. Anis H. Fakeeha	SABIC Grant to KSU
Effect of addition of promoters on Dry reforming Reaction of Methane to Produce Synthesis gas used in Petrochemical Industries.	40,000	2005-2006	Dr. Anis H. Fakeeha	SABIC Grant to KSU
Utilization and Processing of Dates for Production of Fruit Sugar (Fructose	1,500,000	2003-2005	Dr. S. M. Al-Zahrani, Dr. A. E. Abasaheed,	KACST
Conversion of LPG to High Value Aromatics: Catalyst Development	600,000	2003-2005	Dr. S. M. Al-Zahrani Dr. A. E. Abasaheed	KSU (National Research Projects)
Effect of Saudi Phosphate Ores	45,000	2003-2005	Dr. Tariq F. al-Fariss	SABIC grant to KSU
Membrane Technology for Hydrogen Separation in Ethylene Plants	50,000	2003-2005	Dr. AbdulRahman al-Rabiah	SABIC grant to KSU
Gas Holdup and Hydrodynamics in Bubble Columns and its effect on Performance of an Ozone Oxidation reaction for Treating Drinking Water Using Computational Fluid Dynamics	40,500	2004-2005	Dr. Ibrahim al-Mutaz Dr. Mohammad Asif	SBAIC grant to KSU
Identification of a lab-scale Liquid Phase Chemical Reactor	30,000	2004-2005	Dr. Emad Ali	KSU
MATLAB-based System Identification Design Tool	35,000	2004-2005	Dr. Emad Ali	KSU
Characterization of Bubbles in Gas-liquid Phase Reactors using Acoustic Sound Measurements	50,000	2004-2006	Dr. Emad Ali Dr. Waheed almasry	KSU
Soil Corrosion and monitoring	50,000	2005-2006	Dr Maher Alodan	KSU
Corrosion Evaluation of Coated Pipe lines	45,000	2005-2006	Dr Maher Alodan	SABIC
A Numerical investigation and comparison of chlorine compounds refrigerants a potential substitute for R22	30,000	2005-2006	Dr. M. BouMuza	KSU
Survey of atmospheric corrosion rates in Saudi Arabia	700,000	2005-2007	Dr Maher Alodan	KSU (National Research Projects)
Improving Production of Fresh Water in Reverse Osmosis (RO) Desalination Plants Through Advanced Control Techniques	200,000	2005-2007	Dr. K. al-Humaizi Dr. A. Ajbar, Dr. Emad. Ali Dr. M. AlHaj Ali	KSU (National Research Projects)

Design of framework for an integrated system for plant-wide control loop performance assessment using a commercial single-loop performance assessment package	44,000	2005-2006	Dr. Emad Ali	SABIC
Thermal and Brine Dispersion from Coastal MSF Desalination Plants	40,500	2005-2006	Dr. Ibrahim al-Mutaz Dr. Mohammad Abashar	SABIC grant to KSU
Developing a dynamic simulator for the industrial Multi Stage Flash (MSF) Desalination Plants	30,000	2007-2008	Dr. Ibrahim al-Mutaz Dr. Emad Ali	KSU
Optimal Control of Polypropylene Molecular Weight Properties in a Continuous Liquid-pool polymerization Reactor.	30,000	2006-2007	Dr. Mohammad AlhajAli	SABIC grant to KSU
Theoretical and experimental investigations of transport phenomena in a vertical cooling tower	30,000	2006-2007	Dr. M. BouMuza	KSU
Achieving Desired Properties Of The Polyethylene Grade Via Optimal Control Of The Process Feed	30,000	2007-2008	Dr. Emad Ali Dr. Mohammad AlhajAli	SABIC grant to KSU
Mathematical Modeling of Solubility in Ionic Liquids	35,000	2007-2008	Dr. Mohammad AlHaj Ali Dr. Inas AlNashef	KSU
Long Term Demand for desalinated water in KSA	4,000,000	2006-2008	Dr. Ibrahim Almutaz Dr. Abdelhamid Ajbar Dr. Emad Ali Dr. Hamad Alshiekh	Ministry of water and Electricity
Catalysis of Methane Coupling	900,000	2006-2008	Dr. S. Almeman, Dr. W. AlMasry, Dr. Y. Alzeghyer, Dr. I. Alnashef	KACST
Energy reduction investigation in an air liquefaction cycle	30,000	2007-2008	Dr. M. BouMuza	KSU
Modeling of the kinetics of the production of fructose and ethanol by <i>Saccharomyces cerevisiae</i> ATCC 36858 in sugar media containing raffinose	23,400	2007-2008	Dr. H. Atiyeh	KSU
Purification and decolorization of sugar syrups extracted from dates	36,000	2007-2008	Dr. H. Atiyeh	SABIC grant to KSU
Wastewater Management in Kingdom Oil Refineries	170,000	2008-2009	Dr. Ibrahim almutaz, Dr. Abdulaziz almutlaq, Abdelhamid ajbar	KACST