## **Master Thesis:**

| N  | Year | Title   | Student               | Advisor                               |
|----|------|---|-----------------------|---------------------------------------|
| 1  | 1990 | Extraction of Phosphoric Acid from Saudi Phosphate Ore,   | Salah Abdel-Razak     | Tariq al-fariss                       |
| 2  | 1990 | Rheology and Flow Behavior of Polymer Solutions through Porous Media,   | Saeed Al-Zahrani      | Tariq al-fariss                       |
| 3  | 1990 | Beneficiation of Saudi Phosphate Rock by Flotation,   | Abdulrahim Abdulrazak | Tariq al-fariss                       |
| 4  | 1993 | Calcination of Saudi Phosphate Rocks in the Fluidized Bed,  | Waleed Ibraheem       | Tariq al-fariss                       |
| 5  | 1993 | A Study Of The Catalysts Used For The<br>Control Of Automotive Exhaust Emissions<br>In The Kingdom Of Saudi Arabia, | Abdullah AlKoryshy    | Ibrahim AlMutaz,<br>Yousef AlZeghayer |
| 6  | 1997 | Performance Study of Manfouha I and II RO Plants,   | Bandar A. al-Sultan   | Ibrahim al-Mutaz                      |
| 7  | 1998 | On-line tuning Strategy for Linear Model Predictive Control Algorithms,   | Ashraf Ghazzawi       | Emad Ali,<br>Adnan Nouh               |
| 8  | 1998 | Static and Dynamic Bifurcation Behavior of Industrial Fluid Catalytic Cracking (FCC) Units,                         | Abdulaziz alMutlaq    | Ahmed Abasaeed,<br>Emad Ali           |
| 9  | 1998 | Dynamics Modeling and Simulation of an Ethylene Dimerization Reactor,   | Fadi M. Trabzouni     | Mostafa Suliman<br>Khlaid al-Humaizi  |
| 10 | 1999 | Applying flowsheeting technologies for waste water treatment,   | Abdul-Aziz alKhodair  | Khalid alhumaizi                      |
| 11 | 1999 | Effect of Cooper Additives on the Corrosion Behavior of Steel Alloys,   | Ghazy M. al-Harthy    | M. E. al-Dahshan                      |
| 12 | 1999 | Selection of Energy Efficient Flowsheet for<br>the Separation Section in Ethylene<br>Production Plants,             | Mutaeb alotaibi       | Mustafa Suliman,<br>Alaa, Idress      |
| 13 | 2000 | Experimental Investigation of Scale<br>Formation and Control in Desalination<br>Plants,                             | Saad M. al-Jaleel     | Malik al-Ahmad                        |
| 14 | 2000 | Kinetic Study for Ethane Oxydehyogenation<br>Reaction to Acetic Acid Over Promoted<br>VPO Catalyst,                 | Saeed al-wahabi       | Anees Fakeeha                         |
| 15 | 2000 | Atmospheric corrosion behavior of some steel alloys,  | M . AL- Abullatif     | Mansour AL-hazzaa                     |
| 16 | 2000 | Dynamic Modeling and Control of Industrial Reactors for Methanol Converters,  | Sami al-osaimi        | Abdulhamid Ajbar,<br>Emad Ali         |

| 17 | 2001 | Modeling and Bifurcation of 1,2 Bichloro<br>Ethane by Oxidation of Ethylene in a<br>Fluidized Bed Reactors,               | Abdulaziz M. Al-jedae  | Kamil Wagialla,<br>Saeed AlZahrani   |
|----|------|---|------------------------|--------------------------------------|
| 18 | 2001 | The Application of Column Flotation<br>Technology in the Beneficiation of Saudi<br>Phosphate Ores,                        | Medawi AIGahtani       | Tariq al-fariss                      |
| 19 | 2001 | Stability Analysis of fixed Bed Reactor for Ammonia Production  | Saqar, A. al-Musa      | Kamil M. Wagialla                    |
| 20 | 2002 | Control Of Fluidized Bed Reactor for Ethylene Polymerization,   | Wajeh Moughrbiah       | Emad Ali                             |
| 21 | 2002 | Methane Conversion Using Supported Nickel Catalysis,  | Ahmad. al-Fatish       | Anees Fakeeha                        |
| 22 | 2002 | Modeling of Cathodic Protection Systems for Buried Structures,  | Mohammed W. Tahir      | Maher al-Odan                        |
| 23 | 2003 | Atmospheric Corrosion of Copper, Alumina, and Iron,   | Abdulaziz al-Ghyama    | Maher al-Odan                        |
| 24 | 2003 | Silica Removal in Water Purification Plants,  | Ibrahim Al-enzi        | Ibrahim al-Mutaz                     |
| 25 | 2003 | Modeling and Simulation of Butadiene<br>Production from Butane by Dehyogenation<br>in a Packed Bed Reactor with Membrane, | Majid . al-Mutairi     | Ahmed Abasaeed                       |
| 26 | 2004 | Steady State Modeling of Activated Sludge<br>Process in Wastewater Treatment Plants in<br>Riyadh,                         | Absullah S. al-Muzaini | Ibrahim AlMutaz,<br>Ahmad Abasaeed   |
| 27 | 2004 | Using MTBE as an Additive to Target High<br>Quality Unleaded Motor Gasoline<br>Production in Saudi Refinery,              | Tariq N. al-shaie      | Hamid Mustafa,<br>Ibrahim alMutaz,   |
| 28 | 2004 | Optimal Catalyst Activity Profiles in Catalyst Pellets for Propane Dehyogenation,   | Khalid S. Al-Wadie     | Yusuf AlZeghayre                     |
| 29 | 2004 | Theoretical Investigation of Stability of<br>Recombinant DNA Cultures in Continuous<br>Stirred Tank Reactors,             | Waleed al-Olwan        | Abdulhameed Ajbar                    |
| 30 | 2004 | Study of Thermodynamic Properties and Performance of Gaseous Detonations,   | Mufleh M. Alshahrani   | Abdulhameed Ajbar                    |
| 31 | 2004 | Modeling and Simulation of Reactor<br>Multiplicity for Ethylene Oxide Production,   | Abdulaziz. Abahusain   | Khalid Alhumaizi                     |
| 32 | 2005 | Optimum Production of Water and Power in MSF Desalination Plants,   | Abdullah. Al-namlah    | Ibrahim AlMutaz                      |
| 33 | 2005 | Modeling of Thermal and Brine Dispersion from Coastal MSF Desalination Plants,  | Abdullah al-Mejaly     | Ibrahim alMutaz,<br>Mohammad Abashar |

| 34 | 2005 | One Directional Shock Waves in Reactive Flow: Simulation and Stability Study,  | AbdulRahman Abdulaziz  | Tariq alFariss                           |
|----|------|--|------------------------|--|
| 35 | 2005 | Characterization of Coated Pipelines,  | Ghazzai Al-mutairi     | Maher al-Odan,<br>Farag Abdulaleem       |
| 36 | 2006 | Experimental Investigation of Shallow<br>Bubble Column Hyodynamics Using<br>Electrical Capacitance Tomography,                 | Fouad Mousa            | Waheed alMasry,<br>Saleh al-shebaili     |
| 37 | 2006 | Oxidative Dehyogenation of Propane to<br>Propylene Over Supported Molybdenum-<br>Nickel Oxide Catalyst,                        | Mohammad al-Misfer     | Ahmad Abasaeed,<br>Saeed M. al-Zahrani   |
| 38 | 2006 | Removal of Volatile Organic Pollutant from<br>Water Using Air Adsorptive Transport in<br>Bubble Columns,                       | Mohammad al-Zamil      | Fahad alMubaddel                         |
| 39 | 2006 | Preparation and Testing of Supported Metal-<br>Ion Exchanged Zeolite Catalysts for the<br>Selective Conversion of Cyclohexane, | Abdul-Aziz Al-Airafy   | Fahad alMubaddel                         |
| 40 | 2006 | Optimal Distillation Sequence for the Separation of a Mixture of Hyocarbons  | Sultan A. al-otaibi    | Fahad alMubaddel,<br>Waheed alMasry      |
| 41 | 2006 | Performance Evaluation of Design<br>Parameters of Wire Mesh Mist Eliminator in<br>Bubble Columns,                              | Abdullah al-Dughaither | Waheed alMasry,<br>Hamid Mustafa         |
| 42 | 2006 | Multivariable Identification of Industrial Process for MPC Application,  | Saad, A. al-Shammary   | Emad Ali,<br>Khalid Al-humaizi           |
| 43 | 2006 | Effect of Promoters and Shapes on Catalysis<br>Performance in Ethane Conversion to<br>Ethylene by Oxidative Dehyogenation,     | Turki A. Alsemari      | Yusuf AlZeghayre,<br>Mohamad Abashar     |
| 44 | 2006 | Direct Synthesis of Dimethyle Carbonate from Carbon Dioxide and Methanol,  | Fahad S. al-Zimami     | Yusuf al-Zeghayre,<br>Khlaid al-Misatair |
| 45 | 2006 | Simulation of Bubble Columns by<br>Computational Fluid Dynamics,   | Sultan S. al-Khamshi   | Waheed al-Masry                          |
| 46 | 2006 | Optimal Design of Hybrid RO/MSF Desalination Plants,   | Abdullah Al-Khudhiri   | Ibrahim Al-Mutaz                         |
| 47 | 2006 | Fouling and its Control in Heat Exchangers,  | Nawaff N. al-Mutairi   | Malik al-Ahmad                           |
| 48 | 2007 | Fouling Formation in RO Membrane Systems,  | Aayd. M. al-Mutairi    | Malik al-Ahmad                           |
| 49 | 2008 | Performance Optimization of Coagulation /<br>Flocculation in the Treatment of<br>Wastewater From Polyvinyl Chloride Plant,     | Khild Rumaihi          | AbdelHamid Ajbar                         |
| 50 | 2008 | Aromatization of Propane over modified H-ZSM-5 Zeolite,  | Saeed M. al-Shihry     | Saeed alZahrani,<br>Ahmed Abasaeed       |

| 51 | 2008                  | Rheolgy of Metallocene Linear Low Density Polythlene (m-LLDPE) Solution,.   | Bahsir Alshamri        | Tariq alFariss,<br>Faris Alswalim          |
|----|-----------------------|---|------------------------|--|
| 52 | 2008                  | Modeling and Simulation of a Reactive<br>Distillation Unit for Production of MTBE,<br>2008  | Fahad M. Alharthi      | Ahmed Abasaeed                             |
| 53 | 2008                  | Modeling of Membrane Fouling and Flux<br>Decline in Reverse Osmosis Desalination<br>Plants,                                       | Ahmed Hyadra,          | Ibrahim AlMutaz                            |
| 54 | 2008                  | Nitrogen Removal from Natural Gas Using Membrane Technology,  | Fahad A. AlMalki       | AbdulRahman AlRabiah                       |
| 55 | 2008                  | Ethane Dehydrogenation to Ethylene using membrane catalytic Reactors,   | Ali I alhammad         | Abdulrahman alrabiah,<br>Khalid al-Humaizi |
| 56 | 2008                  | Development of Zirconium Catalyst for Optimization of n-Butane,   | AbdulRazaq alShamary   | Yusuf al-Zeghayre<br>Abdulhamid Ajbar      |
| 57 | 2009                  | Optimization and Simulation of a Low<br>Temperature Distillation Column for Air<br>Separation Using The Panchon-Savarit<br>Method | Saad Nour AlUdhailah,  | Mourad Boumaza                             |
| 58 | 02/2010               | Study of the Performance of Emulsion Process<br>Using Porous Agglomerated Ammonium<br>Nitrate Prills                              | Salah B. AlEnezy       | Fahad Almubaddel                           |
| 59 | 06/2010               | Reverse Osmosis Productivity Enhancement<br>by Vibrating membrane   | Fahad AlJam'an         | Ibrahim AlMutaz                            |
| 60 | 6/2010                | Integration of MSF/RO Hybrid Desalination Plants  | Talal alshammary       | Abdulrahman alrabiah                       |
| 61 | 06/2010               | Oxidative Dehydrogenation of Propane to Probylene over $\gamma$ -AL <sub>2</sub> O <sub>3</sub> supported V-Mo Catalysts.         | Milana Putra           | Saeed alzahrani<br>Ahmed abasaeed          |
| 62 | 01/2011               | Enhancement of Polyolefin Properties using different Masterbatches of Nano-Materials  | Ahmed Hafidh           | Mohammad Alhajali<br>Rabih elaithy         |
| 63 | 01/2011               | Modeling of Nanofiltration Process for Desalination Pretreatment  | Mohammad alDehani      | Ibrahim AlMutaz                            |
| 64 | 01/0211               | Theoretical and Experimental Study of the thermal and Hydraulic Performance of a Mechanical Vertical Cooling Tower                | Faris A. Alzahrani     | Mourad Boumaza                             |
| 65 | 03/2011               | Improvement of Fluidization of Nano Particles by Particle Mixing and Pulsated Flow  | Sayd Sadiq Ali         | Mohammad Asif                              |
| 66 | 12/2009<br>06/2011    | Modeling of Carbon Dioxide Release in MSF<br>Desalination Plants  | Ali Alomair            | Ibrahim AlMutaz                            |
| 67 | 01/2010<br>01/2012    | Development of a Catalyst Containing Nano<br>Palladium Supported on Titania for the Partial<br>Oxidation of Ethane Gas            | AbdulRahman<br>Alawadi | Yousef AlZeghyer                           |
| 68 | 02/2010               | Investigation and Removal of the Hazardous and Radioactive Materials in Saudi Phosphate Ores                                      | Mosa A. AlHazmi        | Tariq AlFariss                             |
| 69 | 06/2010<br>04/03/2012 | Development of Nanofiber Membrane of the<br>Removal of dyes from Aqueous Medium   | Fikry AbulRaqeeb       | Yousef AlZeghayer                          |

| 70 | 12/2010<br>01/2012 | Techn-Economic Production of<br>Petrochemicals from Liquid and Gaseous Feed<br>Stocks in Saudi Arabia                       | Munther AlSudais       | Kamil Wagialla                     |
|----|--------------------|---|------------------------|------------------------------------|
| 71 | 03/2011<br>01/2013 | Preparation and investigation of the electrocatalytic activity of platinum coated titanium oxide nanotube arrays            | Mohammad Kamuldin      | Mansour alhoshan                   |
| 72 | 05/2011            | Liquid-Liquid Equilibrium for Aliphatic<br>Hydrocarbon Extraction systems with Deep-<br>Eutectic Solvent                    | Nasser AlQahtani       | Inas AlNashif                      |
| 73 | 11/2011<br>05/2012 | Preparation & Characterization of HDPE-<br>Biodegradable Fiber Reinforced Composites  | Mohamad Rizal          | Saeed Alzahrani                    |
| 74 | 11/2011            | A Study of Degradation and Stabilizations for<br>Linear Density Polyethylene Films Used as<br>Greenhouse Covering Materials | Mohamad Tausikal       | Othman alothman<br>Ilias Ali       |
| 75 | 12/2011            | Preparation of<br>Functionalized Polyacrylonitrile Nanofibers<br>for the Extraction of Dyes from Aqueous<br>Media           | Fayez agag             | Waheed almasry                     |
| 76 | 05/2012            | Modeling of catalytic tube characteristic<br>in steam reformer using a simulation<br>program                                | Abdullah alkhateeb     | Mourad Boumaza                     |
| 77 | 05/2012            | periodic control of a wastewater treatment<br>process to enhance the process<br>productivity                                | Mohamad Rizwn Azhar    | Emadadeen Ali                      |
| 78 | 05/2012            | Preparation and characterization of chitosan / polymeric blend hydrogels  | Mohamad Ijaz           | Fahad almubaddek                   |
| 79 | 05/2012            | Separation of butenes from butanes using facilitated transport membranes  | Mohamad Naeem Iqbal    | AbdulRahman Alrabiah               |
| 80 | 05/2012            | production of fructose and bioethanol from dates syrups   | Mohama Zain alaabedeen | Ahmed Abasaeed                     |
| 81 | 05.2012            | Dry reforming of methane on nano – supported nickel catalysts   | Mohamad Awais Naeem    | Anis Fakeeha                       |
| 82 | 05/2012            | Photocatalytic production of hydrogen<br>from ethanol-water solution using TiO2-<br>ZnO                                     | Meshael aljuhani       | Yousef AlZeghyer                   |
| 83 | 05/2012            | Application of water pinch analysis for water and wastewater minimization in petroleum refinery                             | Wasif Mughaith         | Malik alahmad<br>Mahmoud elhalwagi |
| 84 | 05/2012            | Forecast of Long Term Needs of Sea<br>Water Desalination Plants for Riyadh City   | Yasir Khalid           | Abdelhamid Ajbar                   |
| 85 | 05/2012            | Evaluation of Sulfate Depressant in Phosphate Floatation  | Yasir Arafat           | Tariq alFariss                     |
| 86 | 01/2013            | Preparation and Characterization of Novel<br>Thermoplastic Polymers/Chitosan Polymer<br>Nanofibers for Water Applications   | Hamad alrumaih         | Fahad almubadeel                   |
| 87 | 01/2013            | Preparation and Characterization of   | Fahad alshabonah       | Mansour alhoshan                   |

|    |         | Polysulfone/Poly (ORTHO-TOLUIDINE)<br>Nanocomposite Membranes for Water<br>Application                                      |                      |                 |
|----|---------|---|----------------------|-----------------|
| 88 | 05/2013 | Catalyst Development for Hydrogen<br>Production via Catalytic Decomposition of<br>Methane                                   | Wasimullah khan      | Anis Fakeeha    |
| 89 | 05/2013 | Investigation of the Corrosion Resistance of<br>Epoxy/Polyamide Coating filled with Nano-<br>sized Metallic Oxide Particles | Rawais khan          | Mourad Boumaza  |
| 90 | 05/2013 | investigation of Corrosion Performance of<br>EEpoxy/Polyamide nano Coatings Filled With<br>Conducting Polymers              | Ubair Abdus samad    | Othman alothman |
| 91 | 05/2013 | Development of Novel HDPE-<br>PBI Fiber Reinforced Composites With<br>Improved Thermo-Mechanical Properties                 | Shan Faiz            | Saeed alzahrani |
| 92 | 05/2013 | De-agglomeration of nano-powders using assisted fluidization techniques   | Ibrahim hamadah      | Mohamed Asif    |
| 93 | 05/2013 | Optimization of location of thermo-<br>compressor suction in MED-TVC desalination<br>plants                                 | Irfan Wazeer         | Ibrahim Almutaz |
| 94 | 12/2013 | Modeling of Membrane Distillation Process for Water Desalination  | Abdulaziz almutek    | Ibraim Almutaz  |
| 95 | 12/2013 | Application of hybrid fluidization techniques for promoting deagglomeration of nano powder                                  | Abdulrahman alkhider | Mohammad Asif   |