# **Curriculum Vitae**

# Mohammad A. Taher Al-Mayyahi

#### **Personal Information:**

Full Name: Mohammad A. Taher

Family name: Al-Mayyahi

Date of birth: 27.03.1973

Place of birth: Basra / IRAQ

Languages: Arabic (mother tongue), English (fluent).

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# Academic qualification

Ph.D. (Chemical Engineering - Petroleum Refining Engineering), Monash University, Australia, 2013.

M.Sc. (Chemical Engineering - Unit Operations), Basrah University, Iraq, 1998.

B.Sc. (Chemical Engineering), Basrah University, Iraq, 1996.

#### **Present employment**

Head of Chemical Engineering Department, College of Oil and Gas Engineering, Basrah University for Oil and Gas.

#### Previous employments and professional experience

2014-2015: Head of Environmental and pollution engineering Department, Basrah Engineering Technical College.

2005-2006: Head of Petrochemical Engineering Department, Basrah Engineering Technical College.

2000-2004: Research Engineer, State Company for Petrochemical Industries (SCPI), Basrah.

#### **Professional Appointments**

2015-Present: Lecturer, College of Oil and Gas Engineering, Basrah University for Oil and Gas.

2004-2015: Lecturer, Basrah Engineering Technical College.

2000-2004: Research Engineer, State Company for Petrochemical Industries (SCPI), Basrah.

## **Teaching Commitments:**

Chemical Engineering Principles

Heat and Mass Balance

Chemical Engineering Thermodynamics

**Unit Operations** 

Reaction Kinetics

Mass Transfer

Engineering and Numerical Analysis

## **Publications and Conferences:**

- 1- A Novel Graphical Approach to Target CO<sub>2</sub> Emissions for Energy Resource Planning and Utility System Optimization, Conference paper, Published in the proceeding of ECOS2011, Serbia
- **2-** A Novel Graphical Approach to Target CO<sub>2</sub> Emissions for Energy Resource Planning and Utility System Optimization, Journal paper, Applied Energy 104 (2013) 783-790
- **3-** CO<sub>2</sub> emissions targeting for petroleum refinery optimization, Book chapter in "Multi-Objective Optimization in Chemical Engineering: Developments and Applications". John Wiley & Sons, 2013.
- **4-** Minimum CO<sub>2</sub> emissions to maximize product revenue from the CDU using multi-objective optimization Conference paper Published in the proceeding of PSE ASIA 2010, Singapore

- 5- Energy optimization of crude oil distillation using different designs of pre-flash drums, Applied Thermal Engineering 73 (1), 1204-1210, 2014.
- **6-** Effect of crude type on the reduction cost of CO<sub>2</sub> emissions within the CDU, Conference paper Published in the proceeding of CHEMECA 2010, Adelaide, Australia.
- 7- Investigating the trade-off between operating revenue and CO<sub>2</sub> emissions from crude oil distillation using a blend of two crudes Journal Paper Fuel 90 (2011) 3577-3585.
- **8-** Multi-objective optimization of fluidized bed catalytic cracker unit to minimize CO<sub>2</sub> emissions Conference paper Published in the proceeding of CHEMECA 2011, Sydney, Australia.
- **9-** Investigating the effects of energy integration of FCC and CDU on the total CO<sub>2</sub> emissions using multiobjective optimization Conference paper Published in the proceeding of APCChE2011, Singapore.
- **10-** The effect of flame treatment on wetability of polyethylene. Fifth international conference on polymer materials, University of Basrah, November, 2001.
- **11-** Prediction of optimum operating conditions for VCM refrigeration unit, Iraqi J. Polymers, Vol. 7, No. 1, 93-100,2003.
- **12-** The effect of chlorinated polyethylene wax on resistance to flame for polyethylene. Ninth scientific conference for foundation of technical education, Baghdad, Iraq, March, 2005.

### **Research Interests:**

Process and Energy Integration, Multi-Objective Optimization, Process Modeling and Simulation, Economic and environmental analysis of energy recovery.