CURRICLUM VITA

## PERSONAL DATA

Name: Sahar Mohamed El-Marsafy

Present Position: Professor of Chemical Engineering – Faculty of Eng. – Cairo University

Affiliation: Professor of Chemical Engineering

Field of Specialization: Petrochemicals and Polymers Engineering

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Date of Birth: 12/ 01/ 1964

Nationality: Egyptian

## ACADEMIC QUALIFICATIONS

**Ph. D.:** Chemical Engineering Dept., Faculty of Engineering, Cairo University, (1995).

**M. Sc.:** Chemical Engineering Dept., Faculty of Engineering, Cairo University, (1990).

**B. Sc.:** Chemical Engineering Dept., Faculty of Engineering, Cairo University, (1986).

#### PROFESSIONAL EXPERIENCE

**March 2010** Professor, Chem. Eng. Dept., Faculty of Eng., Cairo University.

**2004 - 2010** Associate Professor, Chem. Eng. Dept., Faculty of Eng., Cairo University.

**1995 - 2004** Lecturer, Chemical Eng. Dept., Faculty of Eng., Cairo University.

**1990 - 1995** Lecturer Assistant, Chem. Eng. Dept., Faculty of Eng., Cairo University.

**1987 - 1990** Laboratory Engineer, Chem. Eng. Dept., Faculty of Eng., Cairo University.

##### 1986 - 1987 Laboratory Engineer, National Research Center, Cairo, Egypt

##### M.Sc. and PH.D SUPERVISED

##### 22 awarded M.Sc and 3 Ph.D; 1 M.Sc and 3 Ph.D under supervision.

##### TEACHING EXPERIENCE

**Undergraduate Courses**

 General Chemistry for Engineers

 Basics of Organic Chemistry

 Organic Chemical Process Industries

 Petrochemical Industry

 Advanced Petrochemicals

 Petroleum Refining

 Introduction to Petroleum Industry

 Oil and Gas Field Operations

 Introduction to Chemical Engineering

 Technical English Writing

 Report Writing

 Presentation & Communication Skills

**Postgraduate Courses**

 Polymer Science and Technology

 Petrochemicals from Oil and Gas

 Advanced Polymer Materials

 Technical English Writing

 Writing a Scientific Research Paper

 Presentation & Communication Skills

 Writing Proposals

**Patents and Publications**

1- Effects of chemical modifications on polyester fibers.

Journal of Islamic Sciences, 4, pp. 275 - 284 (1991)

2- A review on the effects of polyester fibers structural changes on its dyeing abilities.

Bull. NAC, Egypt, vol. 16 (3), pp.165 - 177 (1991)

3- Some evaluations of the dyeing properties of modified polyester fibers.

Annali di Chimica, 81, by Societe Chimica Italiana, (1991)

4- Penetration behavior of disperse dyes into modified polyester fibers.

Annali di Chimica, 82, by Societe Chimica Italiana (1992)

5- Adsorption behavior of disperse dyes on modified polyester fibers.

13th Egyptian Chem. Conf., vol. 3, pp. 211 - 223 (1993)

6- Interaction of some chemical reagents with polyester fibers.

Bull. NRC, EGYPT, vol. 21 (1), pp. 63 - 80 (1996)

7- Some studies on the dye-ability of chemically modified polyester fibers.

14th Egypt. Chem. Conf. Cairo, part1, 147 (1996)

8- Investigation of the suitability of cement-dust as an acid-dye adsorbent.

J. of Eng. and Applied Sc., 44 (4), pp.861 - 875 (1997)

9- A study on the adsorptive capacity of sunflower stalks.

17th Int. Conf. on solid waste technology and management, Philadelphia, PA, USA, (2001)

10- Cracking of contaminated Fuel Oil.

17th Int. Conf. on solid waste technology and management, Philadelphia, PA, USA, (2001)

11- Thermal degradation of polystyrene

J. of Eng. and Applied Sc., 50 (3), pp.587 - 602 (2003)

12- Improving the flame retardency of cotton fabrics by adding some salts to the finishing bath.

J. of Eng. and Applied Sc., 50 (4), pp. 807 - 822 (2003)

13- Improvement of the properties of Insulating Polymers.

J. of Eng. and Applied Sc., 51 (5), pp. 1053 - 1072 (2004)

14- Manufacturing of new polymers formulations resistant to toxic agents.

J. of Eng. and Applied Sc., 52 (5), (2005)

15- Catalytic oxidation of tri-active Blue dye (TAB) by using Fenton’s reagent.

J. of Eng. and Applied Sc., Vol. 52 No. 6, PP. 1245-1264, Dec. 2005.

16- A Comparative Techno-Economic Approach to Dyeing Process of Polyester Fibers.

3rd International Conference of Textile Research Division, NRC, Cairo, Textile Processing: State of the Art and Future Developments, 3(7), pp. 501 – 506 (2006)

17. Maximum Utilization of Used Oils for Cleaner Environment.

22nd Int. Conf. on Solid Waste Technology and Management, Philadelphia, PA, USA, (2007)

Material Science Research India, 6(2), 2009

18. Effect of Inorganic Additives on Some Properties of NBR Vulcanizates.

Pigment and Resin Technology, accepted Feb. 2009

19. Methodology for the Selection of the Most Suitable Water Coning Control Method in Vertical Oil Wells.

J. of Eng. and Applied Sc., 56 (4), pp. 457 - 474 (2009)

20. Investigating the Bio-Corrosion Problem of MEOR in Oil Fields

International Journal for Applied Chemistry, IJAC, December 2009

21. New Incubated *Pseudomonas Aeruginosa* Bacteria for Increasing Oil Recovery under Reservoir Conditions.

Paper SPE 126104, SPE North Africa Technical Conference and Exhibition, Cairo, Egypt, February 2010

22. Using Fibers in the Reinforcement of Concrete.

Material Science Research India, 7(1), 2010

23. Synthesis and Properties of Natural Polymers-Grafted-Acrylamide.

World applied Sciences Journal, 13(2), pp 360-368, 2011

24. Effect of New Coating Flame Retardant System on the Flammability Properties of Different Building Materials.

Australian Journal of Basic and Applied Sciences, 6(3): 393-400, 2012

25. Thermal and Mechanical Characteristics of EPDM Composites

Australian Journal of Basic and Applied Sciences, 6(5): 23-30, 2012

26. Characterization of hydrogel synthesized from natural polysaccharides blend grafted acrylamide using microwave (MW) and ultraviolet (UV) techniques.

Starke/Starch, 65, 172–178, 2013

27. Process and financial considerations pertinent to hydrogel manufacture.

###### Starch/Starke 65, 527–534, 2013

###### 28. Free radical grafting kinetics of acrylamide onto a blend of starch/chitosan/alginate. Carbohydrate Polymers, 98, 460– 464, 2013

29. Selection of the Best Technology for LNG Re-gasification Plant in Egypt.

###### Mediterranean Off-shore Conference (MOC) – Alexandria, December 2014

###### PROFESSIONAL ACTIVITIES

* ***Polymers, Plastics, Petrochemicals and Organic Process Industries Specialist***
* ***Executive Coordinator of Graduate Program in Natural Gas Engineering and Technology, Mining Studies and Research Center, Faculty of Engineering, Cairo University***
* ***Technical Assessor – Egyptian Accreditation Council (EGAC) for Laboratories Accreditation***
* ***Technical Evaluator – STDF – Academy of Scientific Research and Technology***
* ***Board Member – The National Authority for Quality Assurance and Accreditation in Education (NAQAAE)***
* ***United Nations Certified Academic Peer Reviewer – Engineering Programs***

**Part-time Jobs**

**2010 – Present** Technical Consultant, Mining Studies and Research Center, Faculty of Engineering, Cairo University

**2010 – Present** Executive Coordinator of Natural Gas Engineering Diploma, Mining Studies and Research Center, Faculty of Engineering, Cairo University

**2011 – Present** Executive Coordinator of M.Sc. in Natural Gas Technology, Mining Studies and Research Center, Faculty of Engineering, Cairo University

**2007 – 2009** Coordinator of Petrochemical Engineering Program, Credit-Hour System, Faculty of Engineering, Cairo University

**2007 – 2011** Managing Director of Quality Assurance Unit – Faculty of Engineering – Cairo University

**2004 – 2010** Adjunct Associate Prof. of Chem. Eng., Akhbar Al Yom Academy, Faculty of Eng., 6th of October City.

**1999 – 2000** Adjunct Lecturer of Chem. Eng., Arab Academy for Science and Technology, College of Engineering and Technology

**Quality Assurance and Enhancement Activities**

 Board Member – The National Authority for Quality Assurance and Accreditation in Education (NAQAAE)

 Enhancement of Quality Assurance and Institution Planning at Arab Universities Project, United Nations Development Project (UNDP), Principal Investigator (PI).

 Participation in the Peer Review on Developmental Engagement of Faculty of Engineering, University of Jordan, Amman, Jordan (UNDP).

 Member of the Committee for formulation of the Strategic Plan for Graduate Studies – Engineering Sector – 2011

 Member of the committee revising and validating the national academic reference standards for engineering (NARS), National Authority for Quality Assurance and Accreditation in Education (NAQAAE)

 Participation in the monitoring and evaluation of the new programs (MENPP), Ministry of Higher Education

 Evaluation of the action plans of the Continuous Improvement of Quality for Accreditation Project (CIQAP), Ministry of Higher Education.

* Participation in the Peer Review on Developmental Engagement of Faculty of Engineering, Mansoura University (QAAP).

 Participation in the Peer Review on Developmental Engagement of Faculty of Engineering, Ain-Shams University (QAAP).

 Participation in the Peer Review on Developmental Engagement of Faculty of Engineering, Aswan University (QAAP).

 Participation in the Peer Review on Developmental Engagement of Faculty of Applied Science, Helwan University (QAAP).

**Area of Research:**

Organic Process Industries

Polymers Engineering

Petrochemical Engineering