

CURRICULUM VITAE

Name	Olfat Moustafa Sadek Hamdy
Scopus ID	6507265742
Current Position	Associated Professor in Materials Science Department, Institute of Graduate Studies and Research, University of Alexandria, Egypt.
Date of employment	6 November 1983
Personal Information	<ul style="list-style-type: none">• Date of birth Feb. 6th, 1961.• Place of birth Alexandria, Egypt.• Gender Female• Marital status married- one girl and two boys.• Nationality Egyptian.
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Education	<ul style="list-style-type: none">• 1983 B.Sc. in Chemical Engineering, Very Good with Degree of Honor, Faculty of Engineering, University of Alexandria, Egypt.• 1987 M.Sc. in Materials Science (Materials Technology), “Solar Energy Utilization in Photooxidative Processes”, Institute of Graduate Studies and Research, University of Alexandria, Egypt.• 1993 Ph.D. in Materials Science, “Factors Affecting the Up-scaling of Photooxidation Process”, Institute of Graduate Studies and Research, University of Alexandria, Egypt.
Grants	<ul style="list-style-type: none">• 2. 2. 1990- 21. 2. 1992 Co- supervision grant through the joint Egyptian-channel system, Department of Chemistry, University of Manchester Institute of Science and Technology "UMIST", UK
Languages	<ul style="list-style-type: none">• Arabic• English.

- Level of Computer**
- Word
 - Excel
 - Power point
- Brief Chronology of Employment**
- 06. 11. 1983 – 20. 4. 1987
Demonstrator in Materials Science Department,
Institute of Graduate Studies and Research,
University of Alexandria Egypt.
 - 21. 04. 1987 – 24. 01. 1994
Assistant Lecturer in Materials Science Department,
Institute of Graduate Studies and Research,
University of Alexandria, Egypt.
 - 25. 01. 1994 - 26. 12. 2005
Lecturer in Materials Science Department,
Institute of Graduate Studies and Research,
University of Alexandria Egypt.
 - 27. 12. 2005 – Now
Associated Professor in Materials Science Department,
Institute of Graduate Studies and Research,
University of Alexandria, Egypt.
- Contracting**
- 15. 09. 2004 - 25. 06. 2014
Associated professor in chemistry Department,
Science College, University of Dammam, KSA. (Contract)
- Teaching Experience, “Post Graduate Courses”**
- New trends in materials science.
 - Technical Writing.
 - Research methodology.
 - Metals and metals processing
 - Materials selection.
 - Thermodynamics of materials science.
 - Materials in design and processing.
 - Advanced materials.
 - Materials processing.
 - Materials and environments.
 - Chemical change and materials properties.
 - Phase equilibrium and phase transformation.
 - Photochemistry.
 - Introduction to combustion and energy utilization.
 - Polymer characterization.
 - Clay, ceramics, and polymer properties.
 - Ceramics and building materials.
 - Spectroscopic applications for organic compounds.
 - Plastic recycle.

- Petroleum chemistry & technology.
- Solar energy storage.
- Solid organic matter activity.
- Principles of Combustion and Fuel Science
- Heat and mass transfer
- Advanced physical chemistry

Teaching Experience, “Under Graduate Courses –in KSA”

- Physical Chemistry (Thermodynamic II)
- Physical Chemistry (Photochemistry and Laser)
- Physical Chemistry (Nuclear chemistry and Radiation)
- Physical Chemistry (Quantum Chemistry I)
- General Chemistry (CHEM 101 N& CHEM 111 N)
- Physical Chemistry (CHEM 221 N)
- Surface Chemistry and Catalysis (CHEM 323 N)
- Photochemistry (CHEM324)

Referee for Scientific Journals

- International Journal of Biological Macromolecules
- Arab Journal of Basic and Applied Sciences
- Arabian Journal of Chemistry
- Journal of Saudi Chemical Society
- Materials Research Bulletin
- Materials Science in Semiconductor Processing
- Journal of Thermal Analysis and Calorimetry

Professional Experience

- Hydrogel
- Nanoparticles and nanocomposites
- Clay and nanoclay applications and uses.
- Thermodynamics and kinetics calculations.
- Industrial waste water purification.
- Electrocoagulation.
- Materials and polymer analyses by IR.
- Spectroscopic application: IR, UV and VIS.
- Energy storage materials.
- Photochemical reactions.
- Theoretical design for photochemical reactor.

Society Affiliations

- The Arab Society of Materials Science, Alexandria, Egypt.
Honorary member of the Board of Directors for the 2004/2005 session.
- International Center of Theoretical Physics Arab Friends Society (I.C.T.P.), Italy.

Completed projects

- 2001-2002
"Inhibition of Egyptian cotton flammability", Egypt, Project interconnection US and Institute of Graduate Studies and Research, University of Alexandria, Egypt.
- 1997- 1998
"Uses of steel furnaces waste in the local market Institute of Graduate Studies and Research, University of Alexandria and Alexandria National Iron and Steel.

- 1988
"Energy and Environment Project".
Institute of Graduate Studies and Research Alexandria University -
UNESCO

Community concerns and educational development

- Contribute to the addition of photooxidation technology to the scientific activity in the department with the establishment of a laboratory for this activity, and supervision of research and the establishment of a school of student's diplomas, master's and doctorate in this field..
- Contributing to the establishment of the colloidal laboratory in the department and supervision of research and the establishment of a school of student's diplomas, master's and doctorate in this field.
- Attend seminars, general lectures and the discussion of scientific thesis.
- Contribute to the preparation and teaching of many courses in the department.
- Participate in the development of curricula in the department.
- Participation in scientific consultations in the department.
- Coordinator of the training unit of the Institute

Supervision of scientific thesis

- Ph. D.:3 students - awarded (in Egypt)
- Ph. D.: 5 student under supervision (in Egypt)
- Ms. C.:18 students- awarded (in Egypt)
- Ms. C.:2 students under supervision (in Egypt)
- Diploma degree: 18 students- awarded (in Egypt)
- Ms. C : 2 students - awarded (in KSA)
- Ph. D. :2 students - awarded (in KSA)

Contribution in thesis discussion committees

- Ph. D.: 1 students - awarded (in Egypt)
- Ms. C. :8 students- awarded (in Egypt)
- Ph. D. :2 students - awarded (in KSA)
- Ms. C:3 students - awarded (in KSA)
- Diploma degree: 18 students- awarded (in Egypt)

Contribution in a comprehensive examination for Ph. D. students

- 2 student

Major Conferences attended

- 12 December 2020
The 20th Arab International Conference on Materials Science (prospective of Materials science), Institute of Graduate Studies and Research, Alexandria University and Arab Society of Materials
at the Alexandria, Egypt.
- 28-29 December 2019,
THE 19th Arab International Conference on Materials Science (Science Communication: The Road-Map for the Future), Institute of Graduate Studies and Research, Alexandria University and Arab Society of Materials
at the Alexandria, Egypt.

- 22-23 December 2018
The 18th Arab International Conference on Materials Science (Materials Science and Scientific Instruments: Towards Building Research Capacity in the Arab World), Institute of Graduate Studies and Research, Alexandria University and Arab Society of Materials Science, Alexandria, Egypt.
- 17-20 November 2018
Coordinator of the work shop on "Science and Technology of Materials- A Comprehensive Outlook" Institute of Graduate Studies and Research, Alexandria University and Arab Society of Materials Science, Alexandria, Egypt.
- 7-8 February 2018
Training course on "University Laws and Regulations", Faculty and Leadership Development Center, Alexandria University, Egypt.
- 18-20 December 2017
The 17th Arab International Conference on Materials Science (Materials for novel applications), Institute of Graduate Studies and Research, Alexandria University and Arab Society of Materials Science, Alexandria, Egypt.
- 26- 27 March 2017
Workshop on "How to write scientific articles", Quality Assurance Unit, Institute of Graduate Studies and Research, Alexandria University.
- 3-5 December 2016
The 16th Arab International Conference on Materials Science (Materials and Society), Institute of Graduate Studies and Research, Alexandria University and Arab Society of Materials Science, Alexandria, Egypt,
- 27 April- 8 May 2008
The first scientific meeting for "Deanship of Scientific Research for the Girls' Colleges in the Eastern Province" Science College, University of Dammam, KSA.
- 5 March 2008.
Workshop on "Zeta Potential", (speaker and dialog Manage), Science College, University of Dammam, KSA
- 5 March 2008.
Workshop on "Promotion of faculty members", Science College, University of Dammam, KSA.
- 20 February 2008.
Workshop on "Publishing of scientific research" (speaker and dialog Manage), Science College, University of Dammam, KSA.
- 15 January 2008.
Workshop on "Discuss of regulation of the presence of conferences and seminars" Science College, University of Dammam, KSA.
- 14 January 2008.
Workshop on "Academic guidance for graduate students" Science College, University of Dammam, KSA.

- 5-7 September 2006.
Workshop on "The life skills" Science College, University of Dammam, KSA.
- 9-12 July 2005
Workshop on "The thinking skills" Faculty and Leadership Development Center, Alexandria University, Egypt.
- 2-4 July 2005
Workshop on "Ethics and professional ethics" Faculty and Leadership Development Center, Alexandria University, Egypt.
- 17– 20 March 2002
7th Arab International Conference on Material Science (Recycling and Reuse of Materials), The Arab Society of Materials Science, Alexandria, Egypt, (organizing committee).
- 13-14 October 2001
Workshop on "Towards for plastic recycle", The Arab Society of Materials Science, Alexandria, Egypt.
- 19- 22 November 2000
6th Arab International Conference on Material Science (Plastics Materials for Agriculture Applications), The Arab Society of Materials Science. Alexandria, Egypt, (organizing committee).
- 1-2 February 1999
Workshop on "Introduction to materials science and technology", The Arab Society of Materials Science, Alexandria, Egypt.
- 22– 25 March 1998
5th Arab International Conference on Material Science (Materials and Fire), The Arab Society of Materials Science, Alexandria, Egypt, (organizing committee).
- 13-16 March 1993
Workshop on "Scientific writing", The Arab Society of Materials Science, Alexandria, Egypt.
- 11 – 29 September 1989
Workshop on "Materials Science and Physics of Non-conventional Energy Sources", International Center for Theoretical Physics (I.C.T.P.), Trieste, Italy.
- 25-30 March 1989
Workshop on "Thermal analysis of materials", Institute of Graduate Studies and Research, Alexandria University, Egypt.
- 29-31 December 1987
1st Arab Regional Conference on Material Science, of Graduate Studies and Research, Alexandria, Egypt, (organizing committee).
- 21-25 December 1986
Workshop on "Colloidal aspects of industrial formulation", Institute of Graduate Studies and Research, Alexandria University, Egypt.
- 27-31 October 1986
Workshop on "pH meter", Institute of Graduate Studies and Research, Alexandria University, Egypt.

- 9-24 April 1986
Workshop on "Instrumental analysis: spectroscopic techniques", Institute of Graduate Studies and Research, Alexandria University, Egypt.
- 4-9 January 1986
6th Winter School, "X-ray analysis: theory and applications", Institute of Graduate Studies and Research, Alexandria University, Egypt.
- 22 September 1984
12th workshop on "for preparing the administrator and assistants lecturer for teaching", college of Education, Alexandria University, Egypt.
- 7-9 April 1984
Instrumental Analysis "Infrared spectroscopy between theory, techniques and applications", Institute of Graduate Studies and Research, Alexandria University, Egypt.
- 7-12 January 1984
4th Winter School, "The science and technology of polymers", Institute of Graduate Studies and Research, Alexandria University, Egypt.

List of Publications

- Ayman Galal, Olfat Sadek¹, Moataz Soliman, Shaker Ebrahim, M. Anas, 2021, "Synthesis of Nanosized Nickel Zinc Ferrite Using Electric Arc Furnace Dust And Ferrous Pickle Liquor.", Scientific Reports, 11:20170.
- Abdallah S. Elgharbawy, Wagih A. Sadik, Olfat M. Sadek, Mosaad A, 2021, "Maximizing Biodiesel Production From High Free Fatty Acids Feedstocks Through Glycerolysis Treatment", Biomass and Bioenergy 146, 105997
- Abdallah S. Elgharbawy, Wagih A. Sadik, Olfat M. Sadek, Mosaad A, 2021, "A Review on Biodiesel Feedstocks and Production Technologies", J. Chil. Chem. Soc., 66, N^o1
- Abdallah S. Elgharbawy, Wagih A. Sadik, Olfat M. Sadek, Mosaad A, 2021, Transesterification Reaction Conditions And Low-Quality Feedstock Treatment Processes for Biodiesel Production, Journal of Petroleum and Mining Engineering 23(1), 98-103
- Abdallah S. Elgharbawy, Wagih A. Sadik, Olfat M. Sadek, Mosaad A. Kasaby, 2021, "Glycerolysis treatment to enhance biodiesel production from low-quality Feedstocks", Fuel, 284, 118970,1-13.
- Ayman Galal Barakat, Moataz Bellah Soliman, , Shaker Mabrouk Ibrahim, Olfat Moustafa Sadek, "Synthesis and Characterization of Nanostructured Nickel-Zinc-Ferrite Using Electric Arc Furnace Dust", The 20th Arab International Conference on Materials Science (Prospective of Materials Science), Institute of Graduate Studies and Research, Alexandria University and Arab Society of Materials Science, Alexandria, Egypt, 12 December 2020.

- Hisham M. Gad; Moataz M. Soliman; Olfat M. Sadek, 2018, "Preparation and Characterization of Protective coatings from polydimethylsiloxane and Metal Alkoxides for Protection of heliostates", The 18th Arab International Conference on Materials Science (Materials Science and Scientific Instruments: Towards Building Research Capacity in the Arab World), Institute of Graduate Studies and Research, Alexandria University and Arab Society of Materials Science, Alexandria, Egypt, 22-23 December 2018.
- A. Meligi; O. Sadek, M. Shehap; M. Soliman, 2018, "Clay/Polyaniline Composite Electrode for Supercapacitor Application", The 18th Arab International Conference on Materials Science (Materials Science and Scientific Instruments: Towards Building Research Capacity in the Arab World), Institute of Graduate Studies and Research, Alexandria University and Arab Society of Materials Science, Alexandria, Egypt, 22-23 December 2018.
- Olfat Moustafa Sadek , Mosad Attia EL-Kasaby, Marwan Medhat Shawky Soliman, Sherif Hussien Kandil, 2017, "Improvement of Gasoline Octane Number by Using Some Petroleum Extracts", The 17th Arab International Conference on Materials Science (Materials and Society), Institute of Graduate Studies and Research, Alexandria University and The Arab Society of Materials Science, Alexandria, Egypt, 18-20 December 2017.
- Olfat M. Sadek, Nuhad A. Al-Omair, Eman A. A. Al-Abbad, 2016, "Kinetics and Thermodynamics Studies of Some Fatty Acids Adsorption on Sodium- Montmorillonite Clay", The 16th Arab International Conference on Materials Science (Materials for Noval Applications), Institute of Graduate Studies and Research, Alexandria University and The Arab Society of Materials Science, Alexandria, Egypt, 3-5 December 2016.
- El Sayed Mohamed El Sayed Ibrahim, Mohamed Essam El-Rafey, Olfat Moustafa Sadek, 2014, "Production of compounded waxes from Egyptian petroleum waxes, Academy of Scientific Research & Technology, Egyptian Patent No. 26736, Cairo, 8 July 2014.
- Olfat M. Sadek, Safenaz M. Reda, Reem K. Al-Bilali, 2013,, "Preparation and Characterization of Silica and Clay-Silica Core-Shell Nanoparticles Using Sol-Gel Method", *Advances in Nanoparticles*, 2, 165-175.
- Sadek, O. M.; Mekhemer, W. K.; Assaad, F.F.; Mostafa, B. A., 2006, "Adsorption of (4-Sodium styrene sulfonate) on kaolinite clays", *J. Applied Polymer Science*, 100, 1712- 1719.
- Sadek, O. M.; Mekhemer, W. K.; Assaad, F.F.; Mostafa, B. A., 2006, "Electro-kinetic potential of kaolinite clay in the presence of polystyrene sulfonate", *J. Applied Polymer Science*, 100, 1705- 1711.
- Sadik, W .A., Sadek, O .M., El-Demerdash, A.M, 2004, The Use of Heterogeneous Advanced Oxidation Processes to Degrade Neutral Red

Dye in Aqueous Solution, Polymer-Plastics Technology and Engineering, 43, 1675–1686.

- El-Masry, M. H.; Sadek, O. M.; Mekhemer, W.K., 2004, "Purification of surface raw water using electro-coagulation method", Water, Air and Soil pollution, 158, 375-385.
- El-Batouti, M., Sadek, O. M., and Assaad, F. F., 2003, "Kinetics and thermodynamics studies of copper exchange on Na-montmorillonite clay mineral" J. Colloid and Interface Science, 259, 223-227.
- Sadek, O. M. and Mekhamer, W. K., 2001, "Na-montmorillonite clay as thermal energy storage material", Thermochemica Acta, 370, 57-63.
- Sadek, O. M. and Mekhamer, W. K., 2000, "Ca-montmorillonite clay as thermal energy storage material", Thermochemica Acta, 363, 47-54.
- El-Kharashi, S. A., Abou-El Ghit, M. A., Sadek, O. M., Abou-Senna, G. F., 2000, "Controlling NOX emissions in petroleum industry, (case study)", 3rd International Conference- RETBE 2000, Alexandria, Egypt, 18-20 November, 2000.
- Mekhemer, W. K., Sadek, O. M., Assaad, F. F., Mostafa, B. A., 2000, "Flocculation of kaolinite by Na-polystyrene sulfonate: Effect of pH and type of surface cations", 6th Arab International Conference on Material Science, Alexandria, Egypt, 19-22, November 2000 .
- El-Kharashi, S. A., Abou-Senna, G. F., Abou-El Ghit, M. A., Sadek, O. M., 1998, "Utilization of natural gas in Alexandria Petroleum Co.", 14th Petroleum Conference, Cairo, Egypt, 13-15 October 1998.
- El Gamel, M A., Naem, M. M., Sadek, O.M., and Abd Allah, S. F., 1998, "An investigation of fatty acids and their mixtures as phase change materials for energy storage", 5th Arab International Conference on Material Science, Alexandria, A.R.E., Egypt – 25, March 1998.
- Abdel Kader, M.H., Kandil, S.H., El Rafey E., Sadek, O.M., Braun, A.H., 1996, "Photosensitization of furfuryl alcohol by aluminium phthalocyanine tetra-sulfonate in micellar systems", 2nd International Conference on Laser and Applications, Cairo, Egypt, 16– 19, September 1996.
- El-Masry, M. H.; Sadek, O. M.; "Electro-coagulant composite for purifying surface raw water", in press.
- Sadek, O. M.; Al-Omire, N., Al-Abbad, E.; "Kinetics behavior of some fatty acids adsorption on the surface of sodium-montmorillonite clay", in press.
- Sadek, O. M.; Al-Omire, N., Al-Abbad, E.; "Adsorption behavior of myristic, palmetic and stearic acids on sodium montmorillonite clay", in press.

**Name and
address
of Reference**

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