Ahmed Ahmed Refaat

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EDUCATION

PhD., Department of Chemical Engineering – Faculty of Engineering – Cairo University, 2014: Distinction

"Green Chemistry Application Using Nano Technology and Microwave Irradiation: Biodiesel a Case"

MSc., Department of Chemical Engineering – Faculty of Engineering – Cairo University, 2009: Distinction

"Optimization of Biodiesel Production Using Different Techniques" Graduation:

BSc. (Hons), 2007: Cumulative Appreciation – Distinction with Honour degree

Graduation Project: Distinction

"Green Chemistry Applications - Biodiesel Production"

CERTIFICATES

Certified Career Service Provider (CCSP), National Career Development Association (NCDA), Jul 2025

Certified Manager (CM), Institute of Certified Professional Managers (ICPM), May 2025

EXPERIENCE

Director, University Career Development Center (UCCD), King Salman International University: Feb 2024 - Present

Associate Professor at King Salman International University: (Defence Jul 2025 - Expected Sept 2025)

Assistant Professor at King Salman International University: Oct 2020 - Present

Assistant Professor, Department of Chemical Engineering – Faculty of Engineering – Cairo University: May 2014 – Oct 2020 Assistant Lecturer, Department of Chemical Engineering – Faculty of Engineering – Cairo University: Apr 2010 – May 2014

Teaching Assistant, Department of Chemical Engineering – Faculty of Engineering – Cairo University: Oct 2007 – Apr 2010

PUBLICATIONS

Metrics:

h-index (Scopus): 11 Total Citations: 1394

Total no. of International Publications in Scopus: 15

Total no. of Publications: 28

Page 1 of 5 (Feb 2024)

Journal Publications:

Mohamed. S. El-Sawy, Fatma H. Ashour, **Ahmed Refaat**, Tarek M. Aboul-Fotouh and S. A. Hanafi, Simulation VGO and waste lubricating/cooking oil co-hydroprocessing, PTQ, Q4, 2023, pp. 69-77.

S.M. Kakom, N.M. Abdelmonem, I.M. Ismail, **A.A. Refaat**, Activated Carbon from Sugarcane Bagasse Pyrolysis for Heavy Metals Adsorption, Sugar Tech, 2023, 25(3), pp. 619–629

A.M. Adam, A.K. Diab, Mohamed Tolan, Z.M.H. El-Qahtani, **A.A. Refaat**, Medhat A. El-Hadek, E.M. Elsehly, A. El-Khouly, Abdulaziz N. Alharbi, V. Khovaylo, M. Ataalla, Outstanding optical properties of thermally grown (Bi2Se3)1-x (Bi2Te3)x thin films, Materials Science in Semiconductor Processing, Volume 143, 2022, 106557, ISSN 1369-8001, https://doi.org/10.1016/j.mssp.2022.106557.

A.M. Adam, Mohamed Tolan, **A.A. Refaat**, Ayman Nafady, P. Petkov, M. Ataalla, Optical properties of thin Bi2Te3 films synthesized by different techniques, Superlattices and Microstructures, Volume 155, 2021, 106909, ISSN 0749-6036, https://doi.org/10.1016/j.spmi.2021.106909.

Refaat, A.A. (2011). "Biodiesel production using solid metal oxide catalysts". International Journal of Environmental Science and Technology, 8 (1), 203-221. El Sherbiny, S.A.; **Refaat**, A.A. and El Sheltawy, S.T. (2010). "Production of biodiesel using the microwave technique". Journal of Advanced Research, 1 (4), 309-314.

Refaat, A.A. (2010). "Different techniques for the production of biodiesel from waste vegetable oil". International Journal of Environmental Science and Technology, 7 (1), 183-213.

Refaat, A.A. (2009). "Correlation between the Chemical Structure of Biodiesel and its Physical Properties". International Journal of Environmental Science and Technology, 6 (4), 677-674.

Refaat, A.A. (2009). "The Imperative Need for an Integrated Energy and Climate Policy for Africa". International Journal of Energy and Environment, 3 (1), 29-43. **Refaat**, A.A. (2009). "The Necessity of Engineering Entrepreneurship Education for Developing Economies". International Journal of Education and Information Technologies, 3 (2), 85-96.

Refaat, A.A.; El Sheltawy, S. T.; Sadek, K. U., (2008). Optimum reaction time, performance and exhaust emissions of biodiesel produced by microwave irradiation. International Journal of Environmental Science and Technology, 5 (3), 315-322.

Refaat, A.A.; Attia, N.K.; , Sibak, H.A.; El Sheltawy, S.T.; ElDiwani, G.I., (2008). Production Optimization and Quality Assessment of Biodiesel from Waste Vegetable Oil. International Journal of Environmental Science and Technology, 5 (1), 75-82.

El Sheltawy, S.T. and **Refaat, A.A.**, (2007). Guidance for an Effective EIA for a Biodiesel Project in Egypt. Cairo University Journal for Environmental Sciences, 5 (1), 1-10.

Books and Book Chapters:

Refaat, **A.A.** (2012), 'Biofuels from Waste Materials', in A Sayigh (ed.), *Comprehensive Renewable Energy*, Elsevier Ltd., Oxford, pp. 217–261. Transactions:

Refaat, A.A. and El Sheltawy, S.T. (2008). Comparing three options for biodiesel production from waste vegetable oil. WIT Transactions on Ecology and the Environment, Waste Management and the Environment IV, Vol. 109, WIT Press, ISSN 1743-3541. doi:10.2495/WM080151. p. 133-140.

Refaat, **A.A.** and El Sheltawy, S.T. (2008). Time Factor in Microwave-enhanced Biodiesel Production. WSEAS Transactions on Environment and Development, 4 (4), 279-288.

Conference Publications:

Bayoumi, R.A., Abdelmonem, N.M., Soliman, M.A., Ismail, I.M. and **Refaat, A.A.** (2022). "Hybrid Hydro-pyrometallurgical Process for Zn Recovery from Electric Arc Furnace Dust". 11th International Conference on Chemical and Environmental Engineering (ICEE-11), Cairo, Egypt, March 29-31, **2022**

Refaat, A.A. and El Sheltawy, S.T. (2017). "Solid Waste Management in the MENA Region: A Review". 7th International Conference on Solid Waste

Management (7th IconSWM 2017), Hyderabad, India, December 15 - 17, 2017.

Refaat, A.A. and Ismail, I.M. (2017). "Water, Food and Energy Sustainability Nexus". International Conference on Sustainable Futures - ICSF 2017- Kingdom of Bahrain, November 26-27, **2017**.

El Sheltawy, S.T. and **Refaat**, **A.A.** (2011). "Sustainable Bioenergy: Challenges and Opportunities". 1st Annual Congress of Environmental Biotechnology (WCEB-2011), Dalian, China, October 19-22, 2011

Refaat, A.A. (2009). "Fostering Entrepreneurial Intention Among Engineering Students". Proceedings of The 6th International Conference on ENGINEERING EDUCATION (Engineering Education'09 - EE'09), Rodos (Rhodes) Island, Greece, July 22-24, 2009. ISSN: 1790-2769. ISBN: 978-960-474-100-7. p. 159-167.

Refaat, A.A. (2009). "Nurturing the Entrepreneurial Spirit in Future Engineers". Proceedings of EDULEARNO9 Conference, Barcelona, Spain, 6th-8th July 2009. ISBN:978-84-612-9802-0. p. 2206-2213.

El Sheltawy, S.T. and **Refaat, A.A.** (2009). "Strategies and Compromises: Towards an Integrated Energy and Climate Policy for Egypt". Proceedings of the International Conference on Energy, Environment, Sustainable Development (EESD'09), Paris, France, June 24-26, 2009. World Academy of Science, Engineering and Technology, Vol. 54 (235), p. 1454-1468.

Engineering and Technology, Vol. 54 (235), p. 1454-1468. El Sheltawy, S.T. and **Refaat**, **A.A.** (2009). "A Recommended Holistic Policy Framework for Vegetable Oil Waste Management in Egypt". Proceedings of The 24th International Conference on Solid Waste Technology and Management (ICSW'09), Philadelphia, U.S.A., March 15 - 18, 2009. ISSN: 1091-8043. p. 560-577.

Refaat, A.A. (2008). Recommended Integrated Climate and Energy Policy for Africa: the Continent of many Contradictions. 2nd WSEAS/IASME International Conference on Energy Planning, Energy Saving, Environmental Education (EPESE'08), 26-28 October 2008, Corfu, Greece. ISSN: 1790-5095. ISBN: 978-960-474-016-1. p. 119-134.

Refaat, **A.A.** (2008). Introducing Entrepreneurship as a Paradigm Shift in Engineering Education in Egypt. 4th WSEAS/IASME International Conference on Educational Technologies (EDUTE'08), 26-28 October 2008, Corfu, Greece. ISSN: 1790-5109. ISBN: 978-960-474-013-0. p. 34-45.

Refaat, A.A.; El Sheltawy, S.T. and Sibak, H.A. (2008). Guidance for an Effective Biodiesel Environmental Impact Assessment. 1st WSEAS International Conference on Environmental and Geological Science and Engineering, 11-13 September 2008, Malta. ISSN: 1790-5095. ISBN: 978-960-474-001-7. p. 199-206.

El Sheltawy, S.T. and **Refaat, A.A.** (2008). Using Ultrasonication for Fast Production of Biodiesel from Waste Vegetable Oil in Egypt. Proceedings of The 23rd International Conference on Solid Waste Technology and Management, 30 March-2 April 2008, Philadelphia, U.S.A. ISSN: 1091-8043. p. 1288-1297.

El Sheltawy, S.T.; **Refaat, A.A.** and Sadek, K.U. (2008). Improved Biodiesel Production Using Microwave Irradiation. Presented to the 3rd IASME / WSEAS International Conference on Energy and Environment (EE'08), February 23-25, 2008, Cambridge University, UK. Published in the proceedings of the 2nd WSEAS International Conference on Management, Marketing and Finances (MMF'08), 24-26 March 2008, Harvard University, Cambridge, Massachusetts, USA. ISSN: 1790-5117. ISBN: 978-960-6766-48-0. p. 149-154.

Conference Presentations:

El Sheltawy, S.T. and **Refaat**, **A.A.** (2013). "Waste management in the biodiesel industry". Engineering Conference of "Waste Management & Sustainable Development", Cairo University, Egypt, March 5-7, 2013.

El Sheltawy, S.T. and **Refaat**, A.A. (2012). "Biofuels in Egypt: Challenges and Opportunities". Engineering Conference of "Waste Management & Sustainable Development", Cairo University, Egypt, March 5-7, 2012.

THESIS SUPERVISION

PhD. Thesis:

Kakom, S.M. "Activated Carbon from Sugarcane Bagasse Pyrolysis and Its Use on Heavy Metals Adsorption" PhD. Thesis Cairo University, 2023.

Bayoumi, R.A. "Zinc Recovery from Electric Arc Furnace Dust" PhD. Thesis Cairo University, 2022.

Elsawy, M.S. "Co-hydroprocessing and hydrocracking of alternative feed mixture (vacuum gas oil/used lubricating oil/waste cooking oil) for Production of highquality fuels" PhD. Thesis Cairo University, 2021.

MSc. Thesis:

Zohairy, H. "Mini Plant for NGL Recovery from Associated Gas: Design of Dehydration Packages" MSc. Thesis Cairo University, 2017.

Habib, A. "Mini Plant for NGL Recovery from Associated Gas: Design of Sweetening Packages" MSc. Thesis Cairo University, 2017.

COURSES TAUGHT

King Salman International University - South Sinai:

Engineering Chemistry (2020- to date)

Energy Resources (2023 - to date)

Thermal Energy (2022 – to date)

Piping and Instrumentation (P&ID) Drawing (2023)

Hazards & Implementations of Safe Working Practices (2023)

Hydraulic, Pneumatic, Air Filtration Systems (2022)

Material Science (2021)

Physical Chemistry (2021 – to date)

General Chemistry (2020)

Faculty of Engineering - Cairo University:

Management for Engineering Students (2015 -2018)

Organic Chemistry for Biomedical Students (2015-2018)

Introduction to Chemical Engineering – Course in Diploma (2014)

Transport Phenomena for Postgraduate students (2014 – Present): Credit hours

Biochemistry for Biomedical Students (2014)

Reactor and Vessel Design (Tutorial) (2013)

Biofuels (Tutorial) – REMENA Master's Program (2012-2013)

Organic Chemistry Lab (2008 - 2013): Main stream and Credit hours

Chemical Engineering Lab (2008 – Present)

Chemistry for Freshman Students (2007 – Present)

Faculty of Engineering - Higher Technical Institute (10th of

Ramadan):

Chemical Engineering Principles (2020)

Engineering Chemistry (2020)

Faculty of Engineering – Nile University:

General Chemistry for Engineering Students (2015)

Faculty of Engineering – French University in Egypt:

Reactor Design (2014)

Process Design (2014)

ACTIVITIES AND ADMIN ROLES

King Salman International University - South Sinai:

Faculty SIS Registrar (2021 - to date)

Faculty Exam Revision Committee (2021 – to date)

Faculty Academic Advising Representative (2020 – to date)

Member of Faculty Schedules Committee (2020 – to date)

Faculty Quality Responsible (2021 – 2022)

Member of Faculty Lab Examination and Receipt Committee (2021 – 2022)

Member of Faculty Academic Resources Committee (2020 – 2022)

AWARDS

Certificate of Excellence – King Salman International University (2020)

Certificate of Excellence for the Student Activity "B positive" – Faculty of Engineering, Cairo University (2015)

Certificate of Appreciation for International Publications – Cairo University (2010)

Award of Excellence in Postgraduate Studies (Master's Thesis) – Center for Advancement of Postgraduate Studies – Faculty of Engineering, Cairo University (2010)

COURSES TAKEN

2022 Interdisciplinary Excellence Programme (2022)

Teaching Excellence in Engineering – EKB (2019)

Egypt's Next Generation of Chemical Security Practitioners - CRDF (2017)

Security Risk Assessment Skills Primer – AcuTech (2017)

Training Program of Diplomatic and Consular Relations – Geneva Institute for the Preparation of Diplomats (2015)

Training Program of Preparing Diplomatic and Consular Relations Advisors - Geneva Institute for the Preparation of Diplomats (2015)

Chemical Safety and Security Officer Training – Sandia National Laboratories (2014)

Presentation Skills – Faculty and Leadership Development Center, Cairo University (2013)

Conference Organization - Faculty and Leadership Development Center, Cairo University (2013)

Teaching Skills – Faculty and Leadership Development Center, Cairo University (2013)

Quality in the Educational Process – Faculty and Leadership Development Center, Cairo University (2013)

Recent Teaching Trends – Faculty and Leadership Development Center, Cairo University (2013)

The Credit Hour System – Faculty and Leadership Development Center, Cairo University (2013)

REVIEWER

STDF

Applied Energy

Applied Thermal Engineering

Biomass and Bioenergy

Bioresource Technology

Energy Conversion and Management

Environmental Impact Assessment Review

Fuel Processing Technology

International journal of Environmental Science and Technology

Journal of Advanced Research

Journal of Environmental Management

Renewable and Sustainable Energy Reviews

Sustainable Energy Technologies and Assessments