



REHAB MOHAMED ALI

RESEARCHER

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| <p>PERSONAL INFORMATION</p> | <p>Full Name: Affiliations: Address: Mobile No.: E-mail: Important links:</p> | <p>Rehab Mohamed Ali Hassan</p> <p>Fabrication Technology Department, Advanced Technology and New Materials Research Institute (ATNMRI), City of Scientific Research and Technological Applications (SRTA-City), Alexandria 21934, Egypt.</p> <p>190 El Hourria Road, Ebrahemia, Alexandria.</p> <p>01223810108</p> <p>Rali@srtacity.sci.eg Rehabmohamedali1983@gmail.com</p> <p>Scopus (Ali, Rehab) Google scholar (Rehab Mohamed Ali)</p> |
| <p>EDUCATION</p> | <ul style="list-style-type: none"> • Doctorate degree of Engineering Sciences in Chemical Engineering. University: Alexandria. CGPA of courses: 3.777 (A) “Accomplished all courses in one term”. Graduation date: September 2014 Research topic: “Production of biodiesel from waste frying oils using homogeneous and heterogeneous catalysts”. □ Master degree of Engineering Sciences in Chemical Engineering. University: Alexandria CGPA of courses: 3.555 (B⁺) Graduation date: February 2012 Research topic: “A study on adsorption of copper ions from wastewater using peanut hulls”. □ Bachelor of Chemical Engineering 2000-2005. University: Alexandria Graduation date: June 2005 Project of graduation: “Removal of heavy metals from waste water by | |

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| | fluidization using sand”. |
| ACTIVITIES | <p>Scientific Activities</p> <p><u>Supervision</u></p> <p><u>Master of Science in Chemical Engineering:</u> 1- Title: Preparation and Characterization of New Catalyst Used in Biodiesel Production Alexandria University, Faculty of Engineering.</p> <p><u>Doctor of philosophy in Chemical Engineering:</u> 2- Title: Study in using Microwave Technology and new catalysts for Biodiesel Production from Waste Cooking Oil. Alexandria University, Faculty of Engineering.</p> <p>3- Title: Study in using Ultrasonic Technology and new catalysts for Biodiesel Production from Waste Cooking Oil. Alexandria University, Faculty of Engineering.</p> <p><u>Patents</u> <u>Rehab M. Ali*</u>, Sara E. Abdel Hafez, Marwa R. El Katory, Ali M. Hashem, “Rapid degradation of crystal violet dye by treated Ficus retusa leaves”, 1426/2019, (Bending).</p> <p><u>Conferences</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> Publishing poster on the title “Adsorption of copper from simulated wastewater using peanut hulls”, at 1st International water BioTech Conference, National Research Center (NRC). Cairo, Egypt, 9-11 October 2012. <input type="checkbox"/> Attendance conference on title “Challenges facing health”, Bibliotheca Alexandria- Alexandria- Egypt, November, 2012. <input type="checkbox"/> Attendance workshop on title “wastewater reuse in Agriculture “, High institute of public health, Alexandria- Egypt, November, 2012. <input type="checkbox"/> Attendance workshop on title “Bio-fuel Production”, City of |

Scientific research and technological application (SRTA-City) in cooperation with YONESEI University, 3rd February, 2013.

- Attendance conference on title “**Water and sanitation in Africa and the Middle East**”, Bibliotheca Alexandria- Alexandria- Egypt, October, 2013.
- Share in Arab Science and Technology Foundation competition with a proposal on title “**Production of bioethanol from water hyacinth (Eichhornia crassipes)**” reach to the final stage and be one of the top fifteenth winners. From May 2013 to September 2014.
- Attendance training workshop on title “**Entrepreneurship**”, 9th Arab technology Business Plan Competition Nile University- Cairo- Egypt, 19-20 January, 2014.
- Oral presentation on the title “**Production of bioethanol from agricultural wastes**”, at MEK competition, 30 August 2014.
- Oral presentation on the title “**Production of bioethanol from water hyacinth (Eichhornia crassipes)**”, during Arab Science and Technology Foundation competition. 30 September 2014 in Nile University, Cairo, Egypt.
- Attendance training workshop on title “**Data analysis and modeling using CoStat statistical software**”, City of Scientific research and technological application (SRTA- City), Egypt. 1 December 2014.
- Presentation about green adsorbent for water treatment in “**The 15th Arab International Conference on Material Science, Materials for water Applications**”, 2-4 December 2014, Alexandria, Egypt.
- Attendance conference on title “**New life sciences: the next decade**” BioVision Alexandria, Egypt. 7-9 April 2014.
- Attendance of “**The 15th Arab International Conference of Material Science**”, at the institute of graduate studies and research (IGSR), Alexandria University, Egypt. 2-4 December 2015.
- Participate in “**Research essentials, advanced technical writing, and the art of debates workshop**” Center for special studies and programs (CSSP), Bibliotheca Alexandrina, Egypt. 28-29 December 2015.
- Participate in “**1st ENMRI International Workshop of Environment: Challenges and Solutions**”, Bibliotheca Alexandrina, Egypt. 5 April 2016.

- Attendance of "**The 16th Arab International Conference of Material Science**", at the institute of graduate studies and research (IGSR), Alexandria University, Egypt. 3-5 December 2016.
- Oral presentation and poster in "**The 17th Arab International Conference of Material Science**", at the institute of graduate studies and research (IGSR), Alexandria University, Egypt. 18-20 December 2017.
- Presentation entitle "**Effect of Fatty Ester-Maleic Anhydride Copolymer Di-Esters on the Crystallization Behavior of Waxy Crude Oil**" in "**the 2nd International Conference on Applications in Chemistry and Chemical Engineering**", 10-14 October 2018, Belgrade, Serbia.
- Participate in the organization committee of workshop entitled "**Safety Precautions in Laboratories and Industry**", 27 January 2019, SRTA-City, Alexandria, Egypt.
- Supervision of "**Biodiesel Production**" summer school, 1-12 September 2019, SRTA-City, Alexandria, Egypt.
- Instructor of "**Biodiesel Production program**", to teach 15 students how to produce biodiesel. 1-12 September 2019, SRTA-City, Alexandria, Egypt.
- Participate in the organization committee of workshop entitled "**From lab to industry**", 16 October 2019, SRTA-City, Alexandria, Egypt.

Administrative Activities

Member in the following committees:

- 1- Preparing the technical examination for the public tender for the supply of scientific devices for the Advanced Technology and New Materials Research Institute (ATNMRI) for the 2015/2016 fiscal year. Executive Order No. (315) of 2015 dated 24-12-2015.
- 2- Technical decision committee for the public tender for the 2015/2016 fiscal year for the supply of chemicals for ATNMRI. Executive Order No. (317) of 2015 dated 24-12-2015.
- 3- Examination and receipt of scientific equipment subject of direct contracting with the Ministry of Military Production. Resolution No. (114) on April 4, 2019.

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| | <p>4- Knowledge and Technology Transfer (KTT). Resolution No. (130) dated 4/15/2019.</p> <p>5- Quality control and laboratory safety in the City of Scientific Research and Technological Applications (SRTA-City). Resolution No. (268) on August 8 2019.</p> <p>6- Installation and commissioning for the work of the ATNMRI. Resolution No. (429) of 2019 on 12/8/2019.</p> <p>7- Leader of the organizing team for the annual celebration of SRTA-city. 8/2/2020.</p> <p>8- Committee of direct agreement with the Ministry of Military Production represented by the Center for Information Systems and Computers regarding the process of "raising the efficiency of laboratory devices in the SRTA-city and the purchase of new devices." Resolution No. (117) dated 4/14/2020.</p> <p>Extra-curriculum Activities</p> <ul style="list-style-type: none"> • Member of the "Arab Society for Materials Science". • Worked as a part time lecturer at Alexandria University- faculty of Engineering- chemical engineering department. Teach the theoretical & experimental parts in general chemistry. Starting date: 1/2012 End date: 7/2012 |
| <p>LIST OF PUBLICATIONS</p> | <p>1- <u>Rehab M. Ali*</u>, M.R. Elkatory, M.A. Hassaan, 2020. <i>“Towards potential removal of malachite green from wastewater: Adsorption process optimization and prediction”</i>, key engineering materials.</p> <p>2- <u>Rehab M. Ali*</u>, Marwa R. Elkatory, Hesham A. Hamad, 2020. <i>“Highly active and stable magnetically recyclable CuFe₂O₄ as a heterogeneous catalyst for efficient conversion of waste frying oil to biodiesel”</i>, Fuel.</p> <p>3- Mohamed A. Hassaan, Marwa R. Elkatory, <u>Rehab M. Ali*</u>, Ahmed El Nemr, 2020. <i>“Photocatalytic degradation of reactive black 5 using photo-Fenton and ZnO nanoparticles under ultraviolet light irradiation”</i>, Egyptian journal of chemistry.</p> |

- 4-** Ahmed Elwardany, Mohamed Marei, Yehia Eldrainy, **Rehab M. Ali**, Mohamed Ismail, Mohamed El-kassaby, 2020. *“Improving Performance and Emissions Characteristics of Compression Ignition Engine: Effect of Ferrocene Nanoparticles to Diesel-Biodiesel Blend”*, fuel.
- 5-** **Rehab Mohamed Ali***, Marwa El Katory, Mohamed Hassaan, Karim Amer, Adel El Geiheini, 2020. *“Highly crystalline heterogeneous catalyst synthesis from industrial waste for sustainable biodiesel production”*, Egyptian journal of chemistry.
- 6-** Mohamed A. Hassaan, Antonio Pantaleo, Luigi Tedone, Marwa R. Elkatory, **Rehab M. Ali**, Ahmed El Nemr, Giuseppe De Mastro, 2019. *“Enhancement of biogas production via green ZnO nanoparticles: experimental results of selected herbaceous crops”*, Chemical Engineering Communications.
- 7-** Marwa R. Elkatory, Emad A. Soliman, Ahmed I. Hashem, Mohamed A. Hassaan, **Rehab M. Ali***, 2018. *“Effect Of Fatty Ester-Maleic Anhydride Copolymer Diesters On Crystallization Behavior Of Waxy Crude Oil”*, Full paper in the 2nd international conference on applications in chemistry and chemical engineering conference proceeding.
- 8-** Dena A. Kamel, Hassan A. Farag, Nevine K. Amin, Ahmed A. Zaatout, **Rehab M. Ali***, 2018. *Smart utilization of jatropha (Jatropha curcas Linnaeus) seeds for biodiesel production: Optimization and mechanism*", Industrial Crops & Products, 111, 407–413.
- 9-** Yousr E. Khater, **Rehab M. Ali**, Gihan F. Malash, Ahmed A. Zaatout, 2017. *“Mass Transfer in Adsorption Systems onto Granular Activated Carbon”*, International Journal of Scientific & Engineering Research, 8, 1397-1403.
- 10-** **Rehab M. Ali***, Hesham A. Hamad, Mohamed M. Hussein, Gihan F. Malash, 2016. *Potential of using green adsorbent of heavy metal removal from aqueous solutions: Adsorption kinetics, isotherm, thermodynamic, mechanism and economic analysis,* Ecological Engineering, 91, 317–332.
- 11-** **Rehab M. Ali***, Hassan A. Farag, Nahla A. Amin, Ihab H. Farag, 2015. *“Abu-Tartour Phosphate Rock Catalyst for Biodiesel Production from Waste Frying Oil”*, Jokull, 65, 3, 233-244.

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| | <p>12- Rehab M. Ali*, Mona M. Abd El Latif, Hassan A. Farag, 2015. <i>“Preparation and characterization of $\text{CaSO}_4\text{-SiO}_2\text{-CaO/SO}_4^{2-}$ composite for biodiesel production”</i>, American Journal of Applied Chemistry, 3, 38-45.</p> |
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