

Dr: Sameh Tawfik Abd Elfattah Mahmoud



Personal Data

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- 6. Scopus Link
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- 7. Goole Scholar link: <https://scholar.google.com/citations?user=xDrQz4MAAAAJ&hl=ar>
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- 9. ResearchGate Link : https://www.researchgate.net/profile/Sameh-Tawfeek?ev=hdr_xprf
- 10. Academia Link : <https://aastmt.academia.edu/SamehTawfeek>
- 11. YouTube link: <https://www.youtube.com/@Dr.SamehTawfik>

Education

- 2016, PhD Degree in Mechanical Power Engineering (Biogas Sweetening and Fractionation),
- 2009, M.Sc. Degree in Mechanical Power Engineering (Thermal Engineering), Alexandria University, 2009.
- 1991, B.Sc. Degree in Mechanical Power Engineer, Military Technical Collage.
- 2012, Certificate of Competency as Chief Engineer.
- 2018 certificate of consultant engineer in mechanical engineering, Egyptian Engineering Syndicate.

Recent Training and Academic Development

- Training Course for Simulator Trainer & Assessor Based on IMO Model 6.10 - Level (1)
- Training Course for Simulator Trainer & Assessor Based on IMO Model 6.10 - Level (2)
- Training Course for Instructors in Maritime Institutions Based on IMO Model Course 6.09
- Training Course for Assessment, Examination, and Certification of Seafarers Based on IMO Model Course 3.12
- Generative AI Course

Experience

- Leader of the Egyptian Naval Forces Research Centr.

- Publishing many scientific researches, articles and notes in various scientific fields in specialized scientific journals and websites.
- Participation in many local and international scientific conferences.
- Working as a faculty member in many engineering colleges and institutes.
- Certified as international scientific research lecturer and reviewer.
- Member of the Maritime Salon Cultural Organization.
- Received many honours, and medals, the most important of which is the Medal of Excellent long duty and Meritorious from President of the Supreme Council of the Egyptian Armed Forces.
- Honorary professor degree in human development and self-development - Smart Intel University – England ,Approved by Ain Shams University.

Responsibilities

- Assistant Professor in Marine engineering technology department (College of Maritime Transport & Technology).
- Academic Advisor in Marine engineering technology department (College of Maritime Transport & Technology).

Achievements

Researches and Scientific Studies

1. Numerical Simulation to Optimize Di-Ethanol-Amine (DEA) Strength for Achieving the Highest Methane Purity from Biogas. International Journal of Advanced Scientific and Technical Research Issue 5 volume 4, July-August 2015. ISSN 2249-9954.
2. Optimization of Pressure Swing Absorber (PSA) Geometry to Achieve Highest Methane Purity from the Egyptian Biogas Using Aspen HYSYS Simulation. International Journal of Innovative Research And Development, January, 2016 Vol 5 Issue 1 ISSN 2278 – 0211
3. Utilization Of Aspen HYSYS Simulation To Determine The Optimum Absorber Working Pressure Needed To Achieve More Than 0.99 Methane Purity From Egyptian Biogas. International Journal of Information Research and Review ,Vol. 03, Issue, 01, pp.1739-1744, January, 2016.
4. Upgrade Egyptian biogas to meet the natural gas network quality standard. Alexandria Engineering Journal (2016) 55, 2279–2283 (hosted by ELSEVIER)
5. Utilization of Arduino Circuit to Design a Simplified Circuit to Encrypt Morse Signals Used In Naval Applications, Second International Undergraduate Research Conference, Military Technical, July 24 –27, 2017College, Cairo, Egypt.
6. Using of Computer Aided Programs to Design a Methane Generation Plant in Accordance With the Specifications of Use in Domestic Stoves from Organic Waste Available in Egyptian Garbage ,The Second International Conference on New Trends for Sustainable Energy" ICNTSE 2018, "Energy and Sustainable Development", November 5-6, 2018, Faculty of Engineering. Pharos University in Alexandria.
7. Thermoelectric Atmospheric Water Generator (TEAWG), The 5th International Conference of Business Innovation and Economic Sustainability Challenges Wednesday, 17 April, 2019 Pharos University in Alexandria.
8. An Investigation of the Optimum Techniques for Gathering, Treatment, Liquefaction, Shipping and Pricing the Natural Gas (N G), The 5th International Conference of Business Innovation

and Economic Sustainability Challenges Wednesday, 17 April, 2019 Pharos University in Alexandria.

9. HYSYS Simulation of N2 Extraction Process, AUI Research Journal, www.aui-edu.us, 14 April 2020.
10. Analytical Study for Common CO2 Capture Technologies, AUI Research Journal, www.aui-edu.us, 28 May 2020.
11. Steady state numerical simulation and studying performance of a modified diffusion absorption refrigeration cycle, Alexandria Engineering Journal, July 2021.
12. Potable water generation from atmospheric moisture in coastal areas using the thermoelectric effect, Maritime Research and Technology, November 2022.
13. A comprehensive study of HYSYS Simulation of the Linde-Hampson Cycle in Liquefied Natural Gas Carriers, Seventh International Conference of Business Innovation & Economic Sustainability Challenges 3rd May 2023.
14. The impact of Ergonomics in Productivity Increasing, Seventh International Conference of Business Innovation & Economic Sustainability Challenges 3rd May 2023.
15. Surge behaviour in Alexandria western harbour and its correlation to dominant meteorological condition, Maritime Research and Technology, January 2025.
16. Enhancing efficiency and sustainability: a comparative analysis of refrigerants in ethylene BOG re-liquefaction processes, Journal of Engineering and Applied Science, September 2025.

Relevant Courses

1. Cryogenic and gas liquefaction.
2. HYSYS
3. Natural Gas Processing.
4. Thermodynamics.
5. Heat Transfer.
6. Refrigeration and air conditioning
7. Engineering Mechanics.
8. Human factors Engineering.
9. Industrial safety.
10. Marine Engineering.
11. Ship Construction.
12. Maritime Culture and Leadership

