Ehab Salah Ali Abd-Elall

Personal Data:

Address	Naser city _ Sohag _ Egypt.
Age	34 years old.
Birth date	July 17th, 1987.
Nationality	Egyptian.
Marital Status	Married.
Military Duty	Postponed.
Occupation	**Lecturer at Tabbin Institute for Metallurgical Studies (TIMS)**
Graduation date	Jul 2009.
Phone, Cell phone	+201279911169, +201004460663
Email	eng_ehab1987@yahoo.com

	Google Scholar	Scopus
Citation	445	377
h-index	13	12

Education:

- B. SC., Engineering, Mechanical Dept., Power section, Assiut University. The overall grade is **GOOD** with (70.17%). (2009)
- **Master degree in Mechanical power and energy Dept. Minia University in "A simulation model and a parametric study of a reverse osmosis process".(2014)**
- **PHD degree in Mechanical power and energy Dept. Minia University in " Analytical and Experimental Study of an Adsorption Based Desalination System Powered by Solar Energy"(2018).**

Experience

- **Lecturer at Tabbin Institute for Metallurgical Studies (TIMS) (From 1-1-2019 to now)**
- Eight years in holding company for drinking water and waste water in Sohag**. I worked in company research section for two years.**

- **Member team in the project of** " Solar Powered Water Desalination Unit as a Commercial Modular " funded by **Academy of Scientific Research and Technology** with total fund **1,705,000 L.E**
- **PI in the project of** " Zero electricity stand-alone house with solar powered cooling/heating and desalination system " funded by **STDF** with total fund **1,390,000 L.E**

Publications

Journals

No.	Title	Impact factor
1	Mohammed, R. H., A. Rezk, A. Askalany, **Ehab S. Ali**, A. E. Zohir, M. Sultan, M. Ghazy, M. A. Abdelkareem and A. G. Olabi Metal-organic frameworks in cooling and water desalination: Synthesis and application, Renewable and Sustainable Energy Reviews, 2021	**14.9**
2	**Ehab S. Ali**, Mohammed, R.H., Qasem, N.A., Zubair, S.M. and Askalany A. Solar-powered ejector-based adsorption desalination system integrated with a humidification-dehumidification system, Energy Conversion and Management, 2021	**11.53**
3	**Ehab S. Ali**, Askalany, A.A., Harby, K., Diab, M.R., Hussein, B.R. and Alsaman, A.S., 2021. Experimental adsorption water desalination system utilizing activated clay for low grade heat source applications. Journal of Energy Storage, 43, p.103219.	**8.9**
4	Ghazy, M., Askalany, A.A., Ibrahim, E.M.M., Mohamed, A.S.A., A**li, E.S.** and Raya, A.D., 2022. Solar powered adsorption desalination system employing CPO-27 (Ni). Journal of Energy Storage, 53, p.105174.	**8.9**
5	**Ehab S. Ali**, Askalany AA, Zohir AE. "Innovative employing of salt hydration with adsorption to enhance performance of desalination and heat transformation systems**"**. Applied Thermal Engineering. 2020 Oct 1;179:115614 .	**6.465**
6	Askalany AA, **Ehab S. Ali**, "A new approach integration of ejector within adsorption desalination cycle reaching COP higher than one". Sustainable Energy Technologies and Assessments. 2020 Oct	**5.353**

	1;41:100766.	
7	Askalany A, **Ehab S. Ali**, Mohammed RH. “A novel cycle for adsorption desalination system with two stages-ejector for higher water production and efficiency”. Desalination. 2020 Dec 15;496:114753.	**11.2**
8	**Ehab S. Ali**, Mohammed RH, Askalany A. “A daily freshwater production of 50 m^3/ton of silica gel using an adsorption-ejector combination powered by low-grade heat”. Journal of Cleaner Production. 2021 Feb 1;282:124494.	**11.07**
9	Harby K, **Ehab S. Ali**, Almohammadi KM. “A novel combined reverse osmosis and hybrid absorption desalination-cooling system to increase overall water recovery and energy efficiency”. Journal of Cleaner Production. 2021 Mar 10;287:125014.	**11.07**
10	Alsaman, A.S., Askalany, A.A., Ibrahim, E.M.M., Farid, A.M., **Ali, E.S.** and Ahmed, M.S., 2022. Characterization and cost analysis of a modified silica gel-based adsorption desalination application. *Journal of Cleaner Production*, *379*, p.134614.	**11.07**
11	Aboelmaaref MM, Zayed ME, Zhao J, Li W, Askalany AA, Ahmed MS, **Ehab S. Ali**, "Hybrid solar desalination systems driven by parabolic trough and parabolic dish CSP technologies: technology categorization, thermodynamic performance and economical assessment." Energy Conversion and Management 220 (2020): 113103.	**11.53**
12	Alsaman, A.S., Ibrahim, E.M.M., Ahmed, M.S., **Ali, E.S**., Farid, A.M. and Askalany, A.A., 2022. Experimental investigation of sodium polyacrylate-based innovative adsorbent material for higher desalination and cooling effects. Energy Conversion and Management, 266, p.115818.	**11.53**
13	**Ehab S. Ali**, Ahmed Alsaman, Ahmed Askalany, Khaled Harby, M. Reffat " Recycling Brine Water of Reverse Osmosis Desalination System Employing Adsorption Desalination System: a theoretical	**11.2**

	study" Desalination 408 (2017) 13–24	
14	**Ehab S. Ali**, Ahmed Askalany, Khaled Harby, M. Reffat, Ahmed Alsaman, " Adsorption desalination-cooling system employing copper sulfate driven by low grade heat sources " Applied Thermal Engineering 136 (2018) 169–176	**6.4**
15	**Ehab S. Ali**, Ahmed Askalany, Khaled Harby, M. Reffat, Ahmed Alsaman, "Weather effect on a solar powered hybrid adsorption desalination-cooling system: A Case Study of Egypt's Climate" Applied Thermal Engineering, 142 (2017) 663–672.	**6.4**
16	**Ali ES,** Mohammed RH, Zohir AE, Farid AM, Elshaer RN, El-Ghetany HH, Askalany AA. Novel ultrasonic dynamic vapor sorption apparatus for adsorption drying, cooling and desalination applications. Energy Reports. 2022 Nov 1;8:8798-804.	**4.5**
17	**Ali, E.S.,** Asfahan, H.M., Sultan, M. and Askalany, A.A., 2021. A novel ejectors integration with two-stages adsorption desalination: Away to scavenge the ambient energy. Sustainable Energy Technologies and Assessments, 48, p.101658.	**7.632**
18	Zohir, A.E., **Ali, E.S.,** Farid, A.M., Elshaer, R.N., Mohammed, R.H., Alsaman, A.S., El-Ghetany, H.H. and Askalany, A.A., 2022. A state-of-the-art of experimentally studied adsorption water desalination systems. International Journal of Energy and Environmental Engineering, pp.1-27.	**3.5**
19	Alsaman, A.S., Ibrahim, E.M.M., Askalany, A.A., Farid, A.M., **Ali, E.S**. and Ahmed, M.S., 2022. Composite material-based a clay for adsorption desalination and cooling applications. *Chemical Engineering Research and Design*, *188*, pp.417-432.	**4.11**
20	Alsaman, A.S., Hassan, A.A., **Ali, E.S.,** Mohammed, R.H., Zohir, A.E., Farid, A.M., Eraqi, A.M.Z., El-Ghetany, H.H. and Askalany, A.A., 2022. Hybrid Solar-Driven Desalination/Cooling Systems: Current Situation and Future Trend. Energies, 15(21), p.8099.	**3**
Conferences		

1	Ehab Ali, Ahmed Askalany, Ahmed Alsaman, Khaled Harby M., M. Salem, M. Reffat: **"Simulation model for silica gel-water adsorption cooling system powered by renewable energy",** 3rd International Conference on Energy Engineering (ICEE-2015), Aswan, Egypt; 12/2015
2	Ehab Ali, Ahmed Askalany, Khaled Harby, M. Refaat, **" adsorption isotherms of water vapor on aluminum sulfate**" 4th International Conference on Innovative Materials for Processes in Energy Systems (IMPRES-2016), Taorimina,Sicily, ITaly; 10/2016.
3	Ahmed Alsaman, Ehab Ali, Ahmed Askalany, Khaled Harby M., M. Salem : **" Performance improvement of a solar driven adsorption desalination system by heat recovery operation"** Twentieth International Water Technology Conference, IWTC20, Hurghada, Egypt 5/2017
4	Ehab Ali ,Ahmed Alsaman, Ahmed Askalany, Khaled Harby M., M. Salem : **" Innovated double effect adsorber heat exchanger for adsorption desalination system"** Twentieth International Water Technology Conference, IWTC20, Hurghada, Egypt 5/2017

Interested Areas

- Adsorption cooling improvements
- Adsorption materials
- Adsorption desalination
- Reverse osmosis water desalination
- Renewable and sustainable energy applications

Skills:

Energy Engineering, Mechanical Engineering, Desalination, Applied Thermodynamics, Thermal Engineering, Modeling and Simulation, Heat Capacity, Engineering Thermodynamics, Reverse Osmosis, Heat Exchangers, Chemical Engineering

Computer Skills:

Engineering equation solver -TRNSYS Simulation software- MATLAB software- MS Office

Training:

- Training in Specialist on contracts and purchases (25 h)
- Maintenance of pumps
- Certification of water plants operators
- Design and maintenance of waste water networks

Languages:

- Mother language Arabic.
- Good in English (listening, speaking, and Writing).