

# C.V

## Personal information

Name: Ahmed Abdelkader Shehata Askalani  
Date of birth: 1/8/1980  
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Address: 3 rd floor, Borg Elhamd, Damares, Minia  
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Military status: Free



	Google Scholar	Scopus	RG Score
Citation	453	352	28.98
h-index	13	12	
Link	<a href="https://scholar.google.com/citations?user=wMxrBcEAAAAJ&amp;hl=de">https://scholar.google.com/citations?user=wMxrBcEAAAAJ&amp;hl=de</a>	<a href="https://www.scopus.com/authid/detail.uri?authorId=35209931900">https://www.scopus.com/authid/detail.uri?authorId=35209931900</a>	<a href="https://www.researchgate.net/profile/Ahmed_Askalany">https://www.researchgate.net/profile/Ahmed_Askalany</a>

## Examining and supervising Activity:

Examining a Ph.D. thesis in Birmingham University  
Examining theses (4 M.Sc. & 1Ph.D.)  
Finished supervising theses (4 M.Sc.)  
Ongoing supervising theses (3 M.Sc. and 2 Ph.D).

## Education

2009-2014 Ph.D. from Kyushu University (Japan)-Assiut University (Egypt) Joint supervision  
2002-2007 MSc. in mechanical power engineering from Minia University  
1997- 2002 BSc. in mechanical Power engineering from Minia University

## Professional experience

- July 2017 to October 2018: Postdoctoral research associate, School of Engineering, **University of Edinburgh, UK**
- January 2016 to April 2016: **Fraunhofer Institute For solar Energy, ISE, Freiburg, Germany.**
- December 2013 up to now: Assistant professor, Faculty of Industrial Education, Sohag University, Egypt
- December 2011 to November 2013: Visiting Researcher, Faculty of Engineering, **Kyushu University, Japan.**
- July 2007 to November 2011: Assistant Lecturer, Faculty of Industrial Education, Sohag University, Egypt.
- October 2005 to February 2007: Designer of Air conditioning and water pipelines

in EGE (Egyptian Group for Engineering Consultations)

- June 2005-June 2007: Assistant researcher, Faculty of Engineering, Minia University.
- February 2003 to June 2005: Mechanical engineer in ministry of Irrigation, Egypt.

**Teaching courses of:**

Thermodynamics, Heat transfer, Refrigeration, Air conditioning, Water desalination.

**Publications**

<b><u>Books</u></b>		
1. New adsorption pairs for cooling by renewable energy, Lambert, Germany 2014		
<b><u>Journals</u></b>		
<b>No.</b>	<b>Title</b>	<b>Impact factor</b>
1	Ehab S. Ali, <b>Ahmed A. Askalany</b> , K. Harby, Mohamed Refaat Diab, Ahmed S. Alsaman, Adsorption desalination-cooling system employing copper sulfate driven by low grade heat sources, Applied Thermal Engineering 136:169–176.	3.35
2	<b>Ahmed Askalany</b> , Sebastian-Johannes Ernst, Philipp P.C. Hügenell, Stefan Henninger, Ahmed Alsaman, High potential of employing bentonite in adsorption cooling systems driven by low grade heat source temperatures. Energy 2017	4.5
3	Ehab Ali, Khaled Harby, <b>Ahmed Askalany</b> , M. Refat, Ahmed Alsaman Weather effect on a solar powered hybrid adsorption desalination-cooling system: A Case Study of Egypt’s Climate, Applied Thermal Engineering 2017	3.3
4	Ahmed Elsayed, <b>Ahmed Askalany</b> , Andrew D. Shea, Hassan Fadhiel, Waseem Kaiyaly, Raya K. AL-Dadah, Saad Mahmoud, Waseem Kaiyaly, A state of the art of required techniques for employing activated carbon in renewable energy powered adsorption applications, Renewable and sustainable Energy Reviews 2017	8.05
5	Ahmed Alsaman, <b>Ahmed Askalany</b> , Khaled Harby, Mahmoud S. Ahmed, Performance evaluation of a solar-driven adsorption desalination-cooling system, Energy 2017	4.5
6	Ehab S. Ali, Ahmed S. Alsaman, K. Harby, <b>Ahmed A. Askalany</b> , Mohamed Refaat Diab, Sobhy M. Ebrahim Yakoot, Recycling Brine Water of Reverse Osmosis Desalination Employing Adsorption Desalination: A Theoretical Simulation, Desalination 2017	4.4
7	<b>Ahmed A. Askalany</b> , <b>Bidyut B. Saha</b> , Towards an accurate estimation of the isosteric heat of adsorption - A correlation with the potential theory, Journal of Colloid and Interface Science 490 (2017) 59–63	3.78

8	<b>Ahmed A. Askalany</b> , Stefan K. Henninger, Mohamed Ghazy, Bidyut B. Saha, Effect of improving thermal conductivity of the adsorbent on performance of adsorption cooling system, <i>Applied Thermal Engineering</i> , 2017	3.043
9	<b>Ahmed A. Askalany</b> , Innovative mechanical vapor compression adsorption desalination (MVC-AD) system, <i>Applied Thermal Engineering</i> , 2016	3.043
10	<b>Ahmed A. Askalany</b> , Bidyut B. Saha, Highly porous Activated carbon based adsorption cooling system employing Difluoromethane and a mixture of Pentafluoroethane and Difluoromethane, <i>Heat and Mass Transfer</i> , 2016	0.946
11	Mohamed Ghazy, K. Harby, Ahmed A. Askalany, M. Salem, Adsorption isotherms and kinetics of HFC-404A onto bituminous based granular activated carbon for storage and cooling applications, <i>Applied Thermal Engineering</i> , 2016	2.7
12	Mohamed Ghazy, K. Harby, Ahmed A. Askalany, Bidyut B. Saha, Adsorption isotherms and kinetics of activated carbon/Difluoroethane adsorption pair: theory and experiments, <i>International Journal of Refrigeration</i> , 2016	2.2
13	Ahmed S. Alsaman, <b>Ahmed A. Askalany</b> , M. salem, A state of the art of hybrid adsorption desalination-cooling systems, <i>Renewable and Sustainable Energy Reviews</i> , 58(2016)692-703	5.2
14	M.M. El-Sharkawy, <b>Ahmed A. Askalany</b> , K. Harby, Mahmoud Salem, Adsorption isotherms and kinetics of a mixture of Pentafluoroethane, 1,1,1,2-Tetrafluoroethane and Difluoromethane (HFC-407C) onto granular activated carbon, <i>Applied Thermal Engineering</i> , 93 (2016) 988-994	2.6
15	Ahmed A. Askalany, K. Habib, M. Ghazy, M.K. Assadi, Adsorption cooling system employing activated carbon/ hfc410a adsorption pair, <i>Journal of Engineering and Applied Sciences</i> , 2016	0.7
16	Khairul Habib, <b>Ahmed A. Askalany</b> , Study of a silica gel-water based dual mode adsorption chiller, <i>International Journal of Engineering and Technology</i> , 2016	0.8
17	Mohamed Hamdy, <b>Ahmed A. Askalany</b> , K. Harby, Nader Kora, An overview on adsorption cooling systems powered by waste heat from internal combustion engine, <i>Renewable and Sustainable Energy Reviews</i> , Volume 51, November 2015, 1223–1234	5.2
18	<b>Ahmed A. Askalany</b> , Bidyut B. Saha, Derivation of isosteric heat of adsorption for non-ideal gases, <i>International Journal of Heat and Mass Transfer</i> , 89 (2015) 186–192, 2015.	2.5
19	<b>Ahmed A. Askalany</b> , Bidyut B. Saha, Experimental and theoretical study of adsorption kinetics of Difluoromethane onto activated carbons, <i>International Journal of Refrigeration</i> , 49, 2015, 160-168.	2.2
20	<b>Ahmed A. Askalany</b> , Bidyut B. Saha, Ibrahim M. Ismail, Adsorption isotherms and kinetics of HFC410A onto activated carbons, <i>Applied Thermal Engineering</i> , 72, 2, 2014, 237-243.	2.6
21	<b>Ahmed A. Askalany</b> , Bidyut B. Saha, Kutub Uddin, Takahiko Miyzaki, Shigeru Koyama, Kandadai Srinivasan, Ibrahim M. Ismail, Adsorption	2

	isotherms and heat of adsorption of difluoromethane on activated carbons. <i>Journal of Chemical and Engineering Data</i> , 58 (10), pp 2828–2834, 10.1021/je4005678, 2013	
22	<b>Ahmed A. Askalany</b> , Bidyut B. Saha, Mahmoud S. Ahmed, Ibrahim M. Ismail, Adsorption cooling system employing granular activated carbon-R134a pair for renewable energy applications. <i>International Journal of Refrigeration</i> , 36, 2012, 1037-1044.	<b>2.2</b>
23	<b>Askalany, A.A.</b> , Saha, B.B., Kariya, K., Ismail, I.M., Salem, M., Ali, A.H.H., Morsy, M.G. Hybrid adsorption cooling systems-An overview. <i>Renewable and Sustainable Energy Reviews</i> 16 (8), 2012 , 5787-5801	<b>5.5</b>
24	<b>Ahmed A. Askalany</b> , M. Salem, I.M. Ismael, A.H.H. Ali, M.G. Morsy, Bidyut B. Saha, An overview on adsorption pairs for cooling. <i>Renewable and Sustainable Energy Reviews</i> , 19, 2013, 565-572.	<b>5.5</b>
25	<b>Ahmed A. Askalany</b> , M. Salem, I.M. Ismail, Ahmed Hamza H. Ali, M.G. Morsy, Experimental study on adsorption–desorption characteristics of granular activated carbon/R134a pair. <i>International Journal of Refrigeration</i> , 35, 3, 2012, 494-498.	<b>2.2</b>
26	<b>Ahmed A. Askalany</b> , M. Salem, I.M. Ismail, Ahmed Hamza H. Ali, M.G. Morsy, A review on adsorption cooling systems with adsorbent carbon. <i>Renewable and Sustainable Energy Reviews</i> , 16, 1, January 2012, 493-500.	<b>5.5</b>
27	Mahmoud A. Youssef, Seddik S. Wahid, Maher A. Mohamed, <b>Ahmed A. Askalany</b> , Experimental study on Egyptian biomass combustion in circulating fluidized bed, <i>Applied Energy</i> , 86, 12, 2009, 2644-2650.	5.2

### Conferences

	Title	Country
28	J. Cranston, Ahmed A. Askalany, Giulio Santori, A new generation of hybrid adsorption washer-dryers, Heat Power Cycles (HPC 2018)	Germany
29	H. Dong, Ahmed A. Askalany, G Santori, Formulation influence on the preparation of silica nanoparticle-based ionogels, Heat Power Cycles (HPC 2018)	Germany
30	Ahmed Alsaman, Ehab Ali, Khaled Harby, M. Salem, Performance improvement of a solar driven adsorption desalination system by heat recovery operation 2017	Egypt
31	Ahmed Alsaman, Ehab Ali, Khaled Harby, M. Ghazy, M. Salem, Innovated double effect adsorber heat exchanger for adsorption desalination system, Twentieth International Water Technology Conference, IWTC20, 2017	Egypt
32	Ehab S. Ali, Ahmed S. Alsaman, K. Harby, <b>Ahmed A. Askalany</b> , Mohamed Refaat Diab, Adsorption isotherms of water on Aluminum sulfate, IMPRES 2016	Italy

33	<b>Ahmed Askalany</b> , Bidyut B. Saha, Maximum Available COP of adsorption cooling system based on refrigerant, IMPRES 2016	Italy
34	Mohamed Ghazy, Ahmed Askalany, K. Harby, M. Salem. Innovative double effect heat exchanger of an adsorption cooling system, impres 2016	Italy
35	<b>Ahmed Askalany</b> , Khairul Habib, M. Ghazy, Morteza K. Assadi, adsorption cooling system employing activated carbon/hfc410a adsorption pair, The 5th International Conference on Production, Energy and Reliability (ICPER2016), At Kuala Lumpur, Malaysia.	Malaysia
36	Mohamed Ghazy, K. Harby, Ahmed A. Askalany, Adsorption characteristics of activated carbon /HFC-152a pair for solar adsorption cooling systems, 3rd ICEE2015, 28-30 December 2015, Aswan, Egypt.	Egypt
37	M .M.Abo Elmaaref, Ahmed A. Askalany, M. Salem, K. Harby, Solar thermoelectric cooling technologies: An overview, 3rd ICEE2015, 28-30 December 2015, Aswan, Egypt.	Egypt
38	Ahmed S. Alsaman, Ahmed A. Askalany, M. salem, Ehab S. Ali, K. Harby, Mohamed Refaat Diab, Simulation model study for silica gel-water vapor adsorption cooling system powred by renewable energy, 3rd ICEE2015, 28-30 December 2015, Aswan, Egypt.	Egypt
39	Ahmed A. Askalany, Mohamed A. Essa, K. Harby, Aswan weather effect on a solar powered adsorption cooling system, 3rd ICEE2015, 28-30 December 2015, Aswan, Egypt.	Egypt
40	Ahmed A. Askalany, K. Harby, Ahmed Alsaman, Advancements in Desalination: adsorption desalination systems overview, 2nd ICES, 19-21 August 2014, Hurgada, Egypt.	Egypt
41	Ahmed A. Askalany, Bidyut B. Saha, K. Habib, Adsorption Cooling System Employing Activated Carbon/R32 Adsorption Pair, ICPER 2014, Malaysia.	Malaysia
42	Matsumoto Hayato, Miyazaki Takahiko, Koyama Shigeru, Askalany Ahmed, Saha Bidyut Baran, El-Sharkawy Ibrahim I., Measurement of adsorption characteristics of R32 onto activated carbon and performance evaluation of adsorption heat pump system. Japan society of refrigeration and air condition engineers (JSRAE) 2013 annual conference, September 10-12, Japan.	Japan
43	Ahmed Askalany, Bidyut Saha, Takahiko Miyazaki, Shigeru Koyama, adsorption isotherms of R410A onto activated carbon. Japan society of refrigeration and air condition engineers (JSRAE) 2013 annual conference, September 10-12, Japan.	Japan
44	Ahmed Askalany, Bidyut Baran Saha, Takahiko Miyzaki, Shigeru Koyama, and Ibrahim M. Ismail, modified linear driving force model for accurate approximation of adsorption kinetics experimental data, IMPRES 2013, Japan	Japan
45	Ahmed Askalany, Bidyut Baran Saha, Kutub Uddin, Takahiko Miyzaki,	Japan

	Shigeru Koyama, Adsorption isotherms of R134a and R32 onto activated carbons. 14th Cross Straits Symposium on Energy and Environmental Science and Technology (CSS-EEST 14) at Japan, 18-19 February 2013.	
46	Ahmed A. Askalany, Bidyut B. Saha, and I.M. Ismail, Experimental and theoretical adsorption kinetics of granular activated carbon/R134a pair. Heat Powered Cycles Conference 2012 The Netherlands, 9 to 12 September 2012	Netherlands
47	Oh S. T., Askalany A., Saha B. B., Kariya K., Fuel Cell Waste Heat Powered Adsorption Chiller. Japan society of refrigeration and air condition engineers (JSRAE) 2012 Annual Conference, Hokkaido Institute of Technology (Teine-ku, Sapporo), Japan, September 12-14.	Japan
48	Askalany A. A., Saha B. B., Ismail I. M., Adsorption cooling system using granular activated carbon/R134a pair. The 6th Asian Conference on Refrigeration and Air Conditioning (ACRA2012), Xian, China, 26-28 August 2012	China
49	Ahmed A. Askalany, Mahmoud Salem Ahmed, The Future of the adsorption cooling. International 10th World Wind Energy Conference and Renewable Energy Exhibition, Cairo, Egypt.	Egypt
<b><u>Thesis</u></b>		
1.	Theoretical and experimental study on the performance of an adsorption cooling system using activated carbon/R134a pair. Ph.D. thesis, Assiut University, 2014	
2.	An investigation into the combustion characteristics of biomass fuel using circulating fluidized bed system. MSc. Thesis, Minia University, 2007.	

### **Theses Examining and Supervising:**

#### **- Examining theses**

1. Experimental and theoretical study on the performance improvement of an adsorption cooling system (M.Sc. 2016)
2. Implementation of a hybrid adsorption desalination-cooling system driven by solar energy (M.Sc. 2016)
3. Experimental and theoretical study on performance of an adsorption cooling system employing activated carbon/R-407C pair (M.Sc. 2016)
4. Experimental and analytical study of the performance of a thermoelectric air conditioning system driven by solar cells (M.Sc. 2017)

#### **- Finished supervised theses:**

1. Experimental and theoretical study on the performance improvement of an adsorption cooling system (M.Sc. 2016)
2. Implementation of a hybrid adsorption desalination-cooling system driven by solar energy (M.Sc. 2016)

3. Experimental and theoretical study on performance of an adsorption cooling system employing activated carbon/R-407C pair (M.Sc. 2016)
4. Experimental and analytical study of the performance of a thermoelectric air conditioning system driven by solar cells (M.Sc. 2017)

- **On-going M.Sc. researches:**

5. Effect of Nano sizing on the adsorption characteristics of the adsorbent.
6. Experimental and theoretical study on performance of an adsorption cooling system employing activated carbon/R-440 pair
7. Experimental and theoretical study of water desalination system using new adsorbent material

- **On-going Ph.D. researches:**

8. Simulation and Experimental Study on the Performance Investigation of an Adsorption Based Desalination Cycle Powered by Solar Energy
9. Experimental and Theoretical Study on an Adsorption Air Conditioning System Powered by Waste Heat Recovery from an Internal Combustion Engines

**Reviewing activities**

Authorized Reviewer for the UK British Council

**Reviewer for the journals of;**

- Renewable and sustainable energy reviews
- Applied thermal Engineering
- ASHRAE
- International Journal of Refrigeration
- Journal of Hydrodynamics ser. b
- International Journal of Heat and Mass Transfer
- Applied Energy
- ASME 2012 6<sup>TH</sup> International conference in energy sustainability conference.
- International Journal of Sustainable Aviation
- Energy
- Environment, Development and Sustainability

**Fields of interest**

- Renewable Energy applications and management
- Adsorption materials
- Water desalination
- Adsorption cooling improvements
- Heat Transfer
- Cooling and heating

**Awards Honoured**

- STDF short mission fellowship 2014

- Best paper award at 2<sup>nd</sup> ICES 2014
- Egyptian scholarship as Joint supervision for two years at Japan

### **Training courses**

- PLC preparing course from RCTWS.
- PLC intermediate course from RCTWS.
- PLC advanced course from RCTWS.
- Communication skills program in education from FLDP.
- Computational Research projects program from FLDP.
- Management the research team program from FLDP.

### **Availability**

- Available from September 2019.

### **Languages**

- Arabic: native languages
- English: Fluent read and write

### **Computer skills**

- Proficient in Microsoft Office (Word, Excel, PowerPoint), Endnote
- Strong knowledge of AutoCAD, Fortran, PLC and TRANSYS, REFPROP9, MATLAB
- Internet, ICDL

### **Reference Professors**

- **Prof. Bidyut Baran Saha**, PhD. Advanced Graduate Program in Global Strategy for Green Asia, Interdisciplinary Graduate School of Engineering Sciences, Kyushu University, Kasuga-koen 6-1, Kasuga-shi, Fukuoka 816-8580, Japan. Tel: +81-92-583-7903, Fax: +81-92-583-8909  
E-mail: [saha.baran.bidyut.213@m.kyushu-u.ac.jp](mailto:saha.baran.bidyut.213@m.kyushu-u.ac.jp)
- **Dr. Giulio Santori**, Ph.D., The University of Edinburgh, School of Engineering, Institute for Materials and Processes, Mayfield Road, The King's Buildings, EH9 3JL, Edinburgh, UK, [g.santori@ed.ac.uk](mailto:g.santori@ed.ac.uk), Tel. +44 (0)131 651 9043, Fax +44 (0)131 650 6551.
- **Prof. Abd Elnaby Kabeel**, Mechanical Engineering Department, Faculty of Engineering, Tanta University, Egypt, E-mail: [Kabeel6@hotmail.com](mailto:Kabeel6@hotmail.com)
- **Prof. Ibrahim El-Sharkawy**, Ph.D. Interdisciplinary Graduate School of Engineering Sciences, Kyushu University, 6-1 Kasuga-Koen, Kasuga-Shi, Fukuoka 816-8580, Japan. E-mail: [ib\\_sharkawy@yahoo.com](mailto:ib_sharkawy@yahoo.com)