

## Curriculum Vitae

<p>جامعة الباحة Al-Baha University</p> <p>2006</p> <p>BU</p> <p><i>osabdelkawi@bu.edu.sa</i> <i>usama_ali35@hotmail.com</i></p> <p><a href="https://www.researchgate.net/profile/O-Abd-El-Kawi">https://www.researchgate.net/profile/O-Abd-El-Kawi</a> <a href="https://scholar.google.com/citations?user=yJz2DEkAAAAJ&amp;hl=ar">https://scholar.google.com/citations?user=yJz2DEkAAAAJ&amp;hl=ar</a></p>	
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### (1) General Information

Name	<i>Osama Sayed Abd-Elkawi Ali</i>
Date of Birth:	<i>20/9/1971</i>
Nationality	<i>Egyptian</i>
e-mail	<i>usama_ali35@hotmail.com</i>
Current Position	<ul style="list-style-type: none"><li>• <i>Assistant professor at the Faculty of Engineering Al-Baha University, Saudi Arabia</i></li><li>• <i>Researcher in Nuclear research center – Egypt</i></li></ul>
Fields of Research	<i>CFD, Fluidization, Simulation, Water desalination, Mechatronic, Heat transfer, Numerical Analysis and computer programming</i>
Languages	<i>Arabic – English</i>
Telephone	<i>+966560775625 &amp; +201007228209</i>
Address	<i>Egypt – 6 October city – Compound Baity- Building E1- Flat no. 9</i>

## (2) Academic History

### • Bachelor of science

*B.Sc. in mechanical power engineering (1993)*

*From: faculty of engineering – Mansoura University – Egypt*

*Years of Attended: from 1988 to 1993*

*General grade: Very good*

*General ranking: The forth*

### • Master of science

*M.Sc. in mechanical power engineering (2001)*

*From: faculty of engineering – Mansoura University – Egypt*

*Years of Attended: from 1997 to 2001*

*Title: "Study of Heat Transfer in Fluidized Bed Heat Exchangers"*

### • Ph.D.

*Ph.D. in mechanical power engineering (2007)*

*From: faculty of engineering – Benha University – Egypt*

*Years of Attended: from 2002 to 2007*

*Title: "Mathematical Modeling and Numerical Simulation for Fluidized Bed"*

## (3) Publications

### Research Papers:

1. **Abd El-kawi,O.S.**, Ibrahim ,A.M. and Awad, M.M. , "Effects of Particles Diameter on Heat Transfer Between Fluidized Bed and Horizontal Tube ", IMPEC 12, H11, H135-H145, Oct. 30<sup>th</sup> – Nov. 1st , 2001 .
2. Ibrahim ,A.M., **Abd El-kawi, O.S.**and Awad, M.M. , "Heat Transfer Between Gas Fluidized Bed and Immersed Tube Bank", IMPEC 12, H12, H151-H164, Oct. 30th – Nov. 1 st , 2001 .
3. **Abd El-kawi,O.S.**, Atwan, E.F., Abdelmonem, S.A., Abdalla, A.M., Elshazly ,

- K.M., " Hydrodynamic and Thermal Modeling of Gas– Particle Flow in Fluidized Beds", International Journal of Chemical Reactor Engineering, A35, Vol. 5, 2007 .
4. **Abd El-kawi,O.S.**, Atwan, E.F., Abdelmonem, S.A., Abdalla, A.M., Elshazly , K.M., " Hydrodynamic and Thermal Modeling of Gas– Particle Flow in Fluidized Beds", Arab Journal of Nuclear Science and Applications, 2008 .
  5. **Abd El Kawi , O. S.**, Elbakhshawangy, H. F., Elshazly , M. N., "Simulation of Water Hammer Oscillations in Single Pipe Line due to Sudden Valve Closure", Journal of American Science, 2013
  6. **Abd El Kawi, O. S.**, Elbakhshawangy, H. F. ,Elshazly , M.N. ,"Heat Transfer And Flow Characteristics Inside Air Filled Cavities" , Arab Journal of Nuclear Science and Applications, 2013.
  7. H. F. Elbakhshawangy, **O. S. Abd El-Kawi** and H. H. Sarhan” Numerical Study Of Incompressible Flow Characteristics Through Butterfly Valve”, Journal of Multidisciplinary Engineering Science and Technology (JMEST),2015.
  8. H. F. Elbakhshawangy, **O. S. Abd El-Kawi** and H. H. Sarhan, “AIR COOLING OF ELECTRONIC COMPONENTS IN PARTIALLY TOP VENTED ENCLOSURES”, International Journal of Current Research,2015.
  9. **O. S. Abd El-Kawi**, H. H. Sarhan and H. F. Elbakhshawangy, “Theoretical and Experimental Investigation of Heat Transfer in Gas - Solid Packed Beds”, International Journal of Engineering & Scientific Research, 2017.
  10. **O. S. Abd El-Kawi** and F. S. Alariqi, “Predictive Maintenance of Rotating Machines using Arduino Platform”, International Journal for Research in Applied Science & Engineering Technology (IJRASET), 2020.
  11. Abdelfatah Abdelmaksoud, H.F. Elbakhshawangy, and O. S. Abd El-Kawi, “Heat Transport and Chimney Design in a Typical MTR Reactor during

- Natural Convection Cooling Regime”, *Progress in Nuclear Energy*, 138(3):103814, 2021.
12. Abdelfatah Abdelmaksoud, H.F. Elbakhshawangy, and O. S. Abd El-Kawi, “Flow and heat transfer characteristics of a nanofluid as the coolant in a typical MTR core”, *Kerntechnik* 87(1):48-58, 2022
  13. **O. S. Abd El-Kawi**, H. F. Elbakhshawangy and Abdelfatah Abdelmaksoud, “Numerical and experimental performance analysis for different types of heat exchangers”, *Journal of Mechanical, Civil and Industrial Engineering*, DOI: 10.32996/jmcie, 2021.
  14. **O. S. Abd El-Kawi**, Saeed. A. Al-Ghamdi, “Influence of Wind Speed and Direct Solar Irradiance on The Performance of Photovoltaic Modules”, *Multicultural Education Volume 7(Issue 12):664-672*, 2022.
  15. Saeed A. Al-Ghamdi, Ahmed Abdel-Latif, **O. S. Abd El-Kawi**, Ossama Abouelatta, “Analysis of Wind Speed Data and Wind Energy Potential for Seven Selected Locations in KSA”, *Journal of Power and Energy Engineering* 10(04):1-26, 2022.
  16. **O. S. Abd El-Kawi**, Saeed. A. Al-Ghamdi, "Experimental Analysis of Photovoltaic Module Performance based on Ambient Temperature, Module Temperature and Dust Accumulation”, *Solid State Technology* 65(1):2022

#### **Book Chapter:**

• **Book title:** Nuclear Reactor Thermal Hydraulics and Other Applications, DOI: 10.5772/45830

**Chapter title:** Hydrodynamic and Heat Transfer Simulation of Fluidized Bed Using CFD, DOI: 10.5772/52072

#### **(4) Under Publications**

#### **Research Papers**

1. **O. S. Abd El-Kawi**, “Design and Fabricate A Portable Desalination Unit”, 2023
2. **O. S. Abd El-Kawi**, “Experimental Analysis of Performance of Portable Desalination Unit”, 2023

3. **O. S. Abd El-Kawi**, “Experimental and Theoretical Analysis of Renewable Energy sources and Air Quality with Case Study”, 2023

#### **(5) Awards**

- Egyptian Engineering Syndicate, 1993.
- Egyptian Atomic Energy Authority, 2008.

#### **(6) Computer Skills**

##### **Perfect in:**

- FORTRAN programming
- VISUAL BASIC programming
- Simulation and numerical analysis
- Windows and its applications (word, power point,...etc)
- Internet and its application (front page, HTML,....etc)
- AutoCAD
- Golden Software Grapher
- Golden Software Surfer
- Computational fluid dynamic codes (FLUENT, FEHT, COSMOS, MFIX AND FEMAP)
- Use of Matlab

#### **(7) Experiences**

- *From 1993 to 1996 maintenance engineer in power supply units.*
- *From 1997 to 1998 maintenance engineer in weaving and spinning machines.*
- *From 1998 to 2002 demonstrator in nuclear research center - Egyptian atomic energy authority.*
- *From 2002 to 2007 lecturer in nuclear research center – Egyptian atomic energy authority.*
- *From 2008 to 2011 assistant professor in nuclear research center - Egyptian atomic energy authority.*
- *From 2011 until now assistant professor in Mechanical department – Faculty of Engineering - Al\_Baha University*

#### **(8) Training Courses**

- *Thermal hydraulic calculation in Egyptian second research reactor.*
- *Work shop in silicon doping.*

- *Radiation protection.*
- *Participate in the workshop “Status of high-temperature gas-cooled reactor”, Trieste, Italy.*
- *Predictive maintenance.*
- *Training program in Developing Research Abilities.*

## **(9) Teaching Courses**

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| <ul style="list-style-type: none"> <li>• <i>Thermodynamics</i></li> <li>• <i>Fluid mechanics</i></li> <li>• <i>Heat transfer</i></li> <li>• <i>Numerical solutions</i></li> <li>• <i>Engineering mathematics</i></li> <li>• <i>Boilers technology</i></li> <li>• <i>Fluidized bed</i></li> <li>• <i>Engineering simulation</i></li> <li>• <i>FORTRAN programming.</i></li> <li>• <i>New and Renewable Energy</i></li> <li>• <i>Fluidization Technology</i></li> </ul> | <ul style="list-style-type: none"> <li>• <i>Engineering Economics</i></li> <li>• <i>Experimental Engineering and Measurements</i></li> <li>• <i>Fundamentals of Workshops</i></li> <li>• <i>Engineering statistics and probabilities theory</i></li> <li>• <i>Advanced Measurements</i></li> <li>• <i>Refrigeration and Air Conditioning</i></li> <li>• <i>Robotics</i></li> <li>• <i>Engineering management</i></li> <li>• <i>Water Desalination</i></li> </ul> |
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