



**1. Name and academic rank**

Ahmed Bahaa El-Din Salem, Assistant professor, full time.

**2. Education – degree, discipline, institution, year**

- Ph.D., Mechanical Engineering, Alexandria University, 2013.
- M.S., Mechanical Engineering, Alexandria University, 2005.
- B.S., Mechanical Engineering, Alexandria University, 1999.

**3. Academic experience**

- Beirut Arab University (BAU), Lebanon, Assistant Professor, Fall 2018-Present, full time.
- Alexandria University, Associate Professor, November 2019- Present, full time.
- Arab Academy for Science, Technology & Maritime Transport (AASTMT), Smart Village Campus, Assistant Professor, Spring 2017- Spring 2018, full time.
- Alexandria University, Assistant Professor, Spring 2014- November 2019.
- Alexandria University, Teaching Assistant, Spring 2000- Spring 2014, full time.

**4. Non-academic experience**

Member in consultation group for:

- Fuel distribution network in Cairo International Airport.
- Water distribution network for water demand and firefighting in Alexandria Automotive Company.
- Water transporting pipelines in Cairo and Alexandria Water Company.
- Engineering Assessment for Influent Water Pipeline Drain at PetroGulf Company.
- Engineering Assessment for Influent Water Pipeline Drain at Al-Amal Petroleum Company.
- Hydraulic Analysis of a Jet Pipeline from West Delta Repository to Borg El-Arab Air Base.
- Design of Piping Arrangement of the Existing Water Injection System at Esh El-Mallaha Petroleum Company.
- Construction of Piping Arrangement of the Existing Water Injection System at Esh El-Mallaha Petroleum Company.

Training Programs & Short Courses for Engineers and Technicians

- Fluid Power Systems
- Pneumatic Circuits
- Hydraulic and Pneumatic Basics
- Pump Technology
- Pipeline Design
- Seals and Mechanical Seals
- Valves



**5. Certifications or professional registrations**

Authorization to practice engineering profession in Lebanon.  
ASME

**6. Current membership in professional organizations**

Egyptian Engineers Syndicate.

**7. Honors and awards**

None

**8. Service activities**

- **Member at Faculties' Councils, September 2022 – September 2023**, Faculty of Engineering, Beirut Arab University (BAU), Beirut.
- **Member at Faculties' Councils, September 2020 – September 2021**, Faculty of Engineering, Beirut Arab University (BAU), Beirut.
- **Member at Faculties' Councils, September 2018 – September 2019**, Faculty of Engineering, Beirut Arab University (BAU), Beirut.
- **Member of the Faculty of Engineering Quality Unit, September 2022 – September 2023**, Faculty of Engineering, Beirut Arab University (BAU), Beirut.
- **Member of the Research Committee, September 2022 – September 2023**, Faculty of Engineering, Beirut Arab University (BAU), Beirut.
- **Head of the Central Committee for Examination, September 2017 – September 2018**, Arab Academy for Science, Technology & Maritime Transport, Smart Village Campus
- **Academic Advisor of Specialized Scientific Programs “SSP”, January 2014 – 2017**, Faculty of Engineering, Alexandria University.
- **Director of Fluid Mechanics and Hydraulic Machines Lab, January 2014 – 2017**, Faculty of Engineering, Alexandria University.

**9. Research interests**

Pipeline Leak Detection, Unsteady Flow in Pipeline, Renewable Energy, Turbo-machinery, Fluid Power Systems.

**10. Publications and presentations from the past five years**

**Journal publications**

- Nada Gaber, Ahmed Ibrahim, **Ahmed B. Rashad**, Essam Wahba, Zeyad El-Sayad, and Ali F. Bakr “**Improving pedestrian micro-climate in urban canyons: City Center of Alexandria, Egypt**”, ScienceDirect, Urban Climate, Vol. 34, Dec. 2020, 100670, <https://doi.org/10.1016/j.uclim.2020.100670>
- H. A. Warda, I. G. Adam, and **A. B. Rashad**, M. W. Gamal Aldin “**Integral Pumping Rings for Dual Mechanical Seals: Hydraulic Performance Evaluation**



**Using Numerical Simulations**", Taylor & Francis, Engineering Applications of Computational Fluid Mechanics, Vol. 14, No. 1, pp. 923-938, 2020, <https://doi.org/10.1080/19942060.2020.1771425>

- Omar O. Rabhy1, I. G. Adam, M. Elsayed Youssef, **A. B. Rashad** and Gasser E. Hassan "**Numerical and Experimental Analysis for Transparent Solar Distiller used in Agriculture Greenhouse**", ScienceDirect, Applied Energy, Vol. 253, Nov. 2019, 113564, <https://doi.org/10.1016/j.apenergy.2019.113564>
- H. A. Warda, E. M. Wahba, **A. B. Rashad**, A. A. Mahgoub, "**Experimental and Numerical Investigation of Axial Single Scroll Integral Pumping Devices for Dual Mechanical Seals**", ELSEVIER, Alexandria Engineering Journal (AEJ), Vol. 57, No. 4, pp. 2719-2728, 2018, <https://doi.org/10.1016/j.aej.2017.10.007>
- H. A. Warda, I. G. Adam, and **A. B. Rashad**, M. W. Gamal Aldin "Bi-directional Integral Pumping Devices for Dual Mechanical Seals: Influence of Mesh Type on Accuracy of Numerical Simulations", ELSEVIER, Alexandria Engineering Journal (AEJ), Vol. 57, No. 4, pp. 3255-3264, 2018, <https://doi.org/10.1016/j.aej.2017.11.013>
- H. A. Warda, I. G. Adam, and **A. B. Rashad**, M. W. Gamal Aldin "**Integral Pumping Device for Dual Mechanical Seals: Hydraulic Performance Generalization Using Dimensional Analysis**", ASME, Journal of Engineering for Gas Turbines and Power, Vol. 140, No. 8, pp. 082507-1-082507-9, 2018, <https://doi.org/10.1115/1.4039083>

#### Conference proceedings

- H. A. Warda, Sherif Haddara, I. G. Adam, **A. B. Rashad** and H. Alaa El-Deen "**Blade Trailing Edge Profile Effect on Low Speed Centrifugal Pump Performance**", 11<sup>th</sup> International Conference on The Role Of Engineering Towards A Better Environment, Alexandria Egypt, December 2017.
- Rabhy O. O., I. G. Adam, M. E. Youssef, G. E. Hassan, **A. B. Rashad** "**Experimental Study on a New Transparent Passive Solar Distiller in a Novel Agricultural Greenhouse**", 11<sup>th</sup> International Conference on The Role Of Engineering Towards A Better Environment, Alexandria Egypt, December 2017.

#### 11. Most recent professional development activities

None