

# CURRICULUM VITAE

## Salaheddin R. Malkawi

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### *QUALIFICATION*

- **International Nuclear Leadership Education Program**, Massachusetts Institute of Technology (MIT), USA, 18 - 26 Jun. and 22 – 31 Oct. 2014
- **Doctor of Philosophy (Ph. D.) in Nuclear Engineering**, Center for Nuclear Studies, Dec. 2000.
- **Master of Science (M. Sc.) in Nuclear Engineering, First position (Grade A)**, Center for Nuclear Studies, Nov. 1997.
- **Bachelor of Science (B.Sc.) in Electronic Engineering (2.1Hons)**, University of Kent at Canterbury /U.K, Jun. 1988
- **GCE Advanced Level in Physics (A), Pure Math. (A), Applied Math. (A), Combined Math. (A)**, Merton College /U.K. Jun. 1985

### *PROFESSIONAL EXPERIENCE*

- Feb. 2019 – Present**      **Associate Professor**, Department of Nuclear Engineering, Jordan University of Science & Technology (JUST).
- Feb. 2017 – Jan. 2019:**    **Director General (CEO)**, Jordan Nuclear Power Company (JNPC).
- Feb. 2016 – Feb. 2017:**   **Deputy Director General**, Jordan Nuclear Power Company (JNPC).
- Apr. 2008 – Jan. 2016:**   **Chairman, Department of Nuclear Engineering**, Jordan University of Science & Technology. Involved in establishing the first and only Nuclear Engineering Department in Jordan.
- Dec. 2008 – Jan. 2016:**   **Technical Advisor (consultant) to Jordan Atomic Energy Commission**. Involved in the following activities:

- Human Resources Development, member of Jordan Research and Training Reactor (JRTR) safety Committee,
- Apr. 2011 – Jun. 2013:** **Project Manager, Design and Construction of Jordan Subcritical Assembly (JSA).** The first nuclear facility in Jordan. Successfully operated in June 2013.
- Feb. 2009 – Nov.2010:** Counterpart with North Carolina State University, U. S State Department, and International Atomic Energy Agency (IAEA) on the project for Developing An **Internet Reactor Laboratory (IRL)** for Supporting Nuclear Science and Engineering Education in Developing Countries (Internet Reactor Lab.)
- Oct. 2001- Sep. 2007:** Assistant Professor, Department of Electrical Engineering, Mu'tah University. Teaching, head, and member of a number of committees.

### *COURSES TAUGHT*

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- 12 Courses in Nuclear Engineering
- 10 Courses in Electrical and Computer Engineering

### *SUPERVISED M. SC. THESIS AND B. SC. PROJECTS*

- 3 M. Sc. Thesis
- 15 Undergraduate Projects in Nuclear Engineering
- 8 Undergraduate projects in Electrical engineering

### *EXPERT MISSIONS, TECHNICAL MEETINGS AND WORKSHOPS*

- Participated in more than 50 international Expert Missions, Invited Speaker, Seminars, Technical Meetings and Workshops

### *SELECTED PUBLICATIONS*

#### **a. Journals**

1. Ibrahim Jarrah, **Salaheddin Malkawi**, Majdi I. Radaideh, Faisal Aldebie and Mohammad El-Mustafah “*Experimental validation of the neutronic parameters in the Jordan subcritical assembly*”, Progress in Nuclear Energy 108 (2018) 71-80. <https://doi.org/10.1016/j.pnucene.2018.04.014>
2. Majdi I. Radaideh, Ibrahim Jarrah, **Salaheddin Malkawi**, Ahmad Khateeb, and Ibrahim Al-Issa, “*Reactivity and Flux Characterization of the Jordan*

- Subcritical Assembly*”, Progress in Nuclear Energy 108 (2018) 43–53.  
<https://doi.org/10.1016/j.pnucene.2018.05.003>
3. **Salaheddin Malkawi**, Moh’d Al-Nimr, and Danah Azizi, “A *Multi-Criteria Optimization Analysis for Jordan’s Energy Mix*”, Energy, 127 (2017) 680 – 696.
  4. **Salaheddin R. Malkawi**, Mahmoud El Gohary, Mohammad Omari, Danah Azizi, Qusai Al-Mistarihi, and Ebtihal Al-Malahim, “*Investigation of Radioactivity Levels in Soil at JUST Campus Prior to the Construction of JRTR*”, Jordan Journal of Civil Engineering ,7(4) (2013) 371 – 376.
  5. Wafa Batayneh, Omar Al-Araidah, and **Salaheddin R. Malkawi**, “*Biomimetic Design of a Single DOF Stephenson III Leg Mechanism*”, Mechanical Engineering Research, 3(2) (2013) 43 - 50.
  6. **Salaheddin R. Malkawi**, Bassam Khuwaileh, and Malik Al-Momani, “*Prediction of Neutron Energy Spectrum in a Typical MTR type Research Reactor Using Monte Carlo Simulations*”, Annals of Nuclear Energy, 56 (2013) 17 - 22
  7. **Salaheddin Malkawi** and Omar Al-Araidah, “*Students’ Assessment of Interactive Distance Experimentation in Nuclear Reactor Physics Laboratory Education*”, European Journal of Engineering Education, 38(5) (2013) 512 – 518, DOI: 10.1080/03043797.2013.811476
  8. **S. R. Malkawi** and Nasir Ahmad, “*Determination of Neutron Energy Spectrum at a Pneumatic Rabbit Station of a Typical Swimming Pool Type Material Test Research Reactor*”, Annals of Nuclear Energy, 29 (2002) 101-108.
  9. **S. R. Malkawi** and Nasir Ahmad, “*Solution of the Neutron Spectrum Adjustment Problem in a Typical MTR Type Research Reactor*”, Annals of Nuclear Energy, 28 (2001) 25-51.
  10. **S. R. Malkawi** and Nasir Ahmad, “*Prediction and Measurement of Neutron Energy Spectrum in a Material Test Research Reactor*”, Annals of Nuclear Energy, 27 (2000) 311-327.
  11. **S. R. Malkawi** and N. Ahmad, “*Experimental Evaluation of Neutron Spectra in the Irradiation Fields of a Typical Material Test Research Reactor*”, Journal of Neutron Research, 8 (4) (2000) 261-285.
  12. **S. R. Malkawi** and Nasir Ahmad, “*Evaluation of Neutron Environment in the Thermal Column of A Material Test Research Reactor*”, Nuclear Science Journal, 36(6) (1999) 379-392.

## **b. Conferences**

1. **Salaheddin Malkawi**, “A Comparative Analysis of the Use of Internet Reactor Laboratory and Subcritical Assembly for Nuclear Engineering Education”, Proceedings of International Conference on Research Reactors: Safe Management and Effective Utilization, Vienna, Austria, 16 - 20 November 2015

2. Fareed Yasin, Danah Azizi, Mohammad Mustafa, Hannah Hale, Kamal Harahsheh, Reem Khrais, Mohammad Otoom, **Salaheddin Malkawi**, Howard Hall, Joseph R. Stainback IV, “Nuclear Security Culture; Analytical Investigation of Local Incoming Workforce in a Developing Nuclear Country”, Proceedings of the 56<sup>th</sup> Institute of Nuclear Materials Management (INMM) Annual Meeting, Indian wells, California, USA, 12 – 16 July 2015
3. Yahia Qawasmi and **Salaheddin Malkawi**, “The Role of Educational Institutions in Support of Nuclear Energy Programs in New Comer States; Case of Jordan University of Science and Technology, 3rd Annual Nuclear Energy Development Summit, Budapest, Hungary, 2 – 3 October 2014.
4. Dala’ Amawi and **Salaheddin Malkawi**, “*Human Resources Development for Jordan’s Nuclear Energy Programme*”, Proceedings of the IAEA International Conference on Human Resource Development for Nuclear Power Programmes: Building and Sustaining Capacity, Vienna, Austria, May 12 – 16, 2014
5. **Salaheddin Malkawi**, “*Nuclear Security Planning and Education in Jordan*”, Proceedings of the 54<sup>th</sup> Institute of Nuclear Materials Management (INMM) Annual Meeting, Palm Desert, California, USA, 14 – 18 July 2013
6. **Salaheddin Malkawi** and Omar Al-Araidah, “*Evaluation of Nuclear Reactor Physics Laboratory Education through Remote Utilization of Research Reactors*”, Proceedings of European Research Reactor Conference, Saint Petersburg, Russia, April 21 – 25, 2013.
7. H. A. Abu Qdais, **S. R. Malkawi**, and A. I. Malkawi, “*Public Perception on Nuclear Research Reactors in New Comer States: A Case Study from Jordan*”, *Proceedings of European Research Reactor Conference*, Saint Petersburg, Russia, 21- 25April 2013.
8. **Salaheddin Malkawi**, “*Jordan University of Science and Technology's Efforts to Ensure Safe and Secure Nuclear Infrastructure in Jordan*”, Proceedings of the 53<sup>rd</sup> Institute of Nuclear Materials Management (INMM) Annual Meeting, Orlando, Florida, USA, 15 – 19 July 2012.
9. **Salaheddin Malkawi** and Ayman Hawari, “*Needs and Present Status of the First Multipurpose Nuclear Facilities in Jordan*”, International Conference on Research Reactors: Safe Management and Effective Utilization, Rabat, Morocco, 14- 18 November 2011.
10. **Salaheddin Malkawi**, Ayman I. Hawari, Ahmad Obeidat, and Omar Al-Araidah, “*Exploring The Utilization of Nuclear Research Reactors in Distance Education Across International Borders*”, Proceedings of the 1<sup>st</sup> International Nuclear and Renewable Energy Conference (INREC10), Amman, Jordan, 21-24March 2010. IEEE conference Publications.

### c. Reports

1. **Co-Author**, *Environmental Impact Assessment for Jordan Research and Training Reactor (JRTR)*, Jordan Atomic Energy Commission, Queen Rania

Al Abdallah Center for Environmental Sciences & Technology, JUST, Jordan,  
June 2013.

2. **Co-Author**, *Environmental Management Plan for Jordan Subcritical Assembly*, JUST, Jordan, August 2010.