

**Dr. Abdulsalam Saeed A Alghamdi**

*Associate Professor, Electrical and Computer Engineering Dept, King Abdulaziz University*

**Education**

| <i>Degree</i> | <i>Field of Study</i>               | <i>Institution</i>           | <i>Year</i> |
|---------------|-------------------------------------|------------------------------|-------------|
| PhD           | Electrical Engineering              | University of Manchester, UK | 1993        |
| MSc           | Electrical Power and Energy Systems | University of Manchester, UK | 1990        |
| BSc           | Electrical Engineering              | King Abdulaziz University    | 1988        |

**Major Academic Experience**

| <i>From</i> | <i>To</i> | <i>Institution</i>   | <i>Rank</i>         | <i>Title</i>       | <i>Full/ Part-time</i> |
|-------------|-----------|--|---------------------|--------------------|------------------------|
| 2013        | Now       | King Salman bin Abdulaziz Chair for Energy in KAU  | Director            | Director           | Full Time +            |
| 2008        | Now       | King Abdulaziz University, KSA   | Associate Professor | Faculty member     | Full Time              |
| 2002        | 2006      | Head of the Council for Technical Education and Vocational Training in Jeddah Governorate. | Director            | Director           | Full Time              |
| 1998        | 2006      | Dean of the Jeddah College of Technology   | Dean                | Dean               | Full Time              |
| 1993        | 2000      | Jeddah College of Technology   | Assistant Professor | Faculty Member     | Full Time              |
| 1988        | 1993      | Jeddah College of Technology   | Teaching Assistant  | Teaching Assistant | Full Time              |

**1- Institutional Administration**

| <i>From</i> | <i>To</i> | <i>Institution</i>   | <i>Rank</i> | <i>Full/ Part-time</i> |
|-------------|-----------|--|-------------|------------------------|
| 2013        | Now       | King Salman ben Abdulaziz Chair for Energy   | Director    | Full Time              |
| 2002        | 2006      | Head of the Council for Technical Education and Vocational Training in Jeddah Governorate. | Head        | Full Time              |
| 1998        | 2006      | Dean of Jeddah College of Technology.  | Dean        | Full Time              |
| 1994        | 1998      | Vice-Dean of Jeddah College of Technology  | Vice-Dean   | Full Time              |

**2- Professional Services (administration, committees, units, etc.)**

| <i>From</i> | <i>To</i> | <i>Responsibilities</i>   | <i>Title</i> | <i>Full/ Part-time</i> |
|-------------|-----------|---|--------------|------------------------|
| 2005        | 2006      | Member of the Educational Development Committee in The Makkah Region, which is part of the Makkah District Council.   |              | Part Time              |
| 2005        | 2006      | Member of the Social Committee of the International Islamic Relief Organization of the Islamic World Association.   |              | Part Time              |
| 2002        | 2003      | Head of the Colleges of Technology National Committee for Authoring Electrical Power Curricula. He authored and coauthored the following coursebooks: 1- High voltage technology. 2- Electrical installation workshop. 3- Power plants, which are currently taught at technical colleges. | Head         | Part Time              |

|      |      |  |          |           |
|------|------|--|----------|-----------|
| 2002 | 2006 | Member of the Training and Rehabilitation Team Emanating from the Makkah District Council.   | Member   | Part Time |
| 2001 | 2005 | Director of the Training and Employment Office in Jeddah Governorate - The National Training and Employment Project in Makkah Region, Under HRH the Emir of Makkah Region, Prince Abdulmajeed bin Abdulaziz. | Director | Part Time |

### Funded Research Projects (Last Five Years)

1. Distributed Powerhouses: Solar Assisted Electrical and Thermal Demand Reduction in Saudi Arabia Housing. Ministry of Education, International Collaboration Program between King Abdulaziz University - Saudi Arabia and University of Southampton – UK, 2020 – 2023. (7,330,707 SR = 1,954,855 US\$).
2. King Salman bin Abdulaziz Chair for Energy Research. King Abdulaziz University. (6000000 SR = 1,600,000 US\$) – (2013 – now)

### Publications – Books (Last 5 years)

1. **Abdulsalam S Alghamdi**, “Fundamentals of High Voltage Engineering”, (in Arabic) Scientific Publishing Centre, King Abdulaziz University, Jeddah. Dec 2019.

### Major Publications (Last Five Years)

1. Amara, W, Oueslati, D, Eltresy, N, **Alghamdi, A.** Parametric study of modified dipole nano-antennas printed on thick substrates for infrared energy harvesting. Int J Numer Model. 25 Nov 2019; e2704. <https://doi.org/10.1002/jnm.2704>
2. Hassan Baaqeel, Faissal Abdelhady, **Abdulsalam S. Alghamdi**, Mahmoud M. El-Halwagi, Optimal design and scheduling of a solar-assisted domestic desalination systems, Computers & Chemical Engineering, Volume 132, 2020, 106605, ISSN 0098-1354, <https://doi.org/10.1016/j.compchemeng.2019.106605>.
3. **Alghamdi, A. S.** (2019). Potential for Rooftop-Mounted PV Power Generation to Meet Domestic Electrical Demand in Saudi Arabia: Case Study of a Villa in Jeddah. Energies, 12(23), 4411.
4. **Alghamdi, A. S.**, Bahaj, A. S., Blunden, L. S., & Wu, Y. (2019). Dust Removal from Solar PV Modules by Automated Cleaning Systems. Energies, 12(15), pp 2923-2944.
5. Ramli, M. A., Boucekara, H. R. E. H., & **Alghamdi, A. S.** (2019). Efficient energy management in a microgrid with intermittent renewable energy and storage sources. Sustainability, 11(14), 3839.
6. **Alghamdi, A. S.**, Magnetic Field Exposure Assessment During Live Line Maintenance in Saudi Arabia. International Journal of Innovations in Engineering and Technology (IJIET), ISSN: 2319-
7. Makbul A. M. Ramli, H. R. E. H. Boucekara, and **Abdulsalam S. Alghamdi** “Optimal sizing of PV/wind/diesel hybrid microgrid system using multi-objective self-adaptive differential evolution algorithm.” Renewable Energy, Volume 121, June 2018, Pages 400-411.
8. **Alghamdi, Abdulsalam S.**, AbuBakr S. Bahaj, and Yue Wu. "Assessment of Large Scale Photovoltaic Power Generation from Carport Canopies." Energies 10.5 (2017): 686.
9. A.S. Alghamdi, “Reduction of Magnetizing Inrush Current in the Transformers”. Engineering Research Bulletin, Menoufiya University, Egypt, Vol. 21, No. 1, PP. 121-132, 1998.
10. **A.S.G. Alghamdi**, D.W. Auckland, A.J. Risino, B.R. Varlow, “Reducing Variability in Inclined Plane Tracking Test Results”. IEEE Transaction on Dielectrics and Electrical Insulation, Vol. 3, No. 3, PP. 439-443, 1996.
11. **A.S. Alghamdi**, D. Mills, P. Lwein, G. Chen "Factors Influencing Space Charge and Electroluminescence of Epoxy Resin", Experimental data were collected, and a paper will be submitted to the IEEE (Electrical Insulation and Dielectrics Transaction) – ongoing research.

### Patents (Last Five Years)

ABDEL-HADY, F. E., & **ALGHAMDI, A. S.** (2019). FOLDABLE PARABOLIC SOLAR COLLECTOR, U.S. Patent No. 10,208,984. Washington, DC: U.S. Patent and Trademark Office.

### Recent Professional Development Activities (Workshops, training, etc.)

1. Training session on “Innovation and Creative Research”, organized by the Deanship of Scientific Research (DSR) at King Abdulaziz University and presented by Prof. Luck, Jeddah, Saudi Arabia, 15-16 April 2015.