

**DR. Khaled Sedraoui***Associate Professor, Electrical and Computer Engineering Dept., King Abdulaziz University***Education**

<i>Degree</i>	<i>Field</i>	<i>Institution</i>	<i>Year</i>
PhD	Electrical Engineering	ENSET, Tunisia	2010
MS	Electrical Engineering	ETS, Montreal, Canada	1994
BS	Electrical Engineering	ENSET, Tunisia	1989

**Academic Experience**

<i>From</i>	<i>To</i>	<i>Institution</i>	<i>Rank</i>	<i>Title (Chair, Coordinator, etc.)</i>	<i>Full/ Pt Time</i>
1994	1997	ETS, Montreal, Canada	Lecturer.		Full Time
2010	2013	JCT, Jeddah, KSA	Assist. Prof.		Full Time
2013	Date	King Abdulaziz Univ.	Associate. Prof.		Full Time

**Non Academic Industrial Experience (including Consultations)**

<i>From</i>	<i>To</i>	<i>Company/Entity</i>	<i>Title</i>	<i>Position Description (Brief)</i>	<i>Full/Ptt Time</i>
1991	1997	GREPCI, ETS. Montreal	Researcher	R&D in Elect. Eng.	Part Time
1989	1991	INBMI, Tunisia	Engineer	Project engineer	Full Time
1997	2013	JCT, Jeddah, KSA	R&D Engineer	Consultant	Part Time
2013	2020	KAU, Jeddah, KSA	R&D Engineer	Consultant	Part Time

**Funded Research Projects and Patents from the Past Five Years****P.I. of the Research Projects:**

- “Analysis Methods for Assessing Integrated Renewable Energy and Water Desalination Systems”. No. 1-135-36-HiCi , 2016.
- “Load Scheduling optimization of Plug-in Hybrid Electric Vehicles in Smart grids”, No. G-415-135-38, 2017.
- “Multi-criteria infrastructure planning for integrated water-energy systems” No. G-334-135-38, 2018.
- Optimal Centralized Charging Strategies for Electric Vehicles Under Battery Swapping Scenario. No. KEP-2-135-39, 2019.
- Performance-Optimized and energy-aware Task Scheduling for Green Cloud and Edging Computing Systems. No. RG-48-135-40, 2020.

**Certifications and Professional Registrations****Current Membership in Professional Societies and Organizations***Society/organization*

1. *Institute of Electrical and Electronics Engineers, IEEE* Member
2. *Industrial Electronics Society IEEE* Reviewer

**Honours and Awards:** Best paper in the IEEE ISIE 2006 conference, Montreal, Canada.

**Institutional and Professional Services** (*administration, committees, units, etc.*)

1. Academic advisor for more than 300 students, over 14 years, Electrical Eng. Dept., College of Technology, 1997-2013.
2. Member of the Scientific Committee, Jeddah College of Technology, KSA 2000- 2013.
3. Coordinator of several JCT Committees (Curriculum, ISO, and Strategic Planning), KSA – 1997-2013.

**Principal Publications/Presentations from the Past Five Years**

- [1] Makbul A. M. Ramli, Khaled Sedraoui, and al. " Optimal Sizing of Grid-Connected Photovoltaic Energy System in Saudi Arabia" *Journal of Renewable Energy, Elsevier, Journal of Renewable Energy, Elsevier, Volume 75, March 2015, Pages 489–495. (Q1)*
- [2] Makbul Ramli, Khaled Sedraoui, Yusuf A. Al-Turki and al." On the investigation of photovoltaic output power reduction due to dust accumulation and weather conditions", *Journal of Renewable Energy, Elsevier, Volume 99, August 2016, Pages 838–844. (Q1)*
- [3] Qi Kang ; SW Feng ; MC Zhou ; Khaled Sedraoui, A Annmary " Optimal Load Scheduling of Plug-In Hybrid Electric Vehicles via Weight-Aggregation Multi-Objective Evolutionary Algorithms", *IEEE Transactions on Intelligent Transportation Systems, 2017, Volume: 18, Issue: 9, Pages: 2557 – 2568. (Q1)*
- [4] Simon C. Parkinson; Khaled Sedraoui; Ned Djilali, Abd. Almasoud. " Impacts of Groundwater Constraints on Saudi Arabia’s Low-Carbon Electricity Supply Strategy ", *ACS publications, Journal Environmental Science & Technology, January 2016. (Q1)*
- [5] N. Belhaouas, M-S. Khaled Sedraoui, Ned Djilali, and al. "PV Array Power Output Maximization Under Partial Shading Using New Shifted PV Array Arrangements", *Elsevier, Journal of Applied Energy, February 2017, Volume 178, 326-337. (Q1)*
- [6] S. C. Parkinson, M. Makowski, V. Krey. Khaled Sedraoui, Ned Djilali, and al. "A multi-criteria model analysis framework for assessing integrated water-energy system transformation pathways", *Elsevier, Journal of Applied Energy, Vol.210 Jan 2018, 477–486 (Q1).*
- [7] Peng Wu , Cheng-Hu Yang, F Chu , MC Zhou, Khaled Sedraoui, " Cost-Profit Trade-Off for Optimally Locating Automotive Service Firms Under Uncertainty ", *IEEE Transactions on Intelligent Transportation Systems, 2020 , Volume: , Issue, Pages: (Q1)*
- [8] Khaled Sedraoui, Makbul A. M. Ramli, Ibrahim M. Mehedi, Muhammad Hasbi, and Ayong Hiendro " Optimum orientation and tilt angle for estimating performance of photovoltaic modules in western region of Saudi Arabia" *AIP, Journal of Renewable and Sustainable Energy, Marsh 2017, Volume9, Issue2. (Q3)*
- [9] Yosra Ben Fadhel , Sana Ktata , Khaled Sedraoui , Salem Rahmani and Kamal Al-Haddad. " A Modified Wireless Power Transfer System for Medical Implants". *Energies 2019, 12. (Q3)*
- [11] H Yuan, J Bi, M Zhou, K Sedraoui ."WARM: Workload-Aware Multi-Application Task Scheduling for Revenue Maximization in SDN-Based Cloud Data Center ". *IEEE Access 6, 2018, pages 645-657. (Q1)*

**Books:**

Khaled Sedraoui, " Handbook of Power Plants and electrical substations", T.V.T.C, KSA.2008  
 Khaled Sedraoui," Handbook of Power Generation and Transmission Lines", T.V.T.C, KSA 2004

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

1. Implementation of the Electrical Power System Laboratory from Lab-volts in the College of Technology, Jeddah, Saudi Arabia