

Curriculum Vitae

DR. MOHAMMED A. BOU-RABEE

College of Technological Studies

Shuwaikh, Jamal Abdalnasser Street, Kuwait

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Education

- **Diploma** Telecommunication & Navigation Institute- Kuwait, 1973
- **BEE.** Wichita State University - USA, 1984.
- **Msc.** North Carolina A&T State University - USA, 1986.
- **Ph.D.** The University of New South Wales - Australia, 1992.

Academic experience

Assistant Professor at PAAET for 1998-2001, 2012-2020
Teaching several classes in electrical engineering technology department
Associate Professor at PAAET for 2020 to present
Teaching several classes in electrical engineering technology department
And conducting research in the energy field sector

Non-academic experience

- Technical Consultant at Ministry of Communication (MOC) 1992 ~ 1994
- Director, Human Resources at Ministry of Communication (MOC) 1994 ~ 1998
- Private Academic Tutor (part time) 2002 ~ 2004
- General manager at BCEO Bou-Rabee Consulting Engineering Office 2005 ~ 2007
- Deputy General manager at CAD Consulting Engineering Office

Certifications

- Consultant Engineer Studies in field of Electrical Engineering (KSE)
- Total Quality Management (TQM) Cairo Egypt
- First Prospect Degree Officer Ministry of Electricity (MOE) Kuwait

Current membership

- Member, Planning Committee
- Member, Study of Quality Importance
- Member, Staff Appointment Committee
- Member, Equipment and Budget Committee
- Member, Field Training and Sampling Committee
- Member, Safety Committee
- Member, Five-Year Plan Committee
- Convener, Timetable Committee

Convener, Committee of Award distribution to distinguished staff

Honors and awards

NA

Service activities

NA

Publications and presentations

- [1] [Influence of dirt accumulation on performance of PV panels](#)
SA Sulaiman, AK Singh, MMM Mokhtar, MA Bou-Rabee
Energy Procedia 50, 50-56
- [2] [Using artificial neural networks to estimate solar radiation in Kuwait](#)
M Bou-Rabee, SA Sulaiman, MS Saleh, S Marafi
Renewable and Sustainable Energy Reviews 72, 434-438
- [3] [Three-phase modeling of unbalanced distribution systems during open conductors and/or shunt fault conditions using the bus impedance matrix](#)
EB Makram, MA Bou-Rabee, AA Girgis
Electric Power Systems Research 13 (3), 173-183

- [4] [Real-time study on the effect of dust accumulation on performance of solar PV panels in Malaysia](#)
SA Sulaiman, MNH Mat, FM Guangul, MA Bou-Rabee
2015 International Conference on Electrical and Information Technologies
- [5] [Harmonic filters for industrial power systems](#)
D Sutanto, M Bou-Rabee, KS Tam, CS Chang
1991 International Conference on Advances in Power System Control, Operation ...
- [6] [Improving the overall efficiency for DC/DC converter with LoV-HiC system](#)
DH Han, YJ Lee, WS Kwon, MA Bou-Rabee, GH Choe
Journal of Power Electronics 12 (3), 418-428
- [7] [Passive and active harmonic filters for industrial power systems](#)
D Sutanto, M Bou-rabee, KS Tam, CS Chang
TENCON'91. Region 10 International Conference on EC3-Energy, Computer ...
- [8] [Characteristics of solar energy radiation on typical summer and winter days in Kuwait.](#) MA Bou-Rabee, SA Sulaiman, G Choe, D Han, T Saeed, S Marafie
International Journal of Automotive & Mechanical Engineering 12
- [9] [One-month-ahead wind speed forecasting using hybrid AI model for coastal locations](#) M Bou-Rabee, KA Lodi, M Ali, MF Ansari, M Tariq, SA Sulaiman
Ieee Access 8, 198482-198493
- [10] [A new technique for three-phase active power filter](#) ,M Bou-Rabee, D Sutanto, F Barone, GH Choe, [Proceedings] APEC'92 Seventh Annual Applied Power Electronics Conference ...
- [11] [Particle tracking velocimetry investigations on density dependent velocity vector profiles of a swirling fluidized bed](#) , MY Naz, SA Sulaiman, MA Bou-Rabee, Drying Technology 35 (2), 193-202
- [12] [Investigation of the relationship between moisture content and density of selected Malaysian biomass.](#) MNZ Moni, SA Sulaiman, YS Raja, K Karunamurthy, M Inayat, ...
Journal of Mechanical Engineering and Sciences 10 (2), 2111-2125
- [13] [On seasonal variation of solar irradiation in Kuwait](#)
BOUR Mohammed, S Sulaiman, International Journal Of Renewable Energy Research 5 (2), 367-372
- [14] [11-level operation with voltage-balance control of WE-type inverter using conventional and DE-SHE techniques.](#) M Ali, M Tariq, RK Chakraborty, MJ Ryan, B Alamri, MA Bou-Rabee, IEEE Access 9, 64317-64330
- [15] [Active power filters with reactive power compensation capability](#)
D Sutanto, M Bou-Rabee, Int. Power Eng. Conf., 73-78
- [16] [A review of hybrid energy technologies tenets, controls and combinational strategies](#)
MY Naz, M Bou-Rabee, S Shukrullah, A Ghaffar, A Gungor, SA Sulaiman
Cleaner Engineering and Technology 5, 100340
- [17] [A photovoltaic power-generation system with peak power cut function](#)
MA Bou-Rabee, DH Han, GH Choe, International Journal of Sustainable Energy 34 (8), 506-515

- [18] [Enhanced Cooling of Laptop Computer for Improvement of Processing Performance](#) , MA Bou-Rabee, SA Sulaiman, Global Journal of Computer Science and Technology 15 (H5), 1-4
- [19] [A three-phase current-fed active power filter by PWM injection method](#)
MA Bou-Rabee, D Sutanto, MF Rahman, GH Choe
PESC'91 Record 22nd Annual IEEE Power Electronics Specialists Conference ...
- [20] [Statistical Optimization of Pyrolysis Process for Thermal Destruction of Plastic Waste Based on Temperature-Dependent Activation Energies and Pre-Exponential Factors](#), AO Alqarni, RAU Nabi, F Althobiani, MY Naz, S Shukrullah, HA Khawaja, ...
Processes 10 (8), 1559
- [21] [Lightweight deep learning model for weed detection for IoT devices](#)
U Farooq, A Rehman, T Khanam, A Amtullah, MA Bou-Rabee, M Tariq, 2022 2nd International Conference on Emerging Frontiers in Electrical and ...
- [22] [Structural, finite element and simulation analysis for wireless power transfer of power pad for electric vehicles](#) ,B Alam, M Tariq, S Mustafa, W Ali, A Khan, K Rahman, MA Bou-Rabee, Smart Grids for Renewable Energy Systems, Electric Vehicles and Energy ...
- [23] [Performance analysis and misalignment effect of power pad for dynamic wireless power charging of electrical vehicles](#), B Alam, W Ali, M Tariq, MA Bou-Rabee, Smart Grids for Renewable Energy Systems, Electric Vehicles and Energy ...
- [24] [BiLSTM Network-Based Approach for Solar Irradiance Forecasting in Continental Climate Zones](#) MA Bou-Rabee, MY Naz, IED Albalaa, SA Sulaiman, Energies 15 (6), 2226
- [25] [A THREE-PHASE ACTIVE POWER FILTER APPLICATION AND DESIGN](#)
M BOU-RABEE, D SUTANTO, F BARONE, GYUHA CHOE, ICPE (ISPE) 논문집, 426-431
- [26] [A three-phase current-fed active power filter by PWM injection ...](#),
<https://ieeexplore.ieee.org/abstract/document/162662>, M.A. Bou-Rabee, D. Sutanto, M.F. Rahman, Gyu-Ha Choe, 1991
- [27] [A New Technique of Using Three-phase Active Power Filter to Eliminate the Harmonics in AC Current Source](#), D Sutanto, M Bou-Rabee
Electric Energy Conference 1992: EECON'92; Driving Systems Harder; Preprints.
- [28] [A new technique for three-phase active power filter - IEEE Xplore](#)
<https://ieeexplore.ieee.org/document/228327>, Feb 27, 1992
- [29] [Fault calculations involving shunt faults and open conductors in unbalanced distribution systems](#), M Bou-Rabee, North Carolina Agricultural and Technical State University
- [30] [A photovoltaic power generation system with peak cut function](#)
MA Bou-Rabee, DH Han, GH Choe, 506-515, 03 Dec 2013,
<https://doi.org/10.1080/14786451.2013.851081>

- [31] [A review of hybrid energy technologies tenets, controls and ...](#)
<https://www.sciencedirect.com/science/article/pii/S2666790821003001>
M.Y. Naz, M. Bou-Rabee, S. Shukrullah, A. Ghaffar, A. Gungor, S.A. Sulaiman, 2021
- [32] [DE SHM Based Harmonic Minimization for Modified PUC 15 Level Inverter](#)
<https://doi.org/10.15866/iree.v17i6.21690>
Mohammed A. Bou-Rabee, Shaharin Anwar Sulaiman, Muhammad Y. Naz, Imad E. Albalaa
- [33] [Forecasting the Solar Panels Power Output Based on Air Pollution and Weather in the Gulf Countries by Using Machine Learning](#)
<https://doi.org/10.15866/iree.v17i6.22714>
Mohammed A. Bou-Rabee, Mohd Bilal, M. Nasir Bashir, Arif Ali
- [34] [A New ANN-Based Controller with Variable Frequency for a 12-Switches Cascaded Modified Packed U-Cell Inverter](#), Vol 17, No 5 (2022), IREE
[10.15866/iree.v17i5.21761](https://doi.org/10.15866/iree.v17i5.21761)
Mohammed A. Bou-Rabee, Kaif Lodi, M. Nasir Bashir, Imad E. Albalaa

Professional development activities

CONFERENCE ATTENDED

No.	Title	Year
1	Fault calculations involving shunt faults and open conductors in unbalanced distribution systems M Bou-Rabee North Carolina Agricultural and Technical State University	1986
2	Multiple faults involving open conductors and shunt faults on unbalanced distribution systems EB Makram, A Girgis The Nineteenth Southeastern Symposium On System Theory, Annual Conference ...	1987
3	Passive and active harmonic filters for industrial power systems D Sutanto, M Bou-Rabee, KS Tam, CS Chang TENCON'91. Region 10 International Conference on EC3-Energy, Computer	1991
4	A three-phase current-fed active power filter by PWM injection method MA Bou-Rabee, D Sutanto, MF Rahman, GH Choe PESC'91 Record 22nd Annual IEEE Power Electronics Specialists Conference	1991
5	Harmonic filters for industrial power systems D Sutanto, M Bou-Rabee, KS Tam, CS Chang 1991 International Conference on Advances in Power System Control, Operation	1991
6	A New Technique of Using Three-phase Active Power Filter to Eliminate the Harmonics in AC Current Source D Sutanto, M Bou-Rabee Electric Energy Conference 1992: EECON'92; Driving Systems Harder; Preprints	1992
7	A new technique for three-phase active power filter M Bou-Rabee, D Sutanto, F Barone, GH Choe [Proceedings] APEC'92 Seventh Annual Applied Power Electronics Conference	1992

8	A THREE-PHASE ACTIVE POWER FILTER APPLICATION AND DESIGN M BOU-RABEE, D SUTANTO, F BARONE, GYUHA CHOE ICPE (ISPE) 논문집, 426-431	1992
10	Active power filters with reactive power compensation capability D Sutanto, M Bou-Rabee Int. Power Eng. Conf., 73-78	1993
11	Influence of dirt accumulation on performance of PV panels SA Sulaiman, AK Singh, MMM Mokhtar, MA Bou-Rabee Energy Procedia 50, 50-56	2014
12	Real-time study on the effect of dust accumulation on performance of solar PV panels in Malaysia SA Sulaiman, MNH Mat, FM Guangul, MA Bou-Rabee 2015 International Conference on Electrical and Information Technologies	2015
13	A New Technique of Using Three-phase Active Power Filter to Eliminate the Harmonics in AC Current Source, D Sutanto, M Bou-Rabee, Electric Energy Conference 1992: EECON'92; Driving Systems Harder; Preprints	
14	Real-time study on the effect of dust accumulation on performance of solar PV panels in Malaysia SA Sulaiman, MNH Mat, FM Guangul, MA Bou-Rabee 2015 International Conference on Electrical and Information Technologies	2015
15	Role of Renewable Energy in achieving Climate policy targets of $\leq 2^{\circ}\text{C}$ climate warming, Mohammed Bou-Rabee, Annual Summit on renewable & Sustainable Energy, August 13, 2018, Paris, France	

PROJECTS

1. INTEGRATION OF SOLAR ENERGY SYSTEMS TO REDUCE ENVIRONMENTAL IMPACTS IN KUWAIT (Finished)
2. ANALYSIS OF THE EFFECT OF SAND DUST ACCUMULATION ON THE POWER GENERATION OF SOLAR PHOTOVOLTAIC MODULES. (Finished)
3. A NEW VARIABLE FREQUENCY ANN CONTROLLER FOR PROPOSED CASCADED INVERTER. (Finished)
4. Effects of Photovoltaic Parameters on Optimum Power Generation (Pending)

Training Attended

1. SNAGIT, The PUBLIC AUTHORITY FOR APPLIED EDUCATION AND TRAINING 29/5/2012
2. SOLVE PROBLEM IN CREATIVE WAYS. 21/04/2013
3. Position Paper on Assessment and Evolution: The Necessity for Accreditation

COURSES TITLE

DATE

PLACE

Human Resources Management Workshop

July 6th, 1995

Cairo Egypt

Total Quality Management

November 22nd, 1995

Kuwait

The Innovative Excellence & the Thoughts	December 23 rd , 1995	Kuwait
NLP& Communication Mastery	April 8 th , 1996	Cheops international Canada
Quality, Network Management, and Information Technology	July 29 th , 1996	Hewlett Packard USA
The Leading Skills	November 20 th ,1996	Kuwait
The Administrative Plan & The Supervision	March 12 th , 1997	Kuwait
Decision Making & Solution Formative & the Struggles & Administration of the Crises	April 30 th , 1997	Kuwait
Hi-Tech in Designing & Implementing Human Resources Function	September 12 th ,1997	Dearborn, Michigan USA
Planning & Administration Control	October 29 th , 1997	Kuwait
Curriculum Design & Implementation	July ~ August 1999	Florida USA