

# Harith Ahmed Mohammed Al-Badrani

PhD. in Electrical Engineering (Power Electronics)  
Assistant Professor

Ninevah University  
College of Electronic Eng.  
Dept. of Electronics  
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## PERSONAL

**Date of Birth:** 1981  
**Address:** Mosul-Iraq

## EDUCATION

## and EMPLOYMENT

### EDUCATION

**PhD.** 2019, (SiC-VSI with sinusoidal voltages for an enhanced sensorless control of the induction machine) School of Power Electronics and Electrical Drives. University of Siegen. Siegen. Germany.

**M.Sc.** 2006, (Electrical Engineering) Dept. of Electrical Power Technology Engineering. Northern Technical Collage-Iraq

**B.Sc.** 2003, (Electrical Engineering) Dept. of Electrical Power Technology Engineering. Northern Technical Collage-Iraq.

### Employment History:

<b>March 2022 To Now</b>	<b>Assistant Professor</b> College of Electronic Engineering, Ninevah University, Mosul, Iraq
<b>Feb 2019 to March 2022</b>	<b>Lecturer</b> College of Electronic Engineering, University of Mosul. Mosul, Iraq.
<b>Jan 2014 to Feb. 2019</b>	<b>M. Sc. Supervisor and Lab. Demonstrator</b> School of Power Electronics and Electrical Drives. University of Siegen. Siegen. Germany
<b>Feb 2007 to Jan. 2013</b>	<b>Associate Lecturer</b> College of Electronic Engineering, University of Mosul. Mosul, Iraq.
<b>Oct. 2003 to Jul. 2004</b>	<b>Lab. Demonstrator</b> Dept. of Electrical Power Technology Engineering. Northern Technical Collage-Iraq.

## SKILLS

**Language** – Arabic (mother language) – Germany - English

**Computer Skills** – C++, Microsoft Office, Matlab / Simulink, Egl.

**Scholarly Activities** - Reviewer of IEEE – Open Journal of the Industrial Electronic Society. IEEE trans. Transportation, e-Prime Journal, AEEE Journal.

## Teaching and Academic Activities

Series	Courses	Level
1	Power Electronics	M.Sc.
2	Industrial Electronics	M.Sc
3	Electrical Drives	M.Sc
4	Electrical Protection System	B. Sc.
5	Electrical Networks	B.Sc.
6	C++ programming	B.Sc.
7	Computer Science	B.Sc.

Supervised on an M Sc thesis in Power Electronics.

Supervised on an M Sc theses in Renewable Energy.

Supervised on an M Sc theses in Electrical Drive.

Supervised on some other M Sc theses in Power Electronics, Renewable Energy and Drive system.

External postgraduate examiner.

## University and Departmental

### Community Services

#	Committee Name	Period	Position
1	Departmental council	2007-to now	Member
2	Promotion committee.	2019 to now	Member
3	Test and exams college council	2019-2022	Member

## (Publications)

1- Design and simulation of cascaded H-bridge 5-level inverter for grid connection system based on multi-carrier PWM technique

HABATY Hadeel S Maarooof

IOP Conference Series: Materials Science and Engineering, Volume 1152, 1st ...

2- SiC-VSI with sinusoidal voltages for an enhanced sensorless control of the induction machine

H Al-Badrani, S Feuersänger, M Pacas

2018 IEEE 4th Southern Power Electronics Conference (SPEC), 1-7

3- Design of new structure of multilevel inverter based on modified absolute sinusoidal PWM technique

AA Saleh, RK Antar, HA Al-Badrani

International Journal of Power Electronics and Drive Systems 12 (4), 2314

4- Modeling of 81-Level Inverter Based on a Novel Control Technique

AA Harith Al-Badrani, Rakan Khalil Antar

Przegląd Elektrotechniczny

- 5- An AC/DC switch mode power supply based on half bridge DC/DC converter for low power applications  
H Al-Badrani, YMY Ameen, MNA Kadir  
2021 12th International Renewable Energy Congress (IREC), 1-6
- 6- Flux Observation of Induction Machine Based on the Enhanced Sensorless Voltage Model  
H Al-Badrani  
IOP Conference Series: Materials Science and Engineering, Volume 1152, 1st ...
- 7- Design and performance analysis of asymmetric multilevel inverter with reduced switches based on SPWM  
HAB Layth S. Salman  
International Journal of Power Electronics and Drive Systems (IJPEDS) 14 (1 ...
- 8- DESIGN AND SIMULATION OF A HIGH-POWER DOUBLE-OUTPUT ISOLATED CUK CONVERTER  
MNAK Yasir M. Y. Ameen, Harith al-badrani  
Eastern-European Journal of Enterprise Technologies 5 (5), 113
- 9- Development of An Efficient Voltage Regulation Mechanism for Switched Capacitor Converter with Exponential Gain  
MNA Kadir, YMY Ameen, H Al-Badrani  
Eastern-European Journal of Enterprise Technologies 6 (5), 120
- 10- Development of an efficient voltage regulation mechanism for switched capacitor converter with exponential gain  
HAB Mohamed N. Abdulkadir, Yasir M. Y. Ameen  
Eastern-European Journal of Enterprise Technologies 6 (5), 18-28
- 11- Study the Effect of Switching Frequency on THD of Multilevel Inverter  
HAB Laith S. Salman  
Journal of Modern Computing and Engineering Research (JMCER) 2022, 74-83
- 12- Mathematical modeling and engineering design of multi-level inverter based on selective harmonic elimination  
L Salman, H Al-Badrani  
Przeład Elektrotechniczny 11 (2022), 83
- 13- Enhanced Speed Control of a Drive With Rejection of Periodical Disturbances  
H Al-Badrani, M Pacas  
IEEE Open Journal of the Industrial Electronics Society 3, 551-560
- 14- VSI with Sinusoidal Voltages for an Enhanced Sensorless Control of the Induction Machine  
H Al-Badrani, S Feuersaenger, G Pacas, Mario (University of Siegen  
PCIM Europe 2018 - International Exhibition and Conference for Power ...