JOEL G. FERNANDO, Ph.D. Accredited Professor of Physics/Researcher Western Mindanao State University

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Date of birth: January 10, 1982

I. EDUCATION

Degree/Honor's Received	School	Scholarship	Year
			Graduated
PhD in Physics major in Materials Science	Mindanao State University- Iligan Institute of Technology	CHED FDP	2016
MS in Physics major in Condensed Matter	University of the Philippines-Diliman	CHED FDP	2009
BS Physics (Magna cum Laude)	Western Mindanao State University	DOST-SEI	2003

II. DESIGNATIONS

Zonal Center Director for Region IX

August 2020 to present

Research Project Development Unit Head (WMSU)

September 2020 to present

Department Chair, Physics Department (WMSU)

June 2015-May 2018

CCE Evaluation Co-Chair for NBC 461 7A Cycle (WMSU)

2019

III. RESEARCHES

Title	Budget	Funding Agency
1. Development of Chitosan Film from	PhP 4,758,197.34	DOST-PCIEERD
Sardine Fish Scales		
2. Optimization of Polyaniline Film	PhP 4,800,000.00	CHED
Synthesis on Flexible Substrates for Smart		
Packaging Application		
3. Nanostructured polyaniline-coated	PhP 424,200.00	WMSU
paper for oil/water separation		
4. Synthesis of polyaniline/sawdust (Cocos	PhP 329,772.00	WMSU
nucifera) composite for lead		
adsorption application		

IV. AWARDS

Award	Entry Title	Awarding	Date
		Agency/Conference/Contest	
1. Surya Raghu	Sequential polymerization of	SPVM/National Physics Conference	October 19,
Entrepreneurial	aniline on paper as filter for	and International Conference on	2019
Award	retrieval of fish oil from	Advanced Functional Materials and	
	waste water	Nanotechnology	
2. Likha Award-	Inexpensive nanostructured	DOST/Regional Invention Contest	September
Creative Research	filter for separating fish oil		11, 2019
(2 nd Runner-Up)	from sardine canning waste		
	water		
3. Likha Award	Nanoscaled polyaniline films	DOST/2018 National Invention	Aug 16,
(3 rd Price)	for smart packaging	Contest and Exhibits	2018
	application		
4. Likha Award	Nanoscaled polyaniline films	DOST/2018 Regional Invention	November
(First Price)	for smart packaging	Contest and Exhibits	24, 2017
	application		
5. Best Paper	Synthesis of	WESMARDEC/2017 Regional	Dec 6, 2017
(Research	polyaniline/sawdust	Symposium on Research	
Category)	composite for lead sorption	Development Highlights	
	application		

V. PUBLICATIONS

International

"Effect of supercritical carbon dioxide treatment on the polarons of HCI-doped polyaniline films"

Physica Status Solidi, 2015

"Physico-chemical effects of supercritical carbon dioxide post polymerization treatment on HCl-doped polyaniline prepared via oxidative chemical polymerization" IOP Conference Series: Materials Science and Engineering, 2015

"Effects on the Physico-Chemical and Electrical Properties of In Situ HCI-Doped Polyaniline Films to Water as Post-Polymerization Treatment" Journal of Applied Science and Agriculture, 2014

"X-Ray Diffraction Analysis of Strained InGaAs/GaAs Superlattices Grown on GaAs (001) Substrates via Molecular Beam Epitaxy"
Philippine E-journal (WMSU Research Journal), 2011

Transitions of epitaxially lifted-off bulk GaAs and GaAs/AlGaAs quantum well under thermal induced compressive and tensile strain Journal of Applied Physics, 2008

"Growth of Gold-assisted Gallium Arsenide Nanowires on Silicon Substrates via Molecular Beam Epitaxy" Science Diliman, 2008

National

"In-situ chemically polymerized polyaniline films initiated by potassium dichromate" 2015 SPVM Proceedings (ISSN 1655-4620)

"An alternative method to measure acceleration due to gravity" 2015 SPVM Proceedings (ISSN 1655-4620)

"Lead adsorption capacity of HCl-doped polyaniline and deprotonated polyaniline powder"

2015 SPVM Proceedings (ISSN 1655-4620)

"Synthesis of polyaniline/coconut sawdust for heavy metal sorption application" 2015 SPVM Proceedings (ISSN 1655-4620)

"Disorder, polaronic and morphological properties of water-treated in situ HCl-doped polyaniline films"

2014 SPVM Proceedings (ISSN 1655-4620)

"Morphological and spectroscopic changes of chemically oxidized in-situ doped polyaniline films"

2014 SPVM Proceedings (ISSN 1655-4620)

"Effects of ethanol on the oxidation, molecular structure and HOMO-LUMO transition of chemically-synthesized polyaniline films"
2013 SPVM Proceedings (ISSN 1655-4620)

"Hydrophobic properties of taro leaf surface" 2013 SPVM Proceedings (ISSN 1655-4620)

"Changes on physico-chemical properties of polyaniline under water exposure" 2013 SPVM Proceedings (ISSN 1655-4620)

"A method for computing the powder x-ray diffraction spectrum of a material: The ZnS case"

2012 SPVM Proceedings (ISSN 1655-4620)

"X-ray diffraction of epitaxially grown CulnS2 on GaP (111)" 2012 SPVM Proceedings (ISSN 1655-4620)

"FTIR analysis on aluminium compounds evolved from the reaction of cane sugar vinegar and distilled water with aluminium casserole"
2011 SPVM Proceedings (ISSN 1655-4620)

"Improvised vertical axis wind turbine" 2010 SPVM Proceedings (ISSN 1655-4620)

"The Gough-Joule effect in rubber band"

2010 SPVM Proceedings (ISSN 1655-4620)

"Fabrication of a van de Graff generator" 2010 SPVM Proceedings (ISSN 1655-4620)

"Piezoelectric effect in sugarcanes" 2010 SPVM Proceedings (ISSN 1655-4620)

"Fabricating a handy device for mixing collared lights" 2010 SPVM Proceedings (ISSN 1655-4620)

"Determination of indium mole fractions of MBE-grown InGaAs/GaAs superlattices on GaAs (100) substrate"

2009 SPVM Proceedings (ISSN 1655-4620)

"Growth of InGaAs/GaAs superlattices on GaAs (100) substrate via molecular beam epitaxy"

2009 SPVM Proceedings (ISSN 1655-4620)

"X-ray diffraction analysis of Au-assisted GaAs nanowires grown on Si substrates via molecular beam epitaxy"

2008 SPP Proceedings (ISSN 1656-2666)

"Growth and electron microscopy characterization of Au-assisted MBE-grown GaAs nanowires on Si substrates"
2008 SPP Proceedings (ISSN 1656-2666)

VI. PAPER PRESENTATIONS

19th International Conference on Ternary and Multinary Compounds September 1-5, 2014 at Toki Messe, Niigata City, Japan "Effect of supercritical carbon dioxide treatment on the polarons of HCl-doped polyaniline films"

2014 International Conference in Applied Physics and Materials Science October 23-25, 2014 at Cagayan de Oro City, Philippines "Disorder, polaronic and morphological properties of water-treated in-situ HCl-doped polyaniline films"

2013 International Conference in Applied Physics and Materials Science October 24-26, 2013 at Davao City, Philippines "Physico-chemical effects of supercritical carbon dioxide post polymerization treatment on HCl-doped polyaniline prepared via oxidative chemical polymerization"

National/Regional

12th Samahang Pisika ng Visayas at Mindanao National Physics Conference October 21-23, 2010 at Iloilo City, Philippines "Fabrication of sugar lens for optical experiments" 11th Samahang Pisika ng Visayas at Mindanao National Physics Conference October 22-24, 2010 at Butuan City, Philippines "Growth of InGaAs/GaAs superlattices on GaAs (100) substrate via molecular beam epitaxy"

11th Samahang Pisika ng Visayas at Mindanao National Physics Conference October 22-24, 2010 at Butuan City, Philippines "Determination of indium mole fractions of MBE-grown InGaAs/GaAs superlattices on GaAs (100) substrate"

VII. MEMBERSHIP IN ORGANIZATIONS

Samahang Pisika ng Pilipinas 2009

Samahang Pisika ng Visayas at Mindanao 2009-present

National Organization of Professional Teachers 2011-present

Accrediting Agency of Chartered Colleges and Universities in the Philippines 2017-present