

### Rose Marie O. Mendoza, MChE, PhDChE. Blk 13 Lot 22 Walnut cor. Maple St., West Fairview Quezon City Mobile: 09988843968 Email: rosey1926@gmail.com/mendozarosemarie1926@yahoo.com.ph

#### **Research Thrust**

Water and Wastewater Treatment and Remediation, Hydrogen Generation by Solid Oxide Electrolysis, Electrochemistry, Biochemical and Biomedical Engineering, Membrane Separation Nanotechnology, Environmental Engineering, Chemical Engineering, and, Renewable Energy.

#### **Research Fellowships**

Post Doctoral Researcher Thermal and Electrochemical Energy Laboratory University of California Merced Lake Road, Merced CA 95343 September 2016 - Present

Research Fellow III Green Power: Hydrogen Generation by Solid Oxide Electrolysis Cells (SOEC) Advance Ceramics Laboratory Department of Mining, Metallurgy and Materials Engineering University of the Philippines – Diliman September 2016 – March 2017 Visiting Research Fellow Department of Environmental Engineering Chia Nan University of Pharmacy and Science Tainan, Taiwan June 2012 - present

#### Publications

Modelling of Arsenic Removal from Groundwater by Electrodialysis Environmental Science and Technology 2016 (Volume 1), American Science Press, Houston, Texas. ISBN 978-1-5323-2259-4

Effect of Experimental Parameters and Modelling of Arsenic Removal from Groundwater by Electrodialysis Journal of Philippine Institute of Chemical Engineers, February 2016 issue.

Optimum Experimental Parameters on Arsenic Removal from Synthetic Water using Electrodialysis (ED) Journal of Philippine Institute of Chemical Engineers, February 2015, Vol. 16(1), 1-13.

*Feasibility studies on arsenic removal from aqueous solutions by Electrodialysis* Journal of Environmental Science and Health Part (A), 2014, Vol. 49, 1-10 Taylor Francis Online DOI: 10.1080/10934529.2014.859035 (IF=1.259)

Integrated Visualization (IV) Approach in Teaching General Chemistry Among First Year Students of FEU-NRMF FEU-NRMF Medical Journal, December 2011, Vol. 17, No. 2, 61-67

*Effect of Sample Pre-oxidation on the Removal of Arsenic from ground water by Electrodialysis* ICSET 2012 Proceedings, April 2012.

Hypoglycemic Activity of Guava (Psidium guajava) Leaf Extract on Sucrose-Induced Diabetic Albino Rats FEU-NRMF Medical Journal, June 2008, Vol. 14, No. 1, 19-22.

#### Other Original Creative Works (Sole Authorship)

Math Connects 8 Philippine Adaptation Consultant-Author for Philippine Adaption McGraw-Hill (Asia) and C & E Publishing, Inc. Copyright 2014 ISBN 978-971-0105-4

Laboratory Manual in General and Organic Chemistry Used by: Metropolitan Medical Center College of Arts and Science (MMC-CAS)

Lecture Guide in General and Organic Chemistry Used by: Metropolitan Medical Center College of Arts and Science (MMC-CAS), Lyceum of the Philippines Cavite (LPU-Gen. Trias)

Laboratory Manual in Organic Chemistry Used by: FEU-NRMF, Metropolitan Medical Center College of Arts and Science (MMC-CAS), Lyceum of the Philippines Cavite (LPU-Gen. Trias)

Laboratory Manual in Biochemistry Used by: FEU-NRMF, Metropolitan Medical Center College of Arts and Science (MMC-CAS), Lyceum of the Philippines Cavite (LPU-Gen. Trias)

Introductory Statistics Used by: FEU-NRMF, Metropolitan Medical Center College of Arts and Science (MMC-CAS),

Worktext in Trogonometry Used by: FEU-NRMF

#### Education

Doctor of Philosophy in Chemical Engineering (PhD ChE) University of the Philippines – Diliman November 2007 - November 2013 Dissertation: Optimization and Modeling of Arsenic Removal from Groundwater using Electrodialysis Master of Engineering major in Chemical Engineering (MChE) Adamson University June 2002 – May 2006 Thesis: *Effects of Oleo-chemical Waste on the Fuel Properties of Bunker Fuel Oil* 

Bachelor of Science in Chemical Engineering (BSChE) Adamson University June 1993 – March 1998 Thesis: *Wastewater Treatment of a Semiconductor Plant* 

#### Awards and Achievements

*Outstanding Conference Paper-2<sup>nd</sup> Prize* June 6-10, 2016 8<sup>th</sup> International Conference on Environmental Science and Technology Houston, Texas

*Best Paper Awardee* February 2016 77<sup>th</sup> Philippine Institute of Chemical Engineers Convention Ecovillage Resort, Malay Aklan

Coordinator for Faculty Research for General Education (June 2014 – present) FEU-NRMF Coordinator for General Education (June 2011- March 2012) FEU-NRMF

Assistant Coordinator for General Education (June 2006 – March 2011) FEU-NRMF

Best Presenter – IREEC 2011 KMUTT Kuala Lumpur, Malaysia, June 24-26, 2011

Best Presenter –  $EQC^3$ 

National Kaohsiung Marine University, Kaohsiung Taiwan May 25-26, 2011

Awardee/Grantee – CHED-HEDP-FDP PhD Sandwich Program Scholarship				
Nov. 2009 – Nov. 2011				
Awardee/ Grantee – CHED HEDP-Faculty Development Program (Local) Scholarship				
Nov. 2007 – Nov. 2009				
Member – Discipline Committee – FEU-NRMF School of Nursing	June 2006 – 2012			
Member – Faculty Evaluation Committee FEU-NRMF	June 2006 - 2012			
Member – I.M. Research Committee FEU-NRMF	June 2006 - present			
Research Coordinator - FEU-NRMF School of Nursing	November 2006 - 2011			
Chairman – SPS Scholarship Committee School of Nursing	November 2006 - 2009			
PESFA-DOST Scholar	1993 – 1998			
Consistent Dean's Lister	1993 – 1998			
Editor-In-Chief ChE Kinetics	1994 – 1995			
Asst. Editor-In-Chief ChE Kinetics	1993 – 1994			
P.R.O. Adamson Univ. Chem. Eng. Students Society	1996 – 1997			
3 <sup>rd</sup> Placer National On-the-Spot Essay Writing Contest	1993			
4 <sup>th</sup> Honorable Mention 1993 Commencement Exercises (High School)				

#### Professional / Research Undertaking

**1.** Consultant on Environmental Engineering and Pollution Management/Statistical Consultant

**Duties and Responsibilities:** Statistically organize, analyze and interpret field data from water and soil samples extracted from sampling points.

Project Name: "Monitoring, Assessment and Profiling of Artisanal and Small-Scale Gold Mining (MAP-ASGM) in Key Areas in Mindanao, Philippines"

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"Contamination Pathways and Pollution Management of Mining in Selected
Areas in Mindanao, Philippines"
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Program Leader: Rowena P. Varela, PhD.

Location: Philippines

Project Leader: Engr. Sonia Ibarra-Buscano, MSChE. (CSU)

Proponents/ Funding Agencies: Department of Science and Technology, Caraga State University Surigao Del Sur State University, Surigao State College of Technology, University of Southern Mindanao, Agusan Del Sur State College of Agriculture and Technology Project Status: On-going

2. Consultant on Statistical Data Processing and Environmental Issues

**Duties and Responsibilities:** Statistically organize, analyze and interpret experimental data **Project Name:** "Bioluminescent enzyme immunoassay for rapid detection of rabies virus through the use of luciferase enzyme"

Project Leader: Alicia A. Aldave (FEU-NRMF)

Funding Agencies: FEU-NRMF, PCHIERD, RITM

Project Status: On-going

3. Project Leader

**Duties and Responsibilities:** Execute all experimental schedules and design, interpret and analyze Field and experimental data

Project Name: "Arsenic Removal from Ground Water"

Location: Tainan, Taiwan

**Funding Agencies:** National Science Council, Taiwan, ROC, Commision on Higher Education (Phil.), University of the Philippines-Diliman, FEU-NRMF

Project Status: Completed as of August 2012.

#### Affiliations

Associate Member (October 2016-October 2017) – Institute of Materials Engineers of the Philippines, Inc. (MEP)

- PRO (Nov.2015-present) Adamson University Chemical Engineering Alumni Association (AdUChEAA)
- Member (July 2015-Present) Philippine Institute of Chemical Engineers CAMANAVA Chapter
- Board of Directors (2014-2015) Adamson University Chemical Engineering Alumni Association (AduChEAA)
- Board of Directors (2013-2014) Adamson University Chemical Engineering Alumni Association (AduChEAA)

Member (2012-present) - Philippine Society of Molecular Biology (PSMB)

Life Member - Philippine Association of Chemistry Teachers (PACT)

Member (2009-2013)– Kapisanang Kimika ng Pilipinas (KKP)

# Seminars and Trainings

#### International Conferences Attended

Scientific Writing and Speed Sparring		
Workshop – UNESCO IHE		
Kaohsiung, Taiwan	07 and 09 Nov. 2016	PRESENTER
8 <sup>th</sup> IC EST, Houston, Texas	06-10 June 2016	PRESENTER
2015 ICCBES, Kyoto Japan	07-10 May 2015	SESSION CHAIR/
		PRESENTER
3 <sup>rd</sup> Regional Electrochemistry Meeting		
South-East Asia, Philippines	11-13 April 2013	PRESENTER
2012 International Conference on		
Sustainable Environment Technologies,		
(ICSET) Bangkok Thailand	26-27 April 2012	PRESENTER
IREEC 2011, Kuala Lumpur, Malaysia	24-26 June, 2011	PRESENTER
IWA-DEWATS, Manila, Philippines	25-26 May, 2011	Participant
EQC3, NKMU. Kaohsiung, Taiwan	20 May 2011	PRESENTER

# Local Trainings and Conferences

IMEP Conference 2016	26-28 October 2016	Participant
77 <sup>th</sup> PIChE National Convention	17-20 February 2016	PRESENTER
1 <sup>ST</sup> TEAM Conference	November 2015	SESSION CHAIR
76 <sup>th</sup> PIChE National Convention	18 – 21 February 2015	PRESENTER
Classroom Management in Higher ED	17 February 2015	Participant
Basic Teaching Seminar	10-11 October 2014	Participant
Developing Rubrics	20 August 2014	Participant
Joint Training Workshop on Statistical		
Analysis of Field Survey Data using		
Software	15-17 August 2014	SPEAKER
Initiatives on Drug Discovery	24 July 2014	Participant
Career Orientation – Dona Teodora		
Alonzo High School	23 July 2014	SPEAKER
Training Workshop on Principles of		
Health Research Ethics and Good		
Clinical Practice	17-18 July 2014	Participant
Outcome Based Assessment	25 June 2014	Participant
HOTS Part 2 Echo Seminar	28 May 2014	SPEAKER
HOTS Part 2	22-24 May 2014	Participant

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Laboratory Waste Management	April 29, 2014	Participant
29 <sup>th</sup> Philippine Chemistry Congress	9-11 April 2014	PRESENTER
"Training the Mentors"	26 February 2014	Participant
Effective Teaching in a Small Group	18 September 2013	Participant
Outcomes-Based Education	17 July 2013	Participant
Higher Order Thinking Skills	16-18 May 2013	Participant
Test Construction and Test Blue Print	17 April 2013	Participant
Jumpstart to Paper Writing	26 March 2013	SPEAKER
22 <sup>nd</sup> Biochem Research Presentation	12 March 2013	PANEL/SPEAKER
MINITAB: Up Close	9 March 2013	SPEAKER
Agricultural Biotechnology: Towards		
Sustainable Development	29-30 November 2012	Participant
27 <sup>TH</sup> Phil. Chem. Congress	11-13 April 2012	PRESENTER
Chemical Management and Safety		
And Safety for K-12 School	18 February 2012	Participant
Faculty Research Critique Seminar	14-16 October 2011	Participant
1 <sup>st</sup> Reg. Conf. on Biotech. Manila	30-31 July 2009	PRESENTER
1 <sup>st</sup> APCCE, 24 <sup>th</sup> PCC, Bohol, Phils.,	14-16 April 2009	PRESENTER
Pro Health Med. Trng., Q.C. Phils.,	25 July 2008	Participant
CHED-IUPAC Conf., UST Manila	17-18 April 2008	Participant
Microscale Chemistry	17-18 April 2008	Participant
Lecture/Seminar for STATISTICS	24 November 2008	SPEAKER
PAPRAS Research Forum, Manila	29 September 2007	PANEL/SPEAKER
2007 CEM Educators Conf., Manila	7 September 2007	Participant
Team Building, Nasugbu, Batangas	25-27 May 2007	Participant
Lab Waste Management, Q.C.	13 February 2007	SPEAKER
RESEARCH Seminar, Quezon City	10 November 2006	ORGANIZER
Qualitative Inquiry, Adamson UNiv.	26 August 2006	Participant
Mentoring the Mentors. Adamson Univ.	18 July 2006	Participant
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#### Employment History

Introduction to Research.

# Professor Far Eastern University-NRMF Fairview, Regalado, QC - Handling of lecture sessions in College Algebra, Statistics, Pysics 1 and 2 (Lec/Lab), General Inorganic Chemistry (Lec/Lab), Organic Chemistry (Lec/Lab), Biology and

#### 2. June 2006 - present

Adamson University – Graduate School

MS Chemistry Master of Engineering Department

- Lecture sessions in the MS Chemistry Department and Master of Engineering handling Advance Physical Chemistry, Advance Thermodynamics, Methods of Research, Production Management, Advanced Pollution Control, Environmental Biotechnology, and Materials Engineering.

#### 3. November 2013-present

#### Universidad De Manila

University Statistician-Department of Research and Linkages/ Graduate School of Arts and Sciences

Program Developer and Coordinator-Master of Environmental Management

- Provides technical Statistical services for UDM Graduate School students
- Conducts lectures on Research Methods and Advance Statistics Development and Updating of the Master of Environmental Management curriculum
- Preparation of the Environmental Management Laboratory

#### 4. November 2004 – June 2006

#### Metropolitan Hospital College of Nursing

- Handling of lecture sessions in College Algebra, Statistics, General Physics, General Chemistry Inorganic Chemistry, Biology.

#### 5. June 2004 – October 2004

#### **Our Lady of Fatima University**

- Handling of lecture sessions in College Algebra, Statistics, Trigonometry Physics, General Chemistry, Organic Chemistry, Biochemistry, Biology, Environmental Science, Microbiology, Pharmacology, Integral/Differential Calculus.

#### 6. June 2003 – March 2004

#### Emilio Aguinaldo College

- Handling of lecture sessions in College Algebra, Statistics, Trigonometry General Physics, General Chemistry, Organic Chemistry, Integral and Differential Calculus.

#### 7. June 2002 – June 2003

#### **PATTS College of Aeronautics**

- Handling of lecture and laboratory sessions in Chemistry 1 and 2, Physics 1 and 2, Physical Science, Biological Science, Thermodynamics, Statistics,

#### Professorial Lecturer San Marcelino St., Ermita, Mla.

# ntal Management

**Professorial Lecturer V** 

Manila

#### Hilltop Subd, Lagro, QC

Instructor

Sta. Cruz, Manila

# Instructor 2

#### Gonzales St., Ermita Manila

#### Instructor 2

# Domestic Airport Rd., Pasay City

## Instructor 3

College Algebra, Trigonometry, Differential and Integral Calculus.

- Preparation of Standard Solutions and reagents to be used in the Laboratory.

#### 8. August 1999 – January 2001

#### Unioil Petroleum Phils. Inc.,

- Issuance of Product Formulations and Blending Instructions.
- Analysis of Fresh and Used Oils, Product Matching and Development.
- Preparation of Pilot Blends, Reagents and Standard Solutions.
- Product Correction and Quality Control.

#### 9. April 1, 1997 – September 1998

#### **Intertek Testing Services**

#### Laboratory Analyst Cupang, Muntinlupa

- Weighing of Soil samples from mining explorations.
- Digestion of Samples, Analysis of Samples, Leaching.
- Preparation of Standard Solutions and Reagents.
- Sample analysis

#### Chemist

# Canumay, Valenzuela