

ANTHONY O. MAPUTI Ch.E., M.Sc.

I. Work Experience

February 2023-
present

Assistant Lecturer

*Department of Chemical Engineering and Technology
Mindanao State University- Iligan Institute of Technology, Iligan
City, Philippines 9200*

Have taught for more than four accumulated semesters involving courses on General Chemistry, Physical Chemistry for Chemical Engineers, Advanced Engineering Mathematics, Statics and Dynamics of Rigid Bodies, Fluid Dynamics, Environmental Engineering, Water and Wastewater Treatment Processes, and Chemical Thermodynamics.

November 2017-
December 2021

University Research Associate

*Department of Chemical Engineering and Technology
Mindanao State University- Iligan Institute of Technology, Iligan
City, Philippines 9200*

DOST-PCIEERD Grant-in-Aid Project (2017-2020)

Program Title: Processing of Bio-based Polyols and Polyurethanes for Industrial Application

Project Title: Development of Polyurethane-based Packaging Materials and Anti-corrosive Coatings from Vegetable Oil

USAID- Research Triangle Institute (RTI) (2021)

Improving the Gardner Color Index and Homogeneity of a Developed Coconut Fatty Acid Distillate (CFAD)-based Polyol for Commercialization

April 2015 - May 2015

Chemical Analyst (Internship)

*PhilSaga Mining Corporation, Municipality of Rosario,
Agusan del Sur, Philippines*

Performed Chemical and Fire Assaying Analysis on mineral ore samples with the use of Atomic Absorption Spectrophotometry (AAS).

II. Education

August 2021- May
2023

Master of Science

Bio-Nano Material Science and Engineering

Asian Institute of Technology, Thailand

Recipient of The James Linen III Memorial Award for Academic Excellence

Thesis: *UV-Irradiated Photocatalytic Degradation of Flexible Polyurethane Foam Using Metal-Decorated Zinc Oxide Nanoparticles as Plasmonic Photocatalyst in a Batch Reactor*

June 2011-June
2016

Bachelor of Science in Chemical Engineering

MSU- Iligan Institute of Technology - Iligan City, Philippines 9200

- Magna cum Laude
- University Class First Honorable Mention
- Commission on Higher Education (CHED) Full Merit Scholarship Grant

Thesis/Plant Design: *Production of Food Supplement from Lemongrass (Cymbopogon citratus) Oil Extracted through Steam Distillation using Yacon (Smallanthus sonchifolius) as the Microencapsulating Agent*

III. Pedagogy

A.Y 2022-2023

Course	Load	Semester	Academic Program	No. of Students	Teaching Efficiency Rating
ENE140 Water and Waste Water Engineering 2	4.55	2	BS Envi Eng	23	91.20%
CHE160 Process Dynamics and Control	4.55	S	BS. Chem Eng	10	
ENS161 Statics of Rigid Bodies	3	S	Gen Eng	14	

Total Units: 12.10

No. of Students: 47

No. of Hours: 234 Hours

CURRICULUM VITAE

A.Y 2017-2018

Course	Load	Semester	Academic Program	No. of Students	Teaching Efficiency Rating
ENVET102 Environmental Microbiology	3	1	BS Envi Eng	45	93.75%
ENVET102.1 Environmental Microbiology Laboratory	1	1	BS Envi Eng	45	
ENVET110 Air Pollution	3	1	BS Envi Eng	45	
ENVET130 Solid Waste and Hazardous Waste Management	3	1	BS Envi Eng	45	
ES85 Probability and Statistics in Engineering	3	1	Gen Eng	38	

Total Units: 13

No. of Students: 218

No. of Hours: 270Hours

A.Y 2016-2017

Course	Load	Semester	Academic Program	No. of Students	Teaching Efficiency Rating
ES81 Mathematical Methods in Engineering I	3	1	Gen Eng	30	99.03%
ES81 Mathematical Methods in Engineering I	3	1	Gen Eng	30	
ES61 Statics of Rigid Bodies	3	1	Gen Eng	32	
ES65 Mechanics of Fluids	3	2	Gen Eng	18	
ES65 Mechanics of Fluids	3	2	Gen Eng	36	
ES65 Mechanics of Fluids	3	2	Gen Eng	26	
CHEM12ST Fundamentals of Chemistry	3	2	Chemical Engineering Technology	29	
CHEM12ST.1 Fundamentals of Chemistry Laboratory	1	2	Chemical Engineering Technology	29	
ES65 Mechanics of Fluids	3	S	Gen Eng	23	
ES65 Mechanics of Fluids	3	S	Gen Eng	19	
CHE142 Chemical Engineering Thermodynamics	3	S	BS Chemical Engineering	8	

Total Units: 31

No. of Students: 280

No. of Hours: 594 Hours

IV. Publications

1. Salcedo, Ma. L., Omisol, C. J., **Maputi, Anthony O.**, Estrada, D. J., Aguinid, B. J., Asequia, D. M., Erjeno, D. J., Apostol, G., Siy, H., Malaluan, R. M., Alguno, A. C., Dumancas, G. G., & Lubguban, A. A. (2023). *Production of bio-based polyol from coconut fatty acid distillate (CFAD) and crude glycerol for rigid polyurethane foam applications*. *Materials*, 16(15), 5453. <https://doi.org/10.3390/ma16155453>
 2. Estrada, Dave Joseph E., Tilendo Amierson C., Alguno Arnold C., Lubguban Alona A., Dumangcas Gerard G., **Maputi, Anthony O.**, Enobio, Vanessa, Malaluan Roberto M., Lubguban Arnold A. *Synthesis of Silanated Coconut Oil-based Waterborne Polyurethane Coating for Corrosion Protection*. Status: Accepted with Minor Revision
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V. Patents

1. **Anthony O. Maputi**, Amierson C. Tilendo, Roberto M. Malaluan, Arnold A. Lubguban, Renz John Estrada, Dave Joseph Estrada, Ma. Louella D. Salcedo. COCONUT FATTY ACID DISTILLATE-BASED POLYOLS. Philippine Patent Application No.: 12022050672 Status: IPOPHL Filed, 20 December 2022.
 2. Amierson C. Tilendo, Dave Joseph Estrada, **Anthony O. Maputi**, Roberto M. Malaluan, Arnold A. Lubguban, Arnold C. Alguno. FORMULATION AND PROCESS FOR PRODUCTION OF ANTI-CORROSIVE WATERBORNE POLYURETHANE COATING FROM COCONUT OIL-BASED POLYESTER POLYOL. Philippine Patent Application No: 12022050473 Status: IPOPHL Filed, 07 October 2022.
 3. Rosal Jane Ruda-Bayor, Amierson C. Tilendo, Roberto M. Malaluan, Arnold A. Lubguban, **Anthony O. Maputi** PRODUCTION OF BIO-BASED POLYOLS DERIVED FROM RICE STRAW. Philippine Patent Application No: 12022050138. Status: IPOPHL Filed, 11 April 2022.
 4. Amierson C. Tilendo, Roberto M. Malaluan, **Anthony O. Maputi**, Arnold A. Lubguban. PROCESS FOR THE PRODUCTION OF POLYESTER POLYOLS AND FLEXIBLE POLYURETHANE FOAM DERIVED FROM COCONUT OIL. Philippine Patent Application No.: 12021050200. Status: IPOPHL Filed, 03 May 2021.
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VI. Professional Eligibility

May 2017	Chemical Engineering Licensure Examination TOP 5 Scorer
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VII. Conferences and Seminars

Date	Conference/ Seminar	Venue
November 2, 2022	Workshop on Circular Systems Innovation for Plastic Waste organized by the Asian Institute of Technology and The Royal Academy of Engineering, University of Cambridge <i>Winner of the Best Green Polyol Ideathon Pitch on plastic issues with polyurethane</i>	Bangkok, Thailand
December 10-13, 2019	Presenter on the 4 th Philippine Solid and Hazardous Waste Management Conference in conjunction with the 1 st International Conference on Circular Economy-based Waste Management	Tarlac City, Philippines
October 19-21, 2018	International Conference on Advanced Functional Materials and Nanotechnology	Butuan City, Philippines

VII. Relevant Trainings

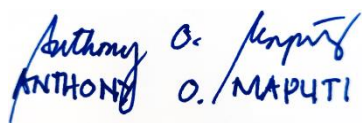
Date	Training	Organizing Agency	No. of Hours
August 2-4, 2023	Orientation on Philippine Environmental Impact Statement (EIS) System Implementation for EIA Reviewers in Mindanao	EMB-DENR, Cagayan de Oro City	8
January 29-31, 2020	Training Course on HPLC-Gel Permeation Chromatography (Prominence with RID20A) Operations	Shimadzu Philippines	16
January 22-23, 2020	Training Course on Fourier Transform Infrared Spectroscopy and Attenuated Total Reflectance Spectroscopy: Fundamentals and Operation	Shimadzu Philippines	16

CURRICULUM VITAE

November 28-29, 2019	Training on Operation and Maintenance of Perkin Elmer Differential Scanning Calorimetry (DSC4000)	ITS, Philippines	16
June 5-6, 2018	Training Course on Shimadzu Autograph Machine AGS-X Training	Shimadzu Pte. Ltd, SINGAPORE	8
October 6, 2015	Lecture Seminar on Imaging Microscopy and Spectroscopy	Agilent Technologies	4

CERTIFICATION:

I, the undersigned, certify that, to the best of my knowledge and belief, these data correctly describe myself, my qualifications and my experience. I understand that any willful misstatement described herein may lead to my disqualification.


ANTHONY O. MAPUTI