



**UNIVERSITY OF GUAM  
UNIBETSEDAT GUÅHAN  
Board of Regents**

**Resolution No. 25-17**

**RELATIVE TO AWARDING EMERITUS PROFESSOR OF SOIL SCIENCE STATUS TO DR.  
MOHAMMAD GOLABI, COLLEGE OF NATURAL AND APPLIED SCIENCES**

**WHEREAS**, the University of Guam (UOG) is the primary U.S. Land Grant and Sea Grant institution accredited by the Western Association of Schools and Colleges Senior College and University Commission serving the post-secondary needs of the people of Guam and the Western Pacific region;

**WHEREAS**, the authority to bestow the title of Emeritus Professor is vested in the Board of Regents (BOR) resolution 1987 and the criteria and procedures were revised by BOR resolutions in 1999, 2001, and 2019;

**WHEREAS**, Dr. Frank A. Camacho of the College of Natural and Applied Sciences has nominated Dr. Mohammad Golabi for the title of Emeritus Professor;

**WHEREAS**, the *Rules, Regulations, and Procedures Manual*, Article V, Chapter A. Faculty Input, Section 13. Emeritus(a) Professor provides the criteria for Professors Emeritus, to include 15 years of service as a faculty member, attainment of tenure at the Associate Professor or Professor rank; and significant contributions to the University of Guam;

**WHEREAS**, Dr. Golabi provided over 23 years of service as a faculty member at UOG;

**WHEREAS**, Dr. Golabi has attained the rank of tenured, Full Professor;

**WHEREAS**, Dr. Golabi has earned international recognition for his expertise in soil and water conservation, watershed management, biochar applications, agroforestry, and climate-smart agriculture, advancing sustainable land management practices across Guam and the wider Pacific;

**WHEREAS**, Dr. Golabi secured numerous competitive research grants, serving as principal investigator on projects that brought nearly \$1 million in research funding to the University of Guam, while also publishing extensively in peer-reviewed journals, book chapters, and technical reports;

**WHEREAS**, his pioneering research on the Vetiver Grass System for soil erosion control and wastewater treatment, along with his studies on conservation tillage, biochar, and organic waste transformation, provided innovative and practical solutions to environmental challenges faced by island communities;

**WHEREAS**, Dr. Golabi contributed significantly to student learning and mentorship through his undergraduate and graduate soil science courses, inspiring future generations of agricultural scientists, and guided students who went on to apply their training across Guam, Micronesia, and beyond;

**WHEREAS**, Dr. Golabi also demonstrated exceptional commitment to community outreach, conducting numerous workshops for farmers, educators, and policymakers on soil and water conservation, agricultural sustainability, and climate adaptation;

**WHEREAS**, the enclosed nomination was reviewed and recommended for approval by the Senior Vice President & Provost and the President; and

**WHEREAS**, the Academic, Personnel and Tenure Committee has reviewed the enclosed nomination and recommends to the BOR to award the title of Emeritus Professor to Dr. Golabi.

**NOW, THEREFORE, BE IT RESOLVED**, that the BOR hereby bestows the title of Emeritus Professor of Soil Science to Dr. Mohammad Golabi, effective the date of this resolution.

Adopted this 25<sup>th</sup> day of September, 2025.



---

Agapito "Pete" A. Diaz, Chairperson

**ATTESTED:**



---

Anita Borja Enriquez, D.B.A., Executive Secretary

---

**Criteria for Professor / Extension Agent Emeritus(a)**  
(Nominee *must* meet all three (3) criteria for eligibility)

1. Is a tenured faculty at the minimum rank of Associate Professor/Extension Agent IV or Professor/Extension Specialist at the University of Guam (UOG) at the time of retirement.
2. Has at least fifteen (15) years of service as a full-time faculty member or a combination of said years of service as a full-time faculty and academic administrator at UOG.
3. Has been reviewed using the following procedures to confirm that he/she has made significant contributions to UOG.

---

**Nomination Procedures for Professor / Extension Agent Emeritus(a)**

1. The faculty nomination process for the status of Professor / Extension Agent Emeritus(a) may begin during the last year of employment prior to retirement from UOG, provided that said status, if granted before retirement, shall only become effective the day after the date of official retirement from the University.
2. Nominations for Professor / Extension Agent Emeritus(a) status may originate from any full-time faculty member, the individual being nominated, the Dean or Director of the Unit, or a member of the Society of Emeritus Professors and Retired Scholars (SEPRS).
3. Nominations for the titled status of Professor / Extension Agent Emeritus(a) shall begin with the submission of the nomination form, with a current curriculum vitae (CV) attached, to the Dean or Director of the Unit from which the nominee is serving or has retired.
4. Nominations shall be reviewed by the Dean or Director (10 business days), Senior Vice President & Provost of Academic & Student Affairs (15 business days), and President (10 business days).
5. The Board of Regents shall have the final determination concerning the granting of the Emeritus(a) status. It is the responsibility of the Executive Secretary of the BOR to notify both the newly granted Professor / Extension Agent Emeritus(a) and the President of SEPRS of the conferred status. The newly granted Professor / Extension Agent Emeritus(a) shall be presented with a certificate of recognition of status by the UOG President.



## Professor / Extension Agent Emeritus(a) Nomination Form

Please refer to the full criteria, deadlines, and process in the University of Guam (UOG), Board of Regent's Bylaws Booklet of Appendices. A current curriculum vitae describing nominee's endeavors in research, teaching, and/or community service **must** be submitted with this form.

---

### Nominee Information

Name of Nominee: Dr. Mohammad H. Golabi

Title (specialty at retirement): Professor Unit: Western Pacific Tropical Research Center

Faculty Start date : 8 / 1 / 2001

Date of Retirement: 2/28/2025

Mailing Address: [REDACTED]

Email address: [REDACTED]

Contact Number(s): [REDACTED]

---

### Nominator Information

*(Complete this section only if you are not the nominee.)*

In addition to self-nominations, a nomination must originate from one (1) of the following: a full-time faculty member, the Dean or Director of the Unit, or a member of the Society of Emeritus Professors and Retired Scholars (SEPRS). In the case of a SEPRS nomination, the nomination must be processed through the respective Dean/Director.

Name of Nominator: Dr. Frank A. Camacho

Relationship to the Nominee: Colleague, and administrator in his unit.

Email address: fcamacho@triton.uog.edu

Contact Number(s): [REDACTED]



---

### Nomination Letter

April 22, 2025

To: Whom it may concern

From: Dr. Frank A. Camacho,  
Professor & Interim Associate Director  
Western Pacific Tropical Research center  
College of Natural and Applied Sciences

RE: Professor Emeritus Nomination for Dr. Mohammad H. Golabi

I am writing to nominate Dr. Mohammad Golabi to the rank of Professor Emeritus at the University of Guam. Dr. Golabi recently retired as a Professor of Soil Science at UOG, with a remarkable career spanning over three decades in the fields of soil science, water conservation, agroforestry, and environmental sustainability. His contributions to academia, research, and community outreach have left an impact on our islands and have directly benefited our island community.

Dr. Golabi completed his doctoral research in Soil Sciences at the University of Georgia in 1991, where his research focused on soil physical properties and their influence on water infiltration and solute movement under no-tillage management systems. His academic background also includes a Master of Science degree in Agricultural Extension Education with an emphasis on soil and water conservation and a Bachelor of Science in Engineering and Mechanized Agriculture from Oklahoma State University. His educational foundation laid the groundwork for his extensive contributions to soil conservation and sustainable land management practices.

As a professor at the University of Guam since 2001, Dr. Golabi has demonstrated a firm commitment to research, education, and mentorship. His expertise lies in soil and water conservation, rehabilitation of degraded soils, watershed management, and climate-smart agriculture. His pioneering research on the use of Vetiver Grass systems for soil erosion control and wastewater treatment has been instrumental in developing sustainable solutions for environmental challenges faced by island ecosystems.

Dr. Golabi's research contributions are extensive and highly impactful. He has secured numerous research grants and has led multiple funded projects focusing on agricultural sustainability, climate change mitigation, and carbon sequestration. As a principal investigator, these awards have brought nearly \$1M in grant funds to UOG. His work on biochar applications, conservation tillage, and organic waste transformation has advanced knowledge in soil carbon dynamics and greenhouse gas reduction strategies. His research has been published widely in peer-reviewed journals, book chapters, and technical reports, underscoring his commitment to scientific advancement and practical solutions for environmental sustainability.



Beyond research, Dr. Golabi has made significant contributions to community outreach and education. He has conducted numerous workshops for educators, farmers, and policymakers, emphasizing the importance of soil and water conservation in sustainable agriculture. He has also contributed significantly to the development of the Agriculture and Life Sciences curriculum through his soil science courses at the undergraduate and graduate level.

Dr. Golabi is not only an accomplished educator but also a respected leader in his field. He has served as an associate editor for several esteemed journals, reviewing and managing numerous manuscripts related to soil and water conservation. He has presented his research in international conferences, where he has helped raise awareness for the environmental issues Guam faces with respect to soils loss and climate change.

What truly sets Dr. Golabi apart is his passion for scientific inquiry and his commitment to mentoring students and early-career researchers. He fosters an environment of intellectual curiosity and encourages his students to pursue innovative research in soil science and environmental sustainability. Perhaps one of his greatest legacies at UOG will be his mentorship of UOG undergraduate and graduate students who have gone on to apply their training in soil science in the islands.

In conclusion, Dr. Golabi is an exemplary scholar, researcher, and mentor whose contributions to soil science and environmental sustainability have had far-reaching impacts. His extensive expertise, dedication to research, and commitment to education will make him a valued colleague in Emeritus Hall. I have no doubt that he will continue to make significant contributions to the field and positively influence future generations of researchers and environmentalists as a member of the Society of Emeritus Professors and Retired Scholars at UOG.

Please feel free to contact me at [fcamacho@triton.uog.edu](mailto:fcamacho@triton.uog.edu) if you have any questions regarding Dr. Golabi's nomination.

Sincerely,

**Frank A. Camacho, Ph.D.**  
Interim Associate Director  
Western Pacific Tropical Research Center  
University of Guam



---

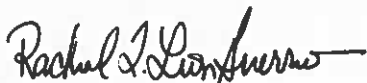
**Dean/Director Recommendation**

Based on the attached nomination form and current curriculum vitae, the applicant has distinguished himself/herself by making significant contributions to the UOG in research, teaching, and/or service.

☒ YES    ☐ NO

Therefore, awarding the status of Professor/Extension Agent Emeritus(a) to this nominee is:

☒ RECOMMENDED    ☐ NOT RECOMMENDED



\_\_\_\_\_  
Director/Dean/Other

August 1, 2025

\_\_\_\_\_  
Date

Comments:



---

**Senior Vice President & Provost (SVP/P) Recommendation**

☒ **The President of SEPRS was notified of this application.** Date:     /     /     /

Based on the attached nomination form and current curriculum vitae, the applicant has distinguished himself/herself by making significant contributions to UOG in research, teaching, and/or service.

☒ YES    ☐ NO

Awarding the status of Professor/Extension Agent Emeritus(a) to this nominee is:

☒ RECOMMENDED    ☐ NOT RECOMMENDED

\_\_\_\_\_  
SVP/P

9/15/25  
Date

Comments:



---

**President Recommendation to the Board of Regents**

Based on the attached nomination form and current curriculum vitae, the applicant has distinguished himself/herself by making significant contributions to UOG in research, teaching, and/or service.

☒ YES [ ] NO

Awarding the status of Professor/Extension Agent Emeritus(a) to this nominee is:

☒ RECOMMENDED [ ] NOT RECOMMENDED

\_\_\_\_\_  
President

9/15/20  
Date

Comments:

## Curriculum Vitae

Mohammed H. GOLABI, PhD

### ADDRESSES:

#### Postal Address:



#### Office Address:

College of Natural and Applied Sciences

University of Guam

Mangilao, Guam 96923

Tel.: (671) 735-2134/2100

Fax: (671) 734-4600

E-mail: [mgolabi@triton.uog.edu](mailto:mgolabi@triton.uog.edu)



### EDUCATION

**Ph.D., 1991. Soil Sciences.** Department of Crop and Soil Sciences, College of Agriculture and Environmental Science, University of Georgia. Athens, Georgia, USA

**Ph.D. Dissertation:** SOIL PHYSICAL PROPERTIES AND THEIR INFLUENCE ON INFILTRATION AND WATER AND SOLUTE MOVEMENT UNDER NO-TILLAGE MANAGEMENT SYSTEMS.

**Dissertation Abstract Number:** DA9133481. *In:* Dissertation Abstract International. Vol. 52, No. 6

Dec. 1991, P 2827-B.

***'This Dissertation has been cited in professional journals by various authors.'***

**MS, 1986. Agricultural Extension Education (with the emphasis on Soil and Water Conservation).** University of Georgia, College of Agriculture. Athens, Georgia, USA

**BS, 1982. Engineering and Mechanized Agriculture.** Oklahoma State University, Agricultural Engineering Department. Stillwater, Oklahoma, USA

University of Guam Board of Regent's - Professor/Extension Agent Emeritus(a) Nomination Form - 3/11/2023

## **PROFESSIONAL EXPERIENCE**

**August 2014–Present: *Professor***-College of Natural and Applied Sciences, University of Guam. Guam-USA

**May 2005 – July 2014: *Associate Professor***- College of Natural and Applied Sciences, University of Guam. Guam-USA

**2001- 2005: *Assistant Professor***- College of Natural and Applied Sciences, University of Guam. Guam-USA

**1995 – 2001: *Post-Doctoral Research Associates***: University of Georgia (UGA) and USDA-ARS, at the JP Center in Watkinsville, Georgia (USA).

**1991– 1995: *Post-Doctoral Research Associate***: Agronomy Dept., Purdue University, West Lafayette, Indiana (USA).

## **SUMMARY OF THE STRENGTH:**

- Team player.
- Strong organizational skills.
- Excellent interpersonal skills.
- Extensive research publications in various international and national journals/book chapters.
- Over thirty years of experience in education and academia.
- Experience in pioneering new schools.
- Enthusiastic and ready for new challenges.

## **RESEARCH INTERESTS**

- Soil and Water Conservation and the Rehabilitation of severely Degraded Soils.
- Watershed Management studies for evaluating/developing techniques such as the use of Vetiver Grass System for controlling upland soil erosion for protecting shorelines from sedimentation.
- Innovative Agroforestry techniques for preventing soil erosion while converting the steep slope land into natural terraces for cash crop production system.

- Evaluating the effects of surface Crop Residues and subsurface macroporosity on hydrological properties of the soil affected by conventional farming practices and/or overgrazing.
- Developing techniques to evaluate the effects of conservation farming practices such as No-Tillage and Inter-Cropping on chemical, physical and biological properties of the soil.
- Evaluating the effect of Crop Residue on soil quality for agricultural sustainability.
- Using Lysimeters as an effective method for monitoring chemical movement within the soil matrix to predict the risk of groundwater contamination in shallow aquifers.
- Studying the effect of 'Biochar' on Soil Carbon Dynamics and its impact on 'Carbon Sequestration' as an important factor related to the 'Climate Change' and Global Warming.
- Evaluating the application of 'CropManage' computer program for implementing the 'Smart-Irrigation' model.
- Bioremediation of Contaminated Soils for mitigating the environmental pollution caused by soil and water contamination.
- Developing techniques to convert 'Organic Waste into Organic Fertilizers' via composting, as a 'Resource Recovery Management' strategy, and as an alternative to conventional waste management techniques (landfilling) while protecting the integrity of the environment.
- Use of Vetiver Grass System (VGS) for the purification and Treatment of urban sewage water and other wastewaters for irrigation.

---

**Research Interest's Key words/phrases:**

- Rehabilitation of degraded Soils
- Watershed Management
- Soil Erosion Control using Vetiver Grass System
- Chemical Movement (solute transport) and Groundwater Contamination
- Soil Surface Hydrology
- Bioremediation of Contaminated Soils
- Biochar and Soil Carbon Dynamics (climate change impact studies)
- Climate Resilient Farming
- Soil Quality and Soil Health

- Agricultural Sustainability
- Soil Conservation and its impact on soil properties
- Organic Waste Transformation as a 'Resource Recovery Management' strategy
- Natural ways of Wastewater Treatment

## SELECTED RESEARCH PROJECTS

### **Funded Research Grants/Projects:**

1. Adaptation of Climate Smart Agriculture through carbon sequestration for reducing greenhouse gasses (GHG) in Micronesia landscapes. **PI: M.H. Golabi** (UOG). Organized by the UOG faculty, **PI: Romina King**. Awarded < \$5 million. Project works in progress.
2. Guam Restoration of Watersheds (GROW) in Ugum: Piloting a traditional agroforest to address erosion control, food security, and carbon credits in Guam. **Co-PI: M.H. Golabi** (UOG). **PI: Austin Shelton and Romina King**. Awarded \$1.5million. Project works in progress.
3. The impact of integrated management practices on soil carbon dynamics and related agroecosystems services in southern Guam. **PI: M.H. Golabi** (UOG). **Multi-State project** (annual funding: \$15,000). Long-term on-going project (continuing). Organized and chaired the 2021 multi-State annual meeting.  
*Project Reports for 2019-2020 have already been submitted. On-going*
4. Improving Soil Quality for a Sustainable Agriculture while reducing greenhouse gas emission by increasing carbon sequestration potential of the porous soils of northern Guam. **PI: M.H. Golabi** (UOG). **Hatch project** (annual funding: \$12,000). *This project has already been completed, and funding period was expired. Project Reports for 2019/20 were submitted. Final report for this project was submitted in September 2021. Completed* (graduate student thesis).
5. Evaluating the agronomic value of compost and 'biochar' on crop productivity while verifying the potential benefits of biochar to crop's health and crop resistance to diseases. RIAD grant: **PI: M.H. Golabi**. **Competitive Hatch Project**. Funding by NIFA for \$110,000/3 years. **On-going**
6. **2018-2021**. Developing integrated management strategies for forest land restoration of degraded watershed basin in southern Guam. **PI: M.H. Golabi** (UOG). **McIntire-Stennis Project**. Completed (Graduate student thesis).
7. **2019 – 2022**. Real-time optimization of Irrigation Scheduling in the kula agricultural park in Maui and Farmers farms in Guam. **PI: Sayed M. Bateni, PhD, Water Resources Research Center, University of Hawaii at Manoa. Co-PI: M. H. Golabi**, soil scientist, College of Natural and applied Sciences of the University of Guam. *This Project is extended to Oct. 2025 (no-cost extension).*

8. **2019 – 2021.** Using Biochar as a 'Carbon Sequestration' technique while improving soil quality for agricultural sustainability in southern Guam. **PI: M.H. Golabi**. Multi State and Hatch Projects (\$15,000/year). **Long-term ongoing project**
9. **2017 – 2022.** Improving Soil Quality for a Sustainable Agriculture while reducing greenhouse gas emission by increasing carbon sequestration potential of the porous soils of northern Guam. **PI: M.H. Golabi** (UOG). **Hatch project** (annual funding: \$12,000).
10. **2014 – 2017.** Developing a Waste Management Strategy for Guam's hotel/restaurant industry. Joined project managed by center for island sustainability (CIS), part of the 'Eco Feed Program. Funded (\$377,956) by the Office of Insular Affairs Technical Assistance Program. **Co-PI: M. H. Golabi**. **Ongoing project**
11. **2012-2014.** Talakhaya (Rota-CNMI) Watershed Soil Loss Assessment. **PI: M. H. Golabi** (UOG), **Co-PI: Dana Danko** (Saipan Coastal Management). Funded (\$97,200 for 1<sup>st</sup> year, additional \$34,200 for 2<sup>nd</sup> year) by NOAA. **Completed project**.
12. **2010-present.** Evaluating Soil Organic Carbon (SOC) storage capacity under different conservation tillage practices on the degraded lands of southern Guam. **PI: M.H. Golabi**. Multi State Project (\$10,000/year). **Long term - Ongoing project**
13. **2010 - 2017.** Evaluating the Environmental Impact of Land Application of Composted Organic Waste on Calcareous Soils of northern Guam. **PI: M.H. Golabi** (UOG). **Co-PIs: Endale Dinku** (NRCS-USDA), **Sayed Hassan** (UGA), **Bob Schlub** (UOG). T-STAR project funded (\$146,135/2 years) by USDA. **Completed project**.
14. **2011-2012.** Towards Understanding Soil Carbon Sequestration - Processes and Mechanisms on Eroded Landscapes'. **PI: M.H. Golabi**. USAD-NIFA (\$4,000) (funding was awarded for organizing a conference under the topic). **Completed**
15. **2011-present.** Effect of Crop Residue Removal (for biofuel production) on Soil Quality. **PI: M H. Golabi** (UOG). **Multi-state group (NC1178) project funded (15,000/year) by USDA. Long term - Ongoing project.**
16. **2009-2010.** Understanding Household Waste Generation on Guam- Phase I- The Survey. A Cooperative research project between the University of Guam and Okayama University in Japan. **PI: M H. Golabi** (UOG), **CO-PIs: Kirk Johnson** (UOG), **Takeshi Fujiwara** (Okayama Univ), and **Eri Ito** (Okayama Univ). **Collaborative Project** (\$10,000/year). **Completed**

17. **2007 -2008.** Evaluating the rate of Soil Organic Carbon (SOC) Sequestration in degraded lands of southern Guam under a Long-Term Soil and Water Conservation Approach and Practices. (PI: **M.H. Golabi**). Multi State Project. **Long-term On-going project**.
18. **2007- 2008.** Characterizing Nitrogen Mineralization and Plant N Supply from Animal Manures in Guam's Agricultural Soils. Awarded \$48,000 for one year. (PI: **M.H. Golabi**). **Completed**
19. **2007.2008.** Large Scale Composting of Organic Waste: A Waste Management Strategy for Guam. Awarded **\$68,000** local fund. (PI: **M.H. Golabi**). **Technical Reports produced. The project activities are continuing for educational purposes.**
20. **2007-2008.** Using Vetiver Grass Technology (VGT) as an Alternative to Conventional Wastewater System. An innovative nutrient removal technology for Southern Guam – A Region 9 Water Quality Program – Extension Project. (Co-PI: Mohammad H. Golabi). **Project completed.**
21. **2006- 2007.** The effect of composted organic material on eroded soils for the enhancement of soil organic matter and general soil quality improvement. A Renewable Resources Project. Three years: \$12,500 per year. (PI: **M.H. Golabi**). **Completed**
22. **2006-2007.** An ecosystem approach to restoring and conserving soil quality in degraded lands of the Pacific islands. USDA Tropical and Subtropical Agricultural Research Program (T-STAR). Funded for three years, \$169,000 (PI: **M.H. Golabi**). Graduate student thesis project. **Completed.**
23. **2005-2007.** Impact of Ordot dump (Landfill) on water quality of Lonfit river basin in central Guam. USGS Water Quality. **\$39,000.** (PI: **M.H. Golabi**). **Completed.**
24. **2005 – 2006.** Composted organic wastes for forest and agricultural land use as soil ameliorant. REERA funded (\$10,000/yr1, \$12,500/yr2). PI: **M.H. Golabi**
25. **2005 – 2006.** Protection of water quality utilizing tropical rock/plant filters and nutrient recycling irrigation system. EPA-NRCS Contract Research Project. **Completed.**
26. **2005 – 2006.** The effect of composted organic material on eroded soils for the enhancement of soil organic matter and general soil quality improvement. A Renewable Resources Project. Three years: 2002 – 2004. \$10,000 for year 2002, \$12,500 for the year 2003 and expecting 10,000 – 12,000 for year 2004. PI: **M.H. Golabi**. **Completed**
27. **2005-2006.** Characterizing Nitrogen Mineralization and Plant N Supply from Animal Manures in Guam's Agricultural Soils. PI: **M.H. Golabi**. Awarded \$48,000 for one year. **Completed.**

28. 2004 -2005. Best Management Practices for Protecting Water Resources from the Agricultural Non-Point Source Pollution in the islands of the American Pacific's. Submitted to Guam EPA under Nonpoint Source Water Pollution Control Program for region 9. **PI: M.H. Golabi.** Requested funding for: \$285, 560. **Not funded**
29. 2004 – 2005. Bioconversion of Mixed Organic Waste to a Value-Added Product: An alternative to land filling of solid wastes for the island of Guam". Submitted to USEPA under Source Reduction Assistant Program for region 9. **PI: M.H. Golabi.** Requested fund was \$169,020 for three years. **It was not funded.**
30. 2004-2005. Protection of water quality utilizing tropical rock/plant filters and nutrient recycling irrigation system. EPA-NRCS Contract Research Project. **PI: M.H. Golabi Completed.**
31. **2002-2004.** Sediment and Erosion Mitigation in the Pacific National Historic Park watershed basin project. The Pacific National Park Watershed Basin. **PI: M.H. Golabi,** Co-PI: D. Minton. Funding sources: National Forestry Services (\$58,000/year for first year, additional \$50,000 for the 2<sup>nd</sup> year). **Completed.**

#### EXTENSION RELATED RESEARCH/ACTIVITIES

##### **Extension/Outreach Project:**

1. **Mohammad H. Golabi,** December 10, 2021. ***An introduction to the Soils; their Formation, Properties and Functions.*** Workshop for Gaum educators. At the UOG, Research station in Yigo, southern Guam.
2. **Mohammad H. Golabi,** February 18, 2023. ***Water resources and Soil Moisture regimes in the small tropical islands of Micronesia I.*** Workshop for the young farmers, at the UOG research station in Yigo, southern Guam.
3. Topographical watershed Model: PI: **M. Golabi:** We have continued to use this model as an outreach and educational tool for bringing awareness to the public as well as local school children and University students about the natural resource's protection and stewardship and how to prevent soil erosion and sedimentation in preserve the quality of water of surrounding areas. This project was initially funded by the Sea grant (\$30,000) of the College of Natural and Applied Sciences. ***An On-going Project at CNAS demonstration site.***
4. Application of the Vetiver grass technology (VGT) for Wastewater Treatment, in the village of Inarajan in southern Guam (WWTP): An innovative nutrient removal technology for Southern Guam – Region 9 Water Quality Program – Extension Project

(\$35,000/year for two years). **PIs:** Manuel V. Duguies and **Mohammad H. Golabi**. Project completed.

5. **M.H. Golabi**, Number of **Workshops** have been conducted to farmers group in southern and northern Guam with the focus on soil sampling techniques and the importance of Soil and Plant Analysis procedures.
6. **M.H. Golabi**, Similar Farmers Education Workshop have been conducted in the islands of Saipan, Palau, Pohnpei, and Tinian in northern Marianas.
7. Guam-Nebraska Biochar Partnership: Improvement of Guam's Forest Management using Biochar as a Soil Amendment. **PIs:** Mari Marutani (UOG), **M.H. Golabi** (UOG), Joe Mafnus (Guam department of Agriculture-forestry division). Already submitted to the Guam forestry division. *Was approved however, the Guam forestry withhold the finding.*

#### SELECTED PUBLICATIONS

##### **REFeree JOURNAL ARTICLES:**

1. Galsim, Ferdinand, **Mohammad H. Golabi**, Alan J. Franzluebbbers, Clancy Iyekar. (2024). **Evaluating the impact of Biochar, Composted organic waste, and Inorganic fertilizer on soil carbon dynamics and their role as Climate-Resilient farming tools: A Case study in northern Guam.** Journal of Earth and Environmental Sciences. J Earth Envi Sci. 2024, JEES-122. ISSN: 2835-7868.
2. **Mohammad H. Golabi**, Ferdinand P. Galsim, Dinko Endale, Sheeka Afaisen Tareyama, and Clancy Iyekar. (2021). ***Agronomic Value of Composted Organic Waste Application on Porous Soils of Northern Guam.*** Malaysian Journal of Soil Science, Vol.25:143-160 (2021). ISSN: 1394-7990. Malaysian Society of Soil Science.
3. Ferdinand Galsim, **Mohammad H. Golabi\***, Yong Sang Kim, Clancy Iyekar (2021). **Comparative effects of composted organic waste and inorganic fertilizer on nitrate leachate from the farm soils of northern Guam.** International Soil and Water Conservation Research Vol. 9 (2021).
4. Ansari, A., **Golabi, M. H.**, Shams, B. (2021). ***Evaluation of Factors Affecting Predator-Prey Distribution for grey wolf, wild sheep and wild goat in Haftad-Gholleh National Park, Iran.*** Journal of Wildlife and Biodiversity, 2021.-. doi: 10.22120/jwb.2021.522829.1210
5. Ferdinand Galsim, **Mohammad H. Golabi**, Yong Sang Kim, and Clancy Iyekar. (2020). ***Comparative effects of composted organic waste and inorganic fertilizer on nitrate leachate from the farm soils of northern Guam.*** Published in the: International Soil

and Water Conservation Research. Online URL:  
<https://doi.org/10.1016/j.iswcr.2020.09.003>

6. Sayed Fakhreddin Afzali, Bijan Azad, **Mohammad H. Golabi**, and Rosa Francaviglia (2019). Using RothC Model to Simulate Soil Organic Carbon Stocks under Different Climate Change Scenarios for the Rangelands of the Arid Regions of Southern Iran. **Water** 2019, 11(10), 2107; <https://doi.org/10.3390/w11102107>
7. Ansari, A., & **Golabi, M. H.**, (2019). Using Ecosystem Service Modeler (ESM) for Ecological Quality, Rarity and Risk Assessment of the wild goat habitat, in the Haftad-Gholleh protected area. **International Soil and Water Conservation Research (ISWCR)**. <https://doi.org/10.1016/j.iswcr.2019.08.004>
8. Sydonia Manibusan, Shahram Khosrowpanah, Mark Alan Lander, **Mohammad H. Golabi**, UJWALKUMAR Dashrath PATIL. (2019). A GIS Based Assessment of a Dynamic Watershed in Guam. **Hydrology**. Vol. 7, No. 1, 2019, pp. 1-9. doi: 10.11648/j.hyd.20190701.1
9. Ansari Amir, and **Mohammad H. Golabi\***. (2018). Prediction of spatial land use changes based on LCM in a GIS environment for Desert Wetlands – A case study: Meighan Wetland, Iran. **International Soil and Water Conservation Research Journal**. Published by Elsevier: (2018, vol. 10, 001). \*University of Guam, USA.
10. **Mohammad H. Golabi\***, Sydonia Manibusan, Timothy Righetti, Dana Okano. (2018). Using Vetiver grass technology for mitigating sediment loads in the Talakhaya Watershed in Rota, CNMI. **International Soil and Water Conservation Research Journal**. Published by Elsevier: (2018, vol.03, 001). \*University of Guam, USA.
11. Mahjoor Farnoosh\*, Ali Asghar Ghaemi\*, and **Mohammad H. Golabi**. (2016). Interaction effects of water salinity and hydroponic growth medium on eggplant yield, water-use efficiency, and evapotranspiration. **International Soil and Water Conservation Research Journal**. Published by Elsevier: (2016, vol.04, 001).
12. **Golabi M. H.**, Kirk Johnson, Takeshi Fujiwara and Eri Ito (2014) Transforming Municipal Waste into a Valuable Soil Conditioner through Knowledge-Based Resource-Recovery Management. **Int. J. Waste Resources** 4:140. doi: 10.4303/2252-5211.1000140
13. **Golabi, M. H.**, S.A. El-Swaify, and Clany Iyekar (2014). Experiment of “no-tillage” farming system on the volcanic soils of Tropical Island of Micronesia. **International Soil and Water Conservation Research Journal**. Vol. 2, No. 2, June 2014.
14. Dixon Boyd, Samuel Walker, **M. H. Golabi**, and Harley Manner. (2012). Two probable latte period agricultural sites in northern Guam: Their Plants, Soils, and interpretations.

**Micronesica** (Scientific Journal of the University of Guam): Volume 42(1/2), March 2012.

15. **Golabi, M.H.**, Kirk. Johnson, Takeshi Fujiwara, and Eri Ito. (2012). Transforming the Island's Municipal Waste into a Valuable Soil Conditioner via Knowledge based Resource Recovery Management System. Published *In: Human Migration and the 21<sup>st</sup> Century Global Society Project*. Publication of the University of the Ryukyus, Okinawa, Japan. *In Japanese*
16. **Golabi, M.H.**, (2012). Using Vetiver Technology (VGT) for the Management of Water Runoff from Construction site in southern Guam. *In: Human Migration and the 21<sup>st</sup> Century Global Society Project* (Japanese). Publication of the University of Ryukyus, Okinawa, Japan.
17. Mirdamadian S.H, Emtiazi G, **M.H. Golabi**, Ghanavati H. (2010). Biodegradation of Petroleum and Aromatic Hydrocarbons by Bacteria Isolated from Petroleum-Contaminated Soil. *J Pet Environ Biotechnol* 1:102. doi:10.4172/2157-7463.1000102
18. Xirui Zhang, Hongwen, Li, Jin He, Qingie Wang, and **M. H. Golabi**. (2009). Influence of conservation tillage practices on soil properties and crop yields for maize and wheat cultivation in Beijing, China. *Australian Journal of Soil Research*. SCIRO publication: 47, 362-371. <http://www.publish.csiro.au/journals/ajsr>
19. Denton, G.R. W., **Golabi, M.H.**, H. R. Wood, Yuming Wen, and Clancy. Iyekar. (2008). Impact of Ordot Dump on Water Quality of Lonfit River Basin in Central Guam II. *Micronesica* (Scientific Journal of the University of Guam): 40(1/2), July 2008.
20. **Golabi, M.H.**, P. Denny, C. Iyekar. (2007). Value of composted organic wastes as an alternative to synthetic fertilizers for soil quality improvement and increased yield. *Compost Science and Utilization*: Vol 14, No. 4. Pp 267-271
21. **Golabi, M.H.**, G. R.W. Denton, H. R. Wood, Yuming Wen, and Clancy. Iyekar. (2006). Impact of Ordot Dump on Water Quality of Lonfit River Basin in Central Guam I: Soil Characterization of Nutrient Retention. *Micronesica* (Scientific Journal of the University of Guam): 39 (1): 41-54, 2006.
22. **Golabi, M.H.**, Dwayne Minton, C. Iyekar, C.L. Raulerson, and J. Chargualaf Drake. (2005). Watershed Management to Meet Water Quality Standards by Using the Vetiver System in Southern Guam. *AU. J. T.* 9 (1): 63-69 (July 2005).

#### BOOK CHAPTER:

University of Guam Board of Regent's - Professor/Extension Agent Emeritus(a) Nomination Form - 3/11/2023

1. **Golabi, M.H.**, Kirk Johnson, Takeshi Fujiwara, Eri Ito. (2024). **Intensifying Waste Management on Guam: Insights from consumption behaviors and composting initiatives**. *Book Chapter In: 'Research Advances in Environment, Geography and Earth Sciences*, Vol. 7, No. PUB.2024/BPR/808.
2. **Mohammad H. Golabi**, (2023). **'Lecture Notes'** for an Introductory Soil Science Course. Compiled and Published by the CNAS communication personnel for printing.
3. **Mohammad H. Golabi**, (2023). **'Laboratory Manuel'** for an Introductory Soil Course' complied for publication. Compiled and Published by the CNAS communication personnel for printing.
4. Jose Guzman, and **Mohammad H. Golabi**, (2017). Agroecosystem Net Primary Productivity and Carbon Footing. *Book Chapter In: Soil Health and Intensification of Agroecosystems*. Edited by; Mahdi Al-Kaisi (Iowa State University), and Birl Lowery (University of Wisconsin-Madison). Academic Press (AP), An imprint of Elsevier. London, San Diego, Cambridge, MA, Oxford, England.
5. **Golabi, M.H.** Soils. *In: Danko Taborosi (ed.), (2013). Soils of Guam. In: 'Environment of Guam'- Island Environments Series*. Island Research and Education Institute.
6. **Golabi, M.H.**, Kirk. Johnson, Takeshi Fujiwara, and Eri Ito. (2012). **Transforming the Island's Municipal Waste into a Valuable Soil Conditioner via Knowledge based Resource Recovery Management System**. Published *In: Human Migration and the 21<sup>st</sup> Century Global Society Project*. Publication of the University of the Ryukyus, Okinawa, Japan. *In Japanese*
7. **Golabi, M.H.**, (2012). Using Vetiver Technology (VGT) for the Management of Water Runoff from Construction site in southern Guam. *In: Human Migration and the 21<sup>st</sup> Century Global Society Project*. Publication of the University of Ryukyus, Okinawa, Japan. *In Japanese*
8. Savabi, M.R., **M.H., Golabi**, A.A., Abou-Arab, and E.J., Kladvko. (2008). Infiltration Characteristics of No-Till vs. Conventional Tillage in Indiana and Illinois Farm Fields. *In: Goddard T., M. A. Zebisch, Y. Ellis, A. Watson, and S. Sombatpanit (editors). 'No-Till Farming Systems', A publication of the World Association of Soil and Water Conservation. (Special Publ., No. 3).*
9. Minton, D., **M.H. Golabi**, and C. Iyekar. Erosion Flumes. 2006. *In: Fire, Erosion, and Sedimentation in the Asan-Piti Watershed and War in the Pacific NHP*. Guam National Park Service. November 2006.
10. **Golabi, M.H.**, C. Iyekar, M. J. Denney and D. Minton. 2006. Ecosystem Approach to Soil and Water Conservation for Sustainable Land Management Systems: Case Studies from University of Guam Board of Regent's - Professor/Extension Agent Emeritus(a) Nomination Form - 3/11/2023

Severely Eroded Soils of southern Guam. *In: ERSEC (UNESCO) Ecological Book Series on Land Resource Management and Ecological Restoration. Publication of UNESCO, China.*

#### **SELECTED TECHNICAL and IMPACT REPORTS:**

1. Mohammad H. Golabi, Ferdinand P. Galsim, and Daneil Encio (2025). Experimental Impact Report 2025: Making of Biochar. ***Impact Report***.
2. Ferdinand P. Galsim, **Mohammad H. Golabi**, Alan J. Franzluebbbers, (2023). Evaluating the Impact of 'Biochar', Composted organic waste, and Inorganic Fertilizer on Soil Carbon Dynamic and their role as a climate-resilient farming tool. A case study in Northern Guam. ***Technical Report*** No. 5, October 2023.
3. Katherine Perez, Mohammad H. Golabi, Ferdinand P. Galsim (2024?). A Closer Look at the UOG Soil Labs! ***Impact Report***.
4. Daniel Encio, Mohammad H. Golabi, Ferdinand P. Galsim (date?). Vetiver hedges reduce farm erosion on sloping southern hills. ***Impact Report***.
5. **Mohammad H. Golabi**, Ferdinand Galsim. (2022). Evaluating the Impact of Land application of 'Biochar' and Compost on Soil Carbon Sequestration and Soil Fertility. Western Pacific Tropical Research Center (WPTRC), University of Guam. Technical Report No. 3.
6. Joseph Casila, Maegan Delfin, Ferdinand Galsim, **Mohammad H. Golabi**, Sayed M. Bateni, and Jesse Bamba. (2021). *Improving Irrigation Efficiency on Vegetable Crops Using Smart Irrigation Technologies in Guam*. ***Technical Report*** No. 4, Western Pacific Tropical Research Center (WPTRC), College of Natural and Applied Sciences, University of Guam.
7. **Mohammad H. Golabi**, Ferdinand Galsim. (2021). *Effects of Biochar on Compost applied Soil and Impacts to Soil Microbial Activity*. ***Technical Report***, Western Pacific Tropical Research Center (WPTRC), University of Guam
8. Ferdinand P. Galsim, **Mohammad H. Golabi**, Clancy Iyekar. (2017). Evaluating the environmental impact of land application of composted organic wastes to porous soil of northern Guam. ***Technical Report*** (WPTRC) College of Natural and Applied Sciences, University of Guam.
9. **Golabi Mohammad H.**, Ferdinand P. Galsim, Clancy Iyekar, Chieriel Desamito. (2017). Agronomic value of land application of composted organic waste to porous soil of northern Guam. ***Technical Report*** (WPTRC) College of Natural and Applied Sciences, University of Guam.

10. **Golabi, M. H.**, Pavlina Fojtikova, Johnedel Ducusin, and Anthony Martin. 2015. Compost and Composting - A method of Waste Management Strategy for Recycling of Organic Waste. **Technical Report** (WPTRC) College of Natural and Applied Sciences, University of Guam.
  
11. Manibusan Sydonia N. C., S. Khosrowpanah, M.A. Lander, and **M.H. Golabi**. 2012. The Hydrologic Response of the Piti-Asan Watershed to Development. A **Publication of Water and Environmental Research Institute (WERI)** of the College of Natural and Applied Sciences (CNAS) of the University of Guam.
  
12. Kottermair, Maria, **M. H. Golabi**, Shahram Khosrowpanah, Yuming Wen. 2011. Spatio-Temporal dynamics of Badlands in southern Guam: A Case Study of selected sites. **Publication of Water and Environmental Research Institute**, University of Guam. Technical report No. 133, September 2011.
  
13. **Golabi, M.H.** 2010. Bioengineering with Vetiver Grass. *In*: Western Pacific Tropical Research Center, 2010 **Impact Report**.
  
14. Obra Leanne, **M. H. Golabi**, John W. Brown, Alexander M. Kerr, and Mari Marutani. 2009. Leafy-Lettuce Production, Water Quality, and the Economic impact of producing Lettuce and Tilapia in an Aquaponic System on Guam. A **Publication of the Western Pacific Tropical Research Center** (WPTRC) of the College of Natural and Applied Sciences (CNAS) of the University of Guam. Technical Report 2009.
  
15. Denton, G.R.W., H. R. Wood, Y. Wen, **M.H., Golabi**, Clancy Iyekar. 2005. Contaminant Scan of Leachate Streams from Ordot Landfill and Levels of Primary Pollutants in Surface Waters and Soil Pore Waters Down gradient. **Publication of Water and Environmental Research Institute** (WERI), University of Guam. Technical Report No. 108, November 2005.
  
16. Rongo, Teina, R.H. Richmond, **M.H. Golabi**, P., Schlub, and L., Raymundo. 2005. Coral Community Change along a Gradient in Fouha Bay, Guam. Marin Lab, UOG. **Marine Lab Technical Report**. August 2005
  
17. **Golabi, Mohammad H.**, and Manuel Duguies. 2013. Application of the Vetiver System for Wastewater Treatment: An Innovative Nutrient Removal Technology for Sewage Water treatment in southern Guam. **Technical Bulletin** No. 2013/1. Publication of the: Pacific Rim Vetiver Network, Office of the Royal Development Projects Board. Bangkok, **Thailand**, April 2013.

## **ABSTRACTS:**

*(More than 80 abstracts were submitted and mostly were reviewed and accepted for presentations at national and international conferences/symposiums.*

***PUBLIC OUTREACH VIA NEWSPAPER ARTICLES:***

**Selected Local Newspaper Articles (as guest columnist):**

1. **Golabi, Mohammad H.** (2024). Celebrate World Environment Day. The Guam Daily Post, June 8, 2024.
2. **Golabi, Mohammad H.** (2023). Bil Gates' Claim about Global Warming. The Guam Daily Post. September 29, 2023.
3. **Golabi, Mohammad H.**, and Murukesan Krishnapillai (2023). Sustaining life on a small island: The crucial nexus of soil and water.
4. **Golabi, Mohammad H.** (2023). Celebrating Persian New Year. Pacific Daily News, Hagatna, Guam, March 29, 2023.
5. **Golabi, M.H.**, (2023). Make local produce affordable. Pacific Daily News, Hagatna, Guam, March 1, 2023.
6. **Golabi, M.H.**, (2022). Recognize the value of Soil. Pacific Daily News, Hagatna, Guam. May 5, 2022.
7. **M.H. Golabi**, (2022). The importance of healthy Soil. Pacific Daily News, Hagatna, Guam. December 8, 2022.
8. **Golabi, M.H.**, (2022). Organic Waste is a Resource. Pacific Daily News, Hagatna, Guam. February 3, 2022.
9. **Golabi, M.H.**, and Murukesan Krishnapillai, (2021). Letter: Celebrate the importance of Soil. Pacific Daily News, Hagatna, Guam. December 8, 2021.
10. **Golabi, M.H.**, (2021). Guam could benefit from certified slaughterhouses. Guam PDN, May 24, 2021.
11. **Golabi, M.H.**, (2020). Restore Soil and rethink our land use practice. Guam PDN, December 6, 2020.
12. **Golabi, M.H.**, (2020). Awareness and knowledge can end harmful Soil erosion. Guam PDN, August 28, 2020.
13. **Golabi, M.H.**, (2020). Guam slaughterhouse would expand the island's economy. Guam Pacific Daily News (PDN). May 6, 2020.

14. **Golabi, M.H.**, (2019). Prevent soil erosion to protect our water. Pacific Daily News (PDN). May 18, 2019.
15. **Golabi, M.H.**, (2019). Vetiver hedgerows help prevent soil erosion. Pacific Daily News (PDN). March 7, 2019.
16. Krishnapillai Murukesan, and **Golabi, M.H.** (2019). You can be the solution to soil pollution issues. Pacific Daily News (PDN). January 3, 2019.
17. **Golabi, M.H.**, (2018). Help reduce Rhino Beetles via production of Biochar. Guam Pacific Daily News (PDN). October 3, 2018.
18. **Golabi, M.H.** (2017). New UOG master to boost knowledge of soil and climate. Guam pdn. August 2017.
19. **Golabi, M. H.**, (2017). Off-Roaders: A Threat to Water Quality and Coral's Health in southern Guam. Submitted for publication. Aug 20, 2017
20. **Golabi, M.H.**, 2016. Control erosion protects our reefs. Thursday, January 21, 2016. Pacific Daily News, Hagatna, Guam
21. **Golabi, M.H.**, 2016. Give farm life, properly managed soil. Friday, April 15, 2016. Pacific Daily News, Hagatna, Guam
22. **Golabi, M.H.** 2015. We can cultivate underused soil. September 2015. Pacific Daily News, Hagatna, Guam
23. **Golabi, M.H.**, 2015. Appreciate the value of soil. Monday, November 2, 2015. Pacific Daily News, Hagatna, Guam
24. **Golabi, M.H.**, 2015. Properly manage our soils. Tuesday, December 8, 2015. Pacific Daily News, Hagatna, Guam.
25. **Golabi, M. H.**, 2013. UOG workshop will highlight 'Soil Quality'. Pacific Daily News. Thursday, January 3, 2013. Vol.44, No. 337. Hagatna, Guam.
26. **Golabi, M. H.** 2012. Agricultural Graduate Degree Program needed. Pacific Daily News. Monday, November 12, 2012. Vol.44, No. 285

27. **Golabi, M. H.** 2012. Check out Erosion Simulation Model at UOG. Pacific Daily News. Tuesday, March 13, 2012. Vol. 44, No 41.
28. **Golabi, M. H.** 2011. Soil plays an important role in Climate Change. Pacific Daily News. Monday, August 1, 2011. Vol. 43, No. 181.
29. **Golabi, M. H.** 2011. A Sustainability Issue for Guam. Marianas Variety. Monday May 2, 2011. Vol. 06, No. 150
30. **Golabi M.H.** 2011. We must care for Soil, A Vital Resource. Guam Pacific Daily News. Thursday, December 29, 2011. Vol. 43, No. 331
31. **Golabi, M.H.** 2010. Vetiver grass can ease drought effects. Pacific Daily News. Tuesday, June 15, 2010. Vol. 42, No. 134.
32. **Golabi, M.H.** 2010. Guam should explore Methane Gas option. Marianas Variety. Wednesday, October 6, 2010. Vol 06, No. 003.
33. Daproza, Joan, A. Ghaffarian, Kathleen Plaza, Juan Santiago and **M.H. Golabi**, 2010. Soil is a precious resource. Pacific Daily News. Sunday, April 18, 2010.
34. **Golabi, M.H.** 2008. Turn Guam's Trash into Energy Source. Pacific Daily News. Wednesday, January 30, 2008.
35. **Golabi, M.H.** 2007. Protect, Preserve and Restore Natural Ecosystem. Marianas Variety. Friday April 20, 2007. Vol. 03, No 143
36. **Golabi, M.H.** 2006. Vetiver grass can hold soil and clean water. Pacific Daily News. July 23, 2006. Vol. 38, No. 172.

#### **CONFERENCE PRESENTATIONS:**

#### **International/National Presentations/Lectures:**

1. **Mohammad H. Golabi**, and Ferdinand P. Galsim (2024). A comparison effect of land application of Biochar on Carbon Sequestration from Acidic soils of southern vs Calcareous soils of northern Guam. **Presented at the:** *SSSA Annual Conferences: 'AI Innovations for a Changing Climate': which was held during November 10-13, 2024, in San Antonio, Texas.*
2. **Mohammad H. Golabi**, Ferdinand P. Galsim, and Katherine Rose Perez (2024). Will conservation tillage be combined with the land application of Biochar 'Sequester' carbon in the tropical soils of southern Guam? **Presented at:** The International Union of Soil Sciences (IUSS) Centennial World Conference that was held in Florence, Italy, During May 19 – 21, 2024.
3. Daniel Encio, **Mohammad H. Golabi** (2024). Developing Strategies for Land Restoration of Degraded Watershed Basin in Southern Guam. Presented at the: Forum for the CNAS selected Research Projects which was held on August 24, 2023.
4. Mohammad H. Golabi, (2023). *Promoting the use of 'Vetiver' grass technology as an innovative tourism project for an island's Community Development and Empowerment.* **Presented at the:** "Global Engaging with Science for Sustainable Island Future". **Invited Speaker.** University of Ryukyus - COIL program. March 2023, Ryukyus University, Okinawa, Japan. *Virtual,*
5. **Mohammad H. Golabi.** (2022). 'Sustainability Solutions - Lessons from Guam: Use of "Biochar" in Soil Carbon management for Agricultural Sustainability. **Presented at the:** 'Inter-University Exchange Project's final Symposium' which was held at the University of Ryukyus in *Okinawa, Japan.* **Invited speaker** to give special commemorative lecture(s) at the event during Dec 19 - Dec 23, 2022.
6. **Mohammad H. Golabi.** (2022). **Presented at:** the NC 1178 annual meeting, that was held in Texas A&M, Texas, during June 7-8, 2022.
7. **Mohammad H. Golabi**, Ferdinand Galsim, and Chieriel S. Desamito, (2022). *Evaluating the effect of land application of 'Biochar' on Carbon dynamic based on the Chemical properties of soils from Acidic soils of southern vs Calcareous soils of northern Guam.* Presented at the: *15<sup>th</sup> International Conference of the East and Southeast Asia Federation of Soil Science Societies (ESAFS 2022)*, which was held in Ruyale Chulan Hotel, Kuala Lumpur, Malaysia during 22 – 26 August 2022. Presented in person as an Oral presentation.
8. Daniel Enco. **Mohammad Golabi**, (2022). *Innovating Management Strategies for Forest Land Restoration of the Degraded Watershed Basin in Southern Guam.* Presented at: *The 77th SWCS International Annual Conference*, that was held during July 31 to August 3, 2022, in Denver, Colorado-USA. Presented in person as Poster presentation.
9. Daniel Encio, **Mohammad H Golabi.** (2021). *Developing an Agroforestry Project for the Restoration and Protection of Degraded Watershed Basin in Southern Guam.* Presented at the: *International Tropical Islands Water Conference* which was held from April 12 to April 15, 2021, Hawaii Standard Time. *Virtual presentation.*

10. **Mohammad H. Golabi**, Ferdinand, Galsim. A comparison effect of land application of Biochar on Carbon Sequestration from Acidic Soils of southern vs Calcareous Soils of northern Guam. (2020). *Presented at: the joint Soil Science Society of Australia & the New Zealand Society of Soil Science Conference, which was held in Cairns, Australia during 29 Nov – 4 Dec 2020. Virtual Presentation*
  
11. Joseph Lance Casila<sup>1</sup>, Maegan Marie Delfin<sup>1</sup>, **Mohammad Golabi<sup>1</sup>**, and Sayed Bateni (2020). Application of Smart Irrigation Scheduling to Improve Water Use Efficiency for Sustainable Agriculture. *Presented at: the National Diversity in STEM Conference. Long Beach, CA. during October 22–24, 2020. (Poster presentation). Virtual presentation.*
  
12. Chieriel Desamito, **Mohammad H. Golabi**. (2020). Evaluating the Impact of Land Application of Biochar on Carbon Sequestration and Agricultural Sustainability. *Submitted to the: CIS Conference, which was held in Tumon, Guam, during March 31<sup>st</sup> to April 3<sup>rd</sup>, 2020. Virtual presentation.*
  
13. Daniel Encio, **Mohammad H Golabi**. (2020). Developing an Agroforestry Project for Land Restoration of Degraded Watershed Basin in Southern Guam. *Submitted to the: University of Guam Conference on Island Sustainability (CIS 2020), which was held in the Hyatt Regency, Guam during March 31-April 3, 2020. Presentation Type: Oral Presentation. Virtual*
  
14. **Golabi, Mohammad H.**, Ferdinand P. Galsim<sup>2</sup>, Chieriel S. Desamito. (2020). 'Integrated Soil and Organic Waste Management as a Resource Recovery Strategy for Resilient Agriculture in Guam'. *Submitted to the: "International Conference on Sustainable Biowaste Management 2020 (SBM2020)". Which was held in Hong Kong Baptist University, Hong Kong. During, 10<sup>th</sup> - 13<sup>th</sup> May 2020. Virtual*
  
15. **Golabi, Mohammad H.**, (2020). A comparison effect of land application of Biochar on Carbon Sequestration from Acidic soils of southern vs. Calcareous soils of northern Guam. *Presented at: the NC 1178 annual meeting, held during June 16, 2020. Virtual meetings.*
  
16. **Golabi, Mohammad H.**, (2019). "Evaluating the effect of 'biochar' on soil quality and on 'Soil Carbon Sequestration' for reducing the carbon print of CO<sub>2</sub> emission into the atmosphere". *Presented at: the NC 1178 annual meeting, held during July 25-26, 2019, at the University of North Dakota, Fargo, North Dakota.*
  
17. **Golabi M. H.**, (2019). "UOG Soil and Plant Testing and Diagnostic Laboratories". *Presented at the: Inaugural meeting of the 'Regional Soil Laboratory Network' (RESOLAN) as part of the Pacific Soil Partnership workshops, sponsored by the UN-FAO and the GLOSOLAN (Global Soil Laboratory Network) that was held during 17 to 18 October 2019 at the ASPACT Eco science Precinct in Brisbane, Australia. These meetings also included a tour of the Australian Soil and Plant analysis labs (ASPACT) at*

the Eco science Precinct in which, we observed soil and plant sample preparation as well as some of the Analytical units in the ASPAC labs.

18. **Golabi, M.H.**, (2019). Attended the workshop for drafting the Soil 'Regional Implementation Plan' as a collaborative regional member in the activities of the Pacific Region Institutions in the planning of the subsequent workshop under the 'Global Soil Partnership Pillar of Action'. The meeting was held during 21 to 23 May 2019 in **Brisbane, Australia**.
19. **Mohammad H. Golabi**. (2019). Promoting the use of Vetiver grass technology as an Innovative Tourism project for Women's Empowerment in an Island's Community Development and Economic growth'. *Submitted to: The 40th (UOG) CLASS Annual Research Conference that was convened on Friday, March 8, 2019, in the Humanities and Social Sciences building at the University of Guam, Guam.*
20. **Mohammad H. Golabi**, Sydonia Manibusan. (2019). Presentation of topographical features in southern and northern Guam via a small-scale model as a tool for community education towards watershed conservation efforts. *Presented at the: 74th Annual Soil and Water Conservation Society (SWCS) Conference. Pittsburgh, Pennsylvania (USA).*, July 28-31, 2019. (Poster presentation).
21. **Mohammad H. Golabi**. (2019). Community Education for Watershed Management - Bringing the Field to the Classroom. *Presented at: The UOG 2019 T.E.A.M Conference, which was held during March 10 – 11, 2019 at the UOG campus, Guam-USA*
22. Chieriel Desamito, **Mohammad H. Golabi**, (2019). The Impact of Land Application of Biochar on Carbon Sequestration and Agricultural Sustainability- Follow up Research. *Presented at the: Conference of Island Sustainability, which will be held in Hyatt Regency Guam, during April 8-12, 2019.*
23. **Mohammad H. Golabi**, and Chieriel S. Desamito, and Clancy Iyekar. (2019). Evaluating the effect of long-term conservation practices on soil quality and soil carbon dynamics on severely eroded soils of southern Guam. *Presented at: The 2019 ASA-CSSA-SSSA International Annual Meeting | Nov. 10-13 | San Antonio, Texas (USA). (Poster presentation)*
24. Chieriel Desamito, **Mohammad H. Golabi**. (2019) The Impact of Land Application of Biochar on Carbon Sequestration and Agricultural Sustainability. *Presented at the: Embracing the digital environment: ASA, CSSA & SSSA International Annual Meeting, which was held in San Antonio, Texas during November 10-13, 2019.*
25. **Mohammad H. Golabi**, (2018). Ferdinand Galsim, Clancy Iyekar, and Chieriel S. Desamito. Mitigating soil acidity for agricultural sustainability in the humid tropics of

Micronesia. The 10th International Symposium on Plant-Soil Interaction at Low pH soils. Held in **Putrajaya, Malaysia**, during June 25-29, 2018. **Invited Keynote Speaker**.

26. **Golabi, Mohammad H.**, Sydonia Manibusan, Tim Righetti, and Clancy Iyekar. (2017). Relationship between hydro-pedological and sedimentation, following the re-vegetation of the badlands of the 'Talakhaya' Watershed in the Micronesian island of Rota. Submitted to the: 1st World Conference on Soil and Water Conservation under Global Change (CONSOWA-2017) for: Sustainable Life on Earth through Soil and Water Conservation. **Lleida, Spain**. June 12 - 16, 2017. Presented as an **Invited Paper**.
27. **Golabi, Mohammad H.**, and Clancy Iyekar. (2017). Evaluating the role of Soil and Water Conservation on 'Carbon Sequestration' for reducing the carbon dioxide (CO<sub>2</sub>) emission into the Atmosphere – a Case study from southern Guam. Submitted to the: 1st World Conference on Soil and Water Conservation under Global Change (CONSOWA-2017) for: Sustainable Life on Earth through Soil and Water Conservation. **Lleida, Spain** June 12 - 16, 2017. **Invited Paper**.
28. **Golabi, Mohammad H.**, and Clancy Iyekar. (2017). Would the land application of 'Biochar' help 'Sequester' soil carbon hence reduces the CO<sub>2</sub> emission into the Atmosphere? – an environmental case study in southern Guam. Submitted to: The 8th Regional Conference on Island Sustainability. April 17-21, 2017, at the Hyatt Regency hotel on the island of **Guam**.
29. **Golabi, Mohammad H.**, Azin Ghafarian (2017). Nowruz (Persian New Year) and Ghanat (Groundwater conduit), the two symbols of conveyance for peace and the admiration of the nature (soil and water). *Presented at:* The 38th annual CLASS Research Conference (March 10, 2017), UOG, **Guam**.
30. **Golabi, Mohammad H.**, and Clancy Iyekar, 2017. Evaluating the benefits of 'Biochar' on soil quality while determining its effect on 'Soil Carbon Sequestration – A pathway to Sustainability. Abstract Submitted to the: 72nd International Annual Conference of the Soil and Water Conservation Society. **Madison, Wisconsin-USA**, July 30th to August 2nd, 2017.
31. **Mohammad H. Golabi**, Role of Conservation practices on Carbon Capture and Storage for Reducing the Net Soil Carbon Emission into the Atmosphere, 2016. Clancy Iyekar, and Ferdinand Galsim. The 6<sup>th</sup> Low Carbon Earth Summit (LCES-2016), that was held in **Qingdao, China** during November 10-12, 2016. **Invited speaker**.
32. **Mohammad H. Golabi**. Soil carbon content and carbon dioxide emission under different conservation techniques, 2016. Presented at the: Multi-State NC – 1178' Annual meetings that was held at the University of Nebraska in **Lincoln, Nebraska**, June 27 - 28, 2016.

33. **Mohammad H. Golabi.** Stream flow monitoring for watershed studies following the 're-vegetation' efforts for reducing the sediment loading on the shorelines of Micronesian island of Rota, CNMI., 2016. *Presented at:* The 71<sup>st</sup> SWCS International Annual Conference- Managing Great River Landscapes, which was held in Galt House hotel in **Louisville, Kentucky**, July 24-27, 2016.
  
34. **Golabi, Mohammad H.**, Evaluating the effect of Soil Quality improvement for a Sustainable Agriculture while maintaining the integrity of the Environment, 2016. Ferdinand Galsim, and Clancy Iyekar. *Presented at:* The 23<sup>rd</sup> Pacific Science Congress, which was held in the Academia Sinica, **Taipei, Taiwan** (13-17 June 2016). **Invited speaker.**
  
35. **Golabi M.H.**, (2016). 'Anthropogenic stressors and the way of protecting the environment from them via community driven action'. Presented at: The UOG Sustainability Conference, **Guam** (April 2016).
  
36. **Golabi, M. H.**, Evaluating the effect of Long-Term Conservation Practices on Soil Quality and Soil Carbon Dynamics as relates to 'Climate Change'. Presented at the College of Agricultural Science and Natural Resources **University of Sari in northern Iran** (May 26 to May28, 2015). **Invited speaker.**
  
37. **Golabi, M. H.**, "Converting Badlands to Good-lands"- A Watershed Management Technique for Reducing Sedimentation Load at the Talakhaya Watershed in Rota, CNMI. Presented at the College of Agricultural Science and Natural Resources **University of Sari in northern Iran** (May 26 to May28, 2015). **Invited speaker.**
  
38. **Golabi, M. H.**, Evaluating the effect of Long-Term Conservation Practices on Soil Quality and Soil Carbon Dynamics as relates to 'Climate Change'. Presented at the College of Agricultural Sciences of the **University of Shiraz, Iran** (June 2015). **Invited speaker.**
  
39. **Golabi, M. H.**, Evaluating the effect of Long-Term Conservation Practices on Soil Quality and Soil Carbon Dynamics as relates to 'Climate Change'. Presented at the College of Agricultural Environmental Science of the **Technological University of Isfahan, Iran** (June 2015). **Invited speaker.**
  
40. **Golabi, M. H.**, Evaluating the effect of Long-Term Conservation Practices on Soil Quality and Soil Carbon Dynamics as relates to 'Climate Change'. Presented at the College of Agricultural Sciences of the **University of Tehran, Iran** (June 2015). **Invited speaker.**
  
41. **Golabi M.H.**, Evaluating the role of Conservation Practices on reducing the Net Carbon loss from the Soil in order to lower the CO<sub>2</sub> concentration in the Atmosphere'. *Presented at:* The International Youth Forum on Soil and Water Conservation (IYFSWC) that was held at Nanchang Institute of Technology, **Nanchang, China** (16-18 October 2015). **Invited plenary speaker.**

42. Golabi, M.H., Sydonia Manibusan. 'Using Hydrologic parameters for Sedimentation, following 're-Vegetation' efforts at the Talakhaya Watershed in the Micronesian island of Rota, CNMI'. *Presented at: The International Youth Forum on Soil and Water Conservation (IYFSWC) that was held at Nanchang Institute of Technology, Nanchang, China* (16-18 October 2015).
  
43. Golabi, M.H., 2014. Biomass conversion of organic waste via small- and large-scale composting: A waste management strategy for large cities. International Symposium on Environmental Science and Technology at the *Okayama University, Okayama, Japan*. January 27-28, 2014. *Invited guest lecturer*.
  
44. Golabi, M.H., and Ferdinand Galsim. 2013. Higher crop yield from healthier Soil via Soil Quality enhancement strategies on the Calcareous soils of northern Guam. The 4<sup>th</sup> International Conference on Conservation Agriculture in Southeast Asia (CA-SEA4). University of Battambang, Cambodia. December 9-13, 2013. *Invited speaker*.
  
45. Golabi, M. H., 2013. Evaluating the Crop Productivity and Environmental Impact of Land Application of Composted Organic Waste on Calcareous Soils of northern Guam. The 2<sup>nd</sup> World Association of Soil and Water Conference, *Chiang Rai, Thailand*. September 4-8, 2013. *Invited presentation*.
  
46. Golabi, M. H., 2013. Using Vetiver Grass Technology for preventing sediment at the shorelines of the island. The Soil and Water Conservation Society (SWCS) Annual Conference. *Reno, Nevada*. July 19-24, 2013.
  
47. Golabi, M. H., 2013. 'Effect of Crop Residue Removal on Soil Carbon Storage', presented at the NC-1178 annual meeting, in conjunction with 'Soil Carbon Conference' by the International Union of Soil Sciences (*attended*). *University of Wisconsin-Madison, Wisconsin-USA*. June 3-6, 2013.
  
48. Golabi, M. H. 2013. Innovative Zero Waste Technology for Sustainable Solid Waste Management. International Conference on Solid Waste 2013. Innovation in Technology and Management. *Hong Kong SAR, P.R. China*. May 5-9, 2013. *Invited*
  
49. Golabi, M. H., 2012. Carbon Sequestration and Distribution in Soils of Eroded Landscape. Multi-State Research Projects Annual Meetings/Conferences. *Ames, Iowa*. June 13-14, 2012.
  
50. Golabi, M. H., Eri Ito, Takeshi Fujiwara, and Kirk Johnson. 2012. Waste Generation in the island of Guam – A cooperative research project with UOG and the Okayama University in Japan – Phase I: the Survey. The Annual Report Conference. Practical Research and Education of Solid Waste Management Based on the Partnerships among University of Guam Board of Regent's - Professor/Extension Agent Emeritus(a) Nomination Form - 3/11/2023

Universities and Governments in Asia and Pacific Countries. Okayama, University, **Okayama, Japan**. February 2012. **Invited**

51. Golabi, M.H., Kirk. Johnson, Takeshi Fujiwara, and Eri Ito, 2012. Transforming the island's municipal waste into a valuable soil conditioner via knowledge-based Resource Recovery Management. International Symposium on Human Migration and the 21<sup>st</sup> Century Global Society. Pacific Island Studies, University of Ryukyus. **Okinawa, Japan**. May 19-21, 2012. **Invited**
52. Golabi, M. H. 2011. Evaluating the Effect of Long-term Conservation Practices on Soil Quality and Soil Carbon Dynamics on Severely Eroded Soils of southern Guam. Soil Science Society of America Annual meetings/Conferences, **San Antonio**, Oct. 16 – 19, 2011.
53. Golabi, M. H., Kirk Johnson. 2012. How can we transform the Municipal Waste Generation – An environmental Crisis into a valuable soil Conditioner via a knowledge-based Resource Recovery Management strategy? International Research Conference for Globalization and Sustainability. **Iloilo, Philippines**, August 14-16, 2012.
54. Golabi M.H., and Samir. A. El-Swaify. 2011. Integrated approaches for the Rehabilitation of Severely Eroded soils for Agricultural Sustainability and Natural Resources Preservation of the Micronesian island of Guam. Royal University of Agriculture in **Phnom Penh, Cambodia**, July 4 -7, 2011
55. Golabi, M.H. 2011. Management Solution for Enhancing Soil Organic Carbon to improve Crop Productivity and Maintain Agricultural Sustainability in the Tropical Island of Guam. Royal University of Agriculture in **Phnom Penh, Cambodia**, July 4 -7, 2011
56. Golabi, M.H. 2011. Using Vetiver Grass Technology (VGT) as a green and low-cost Technology for Wastewater Treatment in Guam and the other islands of Micronesia. **University Putra Malaysia**. **Invited speaker**.
57. Golabi M. H., and Manuel Duguies. 2011. Using Vetiver Grass Technology (VGT) as A Green and Low-Cost Technology for Waste Water Treatment in Guam and the other islands of Micronesia. International Water Conference, College of Engineering, University of Singapore. **Singapore**. January 2011.
58. Golabi, M. H., Dwayne Minton, Clancy Iyekar, C.L. Raulerson, and J. Chargualaf Drake. 2011. "Using Vetiver System as an effective Watershed Management Strategy to control Soil Erosion and mitigate Sedimentation downstream for improving Water Quality and preserving the Coral reef in southern Guam". 21<sup>st</sup> Century Global Society Project Conferences. International Institute for Okinawa Studies. University of the Ryukyus, **Okinawa, Japan**. 2011. **Invited**

59. Golabi, M. H., and Manuel Duguies. 2011. Vetiver Grass System (VGS): Green and Low-cost Technology for Small Island's Wastewater Treatment needs. Water Resource Sustainability Issues on Tropical Islands Conference. **Honolulu, Hawaii**, November 14-16, 2011.
  
60. Golabi, M. H., Takeshi Fujiwara, Kirk Johnson. 2010. Waste Survey and Establishment of Solid Waste Management in Guam. *In*: 'Kick-off Meetings on: Practical Research and Education of Solid Waste Management based on the Partnership among Universities and Governments in Asia and Pacific Countries'. University of Okayama **Okayama City, Japan**. July 2010. Invited
  
61. Golabi, M.H., Samir A. El-Swaify, and Clancy Iyekar. 2009. Evaluating the soil carbon dynamics under cropping rotations and conservation tillage management on severely eroded soils of southern Guam. **Long Beach California**. Nov. 1-5, 2010
  
62. Golabi, M.H. 2009. Watershed Restoration by Using Vetiver Grass for Downstream Water Quality Improvement in Southern Guam. USDA-National Water Conference. **St. Louis Missouri**. February 8-12, 2009.
  
63. Golabi, M.H., M. Duguies. 2009. Application of the Vetiver Grass Technology (VGT) for Wastewater Treatment: An innovative nutrient removal technology for Southern Guam. USDA-CSREES National Water Conference. **St. Louis Missouri**. February 8-12, 2009.
  
64. Golabi, M.H., Samir A. El-Swaify, and Clancy Iyekar. 2009. Evaluating the soil carbon dynamics under cropping rotations and conservation tillage management on severely eroded soils of southern Guam. **Pittsburgh, PA**. Nov. 1-5, 2009
  
65. Golabi, M.H., G.R.W. Denton. 2008. The role of soil components such as charge characteristics on the mobility of contaminants leached down gradient of the Ordot Landfill area in central Guam. American Society of Agronomy, Soil Science Society of America, and Geological Society of America joint Annual Meeting. **Houston, Texas**, October 5-9, 2008.
  
66. Golabi, M.H. S.A. El-Swaify, and Clancy Iyekar. 2008. How Adaptive is Conservation Tillage in Guam and what is the effect of Conservation Practices on Severely Eroded Soils of Southern Guam. Soil and Water Conservation Society Conference. **Tucson, Arizona**. July 2008.
  
67. Golabi, M. H., S.A. El-Swaify. 2007. "An Ecosystem Approach for Restoring Severely eroded Soils of southern Guam". Western Society of Soil Science. **Boise Center, Idaho**. June 19, 2007.

68. Golabi, M. H., Dwayne Minton, and C. Iyekar. 2006. "Using Vetiver Technology to reduce watershed sedimentation for water quality improvement downstream in southern Guam". Presented at the: 4<sup>th</sup> International Conference on Vetiver (ICV-4). **Caracas, Venezuela**. October 22-26, 2006.
69. Golabi, M.H., P. Denney, and C. Iyekar. 2005. "Management solution for improving soil organic matter for crop productivity and environmental quality in the tropical island of Guam". International Symposium for Management of Tropical Sandy Soils for Sustainable Agriculture: A Holistic Approach for Sustainable Development of Problem Soils in the Tropics'. November 27 – December 2, 2005, **Khon Kaen, Thailand**.
70. Golabi, M.H., C. Iyekar, and M.J. Denney. 2005. "Challenges and Actions regarding the Degraded Lands: Case study from the Pacific Island of Guam". International Symposium on Land Degradation and Desertification. Sponsored by the Commission on Land Degradation and Desertification –COMLAN/UGI and published by Revista Sociedade & Natureza. Uberlandia – Minas Gerais, **Brazil**, May 2005.

#### OTHER PUBLICATION/SCHOLARLY ACTIVITIES

##### **PhD Thesis reviewed as an External Reviewer:**

1. Sustainable management of municipal solid waste of Mehmood Booti Lahore Through biochar and compost and its application as soil amendment. A thesis submitted to the Institute of Botany, University of the Punjab, Lahore, Pakistan for the degree of Doctorate of Philosophy (PhD). By Samreen Aslam (September 2025).
2. Optimization of design and operational parameters of constructed wetland system (CWS) for the treatment of textile and sewage effluents. A Thesis submitted to the University of Punjab in partial fulfilment of the requirement for the degree of Doctorate of Philosophy (PhD) in Botany. By Faisal Javeed (PhD-BT09-F17), Institute of Botany, University of Punjab, Lahore, Pakistan (2024).
3. Golabi, M. H. 2017. As the **guest editor**, I was invited to write a **Preface** to the **PROCEEDINGS** of: 'The 2017 International Conference on Agricultural and Biological Sciences (ABS 2016)', that was held in **Qingdao, China**, June 26 -29, 2017. Published by The IOP science.

##### **Research Grant Proposals Reviewed/Evaluated:**

- Mohammad H Golabi. I was invited to review the following grant proposal:

"No-tillage intercropped Maize-Peanut to reduce water and soil loss from cropland in Northern Benin", Bouraima Abdel-kabirou (2016). **University of d'Abomey-Calavi**,

**Benin Parakou**, CARDER/BORGOU BP 49, Parakou, Benin. Submitted to the: IFS (International Foundation for Science). Estimated budget requested: \$11,964. **Made a recommendation to fund this proposal.**

#### **Proposals/Policy Document Reviewed:**

- **Mohammad H. Golabi.** I was invited by the USDA to review the following policy document:  
**USDA-NRCS Nutrient Management (590) National Conservation Practice Standard (CPS).** A policy document for implementation. *Reviewed and the Report was submitted to the: USDA-NRCS in Honolulu, Hawaii*, Review period: **June 16, 2017**. This review was followed by a meeting with the Associate Director of NRCS at the USDA office in **Honolulu** where the policy proposal was further discussed.

#### **JOURNAL ARTICLE REVIEWED AND/OR MANAGED AS AN ASSOCIATE EDITOR**

- Managed numerous manuscripts as an Associate Editor to the 'International Soil and Water Conservation Research' Journal.
- Also, as a demanded reviewer I have Reviewed many manuscripts and articles for numerous different International Journals.

#### **Selected journal articles Reviewed and/or Managed as an Associate Editor.**

1. International Soil and Water Conservation Research Journal. Land use type alters soil infiltration properties by regulating soil structure in the black soil region of Northeast China. Manuscript # ISWCR-D-22-00442. **Reviewed:** March 2023.
2. International Soil and Water Conservation Research Journal. Spatial variation in runoff, sediment, and nutrient losses induced by topo sequence and biochar application in upland maize farming. Manuscript # ISWCR-D-24-00753. **Reviewed** in Feb 2025.
3. International Soil and Water Conservation Research Journal. Prediction and mapping of soil organic carbon in the Bosten Lake Oasis based on Sentneel-2 data and environmental variable. Manuscript #: ISWCR-D-24-00343R2. Managed the article as an **Associate Editor** and submitted on December 16, 2024.
4. International Soil and Water Conservation Research Journal. Establishing and verifying soil quality index model based on GIS and Remote Sensing for cultivated lands under semi-humid terrestrial ecosystem. Manuscript #: ISWCR-D-24-0017R1. **Reviewed** on October 2, 2024
5. International Soil and Water Conservation Research Journal. Effect of long-term conservation tillage practice on soil biological activity and nutrient supply capacity. Manuscript #: ISWCR-D-22-00434R1. **Reviewed** and submitted on February 24, 2023.
6. International Soil and Water Conservation Research Journal. Spatial distribution of soil nutrients affected by land use, topography, and their interactions in the loess plateau of

China. Manuscript #: ISWCR-D-22-0006R1. Managed the article as an **Associate Editor** and submitted on: August 12, 2022.

7. International Soil and Water Conservation Research. Beyond the obvious - the impact of mineral aeolian deposits on carbon characteristics. over the last millennium in Icelandic Histosols. Manuscript Number: ISWCR-D-22-00258. **Reviewed:** Feb 2023.
8. International Soil and Water Conservation Research. EFFECT OF LONG-TERM CONSERVATION TILLAGE PRACTICE ON SOIL BIOLOGICAL ACTIVITY AND NUTRIENT SUPPLY CAPACITY. Manuscript Number: ISWCR-D-22-00434R1. **Reviewed:** January 2023.
9. Forest, MDPI. Experimental fire simulation - physicochemical changes in soil. Forests 2021, 12, x. <https://doi.org/10.3390/xxxxx> [www.mdpi.com/journal/forests](http://www.mdpi.com/journal/forests). **Reviewed:** April 28, 2022.
10. International Soil and Water Conservation Research. Variations of soil organic carbon fractions in response to conservative vegetation. successions on the Loess Plateau of China. Manuscript Number: ISWCR-D-21-00502. **Reviewed:** March 2022.
11. International Soil and Water Conservation Research. Variations of soil organic carbon fractions in response to conservative vegetation. successions on the Loess Plateau of China. Manuscript Number: ISWCR-D-21-00502. **Reviewed:** April 2022.
12. International Soil and Water Conservation Research. Re-desertification: Grazing leads to fixed sand land degradation and increases soil. greenhouse gas emissions in a sand-binding area of Hobq Desert, China. Manuscript Number: ISWCR-D-21-00598. **Reviewed:** January 2022.
13. International Soil and Water Conservation Research. Quantification and depth distribution analysis of carbon to nitrogen ratio in forest soils. using reflectance spectroscopy. Manuscript Number: ISWCR-D-22-00089. **Reviewed:** April 2022.
14. Soil System, MDPI. Effects of elemental sulfur on soil pH and growth of Saskatoon berry (*Amelanchier alnifolia*) and beaked hazelnut (*Corylus cornuta*) seedlings. Soil Syst. 2022, 6, x. <https://doi.org/10.3390/xxxxx> [www.mdpi.com/journal/soilsystems](http://www.mdpi.com/journal/soilsystems). **Reviewed:** February 2022.
15. International Journal of Geo-information. An integrated approach for detection and prediction of greening situation in a typical desert area in China and its human and climatic factors analysis. ISPRS Int. J. Geo-Inf. 2020, 9, x; doi: FOR PEER REVIEW. [www.mdpi.com/journal/ijgi](http://www.mdpi.com/journal/ijgi). **Reviewed:** March 2020.

16. Applied Sciences. Rainfall Standard of Disaster Prediction for Agricultural Droughts Using Damage Data in Korea. Appl. Sci. 2020, 10, x; doi: FOR PEER REVIEW.  
[www.mdpi.com/journal/applsci](http://www.mdpi.com/journal/applsci). **Reviewed:** October 2020.
17. International Soil and Water Conservation Research. Assessment of ecological state of Rostov zoo soil. Manuscript Number: ISWCR-D-20-00148. **Reviewed** and submitted on: June 2020.
18. International Journal of Environmental Research and Public Health. MDPI. Climate Changes Affected Land Cover Change and 3 Vegetation Dynamics in Xinjiang, China. Int. J. Environ. Res. Public Health 2020, 17, x; doi: FOR PEER REVIEW..  
[www.mdpi.com/journal/ijerph](http://www.mdpi.com/journal/ijerph). **Reviewed:** June 2022.
19. Soils. Stratified soil sampling improves predictions of P<sub>2</sub> concentration in surface runoff and tile discharge. Soils 2018, 2, x; doi: FOR PEER REVIEW.  
[www.mdpi.com/journal/soils](http://www.mdpi.com/journal/soils). **Reviewed:** August 2020.
20. Agriculture, a MDPI publication. *Agriculture* 2019, 9, x; doi: **Reviewer:** Mohammad H. Golabi
21. Agriculture, a MDPI publication. *Agriculture* 2019, 9, x; doi. **Reviewer.**
22. ISWCR. February 2019. **Associate Editor:** Mohammad H. Golabi
23. ISWCR-D-19-00012. **Associate Editor:** Mohammad H. Golabi
24. Modern Applied Science. **Reviewer:** Mohammad H. Golabi
25. AJAAR. **Reviewer:** Mohammad H. Golabi
26. JEAJ **Reviewer:** Mohammad H. Golabi
27. Journal of Geography, Environment and Earth Science International (JGEESI). **Reviewer:** Mohammad H. Golabi
28. Microbiology Research Journal International (MRJI). **Reviewer:** Mohammad H. Golabi
29. Advance in Research. Published by: *Science Domain International*. **Reviewer:** Mohammad H. Golabi

30. Asian Journal of Advances in Agricultural Research. **Reviewer:** Mohammad H. Golabi
31. Journal of Experimental Agriculture International. Published by: *Science Domain*. **Reviewer:** Mohammad H. Golabi
32. International Research Journal of Pure and Applied Chemistry (IRJPAC). Published by: *Science domain*. **Reviewed.**
33. Journal of Geography, Environment and Earth Science International. Published by science domain. **Reviewer:** Mohammad H. Golabi
34. Microbiology Research Journal International. Published by Science Domain International. **Reviewer:** Mohammad H. Golabi
35. Agriculture, a publication of MDPI. December 2019. **Reviewer:** Mohammad H. Golabi
36. *Journal of Mountain Science*. Manuscript ID: 16-3845. Reviewed period: Nov 3, 2016. **Reviewer:** Mohammad H. Golabi
37. *Journal of Agriculture and Ecology Research International. A publication of Science Domain International*. **Reviewer:** Mohammad H. Golabi
38. *Asian Journal of Chemical Sciences*. Manuscript Number: Ms\_AJOCS\_34029. Reviewed, June 2017. **Reviewer:** Mohammad H. Golabi
39. *Advances in Environmental Technology*. Manuscript ID: AET 1702 - 1100. Reviewed July 3, 2017. **Reviewer:** Mohammad H. Golabi
40. *Sustainability Journal (published by MDPI)*. Manuscript ID: Sustainability181153. Reviewed in July 2017. **Reviewer:** Mohammad H. Golabi
41. *Modern Applied Science*. Review period: May 2017. **Reviewer:** Mohammad H. Golabi
42. The WASWAC for Outstanding Youth Paper Award. **Reviewer:** Mohammad H. Golabi
43. The WASWAC for Outstanding Youth Paper Award. **Reviewer:** Mohammad H. Golabi
44. WASWAC for Outstanding Youth Paper Award. Paper ID: WASWAC\_AWARD\_22. **Reviewer:** Mohammad H. Golabi

45. Modern Applied Science, Canadian Center of Science and Education. **Reviewer:** Mohammad H. Golabi
46. South Pacific Journal of Natural and Applied Sciences (SPJNAS). June 2015. **Reviewer:** Mohammad H. Golabi
47. International Journal of Environment and Waste Management (IJEWM). July 2015. **Reviewer:** Mohammad H. Golabi
48. Journal of Soil and Water Conservation (JSWC). March 2015. **Reviewer:** Mohammad H. Golabi
49. Journal of Agriculture and Ecology Research International. December 2014. **Reviewer:** Mohammad H. Golabi
50. Sustainability (open access ([www.mdpi.com/journal/sustainability](http://www.mdpi.com/journal/sustainability)); ISSN 2071-1050)). April 2015. **Reviewer:** Mohammad H. Golabi
51. Sustainability (open access ([www.mdpi.com/journal/sustainability](http://www.mdpi.com/journal/sustainability)); ISSN 2071-1050)). December 2014. **Reviewer:** Mohammad H. Golabi

#### COMMUNITY AND UNIVERSITY SERVICES:

##### **Extension/Outreach projects/activities:**

- Developed a **Pyrolysis** system for making carbonized material (biochar) for the application on agricultural lands as soil amendment for improving soil health and for food security and agricultural sustainability in the pacific island. The system is being tested and will be demonstrated at the University of Guam's Research Station in Yigo.
- **Topographical watershed Model:** A constructed model is being used for educational purposes and for demonstrating the impact of Soil Erosion and Sedimentation on the shores of southern Guam. We continue to use this model as an educational tool for bringing awareness to the public as well as local school children and for teaching them about the natural resource's protection and stewardship. Demonstrations are scheduled especially for UOG Charter day events. **On-going project at CNAS demonstration site. Guam**
- **Backyard composting of organic waste:** An educational project for demonstrations and educational purposes was conducted. **On-going project in Yigo Station, Guam (USA)**

- Developed a sedimentation control technique by using **Vetiver Grass System (VGS)** at the UOG research station in southern Guam (Ija).
- Provided **Science guest Lectures**, numerous times (annual) to the student of 4 - H program supervised by the Extension division of the College of Natural and Applied Sciences, UOG.

#### **Featured in the 'Local TV':**

- **Golabi Mohammad H.** 2017. '**Composting for homeowners**. In the: "Here is your Home" program. *Featured in the: ABS Sorensen Media Corp.* January 2017. This program was presented on local TV numerous times.

#### **Served as Guest lecturer:**

- Served as **guest lecturer** numerous times to Geography classes at the College of Arts and Sciences and the College of Natural and Applied Sciences of the University of Guam.
- Served as **guest lecturer** numerous times to Sociology classes at the College of Arts and Sciences and the College of Natural and Applied Sciences of the University of Guam.
- Served as **guest lecturer** numerous times in Biology classes at the College of Natural and Applied Sciences of the University of Guam.

#### **Services to international schools:**

- Served as an **observer** to the Science project competition between students from Okinawa and Australia. Organized by the University of Ryukyus in Okinawa. March 2023.
- Served as a **judge** to high school Science Fair program, organized by the University of Ryukyus in Okinawa. March 2023.

#### **Services to local schools:**

1. **Student Mentoring:**
  - Continued mentoring large number of students from high schools as well as middle schools with their science projects by helping students in their local, national, and regional science projects in our labs as well as in our research sites in the field. Currently mentoring a student from the local high school.
2. **Science Fair Judge:**
  - Served as a judge to numerous Island-wide Science fairs and activities of the local schools.

#### **3. Guest Speaker/Field presenter:**

University of Guam Board of Regent's - Professor/Extension Agent Emeritus(a) Nomination Form - 3/11/2023

- Served as Guest Speaker to local school students both in the class and/or in the field:

#### **4. The UOG 4H club**

- Served as an invited speaker to present and/or demonstrate soil related topics before the 4H participants and other youth during the UOG summer camp activities.

#### **5. 'Big Brother, Big Sister' project:**

- Served as a 'Big Brother' by mentoring a handicapped high school student for a year under the direction of 'Big brother, Big sister' of Guam.

#### **6. College Students Mentoring:**

- Served as mentor in CNAS Summer Research Apprenticeship Program.
- Served as mentor to student interns working with the NIH summer internship Program.

#### ***Public Outreach via Radio and TV:***

As an educator teaching about natural resources and the environment, I occasionally get invited and/or volunteer to talk about these resources via News Media:

- Radio (please see CDs in the binder 'II' under subtitle 'public outreach').
- TV (tape from TV program will be provided upon request)

#### ***Services to Local Government and Legislature:***

- i. Provided expertise to the local government officials and the members of the local legislature pertinent to bills and policy adaptations.
- ii. I Was invited to serve and present 'expert opinion' before the Federal Court Judge during the Ordot Landfill litigation for its closing.
- iii. I have served as a grand Jury for six months within the Guam Court system.

#### ***Services to local and Regional Linkage Group:***

Provided services through lectures, interviews, consultancy, and other types of educational contacts to various groups (i.e., rotary clubs, farmer's groups, etc.) in Guam and the other islands in the region.

***Field Demonstrations and Workshops (Conducted and/or participated):***

- I. Dededo Workshop on 'Soil Health'. October 15, 2024. Northern Guam's Farmers Co-Op. October 15, 2024.
- II. Central Guam Farmers Co-Op, Workshop on 'Soil Sampling and Soil Health'. October 16, 2024.
- III. Yigo workshop. Irrigation II. March 2023
- IV. Yigo workshop Irrigation I. February 2022
- V. Yigo workshop: Soils Sampling. Summer 2022
  
- VI. **'Production of Biochar for Carbon Storage and Sequestration' Workshop.** 2013. College of Natural and Applied Sciences, University of Guam. Golabi, M.H., and A. Uddin. This was a joined demonstration conducted with the visitors from the University of Okayama, Japan. October 2013.
  
- VII. **'Soil Quality Improvement and Soil Management Workshop'.** I have conducted numerous workshops about soil quality and soil health educational purposes before the public both in Guam and other islands of Micronesia.
  
- VIII. An Integrated Watershed Management Strategy to Mitigate Sediment Transport for Water Quality Improvement and Coral Reef Conservation – **Demonstration:** A Constructed Topographical Simulation Model for Educational Purposes. **PI:** M.H. Golabi, **Co-PI:** J. Biggs (2010/2012). Continuing educational program.
  
- IX. **Field Demonstration:** Application of the VGT for Wastewater Treatment, Inarajan WWTP: An Innovative nutrient removal Technology for Southern Guam – Region 9 Water Quality Program– Extension Project. **PIs:** M.H. Golabi, and Manuel V. Duguies. 2010.
  
- X. Golabi, M.H., 2010. 1) How to take Soil samples and interpret the UOG Soil test results, 2) Organic amendments. *Presented In:* Soil and Plant Nutrient Guide for the Mariana islands- a two-day **Workshop** conducted by the UOG cooperative extension services. UOG, May 10-12, 2010.
  
- XI. Large-Scale Composting and Effect of Land application of Compost on Crop growth in northern Guam. **PI:** M.H. Golabi. A continuing educational pilot project: Field Demonstrations and educational purposes. March 2006
  
- XII. Watershed Management for Water Quality Improvement. 2005. Cross island road Project (War in the Pacific) a continuing project used for soil erosion education. **PI:** M.H. Golabi. Field Demonstration: July 2015.

## UNIVERSITY SERVICES:

### 1. **P&T (promotion and tenure) Committee:**

Served number of years as a member of the UOG - P&T committee.

### 2. **Academic Committees/Programs:**

- Served as the **Chair** of the Sustainable Agriculture, Food, and Natural Resources (SAFNR) Master degree graduate program when it was approved by the Board of Regent. Years
- Served as the **Vice Chair** for the SAFNR graduate degree program.
- I am currently serving as a member of the SAFNR graduate program.

### 3. **Graduate Advisory Committees:**

- Served as a **Chair** and continue serving as the Advisory Committees of graduate students.
- Served and continue serving as a **member** to graduate student's advisory committees. (Please see the aforementioned items under 'instruction section').

### 3. **Faculty Senate:**

- Served as a member of the Faculty Senate for number of years.
- Served as the **Chair** of the Senate Committee on Faculty Excellence.

### 4. **Academic Committees/Programs:**

- Served as a **Chair** of the Environmental Science (EVs) graduate degree program for two terms (2 years each term).

### 5. **Search Committees:**

- Served in numerous search committees within the College of Natural and Applied Sciences (CNAS) in particular, and the University of Guam in general.

### 6. **Undergraduate Advisory Committees:**

- Served and continue serving as an advisor/mentor to undergraduate students who are seeking a bachelor degree in Agricultural Sciences (Thesis track).

### 7. **Undergraduate Curricula Review Committee:**

- i. Served as a member of the Academic Committee on Undergraduate Curricula (ACUC) and then was elected the **Chair** of the ACUC (2005-2010).

During this time significant improvements were made to the committee's

operation as the Senate re-aligned the academic committee structure and functions, including the re-designation of the committee as the ACUC to UCRC.

**8. Other Committees and Miscellaneous Services:**

- i. Served as different potential either as acting supervisor on behalf of faculty during their traveling and serving as MC during the student graduation ceremonies and other miscellaneous services.

**9. Environmental Science Graduate Program:**

- Served as the **Chair** of the Environmental (EV) Science Graduate program (2006-2008). It was during this time that we developed the professional track for the EV program. This provides alternatives master degree to the traditional thesis for students who are seeking professional careers. Also, during this time we launched and implemented the program website, which has been an effective recruiting tool for the program. I also started an innovative policy of conducting an exit interview with graduating students. Their inputs were implemented, and changes were made in the course curriculum as well in the program.
- Served as **Chair** (2008-2010) and currently serving as a **member** of the Recruitment and Admission Committee for the (EV) Graduate Program. During which time we have made improvements in admission standards and procedures that have enhanced graduate student success and completion rates.

**10. Conferences Organized and Hosted at UOG:**

I have organized and hosted the following local and national conferences which provided opportunities for the exchange of ideas and discussions about the environment and related issues which are of concern both locally and nationally:

International/National Conference Organized/Hosted:

1. **Golabi, M.H. (editor).** Abstracts/Proceedings 2011. Guam Soil Carbon Conference: **Towards Understanding Soil Carbon Sequestration: Processes and Mechanisms on Eroded Landscapes**. College of Natural and Applied Sciences, University of Guam. August 3-5, 2011.

Local Conferences Organized/Hosted:

1. **Golabi, M.H., and George Wall (editors).** 2010. Proceedings of the **2<sup>nd</sup> CNAS Research Conference**. College of Natural and Applied Sciences, University of Guam. Mangilao, Guam. January 13, 2010.

2. George Wall, and **M.H., Golabi (editors)**. 2006. Proceedings of the 1<sup>st</sup> CNAS Research Conference. College of Natural and Applied Sciences, University of Guam. Mangilao, Guam. October 23, 2006.

#### 11. Services to the International Organizations:

- Serving as **Associate Editor** to the journal of 'International Soil and Water Conservation Research' (ISWCR).
- Served and continue serving as a regional vice president and the **editorial board member** for the World Association of Soil and Water Conservation (WASWAC).
- Served as **guest Editor** for editing the *PROCEEDINGS* of 'The 2017 International Conference on Agricultural and Biological Sciences (ABS 2017)', that was held in Qingdao, China (June 26 – 29, 2017) and published by The IOP science.

### INSTRUCTIONAL ACTIVITIES

#### Courses Taught and/or Developed:

##### Undergraduate Courses:

- i. Principles of Soil Sciences (AL 380\*) - Offered very fall semester.
- ii. Principles of Soil Sciences Laboratory (AL 380L) - Offered every fall semester.
- iii. Tropical Soil Management and Fertility (AG 480\*\*) – developed and offered every even spring semester.
- iv. Undergraduate Seminar (AG 491) - Offered every spring semester.

##### Graduate Courses:

- i. Environmental Soil Science (AL 481/G\*) – developed and offered every odd spring.
- ii. Environmental Soil Science Laboratory (AL 481/G-L) – developed and offered every odd spring.
- iii. Waste Management and Recycling (EV/AL 563) – developed and offered every odd fall semester.
- iv. Plant Nutrition (AL 581) – This course was developed specifically for the SAFNR program and was offered during the spring of even years.
- v. Scientific Presentation (EV 504) - Offered every spring semester.

##### Graduate Thesis Administered:

- i. Managed Thesis (EV 695, AL 695) and Research Assistantship courses (AL 492 and AL 692). Continuously until present.
- ii. *Managed Graduate Thesis - EV 695 (managed during my chairmanship (2008-2010) for the EV Program).*

##### Graduate Program Activities:

- Served as the Chair of the EV program.
- Served as a member of the EV program.
- Served as the first Chair of the SAFNR program (endorsed by the board of regions).
- Served and continue serving as the member of the SFNR program.

#### A. Co-Teachings:

University of Guam Board of Regent's - Professor/Extension Agent Emeritus(a) Nomination Form - 3/11/2023

- i. Environmental Ecology (EV 510). Taught upon invitation of home instructor.
- ii. I have also occasionally taught part of AG 101 as a co-teacher to the course.

**B. Special Project Instruction and Practicum Courses (mentored):**

- i. Administered: AG 190 - Special Project (topics on introductory soil subjects).
- ii. Administered: AG 390 - Teaching Assistant and/or Practicum mentoring.
- iii. Administered: EV 490 - Analytical Soil Science Project.

**C. Guest Lecturing:**

- I have conducted guest lectures numerous times for Physical Geography and Sociology classes occasionally.

**D. Student Comments and Course Evaluations:**

- Student's comments and course evaluation may be provided upon request).

**E. Student Advisement:**

- Served on graduate Advisory Committees (as a member and/or as a chair).
- Provided advisement to several undergraduate students.

**ACKNOWLEDGEMENTS/CERTIFICATES**

- Nominated for the King of Thailand Vetiver Grass Award. May 2023.
- Acknowledgement was issued by the College of Natural and Applied Sciences titled 'Faculty Highlight' and was posted to social media via Instagram.
- Numerous certificates and acknowledgement documents were awarded for serving as a judge to the public-school science fairs.
- Certificates of excellence were received for outstanding contribution to the scientific Journals (i.e., Asian Journal of Advances in Agricultural research).
- Certificates of acknowledgement received for presenting as an '*Invited*' speaker in various conferences and as school guest lecturer.

**PROFESSIONAL MEMBERSHIPS**

1. American Society of Agronomy (ASA)
2. Soil Science Society of America (SSSA)
3. Crop Science Society of America (CSSA)
4. World Association of Soil & Water Conservation (WASWC), Editorial member
5. Isfahan Journal of Environment, Editorial board member
6. Served as Vetiverim – The Pacific Rim Vetiver Network (Country Representative, representing Guam)