

Contact Information

Donna-May Sakura-Lemessy, PhD MIET

Program Coordinator – Physical Science

Asst. Professor

BCB 126

(229) 500 - 2401

Research Areas and Interests

fate & contaminant transport, water resources engineering, water quality modelling, TMDL analyses

Teaching

Physical Science

Professional Experiences

Director (ag) - Institute of Marine Affairs, Trinidad & Tobago

Deputy Director (Research) - Institute of Marine Affairs, Trinidad & Tobago

Graduate Faculty, University of West Indies, Trinidad & Tobago

Graduate Faculty, Albany State University, Albany GA

Research Scientist / Asst. Professor: Flint River Water Planning & Policy Center/Dept. of Natural Sciences, Albany State University

Intergovernmental Oceanographic Commission, UNESCO : Intersessional Working Group for the Development of the IOC Capacity Development Strategy (Member) (2014 - 2015)

National/Country Representative (Trinidad & Tobago) - Intergovernmental Oceanographic Commission, UNESCO : 28th Session of the IOC Assembly, 48th Session of the IOC Executive Council and the IOC Science Day (2015; Paris, France)

Vice Chair - Intergovernmental Oceanographic Commission, (IOC –UNESCO), Submission for the Caribbean and Adjacent Regions (IOCARIBE); (2015 -2017)

United Nations Environmental Programme (UNEP) – Global Environmental Outlook 6 – Coordinating Lead Author (Water) - Latin America and the Caribbean (2015 -2016)

Member - ProEcoServ National Steering Committee (2014 – 2015)

Director, Regional Activity Center for the Pollution/LBS Protocol (Cartagena Convention), United Nations Environmental Program (2014 - 2015)

Publications

Sakura-Lemessy, D. (In Progress). A model combination approach to predicting pathogen loading in TMDL analysis.

Sakura-Lemessy, I and D. Sakura-Lemessy (Under Review). “Gender Differences in STEM fields among US College Students: Evidence from the NELS

Bosch, D. D., Chin, D.A., Sakura-Lemessy, D., Gay, P., Vellidis, G. (2010). “Alternative Methods for Fecal Coliform Load Reductions in South Georgia Watersheds” Proceedings of TMDL 2010: Watershed Management to Improve Water Quality, American Society of Agricultural and Biological Engineers.

Chin, D.A., Sakura-Lemessy, D., Bosch, D.D., Gay, P. (2010). “Enhanced Estimation of Terrestrial Loadings for TMDLs: Normalization Approach”. Journal of Water-Resources Planning and Management, American Society of Civil Engineers. 136(3)357-365.

Chin, D., D. Sakura-Lemessy, D. Bosch and P. Gay (2009). “Watershed scale fate and transport of bacteria.” Transactions of the American Society of Agricultural and Biological Engineers, Volume 52(1): 145 - 154.

Sakura-Lemessy, Donna-May (2009). A multi-model approach to predicting pathogen indicator bacteria loading in TMDL analyses. (Doctoral dissertation) University of Miami.

Sakura-Lemessy I, K. Carter-Tellison, and D. Sakura-Lemessy (2009). “Curriculum placement, race, class and gender differences in wage growth amongst non-college workers: Evidence from the NELS 1988-2000 Data.” Journal of African-American Studies, Volume 13 (4): 406 – 430.

Sakura-Lemessy, D. and M. Masters (2007) “Incidental recharge in the Lower Flint River Basin: agricultural irrigation and consumptive use.” Proceedings of the 2007 Georgia Water Resources Conference, University of Georgia, Athens, GA.

Sakura-Lemessy, Donna-May (2007). “Incidental recharge in the Lower Flint River Basin.” The Research Review, Albany State University, Albany, GA.

Bloetscher, F., D. Meeroff, M. Wright, D. Yang, R Rojas, J Polar, M. Laas, B. Bieler, D.Sakura-Lemessy, S. Aziz, and C. Feikle (2006). “Defining the concentrate disposal problem and identifying potential solutions.” Florida Water Resources Journal. Volume 5 (4): 25 - 30.

Solo-Gabriele, H., D. Sakura-Lemessy, T. Townsend, B. Dubey and J. Jambeck (2003). "Quantities of arsenic within the state of Florida." Florida Center for Solid and Hazardous Waste Management, University of Florida. Technical Report #03-06.

Sakura-Lemessy, Donna-May (2001). "Utilizing sub-pixel analysis to resolve, delineate and map forest riparian buffer zones in the Pachitea Basin, Peru." (MS Thesis) Florida International University.

Sakura-Lemessy, Donna-May (2014) "Area Based Management Tools (including MPAs) in Areas beyond national jurisdiction (ABNJs)". (Panelist) Regional Workshop for CARICOM States on the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction. Kingston, Jamaica : May 19 – 22nd 2014

Sakura-Lemessy, Donna-May (2013) Modelling and Forecasting. An Introduction to Hydrology for Meteorologists Workshop. Institute of Marine Affairs, Chaguaramas, Trinidad June 28th, 2013.

Sakura-Lemessy, Donna-May (2013) Wastewater and Tourism. (Panelist) GEF CREW Regional Media Workshop on Wastewater, Georgetown, Guyana: November 26th, 2013

Sakura-Lemessy, I. and D. Sakura-Lemessy (2009). Social Integration, Occupational and Perceived Life Satisfaction amongst Black West Indian Professionals in the U.S. : Theoretical Outlook and Challenges for Future Research. Conference Presentation: 4th International Conference on Interdisciplinary Social Sciences, Athens, Greece July 8 -11, 2009.

Sakura-Lemessy, I., K. Carter-Tellison and D. Sakura-Lemessy (2009). Can the Integration of High School Vocational & Academic Curriculum Lead to Greater Pay Equity for Black

Non-College Workers? Evidence from the NELS 1988-2000 Data. Conference Presentation: Pacific Sociological Association Conference, San Diego, CA, April 8 -11 2009.

Sakura-Lemessy, D. and I. Sakura-Lemessy (2009). The social and economic impacts of consumptive water use in an agricultural area: Estimating water resources in the Lower Flint River Basin, GA. Conference Presentation: Southern Rural Sociology Association, Atlanta, GA , February 1 - 3, 2009.

Sakura-Lemessy, D. and M. Masters (2007). Incidental recharge in the Lower Flint River Basin: Agricultural irrigation and consumptive use. Conference Presentation: Georgia Water Resources Conference, Athens, GA : March 27 – 29, 2007.

Sakura-Lemessy, D. and M. Masters (2007). Incidental recharge in the Lower Flint River Basin: Agricultural irrigation and consumptive use. Conference Presentation: USDACREES National Water Conference, Savannah, GA: January 28 – February 01, 2007.

Recent Grants

**Enhancing the Teaching/Learning Quality in STEM Fields - US Department of Education
\$611,021 (2022 – 2025) Co-Principal Investigator**

Affordable Materials Grants – USG \$25,200 (2023) Co-Principal Investigator

**Hydrological Study to determine the environmental fate & transport of land-based sources
of pollutants and restore the hydrological regime in the Caroni River Basin \$1,000,000
(2014 – 2016) (Principal Investigator)**

**The Beverage Container Clean-up Project. \$1,000,000 (2014 – 2015) (Principal
Investigator)**

The Marine Submarine Turbine Project. \$2,000,000 (2012 –2015) Principal Investigator

Awards and Honors

Gates Millennium Scholars Award

**Andrew Mellon Foundation / Andean Amazon Rivers Analysis and Management Project
Scholarship (Florida International University)**

**Most Outstanding Student in Environmental Sciences (Undergraduate), University of
Miami**

Wilson Woodson Marshall Scholarship, University of Miami

Henry King Stafford Scholarship, University of Miami

Provost's Honor Roll, University of Miami

Dean's List, University of Miami

National Dean's List

Who's who among America's College Students

Education

PhD - Civil Engineering (University of Miami)

MIET – Member - Institute of Engineering & Technology (UK)

MS - Environmental Sciences (Florida International University)

BA - Environmental Planning (University of Miami)