

The Department of Life Sciences' 5th Annual Research Symposium:
Sustainable Development

Venue: The University of the West Indies, Lecture Theater D, The Teaching and Learning Centre, St. Augustine

Day 1, 18th March, 2015 8:30 am - 11:00 am

Judging of Poster Presentations

Lecturer Presentations, FST Conference Room, Ground Floor, Natural Sciences Bldg.

General Opening Remarks- Prof. Dave Chadee

1pm – 3pm Lecturers' Presentations

1:10pm -1:35pm (DMS): Some prey predator models- Prof. Bal Swaroop Bhatt

1:40pm-2:05pm (DCIT): Data Analytics in the MediNet System- Dr. Permanand Mohan

2:10pm -2:35pm (DP): Dr. Indra Haracksingh

2:40pm -3:05pm (DLS): Caroni Research and Development Impact Project- Dr. Luke Rostant

Day 2, 19th March, 2015 8:30 am - 4:00 pm

Opening Ceremony Chair –Dr. Judith Gobin

Oral Presentations

8:30am-8:40am Welcome: Prof John Agard, Head of Life Sciences Department,

8:40 -8:50am Greetings

Dr. Donna Commisiong, Acting Dean, Faculty of Science and Technology

Morning Session: Session 1 (Department of Computing and Information Technology and Department of Mathematics and Statistics) Chair – Prof. Bal Swaroop Bhatt

THEME: Mathematical Sciences and its Applications

8:50am – 12:00pm

8:50am – 9:05am A Mathematical Model to Determine the Effect of the Presence of a Magnetic Field and Heat Transfer on the Health of a Cardiovascular Patient. -Alana R. Sankar-Ramkarran

9:25am - 9:45am Unsteady Mhd Free Convection Nanofluid Flows Within A Wavy Trapezoidal Enclosure. -Victor M. Job

9:50am – 10:10am Improving The Problem Solving Skill Of Novice Programmers Using Online Multiplayer Games- Eshwar Bachu

10:15 – 1030am Sustainable Low Energy Networks- Koffka Khan

10:35- 10:50am: Improving Students Creativity Skills using Creativity Techniques in a Social Network: Diana Ragbir-Shripat

10:50am – 11:00am: COFFEE BREAK (refreshments provided)

Day 2, Session 2, Department of Physics

Theme: Environmental Physics

11:00 am to 12:15am

Chair: Ms. Xsitaz T. Chadee

11:00am – 11:15am: Lab Development and Testing of a Proton Exchange Membrane for use in Fuel Cells- Marisa Singh and Harinder Pal Singh Missan

11:20am - 11:35am: PVdF-graft-VIm Based Nano-composite Polymer Electrolyte Membranes For Fuel Cell Applications.- Kerrilee Stewart and Harinder Pal Singh Missan

11:40am - 11:55am: Solar Resource Assessment for Trinidad.- Sadira Khan

12:00pm - 12:15am: Rainfall variability in the North Eastern and Central Eastern region of Trinidad, W.I.- Sharlene L. Beharry

12:15pm to 1:00pm LUNCH

Day 2, Session 3, Department of Physics

Environmental Physics

1:00 pm to 1:55 pm

Chair: Dr. Ricardo Clarke

1:00pm – 1:15pm: Relationships between global SSTs and Trinidad's early season rainfall (JJA).- Nkese D. Mc Shine.

1:20pm - 1:35pm: Comparison of Remote Sensed SST datasets with in-situ sea temperature in Tobago.- Shaazia S. Mohammed.

1:40pm - 1:55pm: Electricity generation estimates from the wind in Trinidad and Tobago. - Xsitaz T. Chadee.

1:55pm to 2:10pm: BREAK

Day 2, Session 4, Department of Life Sciences

Video Presentations

2:10 pm to 3:15pm

Chair: Mr. Ryan S. Mohammed

2:10pm - 2:25pm: Ecosystem Services Approaches for Natural Resource Planning and Management in Trinidad and Tobago- Maurice Rawlins

2: 30pm - 2:45pm: -Nariva - An under-recognized treasure. A story about ecosystem services - Akilah Stewart.

2: 50pm to 3:05pm: - Plagiarism - Antonio Ramkissoon, Andrew Dhanoo, Ruth Mohan, Christopher Koo.

3:10pm to 3:25pm:- Utilisation Of Anvils By The Trinidad Motmot (*Momotus Bahamensis*) In Tobago, W.I.- Mike G. Rutherford

END OF DAY 2

Day 3: 20th March, 2014 8:30 am - 6:00 pm

Opening Ceremony Chair- Dr. Judith Gobin

8:30am-9:20am

8:30am-8:40am Welcome from Prof John Agard, Head of Department of Life Sciences

8:40am-8:50am PVC Prof. Clement Sankat, Principal

8:50am-9:10am Prof Patrick Hosein: Boosting Innovation through Interdisciplinary Collaborations

9:10 to 9:20am: BREAK (refreshments provided)

DAY 3, Session 1, 9:20am – 12:35pm

THEME: Cultivation to Conservation

Chair: Ms. Errin Chong

9:20am - 9:35am: Harnessing Cocoa Diversity: Investigating Genotypic Variation In Resilience To Heat And Water Stress.- Ariel Coolman

9:40am - 9:55am: The Effect Of Inbreeding On Germination And Early Growth In *Theobroma Cacao L.*- Kersha Guevara-Jackson

10:00am - 10:15am: Identifying Local Tree Species Suitable For Use In Reforestation Within The Nariva Swamp, Trinidad.- Nkosi Ward

10:20am - 10:35am: Attitude And Perception Of Residents And Visitors Towards Eco-Tourism In Matura National Park.- Kathy Ann George

10:35am - 10:45a: BREAK (refreshments provided)

DAY 3, Session 2, 10:45am to 11:55am
Theme: Understanding our Swamp Dynamics
Chair: Ms. Ariel Coolman

10:45am - 11am: Patch Occupancy Of Crab-Eating Raccoons In The Caroni Swamp, Trinidad.- Laura Baboolal

11:00am - 11:15am: Understanding The Population Dynamics And Socio-Economic Importance Of The Blue Land Crab, *Cardisoma Guanhumi*, In The Caroni Swamp, Trinidad And Tobago.- Keimraj Sookhoo

11:20am - 11:35am: Mapping Of Critical Fish Habitats In The Gulf Of Paria Using Public Participatory Gis.- Christian Persad

11:40am - 11:55am: Impact of industrial activity on mangrove physiology at the Mouville Mangrove.- Shaleni Gopie

11:55am - 12:30 pm: LUNCH

DAY 3, Session 3, 12:30pm to 1: 45pm
Theme: Understanding our Swamp Dynamics
Chair: Ms. Laura Baboolal

12:30pm - 12:45pm: The Impact Of Water Quality On Root Macro Fauna Succession In The Caroni Swamp.- Errin Chong.

12:50pm - 1:05pm: Moriche Palm (*Mauritia Flexuosa*) Fruits And Abundance Of Red-Bellied Macaws (*Orthospittaca Manilata*) And Orange-Winged Parrots (*Amazona Amazonica*) At The Aripo Savannas, Trinidad.- Aliya Hosein.

1:10pm - 1: 25pm: Participatory Gis For Nesting, Feeding And Roosting Habitat Sites Of The Scarlet Ibis *Eudocimus Ruber* In Caroni Swamp, Trinidad.- Deanna Albert

1:30pm - 1:45pm: Habitat Mapping, Body Condition, And Breeding Patterns Of Avian Nectarivores In The Aripo Savannas.- Raqib Abdul

1:45pm to 2:00pm: BREAK

DAY 3, Session 4, 2:00pm to 3: 45pm

Theme: Genetics of Conservation to Cultivation

Chair – Ms. Kerresha Khan

2:00pm - 2:15pm: Evaluation of phytoelicitor activities of three native seaweed species of Trinidad and their influence on pathogenic infections in tomato.- Antonio Ramkissoon

2:20pm - 2: 35pm: The *O*, *R* And *M* Loci Determine The Major Spathe Colors In *Anthurium*.- David Gopaulchan

2:40pm - 2: 2:55pm: The Economic Value Of Sea Turtles In Tobago.- Michelle Cazabon-Mannette

3:00pm - 3:15pm: A study of yield and its components, genetic and interrelationships between components towards improving yield in hot pepper (*Capsicum chinense*).- Rabindra Ramjattan

3:20pm - 3:35pm: Occurrence And Management Of Cowpea (*Vigna Unguiculata*) Root Diseases In Trinidad.- Sophia De Aspa.

Closing remarks Day 3 Prof. Dave Chadee and Prof. John Agard

3:35pm – 4:00pm Closing Ceremony- Presentation of prizes

Light refreshments provided

END OF DAY 3 SESSIONS