

# NATIONAL WORKSHOP ON EXPERIENTIAL LEARNING WITH INDIAN EDUCATORS ON MARINE DEBRIS AND ITS MANAGEMENT (NEIEM-2019)



2019  
JUNE  
11-15

Seminar Hall  
Department of Environmental  
Sciences, University of Kerala  
Karyavattom Campus

Jointly organised by



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Marine debris is a pervasive environmental problem that harms wildlife, ecosystems, and human health. Yet, marine plastic pollution is at its core a problem that experts believe can be solved. Experts find that effective solutions will include education and creating policy that considers the local context. Our work empowers teachers and students to collect and report scientific data about marine debris and forge links with local policymakers to inform policy change.

LOCATED in Thiruvananthapuram, the capital city of Kerala, the University of Kerala is valued as the State's mother university. Since its inception in 1937 by Shri Chitra Tirunal Balaramavarma, King of erstwhile Travancore, the University has been a hub of excellence. The University's campus contains 16 Faculties, 42 Departments and a number of specialist research arenas. The University has fetched Grade A accreditation by the NAAC and remains 22<sup>nd</sup> in NIRF ranking in India. The University's Departments have got over 2000 full time students including a number of foreign candidates. There are over 150 affiliated colleges. There is also Institute of Distance Education, providing higher education for over 7000 students from in and out of the country.

## DEPARTMENT OF ENVIRONMENTAL SCIENCES

THE Department of Environmental Sciences was established in 1995 under the umbrella of the University of Kerala. It is a teaching and research department offering MSc, MPhil, PhD in Environmental Sciences and Post Doctoral Programmes. The department is blessed with three eminent Professors and good laboratory facilities. The department has undertaken research work in Environmental Biology, Environmental Microbiology, Environmental Chemistry, Environmental Toxicology, and Environmental Geology. The department has a Young Scientist/Women Scientist Programme funded by DST/KSCSTE. In addition, the Department engages in research collaboration with National and International Institutions and Agencies including hosting a Fulbright Nehru fellow, collaborating on a National Geographic grant, and hosting eminent scholars from around the world.

## THE WORKSHOP, NEIEM-2019

MARINE debris is a global problem that harms wildlife, ecosystems, human health, water quality, and the economy . Approximately 280 million tons of plastic are produced each year, most to create items not in use within twelve months . Experts estimate the oceans contain at minimum 5.25 trillion particles of debris .

MARINE debris has lasting economic impacts for tourism, recreation, shipping, fisheries, aquaculture, and agriculture . And yet, the problem of marine litter is one that experts believe can be solved by improving education, outreach, protective laws and policies, and enforcement .

INDIA has policies seeking to reduce marine litter at multiple levels. That said, Indian experts call for more education and research on marine debris. Researchers describe this as the "global problem least studied in India". While India is ahead of many nations in terms of marine litter policy, there is still a great deal of work to do to understand the problem fully. THIS workshop seeks to support education, outreach, and the collection of data on the topic of marine litter in India. We hope to empower communities to collect data using scientific methods and then share the results with local policymakers, ideally leading to lasting change.

# WORKSHOP SCHEDULE

11 June

TUESDAY

- 9.00 AM : Registration and check in  
9:30 AM : Inaugural session
- Welcome : Dr. Katharine A. Owens  
(Organising Secretary, NEIEM-2019; Fulbright Nehru Fellow)
- Presidential address** : **Prof. Dr. Simon Thattil** (Director, IQAC, University of Kerala)
- Inaugural address** : **Professor Dr. V. P. Mahadevan Pillai**  
(Hon. Vice Chancellor, University of Kerala)
- Felicitations : Dr. S. Naseeb (Member Syndicate, University of Kerala)  
: Prof. Dr. Salom Gnana Thanga (Director, School of Earth System Sciences, University of Kerala)
- Vote-of-Thanks : Prof. Dr. Jaya D.S. (Organising Secretary, NEIEM-2019)
- 10:30-10:45 AM : Tea break & Group Photo

## TECHNICAL SESSIONS

- 10:45 AM - 11:15 AM : **Marine Debris in the US and India— Challenges and Solutions**  
Dr. Katharine A. Owens (Associate Professor, University of Hartford USA; Fulbright Nehru Fellow, University of Kerala)
- 11:15 AM – 11:50 PM : **Coastal and Marine Biodiversity of India**  
Dr. F. George D'Cruz (Head of Department and Director of Research, Centre of Zoology (Rtd), Fatima Mata National College, Kollam)
- 11:55 AM - 12:25 PM: : **Understanding Waste Trajectories and Stakeholders: Perspectives from Colombo**  
Katie Conlon (PhD Candidate, Portland State University, Oregon, Fulbright Scholar, Sri Lanka)
- 12:30 PM - 1:00 PM: : **Microplastics in Aquatic Ecosystems**  
Dr Akhila S Nair (Lecturer, Department of Aquatic Biology & Fisheries University of Kerala)
- 1:00 PM - 2:00 PM : Lunch
- 2:00 PM - 2:30 PM : **Marine Pollution - Sources & Impacts**  
Dr. Jaya D. S. (Professor, Dept. of Environmental Sciences University of Kerala)
- 2:30 PM - 3:00 PM : Small Group Work
- 3:00 PM – 3:30 PM : Review procedures for Wednesday morning cleanups
- 3.30 PM-4.00PM : Tea break

## 12 June

WEDNESDAY

- 7:00 AM : Field trip
- 7:30- 10:30 AM : BEACH cleanup Menamkulam and
- 7:30 -10:30 AM : Karamana RIVER
- 10:30 AM : TEA BREAK
- 11:00 AM - 1:00 PM : Data Analysis
- 1:00 PM – 2:00 PM : Lunch



## 13 June

THURSDAY

- 9:30 AM to 10:30 AM : Data analysis
- 10:30 AM - 11:00 AM : Tea break
- 11:00 AM - 1:00 PM : Data analysis
- 1:00 PM - 2:00 PM : Lunch
- 2:00 PM - 3.30 PM : Small group work
- 3.30 PM - 4:00 PM : Tea break
- 4:30 PM : Cultural Programme

## 14 June

FRIDAY

- 9:00 AM - 9:30 AM : Sharing results with policymakers
- 9:30 AM - 10:30 AM : Small group work
- 10:30 AM - 11:00 AM : Tea Break
- 11:00 AM - 1:00 PM : Small group work
- 1:00 PM - 2:00 PM : Lunch
- 2:00 PM - 3:30 PM : Small group work
- 3:30 PM - 4:00 PM : Tea Break

## 15 June

SATURDAY

- 9:30 AM – 10:30 AM : Small group work
- 10:30 AM - 11:00 AM : Tea Break
- 11:00 AM - 11:45 AM : Q&A session; Complete participant surveys
- 12:00 PM - 1:00 PM : Valedictory Function and Presentation of Results

**Chief Guest** : **Adv. V.K. Prasanth** (Hon. Mayor, Thiruvananthapuram Corporation)

**Valedictory address** : **Dr. Lawrence Harold** (Managing Director, MATSYAFED)

**Remarks** : Dr. Pramod Kiran R.B. (Senate Member, University of Kerala)

**Vote of thanks** : Dr. Katharine A. Owens

1:00 PM - 2:00 PM : Lunch

2:00 PM : Distribution of certificates

### ORGANIZING COMMITTEE

#### PATRON

Prof. (Dr.) V.P. Mahadevan Pillai  
Honorable Vice-Chancellor  
University of Kerala

#### ORGANISING SECRETARIES

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#### MEMBERS

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Mrs. Navami S.S.  
Miss. Niyathi Vijay  
Mr. Manikandan S.  
Mr. Sonu Sasidharan  
Mr. Alwyn Biju