















# THE FIRST M.O.B.I. WORKSHOP

# MARINE OFFSHORE BIOREFINERY IN ISRAEL

## 24 MAY 2017

- Seaweed Cultivation
- Engineering & Biotechnology
- Environment, Economics and Policy
- Operational Oceanography
- Sustainable Development
- Big Data

### **Organizing Committee:**

Alexander Golberg, Tel Aviv University
Alvaro Israel, Israel Oceanographic and Limnological Research Institute
Yoav Lehahn, Weizmann Institute of Science
Avigdor Abelson, Tel Aviv University



Venue: Porter School of Environmental Studies Klausner St. Tel Aviv-Jaffa



9:00-17:00



Facebook: MOBI2017 mobi2017is@gmail.com



Free entrance RSVP



# Schedule Plan your day



#### Registration and Coffee 8:30

#### **Opening Remarks** 9:00

Prof. Daniel Chamovitz

Dean of the George S. Wise Faculty of Life Sciences, Tel Aviv University

Prof. Colin Price

Head of Porter School of Environmental Studies, Tel Aviv University

Tanja Hutt

Head of the Economic and Commercial Department, German Embassy, Tel Aviv

Johannes Uhl

Advisor Foreign Energy Policy, Deutsche Gesellschaft für internationale Zusammenarbeit

#### 9:15 Sessions

#### Chair: Dr. Yoav Lehahn, Weizmann Institute of Science

Energy from Offshore Kelp Farms: Technologies and **Production of Laminarian Species** Prof. Dr. Bela Hieronymus Buck

Alfred Wegener Institute Helmholtz Centre for Polar and Marine Research (AWI)

Nutrient status and cycling in the Eastern Mediterranean Prof. Michael David Krom, Haifa University

#### **Economics of Macroalgae Utilization**

Dr. Ruslana Palatnik, Yezreel Valley College and University of Haifa

Novel Methods (Microwave and Sonochemistry) for the conversion of Biomass to Biofuels

Prof. Aharon Gedanken, Bar-Ilan University

IMTA as a mitigation tool in stress-prone coastal environments

Prof.Avigdor Abelson, Tel Aviv University

Bio-Economic aspects of off-shore seaweed cultivation - food and energy security

Dr. Shiri Zemah Shamir, IDC Herzliya

#### Coffee Break 10:45

#### Sessions 11:15

Chair: Prof. Avigdor Abelson, Tel Aviv University

Designer cellulosome technology for conversion of cellulosic biomass into biofuels

Prof. Edward Bayer, Weizmann Institute of Science

An Overview Of Seaweed Research & Cultivation Practices In Israel

Dr. Alvaro Israel, Israel Oceanographic & Limnological Research, Ltd.

Conversion of the power plants CO2 emissions into biocoal through algae cultivation

Dr. Gabriel Jinjikhashvily, Israel Electric Company

Environmental Conditions Offshore Israel, their Design Aspects, and Concepts of Floating Structures

Prof. Nitai Drimer, Technion-

Model of techno-economical analysis for algae biofuels

Dr.Bracha Halaf, Ministy of National Infrastructures, Energy and Water Resources

Offshore marine biorefinery in Israel a consolidated approach to support bioeconomy and blue growth. **Proposed Marine Biorefineries Research Center** 

Dr. Alexander Golberg, Tel Aviv University

#### Lunch

#### 14:00 Sessions

13:00

Chair: Dr. Alvaro Israel. Israel Oceanographic & Limnological Research, Ltd.

Designing a consolidated microbial process for production of bioethanol from Ulva biomass

Prof. Ehud Banin. Bar Ilan University

Macroalgae- a potential new and renewable source for macronutrients

Prof. Yoav Livney. Technion

A quantitative management tool reflecting impact of nutrient enrichment from mariculture in the Levantine basin

Prof. Hezi Gildor. The Hebrew University

Biomass processing with solar energy

Prof. Abraham Kribus and Dr. Michael Epstein, Tel Aviv University

FBA modelling for two step fermentation biorefineries

Dr. Zohar Yakhini, Herzliya

Introduction on offshore marine aquaculture planning efforts in Israel

Eng. Noam Mozes. Ministery of Agriculture and Rural Development.

The Win-Wins of Wind Energy: German and European Initiatives in Algae and Marine Biodiversity Cultivation Linked to Offshore Wind Infrastructure

Prof. Miranda Schreurs. Technical University of Munich

#### 15:50 **Workshop Closing**

16:00

Dr. Alexander Golberg, Tel Aviv University

#### A guided tour through the travelling exhibition

"Germany's Energywende"

Guide: Johannes Uhl, Advisor Energy Foreign Policy, GIZ