



# **Scientific Program**

First KISR-TERI Joint Workshop on Research Cooperation

May 25- 27, 2015

Organized By:

The Energy and Resources Institute New Delhi, India

#### **Background**

Kuwait Institute for Scientific Research (KISR) was set up in 1967 by Japan's Arabian Oil Company Limited and was restructured by an Amiri decree in 1973. The main objectives of the institute were to carry out applied scientific research, especially that related to industry, energy, agriculture, and the national economy; to contribute to the economic and social development of the state; and to advise the government on the country's scientific research policy. In 1981, an Amiri decree was issued to reconfirm KISR's role in the development of scientific research and technology in the country. This decree entrusted the institute with undertaking research and scientific and technological consultations for both the governmental and the private sectors in Kuwait, the Arabian Gulf region and the Arab world, and encouraged collaboration with international institutes.

The Energy and Resources Institute (TERI), a dynamic organization with a global vision, was established in 1974. Research activities reflect TERI's firm commitment for efficient utilization of energy and sustainable use of natural resources would propel the process of development. TERI is a leading institution working towards sustainability and has several regional centers in India and affiliate institutes in the US, Europe and UK. It has established its presence and research bases in several countries to both provide technical assistance and facilitate exchange of knowledge.

KISR and TERI have signed the MOUs on May 8, 2014 for scientific and technical cooperation. In order to implement the provisions of the MOU, TERI is organizing the joint workshop in New Delhi during May 25-27, 2015. The main purpose of this workshop is to exchange latest technologies and prepare a roadmap for implementing joint research activities for mutual benefit of both organizations.

#### **Main Topics**

- Desert agriculture, sustainable greenhouse cooling and sustainable agricultural practices.
- Microbial biotechnology.
- Native seed coating and seed enabling technologies.
- Soil enrichment with organic matter from waste water generated biomass in arid climatic conditions.

### **Workshop Coordinators**

Dr. Faiza Al-Yamani, Executive Director Environment and Life Sciences Research Center Kuwait Institute for Scientific Research

Dr. Banwari Lal, Director Environmental and Industrial Biotechnology Division The Energy and Resources Institute

## Day 1, May 25, 2015

Venue: Conference Room, 4<sup>th</sup> Floor , TERI IHC, New Delhi

9:30 – 9:40	Welcome address by TERI: Dr Banwari Lal, Director, Environmental and Industrial Biotechnology Division
9:40 - 9:50	Opening remarks by KISR delegation : Dr. Mohammad Albaho
9:50 – 10:30	Lecture 1: DAEP research priorities during 8 <sup>th</sup> strategic plan (2015 - 2020) Speaker: Dr. Mohammad Albaho
	<b>Lecture 2:</b> Biotechnology program research priorities during 8 <sup>th</sup> strategic plan (2015-2020) Speaker: Dr. Fadila Al-Salameen
10:30 – 12:30	Lecture 3: Restoration of degraded terrestrial ecosystems in Kuwait Speaker: Dr. Mohammed Albaho (KISR)
	Lecture 4: Cooperation opportunities in desert agriculture and sustainable protected environment agriculture research Speaker: Dr Nutan Kaushik
	<b>Discussion</b> - Desert Agriculture and Sustainable Agricultural Technologies  Madaratan, Dr. Nutan Kaushila, TERI
	Moderator - Dr. Nutan Kaushik, TERI
	Discussants -
	Dr. Mohammed Albaho (KISR) Dr Shashi Bhushan Tripathi (TERI)
	Dr Swatismita Dhar( TERI)
	Dr Vijay Sandeep Jakkula( TERI)
	Dr Hemraj Chippa( TERI) Dr Harpreet Kaur( TERI)
12:30 – 1:30	Lecture 5: Soils Kuwait and reclamation strategies
	Speaker: Dr. Hani Al-Zalzaleh
	Lecture 6: Mycorrhiza-assisted reclamation Technologies

	Speaker: Dr Manab Das
	Discussants
	Discussuits
	Dr. Hani Al-Zalzaleh (KISR)
	Dr Manab Das( TERI)
	Dr Vijay Sandeep Jakkula( TERI)
	Dr Hemraj Chippa( TERI)
1:30 – 2:30	Lunch
2:30 – 4:00	Lecture 7: Research opportunities: Microbial Biotechnology/
2.30 4.00	Bioremediation Technology
	Speaker: Dr Sanjukta Subudhi
	Speaker. Di Sanjukta Subudin
	<b>Discussion</b> : Microbial Biotechnology/ Bioremediation technology
	Moderator: Dr Banwari Lal( TERI)
	Woderator . Dr Banwarr Lai(TERT)
	Discussants:
	Discussants.
	Dr. Fadila Al-Salameen (KISR)
	Dr Sanjukta Subudhi( TERI)
	Mr Veeranna Channashettar( TERI)
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	Dr Dheeban C Kannan (TERI)
	Dr K Nanthakumar( TERI)
	Dr Ranjeet Singh( TERI)
	Mr C Paul Jeyaseelan( TERI)
	Mr Mukesh Yadav( TERI)
	Mrutyunjaya Mohanty( TERI)
4:00 – 4:15	Tea break
4:15 – 5:45	Lecture 8: Soils Kuwait and reclamation strategies
	Lecture 9: Green and sustainable technologies.
	21 Swapan Ruman Sima (1210)
	<b>Discussion</b> : Soil Enrichment with Organic Matter from Waste Water
	Generated Biomass in Arid Climatic Conditions
	Speaker: Dr. Hani Al-Zalzaleh  Lecture 9: Green and sustainable technologies.  Speaker: Dr Dipankar Saharia( TERI)  Dr Swapan Kumar Sinha( TERI)  Discussion: Soil Enrichment with Organic Matter from Waste Water

	Moderator: Dr. Dipankar Saharia( TERI)
	<u>Discussants:</u>
	Dr. Hani Al-Zalzaleh (KISR)
	Dr Swapan Kumar Sinha( TERI)
	Dr Vidya S Batra( TERI)
	Dr Meeta Lavania (TERI)
	Dr. Piyush Joshi( TERI)
	Dr. Raj Kishore Kapardar( TERI)
5:45 – 6:15	Roadmap for Implementing Joint projects/ activities
6:15 – 6:30	Concluding remarks and additional topics/ Areas for cooperation

## Day 2, May 26, 2015

**Venue: Visit to TERI Gram** 

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	10:00- 11:00	Visit to TERI Lab Facilities, IHC New Delhi
	11:05	Departure for TERI Gram, IHC
	12:00 – 12:15	Tea/Coffee at TERI Retreat
	12:15 – 1:00	Lab Visit
	1:00 - 2:00	Lunch at TERI Retreat
	2:00	Departure for Hotel

Day 3, May 27, 2015

Visit to Agra - 7:00 am