Tentative Program

MARCO-FFTC Joint International Seminar on Management and Remediation Technologies of Rural Soils Contaminated by Heavy Metals and Radioactive Materials
(受重金屬與放射性物質污染之農田土壤管理與整治技術國際會議)

Taiwan Agricultural Research Institute (TARI), Council of Agriculture, Taiwan
Sep 22-26, 2014

September 22 (Monday)
All invited speakers will arrive in Taipei (Taoyuan) international airport and will be driven to Taichung city using FFTC arranged Shuttle Services.

September 23 (Tuesday)
08:30-09:00 Registration

Master of Ceremonies: Mr. Ronald MANGUBAT (FFTC)

Opening Ceremony
09:00-09:20

Opening Address

Mr. Wen-Deh CHEN
Vice Minister
Council of Agriculture, Executive Yuan, R.O.C. (Taiwan)

Dr. Yu-Tsai HUANG
Director
Food and Fertilizer Technology Center (FFTC) for the Asian and Pacific Region

Welcome Remarks

Dr. Tomohito ARAO (荒尾知人)
Principal Research Coordinator
National Institute for Agro-Environmental Sciences, Japan

Dr. Hung-Teh TSAI
Executive Secretary
Soil and Groundwater Remediation Fund Management Board, EPA, Taiwan

Dr. Junne-Jih CHEN
Director General
Taiwan Agricultural Research Institute (TARI), Council of Agriculture, Taiwan
Session 1  
**Keynote Speech**  
*Moderator: Dr. Zueng-Sang CHEN (Taiwan)*

09:30-10:20  
**Cd and As Contamination of Agricultural Products and Countermeasures in Japan**  
*Dr. Tomohito ARAO (荒尾 知人)*  
Principal Research Coordinator  
National Institute for Agro-Environmental Sciences, Japan

10:20-10:30  
**General Discussion**

10:30-10:40  
Group Photo

10:40-11:00  
Coffee/Tea Break

Session 2  
**The Relationships Between Heavy Metals in Crops and their Contents in Contaminated Soils**  
*Moderator: Prof. Dr. Dar-Yuan LEE (Taiwan)*

11:00-11:30  
**The Relationships of Cd Concentration in Arable Soil and Different Rice Varieties and the Food Safety Evaluation of Different Brown Rice Varieties in Taiwan**  
*Mr. Horng-Yu GUO (郭鴻裕)*  
Division Chief, Division of Agricultural Chemistry  
Taiwan Agricultural Research Institute (TARI), Taiwan

11:30-12:00  
**The Relationships of Heavy Metals Concentration in Arable Soil, Rice Varieties and Vegetables and the Food Safety Evaluation of Agricultural Crop Production in Thailand**  
*Dr. Orathai SUKREEYAPONGSE*  
Director, Office of Science for Land Development  
Land Development Department, Thailand

12:00-13:30  
Lunch

13:30-14:00  
**The Relationships of Cd Concentration in Arable Soils and Different Vegetables and the Food Safety Evaluation of Vegetables in Taiwan**  
*Ms. Yu-Wen LIN (林毓雯)*  
Assistant Researcher, Agricultural Information Service Lab., Division of Agricultural Chemistry, Taiwan Agricultural Research Institute (TARI), Taiwan

14:00-14:40  
**General Discussion**

Session 3  
**Soil Remediation Technologies for Heavy Metals Contaminated Soils**  
*Moderator: Dr. Tomohito ARAO (Japan)*

14:20-14:50  
**Advanced Physico-chemical Method to Restore Agricultural Soils Contaminated with Cd and Radioactive Cesium**  
*Dr. Tomoyuki MAKINO (牧野 知之)*  
Senior Reseracher, Soil Environmental Division  
National Institute for Agro-Environmental Sciences, Japan

14:50-15:20  
**Smart Biochar Technology for Management of Toxic Metals in Contaminated Agricultural Soils**  
*Prof. Yong Sik OK*  
Director, Korea Biochar Research Center  
Department of Biological Environment, Kangwon National University, Korea

15:20-15:40  
**General Discussion**

15:40-16:00  
Coffee/Tea Break
Session 4  Soil Remediation Technologies for Radioactive Materials-Contaminated Soils  
Moderator: Dr. Tomoyuki MAKINO (Japan)

16:00-16:30  Monitoring of Radio-cesium Contamination in Farmland Soil in Eastern Japan  
Dr. Kazunori KOHYAMA  
Senior Researcher, Natural Resources Inventory Center  
National Institute for Agro-Environmental Sciences, Japan

16:30-17:00  Mitigation of Radioactive Contamination from Farmland Environment and Agricultural Products  
Dr. Takuro SHINANO  
Tohoku Agricultural Research Center (TARC)  
National Agriculture and Food Research Organization (NARO), Japan

17:00-17:20  General Discussion

September 24 (Wednesday)

08:30-09:00  Registration

Session 5  New Developed Strategies and Remediation Technologies for Food Safety of Crops Grown in Contaminated Soils  
Moderator: Prof. Dr. Yong Sik OK (Korea)

09:00-09:30  Development of Low-Cd Rice by Mutation with Ion-beam  
Dr. Satoru ISHIKAWA (石川 覚)  
Senior Researcher, Soil Environmental Division  
National Institute for Agro-Environmental Sciences, Japan

09:30-10:00  Effect of Soil As Concentrations, Iron Plaque, and Rice Genotypes on As Accumulation in Rice Plants Grown in As-contaminated Paddy Soils  
Prof. Dr. Dar-Yuan LEE (李達源)  
Distinguished Professor of Soil Chemistry, Department of Agricultural Chemistry  
National Taiwan University, Taipei, Taiwan

10:00-10:20  Coffee/Tea Break

10:20-10:50  Recent Development of Techniques for the Prevention and Reduction of Arsenic Contamination of Rice in Korea  
Dr. Won-II KIM (金源益)  
Research Scientist, Chemical Safety Division, National Academy of Agricultural Science (NAAS), Rural Development Administration (RDA), Korea

10:50-11:20  The New Regulations Development for Soil Remediation of Heavy Metals Contaminated Sites and Health Risk-based Approaches in Taiwan  
Prof. Dr. Zueng-Sang CHEN (陳尊賢)  
Distinguished Professor of Pedology and Soil Environmental Quality, Department of Agricultural Chemistry, National Taiwan University, Taiwan

11:20-11:40  General Discussion

11:40-12:40  Lunch

12:40-13:40  Taiwan Soil Museum, TARI
Session 6
The Status of Rural Soils Contaminated by Heavy Metals and Management Strategies
Moderator: Dr. Satoru ISHIKAWA (Japan)

13:40-14:10  In-situ Immobilization of Selected Heavy Metals Using Industrial Byproducts and Agricultural Wastes
Prof. Dr. Che Fauziah ISHAK
Deputy Dean, Faculty of Agriculture
Department of Land, University of Putra Malaysia (UPM), Malaysia

14:10-14:40  Heavy Metal Contamination and Remediation Practices of Soils in the Philippines
Dr. Rodolfo O. ILAO
Supervising Science Research Specialist, Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development (PCAARRD), Philippines

14:40-15:10  Level of Heavy Metals in Agricultural Soil and Water After Sinabung Mountain Eruption in Medan, North Sumatera, Indonesia
Dr. Asep NUGRAHA
Agrochemical Residue Laboratory, Indonesian Agricultural Environment Research Institute Indonesia

15:10-15:30  Coffee/Tea Break

Session 7
The Status of Rural Soils Contaminated by Heavy Metals and Management Strategies
Moderator: Dr. Rodolfo O. ILAO (Philippines)

15:30-16:00  Heavy Metals in Agricultural Soil and Using Plants to Clean Up Contaminated Soils (Phytoremediation) in Vietnam
Dr. Tran Minh TIEN
Head, Soil Genesis and Classification Research Department
Soils and Fertilizers Research Institute (SFRI), Vietnam

16:00-16:30  Arsenic and Other Heavy Metal Status in Soils and Crops in Bangladesh
Dr. Baktear HOSSAIN
Principal Scientific Officer, Soils Unit, Natural Resources Management Division
Bangladesh Agricultural Research Council, Bangladesh

16:30-17:00  Outlines of Agriculture, Land-use, and Land Degradation Situation Including Heavy Metals in Waste and Ground Water and their Possible Solutions in Cambodia
Dr. Sovuthy PHEAV
Director, Department of Agricultural Land Resources Management, Ministry of Agriculture, Forestry and Fisheries, Cambodia

17:00-17:20  General Discussion

Session 8
General Discussion of Seminar and Closing Ceremony

17:20-17:50  General Discussion of Seminar
Chair: Dr. Tomohito ARAO
Dr. Zueng-Sang Chen, Prof. Dr. Yong Sik OK
Dr. Tran Minh TIEN, Dr. Orathai SUKREEYAPONGSE

17:50-18:00  Closing Ceremony