

Tentative Program

Updated: 8/20

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
- 14:00-14:20 **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 覺)
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-Il 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**