

ReSAGPAPR WG Newsletter

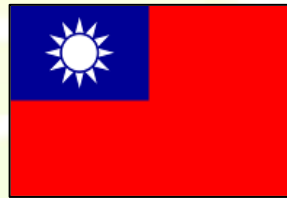
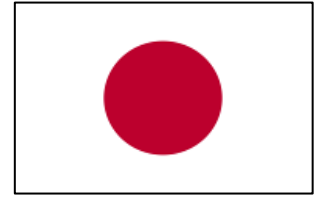
Published by the Working Group on Remediation for
Soil and Groundwater Pollution of Asian and Pacific Region

Volume 8, Issue 1
November, 2020

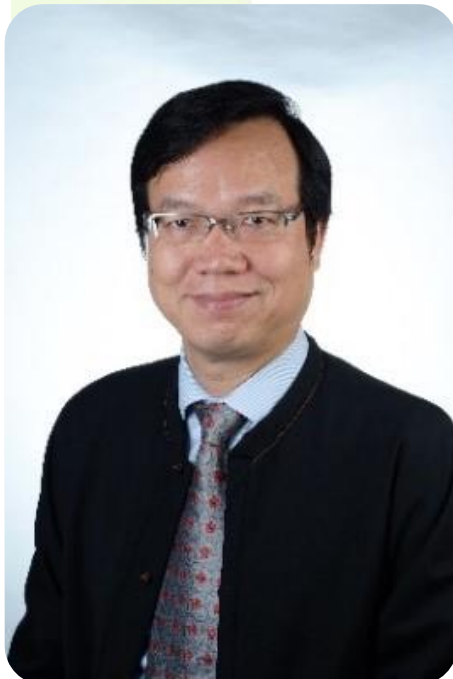
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Member Countries



Chairman of ReSAGPAPR WG



Dr. Tsair-Fuh Lin

Chairman, Working Group on the Remediation of Soil and Groundwater Pollution of Asian and Pacific Region

Distinguished Professor, Groundwater and Drinking Water Laboratory, Department of Environmental Engineering, National Cheng Kung University

Chief Executive Officer, NCKU Research and Development Foundation

Program of 2020 International Workshop on High-Resolution Site Characterization

Date: November 17-18, 2020

Venue: International Conference Hall (1st Lecture Room), Kuang-Fu Campus, National Cheng Kung University (No.1, University Road, Tainan City)

| DAY 1 | | |
|---------------------------|--|--|
| Tuesday, 17 November 2020 | | |
| Time (Taiwan) | Topic | Moderator/Speaker/Panelists |
| 09:00-09:20 | Day 1 Registration | |
| 09:20-09:35 | Opening Remarks <ul style="list-style-type: none"> ■ Executive Director Hui-Chen Chien, Soil and Groundwater Remediation Fund Management Board, Environmental Protection Administration, Taiwan ■ Director Mark Kasman, Office of International and Tribal Affairs, Environmental Protection Agency, United States | |
| 09:35-10:20 | <ul style="list-style-type: none"> ■ History/overview of sampling and remedial approaches that lead to HRSC ■ Overview of HRSC principles, concepts, tools | Moderator: Dr. Shawntine Lai Speaker: Mr. Stephen Dymont |
| 10:20-10:40 | Tea Break | |
| 10:40-11:10 | Scoping, systematic planning, sampling design for HRSC and limitations | Moderator: Dr. Shawntine Lai Speaker: Mr. Matt Jefferson |
| 11:10-12:00 | Morning Session- Conclusion | Panelists: Prof. Ting-Nien Wu, Prof. Tsair-Fuh Lin, Mr. Stephen Dymont |
| 12:00-13:10 | Lunch | |
| 13:10-14:10 | Overview of on-site screening tools and methods: Soil | Moderator: Mr. Jack Shia Speaker: Mr. Tim Frederick |
| 14:10-15:10 | Overview of on-site screening tools and methods: Groundwater | Moderator: Mr. Jack Shia Speaker: Mr. Ben Bentkowski |
| 15:10-15:30 | Tea Break | |
| 15:30-16:00 | Applying HRSC to Remedy design, implementation and optimization | Moderator: Mr. Jack Shia Speaker: Mr. Matt Jefferson |
| 16:00-16:30 | HRSC pros/cons, data interpretation, QC | Moderator: Jack Shia Speaker: Mr. Ben Bentkowski |
| 16:30-17:00 | Recap of Day One | Panelists: Prof. Jimmy C. M. Kao, Prof. Colin S. Chen, Mr. Ben Bentkowski, Mr. Tim Frederick, Mr. Matt Jefferson |

Program of 2020 International Workshop on High-Resolution Site Characterization (Continued)

Date: November 17-18, 2020

Venue: International Conference Hall (1st Lecture Room), Kuang-Fu Campus, National Cheng Kung University (No.1, University Road, Tainan City)

| DAY 2 | | |
|------------------------------------|--|--|
| Wednesday, 18 November 2020 | | |
| Time (Taiwan) | Topic | Moderator/Speaker/Panelists |
| 09:00-09:20 | Day 2 Registration | |
| 09:20-10:20 | Case Studies for total petroleum hydrocarbons | Moderator: Mr. Brian Tung Speaker: Mr. Tom Kady |
| 10:20-10:40 | Tea Break | |
| 10:40-11:50 | Case Studies for chlorinated solvents | Moderator: Mr. Brian Tung Speaker: Mr. Stephen Dymont |
| 11:50-12:20 | Morning Session- Conclusion | Panelists: Prof. Tsair-Fuh Lin, Prof. Wan-Ru Chen, Mr. Ben Bentkowski |
| 12:20-13:30 | Lunch | |
| 13:30-14:30 | Case Studies for heavy metals | Moderator: Mr. Joseph Fan Speaker: Mr. Tim Frederick |
| 14:30-15:10 | Case Studies of other new methods and tools | Moderator: Mr. Joseph Fan Speaker: Mr. Ben Bentkowski |
| 15:10-15:30 | Tea Break | |
| 15:30-15:50 | Future Development and challenges for improving HRSC/ contaminated site investigations | Moderator: Mr. Joseph Fan Speaker: Mr. Matt Jefferson |
| 15:50-16:30 | Wrap-up, Closing Remarks | Panelists: Prof. Tsair-Fuh Lin, Prof. Wen-Che Hou, Mr. Tim Frederick, Mr. Matt Jefferson |
| 16:30 | Workshop Ends | |

International Workshop: Invited Speakers



Ben Bentkowski is a Senior Hydrogeologist in the Scientific Support Section in the Superfund and Emergency Management Division of EPA Region 4 in Atlanta, GA. He has been with the Agency 13 years in the role of scientific support hydrogeology investigations and remedial actions and is also the Regional Vapor Intrusion coordinator. Ben participates in several national workgroups including the Groundwater Forum and is an instructor for the CERCAL Education Center's High-Resolution Site Characterization training course. Prior to

joining EPA, Ben provided geology, hydrogeology, project and program management skills to various Federal contracting vehicles while employed at consulting companies based in Atlanta from 1986 to 2007. Prior to that he was involved in petroleum exploration in Kansas, Oklahoma and Libya. Ben graduated from Florida Atlantic University with a BS in Geology and earned a Masters in Geology from Oklahoma State University. He is the current president of the Atlanta Geological Society and a member of the Georgia Board for Registration of Geologists.



Matthew Jefferson is an Environmental Engineer with the United States Environmental Protection Agency since 2003. Mr. Jefferson provides site characterization technical support and training. He was previously an EPA Superfund Remedial Project Manager with the San Francisco and Kansas City regional offices for 12 years. Mr. Jefferson has a Masters Environmental Engineering from the University of California, Davis and a Bachelors in Environmental Engineering from the University of Oklahoma.

International Workshop: Invited Speakers (Continued)



Stephen Dymant is a chemist with more than 20 years of experience including 4 years in a commercial analytical laboratory and 8 years in environmental consulting. He joined EPA's Office of Superfund Remediation and Technology Innovation in 2005 with a focus towards enhancing acceptance and use of emerging analytical technologies and sampling strategies. His perspective draws upon years of practical laboratory and field experience to apply EPA's Triad approach and associated best management practices at sites in Superfund, Brownfields, RCRA, UST and State programs. Mr. Dymant's efforts have resulted in the development of numerous EPA case studies, profiles, and training courses that outline successful strategies for the use and understanding of high resolution/collaborative data sets, adaptive QC programs, real time analytics, and conceptual site models. In 2015 Mr. Dymant joined EPA's Office of Research and Development as a Superfund and Technology Liaison where he provides direct project support and conducts applied research on issues of national significance. Mr. Dymant also connects regional research and technical support program needs with national ORD experts, laboratories, facilities and research funding mechanisms. He also continues to enjoy teaching courses on sampling design, x-ray fluorescence, high resolution site characterization, 3D visualization and other subjects. Mr. Dymant holds a B.S. in Environmental Science/Toxicology from the University of Massachusetts at Amherst.



Tim Frederick is the Chief of the Scientific Support Section in the Superfund and Emergency Management Division of EPA Region 4 in Atlanta, GA. He oversees a group of scientists who provide technical support in the areas of human health and ecological risk assessment, toxicology, hydrogeology, environmental modelling, environmental sampling, statistics and other scientific disciplines to EPA project managers and emergency responders on a variety of contaminated sites in the Southeastern United States. Tim has worked in the Region's Superfund and Emergency Management Division since 2005 and serves on

International Workshop: Invited Speakers (Continued)

several national workgroups. Prior to joining EPA, Tim provided risk assessment and toxicology technical support to EPA as a contractor from 1996 to 2005, and he worked as an environmental consultant in Miami, Florida from 1990 to 1996. In addition to his duties at EPA, Tim has also taught a graduate course in human health risk assessment annually at the Emory University Rollins School of Public Health since 2015. Tim earned a bachelor's degree from the University of Miami in 1989 and a Master of Public Health degree in Environmental and Occupational Health from Emory University's Rollins School of Public in 1996.



Tom Kady is a member of EPA's Environmental Response Team (ERT). As the field support arm of the Office of Superfund Remediation and Technology Innovation, the ERT provides first responders to national and international incidents as well as technical field support to Remedial Project Managers and On-Scene Coordinators at Superfund sites and oil spills across all

10 EPA regions. Tom's area of focus is advancing the state of the art in real-time, direct-sensing technologies to streamline crucial aspects of remedial investigations, remediation system designs and system performance monitoring. Tom also serves as a lead on optimization reviews for mine sites and other Superfund sites in various phases of investigation and remediation. Prior to joining ERT, Tom served for 20+ years as regional manager for several national consulting/engineering and remediation/construction firms. Tom has a B.S. in chemical engineering from The Pennsylvania State University.

Interesting Sidelights: International Workshop



Opening Remark by Executive Director Hui-Chen Chien, EPA Taiwan, and Director Mark Kasman, EPA United States

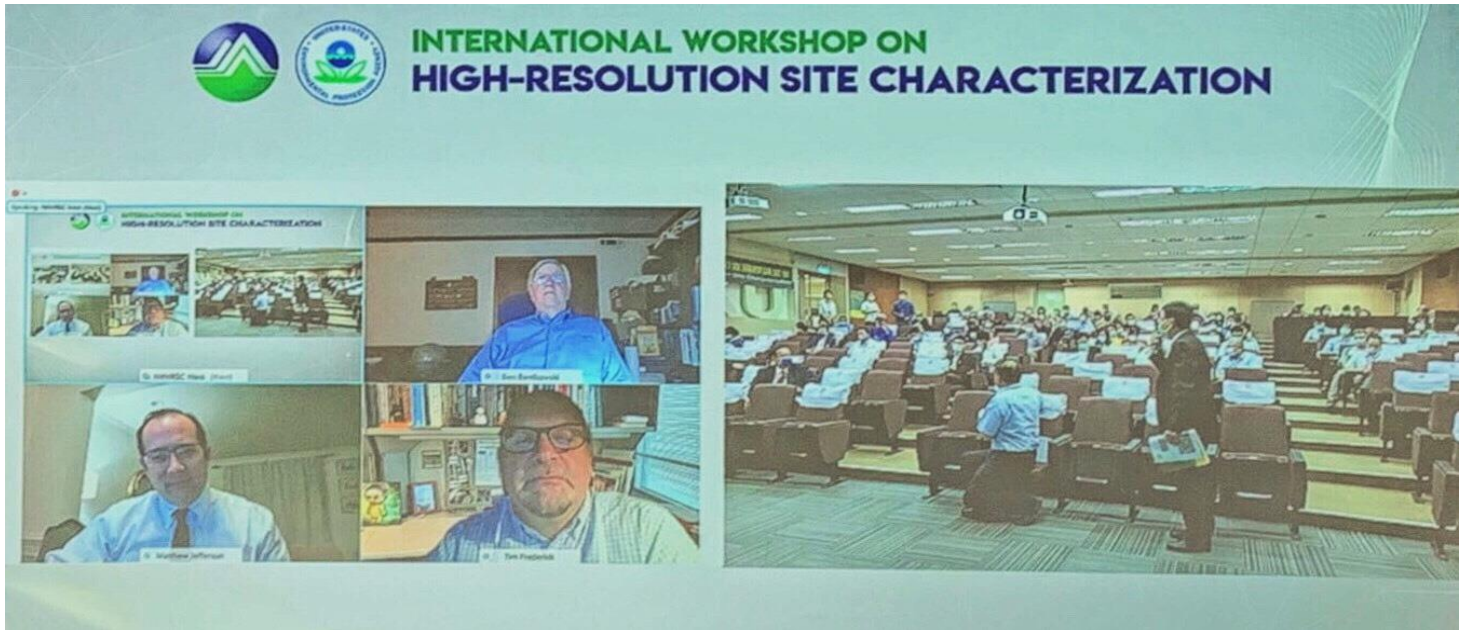


Workshop in Progress



Workshop in Progress

Interesting Sidelights: International Workshop (Continued)



Workshop in Progress



Questions and Discussion

Program of the 9th Business Meeting of ReSAGPAPR

Date: November 19 (Thursday), 2020

Venue: 9F Uni Room, Shangri-La's Far Eastern Plaza Hotel, Tainan

Prof. Dr. Tsair-Fuh Lin, Chairman of WG ReSAGPAPR

| Time (GMT) | Duration | Agenda | Moderator |
|-------------|----------|---|--------------------------|
| 04:00-04:10 | 10 min. | Registration and Social Networking | |
| 04:10-04:25 | 15 min. | Welcome and Introductions | Dr. Tsair-Fuh Lin, Chair |
| 04:25-04:35 | 10 min. | Distinguished Guest's Remark: Dr. Hui-Chen Chien, Executive Director, Soil and Groundwater Remediation Fund Management Board, Environmental Protection Administration, Executive Yuan, Republic of China (Taiwan) | |
| 04:35-04:40 | 5 min. | Group Photo | |
| 04:40-05:00 | 20 min. | Recap of 5th Term (2019-2020) Activities | Dr. Tsair-Fuh Lin, Chair |
| 05:00-05:15 | 15 min. | Election of Chair Country and Vice Chair Country for the 6th Term (2021-2022) | |
| 05:15-05:30 | 15 min. | Discussions on Next Meeting and Future Plans | |
| 05:30-05:40 | 10 min. | Promotion of Events organized by Members | |
| 05:40-05:50 | 10 min. | Other Business and Closing | |
| 05:50 | -- | End of Meeting | |

Minutes of the 9th Business Meeting of ReSAGPAPR

* This meeting was conducted via videoconferencing.

Date: Thursday, November 19, 2020.

Time: 04:00-06:00 GMT

Chairperson: Dr. Tsair-Fuh Lin

Members in attendance: Mr. Andrew Priszinski, Australia
Dr. Harendra Kharkwal, India
Ms. Mutiara Siadari, Indonesia
Mr. Kihwan Lee, Korea
Mr. Bruce Croucher, New Zealand
Dr. Tsair-Fuh Lin, Mr. I-Hsing Chen, Dr. Hao-Chun Hung, Dr. Chih Huang, Taiwan
Dr. Chayawee Wangcharoenrung, Thailand
Mrs. Nguyen Hoang Anh, Vietnam

Minutes:

1. Recap of 5th Term (2019-2020) Activities

- International Training Courses on Sustainable Soil and Groundwater Protection and Remediation
 - Date: March 17-24, 2019
 - 45 trainees, the largest number ever.
 - 13 countries, including 11 Member Countries: Australia, India, Indonesia, Korea, Malaysia, New Zealand, Philippines, Sri Lanka, Taiwan, Thailand, Vietnam, and 2 non-member countries: Cambodia, United States.
 - 8 days of training: courses, case studies, field visits, team projects on soil and groundwater protection.
- 3 Virtual Meetings
 - Date: June 27, 2019, topic discussed: suggestions for improvement of the training courses, challenges in member countries, collaborations among members, regulations for the conference call.
 - Date: May 5, 2020, topic discussed: potential topics for the 9th Steering Committee Meeting, feasibility and alternatives for travel to the 9th Steering Committee Meeting and post-meeting workshop, updates from member countries.
 - Date: September 18, 2020, topic discussed: updates on the 9th Steering Committee Meeting and the international workshop on High Resolution Site Characterization, nomination of chair country and vice chair country for the 6th term (2021-2022) of the working Group of ReSAGPAPR.
- International Workshop on High-resolution Site Characterization
 - Date: November 17-18, 2020.
 - 266 people attended the workshop in person.
 - More than 200 online participation via Facebook and Youtube live streaming.

Minutes of the 9th Business Meeting of ReSAGPAPR (Continued)

2. Election of Chair Country and Vice Chair Country for the 6th Term (2021-2022)
 - Taiwan has been elected as Chair Country and Thailand has been elected as Vice Chair Country for the 6th Term (2021-2022) of the Working Group on Remediation for Soil and Groundwater Pollution of Asian and Pacific Region
3. Discussions on Next Meeting and Future Plans
 - Next Meeting will be held virtually 3 months later (in February 2021).
 - Host country for the next meeting: Thailand.
 - Country report: New Zealand, Indonesia, 15-20 minutes each.
4. Promotion of Events organized by Members
 - Taiwan:
 - International training program for government officials and international workshop on advanced remediation technology will be organized in 2021.
 - The 9th International Water Association Asia Pacific Regional Group Conference and Exhibition will be held at Kaohsiung, Taiwan from October 17 to 21, 2021.
 - Thailand:
 - Seminar on soil and groundwater pollution to be held in August 2021. Organized by Pollution Control Department, Thailand. Sponsored by Shell.

Adjournment: 05:10 GMT



Snapshot of members in attendance

Interesting Sidelights: The 9th Business Meeting of ReSAGPAPR



Chair, Dr. Tsair-Fuh Lin



Mr. I-Hsing Chen, delegate of EPA Taiwan



Dr. Hao-Chun Hung, delegate of EPA
Taiwan



Dr. Chih Huang, delegate of Taiwan
Association of Soil and Groundwater
Environmental Protection