

# Academic Workshop on Subsurface Modeling and AI Applications

## Keynote speakers



**Dr. Heejun Suk**

Principal Researcher  
Korea Institute of  
Geoscience and Mineral Resources,  
Republic of Korea

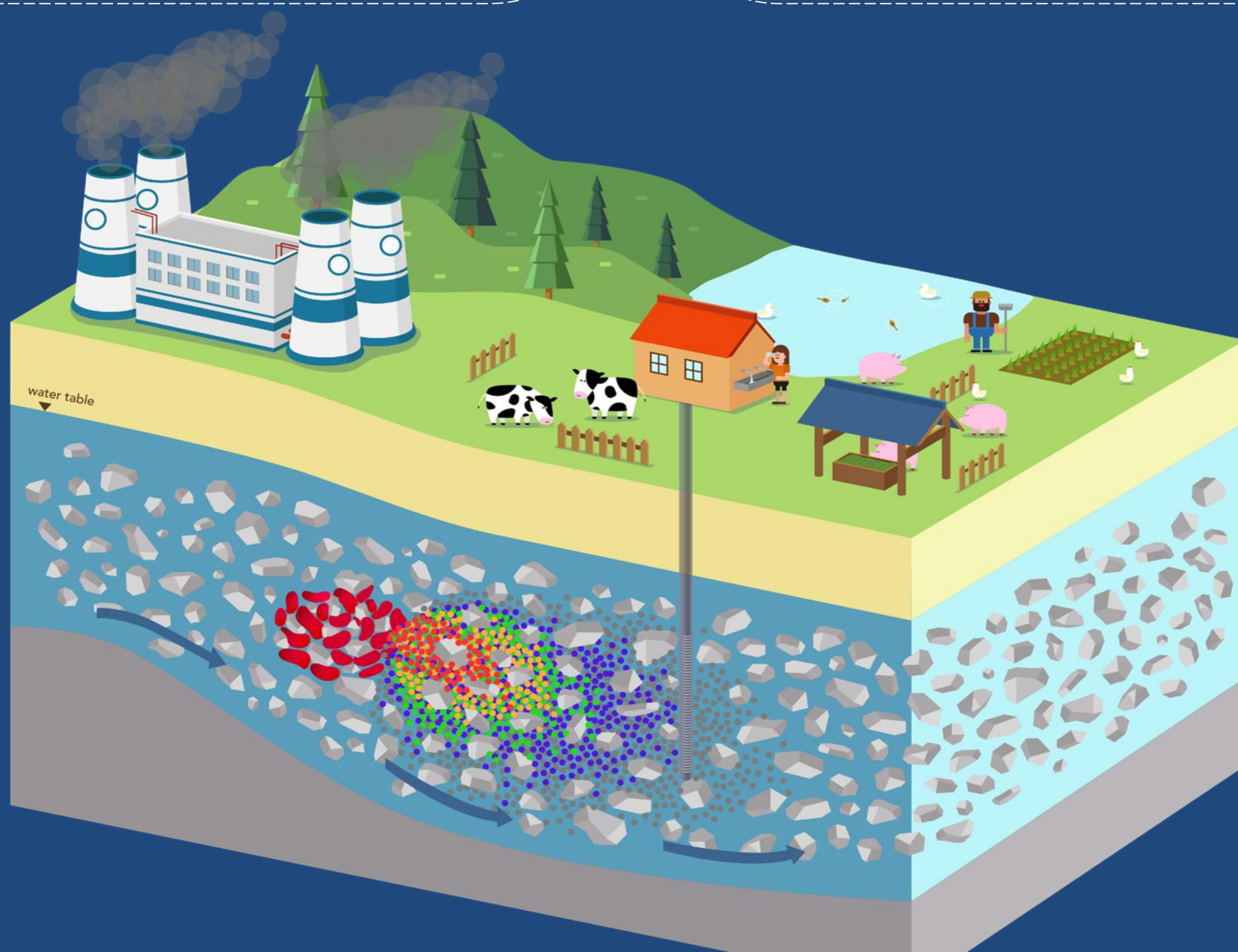
**Groundwater Management  
and Recent Issues  
in South Korea**



**Dr. Eungyu Park**

Full Professor  
Kyungpook National University,  
Republic of Korea

**Collaborative AI Agents:  
A New Decision Support  
Platform for Sustainable  
Groundwater Management**





- Date: Oct 20, 2025 (Mon.)

• Time: 09:00 - 17:00
- Venue: International Conference Hall HK-106, College of Hakka Studies, National Central University

Agenda

Time	Schedule / Topic	Speaker
08:50 - 09:10	Registration	-
09:10 - 09:20	Opening Remarks	Dr. Ming-Hsu Li Dean of the College of Earth Science National Central University
Host: Dr. Kuo-Chin Hsu, Professor, National Cheng Kung University		
09:20 - 10:00	Groundwater Management and Recent Issues in South Korea	Dr. Heejun Suk
10:00 - 10:40	Collaborative AI agents: A new decision Support Platform for Sustainable Groundwater Management	Dr. Eungyu Park
10:40 - 10:50	Coffee Break	
Host: Dr. Shao-Yiu Hsu, Professor, National Central University		
10:50 - 11:20	Flow and Transport Modeling in Fractured Media: Recent Advances and Challenges	Dr. Chuen-Fa Ni Distinguished Professor National Central University
11:20 - 11:50	Applying a Coupled Hydraulic-Mechanical-Chemical Model to Investigate the Influence of Over-Pumping on Land Subsidence and Saltwater Intrusion in a Coastal Aquifer	Dr. Shih-Jung Wang Associate Professor National Central University
11:50 - 12:50	Lunch Break (HK115 & HK116)	
Host: Dr. Tsuey-Lin Tsai, Deputy Director, National Atomic Research Institute		
13:00 - 13:30	Feasibility of Applying Machine Learning Methods to Predict Groundwater Level Changes	Dr. Sheng-Wei Wang Assistant Professor National Central University
13:30 - 14:00	Numerical Modeling of scCO <sub>2</sub> Flow and Mineralization in Saline Aquifers	Dr. Kuan-Ying Hsieh Research Assistant National Atomic Research Institute
14:00 - 14:30	Case Study on Safety Assessment of CO <sub>2</sub> Geological Storage	Mr. Wei-Chun Chien Assistant Researcher National Atomic Research Institute
14:30 - 14:50	Coffee Break	
Host: Dr. Yun-Chen Yu, National Deputy Director, National Atomic Research Institute		
14:50 - 15:20	Numerical Simulation Study on Fault Reactivation in CO <sub>2</sub> Geological Storage	Dr. Cheng-Yueh Wu Assistant Research Fellow National Cheng Kung University
15:20 - 15:50	Three-Dimensional Hydraulic Tomography Analysis of Soil and Groundwater Pollution Remediation	Dr. Bo-Tsen Wang Project Manager Geophysical Technology & Engineering Co., Ltd. Deputy
15:50 - 16:20	Applications of THMC Software in Groundwater, Carbon Capture and Storage, Geothermal Energy, and Nuclear Waste Management	Dr. Zhong-Yi Liao Postdoctoral Researcher National Central University

Organizers:



Co-organizer:

