

The Japanese Society of Irrigation, Drainage and Rural Engineering (JSIDRE),
Soil Physics Division (農業農村工学会土壌物理研究部会)
and
Japanese Society of Soil Physics (土壌物理学会)

organize

International Conference ‘Advanced Modeling of Water Flow and Contaminant Transport in Porous Media’

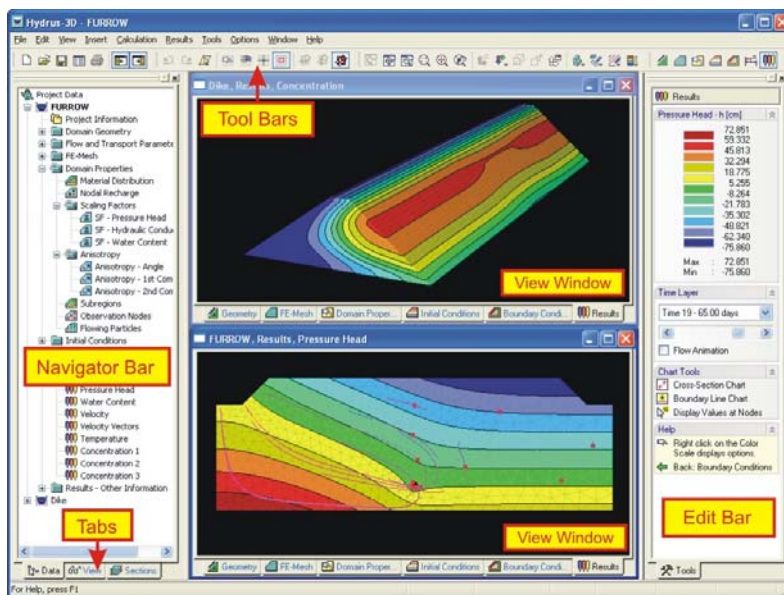
Tokyo

September 20th 2018

&

HYDRUS Short Courses in Tokyo and Mie

Standard: September 18th -19th, 2018 (Tokyo)



<http://web.tuat.ac.jp/~hydrus2018>

Email: hydrus2018-groups <at> go.tuat.ac.jp

HYDRUS Workshop in Tokyo

September 20, 2018

Advanced Modeling of Water Flow and Contaminant Transport in Porous Media

Reliable modeling of water flow and solute transport through the vadose zone is extremely important as the vadose zone recharges water resources such as groundwater and rivers, serves as a buffer and filter for contaminants, and supports agricultural activities. Numerical modeling is a key tool for analyzing complex physical, chemical, and biological processes in the vadose zone. The HYDRUS software that simulates numerically water and solute movement in soils has received increasing attention worldwide because of its flexibility and versatility. This workshop provides not only all current and future HYDRUS users but also researchers, practitioners, and students, in various disciplines who work on numerical analysis of flow and transport in porous media, opportunity to present and discuss their applications in research, management, and education. It also provides rare opportunity to discuss future modeling needs directly with HYDRUS developers.

The 6th international workshop will be held at the University of Tokyo on September, 2018. The workshop is organized by the Soil Physics Division of JSIDRE and Japanese Society of Soil Physics. Both oral and poster presentations (preferably in English) are welcome. A special issue on one of the international journals will allow presenters to publish their work as peer reviewed articles. Details will be announced later. The deadline for submitting an abstract (no more than 400 words) is August 24, 2018. When submitting, please include a title, the authors involved (underline the name of the person giving the presentation), and their affiliations. Feel free to forward this information to anyone who may be interested in the workshop. We hope to see you all in Tokyo soon!

Workshop location: Nakashima Hall (in Food Science Bldg.) at University of Tokyo, Faculty of Agriculture. For directions and more information, please visit <http://www.a.u-tokyo.ac.jp/english/campus/map-e.html>

Tentative schedule: 10:00 -16:00 Lecture/oral presentations, 16:00- Poster session and refreshment

Registration and abstract submission (maximum 300 words): Please register at <https://goo.gl/forms/WRvbdDrO6YDZnTt82> by August 24, 2018.

Registration fees: **3,000 JPY**. The registration fee for students and for those who will be taking the short course will be free. The instruction for payment will be sent to you from the organizer after registration is made.

If interested in submitting a full paper to the special issue, please mention when submitting.

All correspondence should be sent to [hydrus2018-groups <at> go.tuat.ac.jp](mailto:hydrus2018-groups@go.tuat.ac.jp)

HYDRUS Short Courses in Tokyo

September 18-19, 2018

“Modeling Water Flow and Contaminant Transport in Soils and Groundwater using the HYDRUS software package”

Objectives: The course begins with a detailed conceptual and mathematical description of water flow and solute transport processes in the vadose zone, followed by a brief overview of the use of finite element techniques for solving the governing flow and transport equations. Special attention is given to the highly nonlinear nature of the governing flow equation.

"Hands-on" computer sessions will provide participants an opportunity to become familiar with the Windows-based HYDRUS-1D and HYDRUS (2D/3D) software packages. Emphasis will be on the preparation of input data for a variety of applications, including flow and transport in a vadose zone, subsurface drip irrigation, variably-saturated flow in a transect with a stream, and flow and transport to a tile drain. Calibration will be discussed and demonstrated by means of both one- and two-dimensional inverse problems.

Main Instructor

- Dr. Jirka Simunek is a Professor of Hydrology with the Department of Environmental Sciences of the University of California. His expertise is in numerical modeling of subsurface water flow and solute transport processes and inverse procedures for estimating the hydraulic properties of unsaturated porous media. He has authored and coauthored over 300 peer-reviewed publications and over 20 book chapters. His numeric models are used by virtually all scientists, students, and practitioners for modeling water flow, chemical movement, and heat transport through variably saturated soils.
- Japanese translation will be given if necessary

Course location: Room 2-22 (Building 2), Tokyo University of Agriculture & Technology, Faculty of Agriculture, Fuchu, Tokyo, Japan (<http://www.tuat.ac.jp/en/outline/overview/access/fuchu/>)

Tentative schedule: The courses will be held 9:00 -16:00 each day.

Registration: Please register at <https://goo.gl/forms/4oeeCo3EOk85DQ1u2> by August 31, 2018.

Registration fees: **20,000JPY (5,000JPY for students)**. Registration includes: course materials, refreshments, and registration for the workshop. The instruction for payment will be sent to you from the organizer after registration is made.

Please bring your own Windows laptop to the course. There is no need to buy the software prior to the class.

Accommodation in Tokyo

We cannot offer special rates for participants of the HYDRUS short course and workshop at this point. There is a number of hotels in Tokyo from where you can commute easily to TUAT and U-Tokyo by taking public transportation. If you need help to reserve the room, please contact us.

Contact: [hydrus2018-groups <at> go.tuat.ac.jp](mailto:hydrus2018-groups@go.tuat.ac.jp)

Hirota Saito
Tokyo University of Agriculture & Technology
Department of Ecoregion Science
Tel/Fax +81-42-367-5584
E-mail: [hiros at cc.tuat.ac.jp](mailto:hiros@cc.tuat.ac.jp)

Nobuo Toride
Mie University
Graduate School of Bioresources
Tel +81-59-231-9583
Email: [notride at bio.mie-u.ac.jp](mailto:notride@bio.mie-u.ac.jp)

Advanced HYDRUS Short Course in Mie

TBD, 2018

Overview: The course covers advanced topics, such as HP1 (coupled HYDRUS-1D with PHREEQC), UnsatChem, etc., which are usually not taught in regular short courses. Details will be announced later. We expect that all participants of the advanced course are familiar with HYDRUS or other numerical simulation programs.

Instructors

- Dr. Jirka Simunek
- Japanese translation will be given if necessary

Workshop location: Mie University.

For directions and more information, please visit <http://www.mie-u.ac.jp/en/about/map/>

Tentative schedule: 9:00 - 17:00

Registration: Please send <Name/Affiliation/Email> to the organizer via e-mail by August 31, 2018.

Registration fees: TBD

Please bring your own Windows laptop to the course. There is no need to buy the software prior to the class.