



**AHYDTECH GEOMORPHIC**  
ADVANCED HYDROLOGY HYDRAULIC GEOMORPHOLOGY

**Workshop / Training**  
**SMS & 2D Hydraulic (SRH-2D) Modeling**  
**January 26, 2017**

at  
**Rideau Valley Conservation Authority**  
3889 Rideau Valley Drive, Manotick, Ontario K4M 1A5

Designed for Water Resources Specialists, Hydrologists, and Water Resources Engineers with experience in hydraulic modeling

Learn SMS and SRH-2D Hydraulic Modeling. You can develop and compile 2D Hydraulic Model faster than 1D HEC-RAS model.

2D Hydraulic Modeling is NO longer COMPLEX and TIME CONSUMING

**Take ONE-DAY training and develop your own 2D model NEXT DAY**

**Instructor**

The one-day course will be instructed by Dr. Bahar SM, who is expert in hydraulic modeling with over 28 years of experience in fluvial geomorphology, water resources and coastal engineering. He developed 2D hydrodynamic and 2D sediment transport codes during his Ph. D. and Post-Doctoral research. Bahar taught hydrology and urban hydraulics. He completed many projects using SMS and its 2D modeling software.

FEE: \$375 + HST

For any questions contact:

Phone:

Email:

Dr. Bahar SM

519-400-0264

bahar@ahydtech.ca

Participants will get one month SMS license (education/evaluation). Please register early as space is limited. You will be confirmed upon receipt of payment.

**Participants are required to bring their laptop computer to the workshop**

## COURSE OUTLINE

- 8.30am: Welcome & Introduction
- 9.00am: Fundamentals of 2D Hydraulic Modeling
- 9.30am: Introduction of SMS Features: Map, Mesh, Scatter, GIS, Raster, 2D-3D Animation
- 10.15am: Coffee Break
- 10.30am: Conceptual Model Development: Structured / Unstructured Meshes, Material Properties (Manning's  $n$ ), Boundary Conditions of SRH Model
- 12.00pm: Lunch Break
- 12.30pm: Tutorial # 1: Conceptual Model Map, Mesh, Material Properties (Manning's  $n$ ), Boundary Conditions of SRH Model
- 1.30pm: 1D Hydraulic Structure Bridge/Culvert Modeling
- 2.00pm: Coffee Break
- 2.15pm: Tutorial # 2: 1D Bridge/Culvert Modeling
- 3.00pm: 2D Bridge/Culvert Modeling
- 3.30pm: Tutorial # 3: 2D Bridge/Culvert Modeling
- 4.00pm: Develop your own 2D model

More detailed information about SMS can be obtained from the websites below:

<http://chl.erdc.usace.army.mil/sms>

<http://www.aquaveo.com/software/sms-surface-water-modeling-system-introduction>

<http://www.xmswiki.com/wiki/SMS:SMS>

<http://xmswiki.com/wiki/SMS:SRH-2D>



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## REGISTRATION FORM

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**Please email or fax completed form to contact noted below**

Mr. / Mrs. / Ms. First Name: \_\_\_\_\_ Last Name: \_\_\_\_\_

Organization: \_\_\_\_\_

Title / Role: \_\_\_\_\_

Phone: \_\_\_\_\_ Cell: \_\_\_\_\_

Email: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City, Province, Postal Code: \_\_\_\_\_

**Course Fee: \$375 + \$48.75 (HST) = \$423.75**

Payment Method: ☐ Visa Card ☐ Master Card ☐ Cheque, please make payable to  
AHYDTECH Geomorphoc Ltd.

MasterCard / Visa: Card Number: \_ \_ \_ \_ \_

Expire Date: \_\_\_\_\_

Name on Card: \_\_\_\_\_

**To register, please return this form to:**

Dr. Bahar SM  
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22 Zecca Drive, Guelph, ON, N1L 1T1  
Phone: 519-400-0264, Fax: 519-341-7109, Email: [bahar@ahydtech.ca](mailto:bahar@ahydtech.ca)