



Brought to you by CPANS A&WMA

CALPUFF/CALMET General and Advanced Modeling Courses **June 28th – July 2nd, 2010**

Southern Alberta Institute of Technology (SAIT)
1,301 – 16th Ave NW, Calgary, Alberta

Instructed by Joseph Scire and Francoise Robe of the Atmospheric Study Group (ASG) at TRC, Inc.

PRELIMINARY COURSE OUTLINE

The course will be broken into two main parts, including:

- **Part 1: General CALPUFF Modelling Course (June 28th – June 30th)**
- **Part 2: Advanced CALPUFF Modelling Course (July 1st – July 2nd).**

Registrants can participate in either one or both of the courses.

Concepts that will be covered in **Part 1: CALPUFF General Modelling Course** may include the following:

- Introduction to the CALPUFF Modeling System
- Major features of the CALPUFF Modeling System
 - Geophysical and Meteorological Pre-processors
 - Meteorological Modeling (including MM5)
 - Dispersion Modeling
 - Post-processing and Display
 - Advantages of the Puff Approach
- CALMET/CALPUFF Model Inputs
- CALVIEW and Model Outputs
- Hands-on Computer Exercises
 - Installation of Software
 - Overview of Graphical User Interface (GUI) – CALPRO Plus (v7.7)
 - Test Case Problems

Concepts that will be covered in the **Part 2: Advanced Modelling Course** may include the following:

- **Advanced CALMET Topics**
 - Recommended model configuration using advanced options
 - Seasonal GEO.DAT files, effects of snow cover and North America and worldwide snow datasets
 - Meteorological evaluation techniques
 - Use of barriers
 - Forecast applications – coupling CALMET to prognostic models
- **Advanced CALPUFF Topics**
 - Boundary conditions
 - Flares and fires
 - Considerations on selection of source types (points, areas, lines and volumes)
 - Light wind speed dispersion
 - Sub-hourly time steps (emissions, meteorology and concentrations)
 - Fogging and icing (cooling tower plumes) – visible plume length calculations
 - Source contributions (CALANALYSIS)
- **New GUI Features and Capabilities**
 - Time series plots, pollution rose and scatter plots, Google Earth interface, back trajectory module, key variable extractor
- **Hands-on Computer Exercises (Advanced Exercises)**

The most recent Versions of CALPUFF General and Advanced sessions will include both technical instruction (through graphical presentation of theory and associated discussions) and hands-on computer exercises (~50% of the time) in which course participants will work with the various components of the CALPUFF modelling system.

This is a tentative course outline that has been developed by CPANS for the sole benefit of potential course registrants (based on topics covered at the last CALPUFF course offered through CPANS by TRC). Please be advised that actual course topics may vary slightly from those listed above.



COURSE REGISTRATION FORM

CALPUFF/CALMET General and Advanced Modelling Courses

June 28nd – 30th, 2010

Southern Alberta Institute of Technology (SAIT)
1,301 – 16th Ave NW, Calgary, Alberta

SEND COMPLETED FORMS WITH PAYMENT TO:

CPANS – CALPUFF 2010 Course

Attention: Piotr Staniaszek Ph.D. at Millennium EMS Solutions Ltd.
Suite 217, Plaza 14, 811 – 14th Street NW, Calgary, AB T2N 2A4

Phone: 403-592-6180 ext 228, fax: 403-283-2647, fax: 403-283-2647, email pstaniaszek@mems.ca

Last Name _____ First Name _____ MI _____

Position Title _____ A&WMA Member ID# * _____

* (Required for discounted rates below)

Affiliation/Company _____

Address _____

City _____ Province _____ Postal Code _____

Telephone () _____ Fax () _____

Email _____

Course Selection and Registration Fees:

CPANS is offering three options for course participation. Please select one of the following options:

- Option 1: Both CALPUFF General and CALPUFF Advanced Courses**
Dates: June 28th 7:30am – July 2nd 5:30pm (Entire 5 days)
Cost (Please select one): A&WMA Member \$1300 Non-Member \$1,650
- Option 2: CALPUFF General 3 Day Course Only**
Dates: June 28th 7:30am – June 30th 5:00pm (3 days)
Cost (Please select one): A&WMA Member \$1,000 Non-Member \$1,200
- Option 3: CALPUFF Advanced 2 Day Course Only**
Dates: July 1st 7:30am – July 2nd 5:30pm (2 days)
Cost (Please select one): A&WMA Member \$600 Non-Member \$ 800

For Non-Members Only:

- Yes! I have paid a “Non-Member” registration fee and would like to receive a one-year introductory membership to the Air & Waste Management Association at no additional charge.

Deadline for all Course Registrations is Friday, June 18th, 2010.

All prices are in Canadian Dollars. Confirmation of registration and payment receipts will be sent to participants via email. Registration includes a copy of course materials and dispersion modeling user manuals.

Please note that lunch is not provided.

Payment Options:

Make checks payable to the “Canadian Prairie and Northern Section”.

To pay by credit card, provide the following information. Please print clearly.

Credit Card Payment Method: MasterCard Visa (CPANS does not accept American Express)

Card Number _____ Expiration Date _____

Cardholder’s Signature _____ Name on Card _____

Disclaimer: CPANS will attempt to promptly notify all registrants in the event of course cancellation. If courses are cancelled, CPANS is not liable for any expenses incurred by the registrant other than the refund of the registration fee(s) paid.