

Dear Colleague,

we are pleased to inform you that the Call-for-Papers programme of the **European Geosciences Union (EGU) General Assembly 2011 (Wien, Austria, 03 - 08 April 2011)** is now open.

On behalf of the Programme Committee, we are pleased to invite you to submit abstracts to the session:

**"The molecular structure of soil humic substances and its relationship to biological activity"**

(Division Soil System Sciences, Session **SSS4.4**).

**The deadline for the submission of abstracts is January 10, 2011**

In case you would like to apply for financial support (see [http://meetings.copernicus.org/egu2011/support\\_and\\_distinction/financial\\_support.html](http://meetings.copernicus.org/egu2011/support_and_distinction/financial_support.html)), please submit applications no later than **December 3, 2010**.

The description of the Session can be found at <http://meetingorganizer.copernicus.org/EGU2011/sessionprogramme/SSS>, while information about EGU itself can be found at <http://www.egu.eu>.

#### **Abstract Registration**

During the abstract registration, an author can give his/her preference on whether a contribution should be a poster (choice "Poster") an oral presentation (choice "No preference", since there is no guarantee for oral presentations). Please note that an author is not allowed to submit more than one regular abstract and one solicited abstract with the choice "No preference". Of course, poster presentations are always welcome.

#### **Financial Support**

A limited amount of the overall budget of the conference is reserved to assist, as a priority, the younger and more recently established scientists to attend the assembly; moreover, conveners may also support some of the solicited speaker in their session. Authors are kindly asked to submit their abstract via the link "Abstract Submission with Support Application", located below each session title.

Please remark that the deadline for the receipt of abstracts with support applications is the 3<sup>rd</sup> of December 2010!

Please do not hesitate to contact us or the EGU Organizing Committee ([egu2011@copernicus.org](mailto:egu2011@copernicus.org)) if you have any questions.

We hope that we can stimulate your interest in **Session SSS4.4**, and we are looking forward to receive your contribution!

Kind regards,

*Alessandro Piccolo (Convener); Luciano Canellas, Riccardo Spaccini (Co-Conveners)*

**European Geosciences Union (EGU)  
General Assembly 2011**

Vienna, Austria, 03 – 08 April 2011

<http://meetings.copernicus.org/egu2011/home.html>

**SSS – Soil System Sciences  
Session SSS4.4**

**The molecular structure of soil humic substances  
and its relationship to biological activity**

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Humic substances are ubiquitous in the environment but they play a major role in the soil compartment. They control the biogeochemical cycles of carbon, nitrogen and plant nutrients as well as the microbiological activities in soil. Their chemical nature is assimilated to a supramolecular structure of a multitude of heterogeneous molecules which self-associate into labile conformations. Since, humic substances are also recognized to play a direct influence onto plant biochemical systems, with mechanisms which are still obscure, a formidable task resides in understanding the relationship between the molecular and conformational structure of humic substances and their activity towards plant systems.

This session has the objective to gather the most advanced chemical, biochemical and bioinformatic approaches directed to elucidate mechanisms of interactions between humic molecules and plant growth and construct viable structure/activity relationships. A better knowledge of these relationships may represent a step forward to ensure food security for an ever-growing human population, while respecting the sustainability of crop production.