



Commission 1.1 Soil Morphology & Micromorphology Newsletter
December 2008, vol. 4, p.1-13

Letter from the Chair

Dear Members,

Welcome to our 4th bi-annual Newsletter! Included in this newsletter:

- **A report on the 13th International Conference on Soil Micromorphology in Chengdu China, Sept. 11-16th**
- **The first ever Young Micromorphology Publication Awards were presented in Chengdu. Please start to encourage young scientists to apply for the 2010 Award.**
- **Nominations for the Kubiëna Award are DUE to me January 31, 2009.**
- **The International Conference on Soil Geography in Mexico – which includes a Micromorphology Workshop in November 2009**
- **The 19th World Congress in Brisbane, Australia, 2010 – in which we will present the Kubiëna and Young Micromorphology Publication Awards; and our Commission has 2 sponsored symposia although there are numerous symposia in which soil micromorphology is a key component.**
- **The 3rd Intensive Training Course on Soil Micromorphology will take place in Barcelona Spain, June 8-19, 2009 by Drs. Rosa Poch, Àngels Canals, and Georges Stoops.**
- **We desperately need a New Volunteer to keep our Commission 1.1 Website up to date. Please consider!!!**
- **Congratulations to our new elected officers for 2010-2014**
- **New Publications**

More information on this and other activities are enclosed. Please send any new information to me, Brenda J. Buck (buckb@unlv.nevada.edu) or Vice Chair, Rosa Poch (rosa.poch@macs.udl.es).

Sincerely
Brenda J. Buck
Chair, Commission 1.1
Dept. Geoscience, University of Nevada Las Vegas
4505 Maryland Parkway
Las Vegas NV 89154
<http://www.agry.purdue.edu/pedology/iuss/>



13th International Conference on Soil Micromorphology, Chengdu China, Sept. 11-16, 2008



Remembrances for Geoff Humphreys and Peter Bullock, 13th ICSM Chengdu China
(Left to right: Rosa Poch, Daniella Sauer).



**Report on 13th International Conference on Soil Micromorphology,
Chengdu, China, Sept. 11-16.**

The 13th International Conference on Soil Micromorphology, was held in Chengdu, China, Sept. 11-16. This was the 1st such meeting ever held in Asia. This meeting, held every 4 years, is one of the major activities of IUSS Commission 1.1, Soil Micromorphology and Morphology. This year, there were participants from 26 countries, with 181 published abstracts. This was an important and timely location for this meeting as the Chinese Soil Science Society now boasts a membership of over 100,000. Support for this meeting was obtained by the National Natural Science Foundation of China, the Chinese Academy of Sciences, the Institute of Mountain Hazards & Environment, and the Shaanxi Normal University.

Excellent lectures and posters were presented on all aspects of soil micromorphology including climate change, applied applications for agro-environment sustainability, soil, water and air pollution, paleopedology, interactions among soil biota and minerals, loess, archaeology, extreme environments, soil genesis and classification, and emerging technologies in ultra-micro techniques. The opening ceremony was followed by 14 keynote lectures and 2 additional days of 2 concurrent oral sessions and posters. Remembrances were given for two extraordinary scientists who have died recently, Geoff Humphreys (given by Rosa Poch) and Peter Bullock (given by Georges Stoops). Daniela Sauer arranged for symbolic candles to be lighted during the following symposia in their honor. The mid-conference fieldtrip examined the famous 'ancient paddy soils' and 'purple soils' near Chengdu as well as giving participants the rare opportunity to view endangered pandas at a nearby research station. Post-conference tours explored such sights as the Three Gorges Dam, the Xi'an Terra Cotta Warriors, the Great Wall, and many other exciting cultural and scientific stops. The 14th International Conference on Soil Micromorphology will be held in Lleida Spain, 2012, and is being organized by Rosa Poch.

A Note on Publication of Papers from the 13th ICSM:

Dear Colleagues,

This is just a note to remind all of you that our selected conference papers are going to be published in the Journal of Mountain Science. (<http://jms.imde.ac.cn/>)

Please submit your MS before Jan. 15, 2009. We will notify the acceptance before Mar. 15, 2009. Anyone who submitted MS before Sept. 11, 2008 is asked to resubmit it according to the Guide to Authors of the Journal.

We have noted page limitation of 4-6 pages, but not strictly!

Best wishes,
Xiubin He
xiubinh@imde.ac.cn

2008 Young Micromorphology Publication Awards

Rosa Poch chaired the Young Micromorphologist Publication Awards Committee 2008. She announced the winners at the 13th ICSM in Chengdu China, Sept. 11-16th. Rosa explained that the committee included H. Mücher, R. Poch, and L. Wilding because the other members excluded themselves because of conflict of interest. This is the first time for the award, and this award will be offered every two years, both at ICSM and World Congresses. She informed the members about a change in the applicant age's requirements for next editions: the awardees must be 35 years or less at the moment of receiving the award, instead of at the moment of the publication. The 2008 Awardees are:

Adrienne L. Ryan, for her paper: "Do Sand Dunes of the Lower Lachlan floodplain Contain the Same Dust that Produced Parna?" Australian Journal of Soil Research, 2006, 44:769-781; and

Amy L. Brock for her paper "New Formation Process for Calcic Pendants from Pahrnagat Valley, Navada, USA, and Implication for Dating Quaternary Landforms" Quaternary Research, 2005, 63:359-367.



Left to Right: Rosa Poch, Amy Brock, Adrienne Ryan, Brenda Buck

Kubiëna Medal 2010
Call for nominations due January 31, 2009.

The Kubiëna Medal was introduced by Subcommittee B - Soil Micromorphology of the IUSS to commemorate the memory of Walter L Kubiëna for his distinguished contribution to soil micromorphology. It is the only medal awarded by the IUSS and is given for outstanding and sustained contribution in the discipline of soil micromorphology and to date there have been eight awards: H.J Altemüller, E. Yarılova, R. Brewer, G. Stoops, E.A FitzPatrick, L. Wilding, A. Jongerius, and Herman Múcher. It is made every four years and currently is presented every four years at the World Congress of Soil Science.

The selection committee for the 2010 Kubiëna Medal award is composed of G. Stoops, E.A. FitzPatrick, L. Wilding, and Herman Múcher (Previous award holders), & Current and 1-term-past Chairs and Vice Chairs of Commission 1.1 (For this term it is: Brenda J. Buck (USA) (Current Chair), Rosa Poch (Spain) (Current Vice Chair), and Alexander Tsaskin (Past Vice Chair) Members of the committee are not eligible to make nominations or second nominations.

The Committee now makes a new call for proposals from any member of the IUSS for the next award to be presented at the next International World Congress of Soil Science of the IUSS, to take place in Brisbane (Australia), 2010. All areas of micromorphological endeavor including research, teaching and application of results to environmental, agricultural, archaeological and industrial problems are considered relevant.

Nominations with supporting information (see below) should be sent to Brenda Buck, by January 31th, 2009 at the following e-mail address:
buckb@unlv.nevada.edu

Guidelines

1. Statement of key achievements and career highlights of the nominee (1 page)
2. Curriculum vitae detailing career history and publication record of the nominee
3. Name of proposer and seconder for the nominee
4. Any other relevant information in support of the nominee
5. Full address and contact details for the nominee

Send to:

Dr. Brenda J. Buck
Department of Geoscience
University of Nevada Las Vegas
4505 Maryland Parkway
Las Vegas NV 89154-4010
buckb@unlv.nevada.edu

International Conference on Soil Geography: New Horizons

The International Conference, Soil Geography: New Horizons will be held in Huatulco Santa Cruz, Oaxaca, Mexico, 16-19 November, 2009. This meeting will also host a workshop on soil micromorphology using several microscopes and thin sections (see information below).

Background

Soil Geography is a branch of Soil Science that deals with the areal distribution of soils. It should be recognized that the laws regulating the distribution of soils appear to be more complex than we imagined. In most landscapes the spatial pattern of soils cannot be explained just by spatial application of actual soil-forming factors. The development of soil geomorphology and paleopedology showed that to a great extent, soil distribution in space depends on ancient processes of erosion, sedimentation, and soil formation, which only partially may be reconstructive. The development of pedometrics brought in to the attention of natural and anthropogenic variability of soil properties. The understanding of these new data needs an improvement in paradigm in the soil geography. That is why we are calling for contribution to all the specialists in soil geography and related areas with an aim to integrate actual knowledge to the development of soil geography. For more information see the following website:

<http://www.soilgeography09.fciencias.unam.mx/>

In association with the International Conference on Soil Geography: New Horizons, a workshop on Soil Micromorphology will be held:

Soil Micromorphology Workshop

“Micromorphology for paleopedological and geoarchaeological research”

November 25-29, Institute of Geology, UNAM, Mexico City, Mexico.

Joint event of:

- IUSS Commission 1.1 - Soil morphology and micromorphology
- IUSS Commission 1.6 - Paleopedology
- International Archaeological Soil Micromorphology Working Group

Organised by:

- Institute of Geology, National University of Mexico (UNAM)
- Sociedad Mexicana de la Ciencia del Suelo

Linked to the International Conference : Soil Geography: New Horizons. Huatulco Santa Cruz, Oaxaca, Mexico, <http://www.soilgeography09.fciencias.unam.mx/>

Local organising committee:

Sergey Sedov

Carmen Gutiérrez

Alexander Borejsza

Elizabeth Solleiro

Jaime Díaz

Committee e-mail: micropaleomex09@gmail.com

Phone: +5255 56224267 (Sergey Sedov)

Fax: +5255 56224317 (Sergey Sedov, Elizabeth Solleiro)

Soil Micromorphology Workshop (cont.)

Topics: Micromorphological diagnostics of buried paleosols and pedosediments, relict features in contemporary surface soils, and soil and sedimentary materials from archaeological contexts. Paleopedological and soil-archaeological research in alluvial and volcanic geosystems will be especially emphasized.

Scope: the meeting will follow the tradition of the workshops of the International Archaeological Soil Micromorphology Working Group: major time and importance will be given to informal exchange of ideas and experiences during the microscopy sessions. In addition, we will arrange an oral session with a few invited talks and a poster session, as well as a short visit to the thin sectioning lab. The Institute of Geology has all necessary infrastructure for these activities: a microscopy laboratory with 10 polarizing microscopes, with some of them equipped with digital cameras and connected to computers for quickly documenting interesting images.

There will be an excursion that will be focused on alluvial and tephra soil-sedimentary sequences, adjacent to the world-famous pre-hispanic archaeological sites of Teotihuacan (Classic period, 2-7 century AD) and Cacaxtla-Xochitecatl (Epiclassic Period, 7-9 century AD). All profiles are well documented by micromorphology.

The conference will begin the day after the end of the post-conference excursion of the Soil Geography conference, so that it will be possible to attend both events.

Tentative schedule:

25.11.2009

Morning: registration, microscopy session

Afternoon: oral presentations

26.11.2009

Morning: microscopy session

Afternoon: poster presentations, microscopy session

27.11.2009

Excursion to the Tlaxcala state: paleosols in tephrous and alluvial sequences; visit to the Epiclassic archaeological site Cacaxtla-Xochitecatl. Overnight stay in Tlaxcala

28.11.2009

Excursion to Teotihuacan valley: soil scapes of the greatest pre-hispanic urban civilization; visit to the Sun and Moon pyramids. Return to the Mexico City.

The participation fee is 50 €, for students 25 €. (to be paid cash at the workshop)

Excursion fee will be approximately 150 € (transportation, hotel and meals included).

Further information about abstract preparation and submission, arrival, accommodation and excursions will be published in the 2nd announcement, which will be sent out in the February 2009

Soil Micromorphology Workshop (cont.)

Please fill the following registration form and return it to:
Dr. Sergey Sedov, Instituto de Geología, UNAM. Circuito de la Investigación Científica,
Ciudad Universitaria, C.P. 04510, Mexico City.
E-mail: micropaleomex09@gmail.com,
Fax: +52-56-22-43-17.

I intend to participate in the workshop “Micromorphology for paleopedological and
geoarchaeological research” November 25-29, Institute of Geology, UNAM, Mexico City,
Mexico.

Name:.....

Institution:.....

Postal address:.....

.....

Phone:..... Fax:.....

E-mail:

I intend to submit a paper entitled:

oral _____

poster _____

I intend to participate in the tour Tlaxcala-Teotihuacan, November 27 and 28, 2009



Mexico City, Mexico

Symposia for 19th World Congress of Soil Science, Brisbane, 2010

There will be two Commission 1.1 symposia:

(1) *Changes in Soil Morphology in Response to Global Climate Change,*

Co-Convenor – Irina Kovda (Russia) and Co-Convenor Inakwu Odeh (Australia)

Soils are expected to change under a warmer Earth but the types of modification and the rate of change are difficult to predict since it is not only temperature but also the amount and distribution of rainfall. This symposium will explore what soil parameters (i.e. organic matter content, salinity, erosion, mineral alteration, crusting) are likely to change at local and regional scales. Soil morphology and micromorphology can be used to measure these changes. By studying a suite of soil conditions from natural, little disturbed sites to sites of recent recovery we are able to glean a picture of what is likely to happen. This symposium will provide a basis for updating earlier viewpoints as expressed in books such as Scharpenseel et al (1990) and Bouwman (1990), which will be 20 years old at the time of the congress.

(2) *Soil Morphology and Micromorphology to Predict and Manage Environmental Hazards,*

Co-Convenor – Brenda Buck (USA) and Co-Convenor Des McGarry (Australia)

Many environmental and geologic hazards (landslides, earthquakes, floods, surface heave/collapse, pollution/contamination of water resources) can be identified and mitigated through the use of soil morphology and/or micromorphology. This symposium will explore the soil morphologic indicators that can be used to identify soil processes that either cause or exacerbate environmental hazards.



Brisbane, Australia

2nd announcement, December 2008

Intensive Training Course on Soil Micromorphology (3rd Edition)

Barcelona, 8-19 June 2009

Universitat de Lleida

Universitat de Barcelona

Universiteit Gent

Venue:

Dpt. Cristal·lografia, Mineralogia i Dipòsits Minerals, Facultat de Geologia
Martí i Franquès s/n , 08028 Barcelona, Catalonia (Spain)
Fax : +34934021340; Phone: + 34934021345
<http://www.ub.edu/geologia/english/facultat/map.htm>

Organizing committee

Prof. Dr. Rosa M. Poch UdL (co-director) rosa.poch@macs.udl.cat
Prof. Dr. Àngels Canals UB (co-director) angelscanals@ub.edu
Prof. Dr. Georges Stoops UG

Duration

6 credits (60 lecture-hours)

Lecturers (provisional)

Àngels Canals (UB)	Rosa M Poch (UdL)
E.A. FitzPatrick (U Aberdeen)	Jaume Porta (UdL)
Juan Herrero (CSIC)	Rafael Rodríguez (UdL)
Manuel Labrador (UB)	Albert Solé-Benet (CSIC)
Richard MacPhail (I. of Archaeology - UCL)	Georges Stoops (UG)
Vera Marcelino (UG)	Esperança Tauler (UB)

Themes

- Principles of mineralogy and petrography, optical mineralogy
- Submicroscopical and special techniques
- Making thin sections
- Guidelines for the description of thin sections of soils and regoliths
- Micromorphology of soil materials and identification of soil formation processes: carbonate-, gypsum-, and salt affected soils, volcanic soils, clay accumulation, hydromorphic soils, tropical and highly weathered soils, glacial and periglacial processes.
- Micromorphometry and image processing.
- Applications of micromorphology:
 - Soil genesis and classification
 - Agronomy: sealing and crusting, structure and porosity
 - Archaeology
 - Geomorphology and sedimentology
 - Mineral weathering
- Optional weekend excursion: Mediterranean soilscapes, soil genesis, sampling techniques.

3rd Intensive Soil Micromorphology Training Course (cont.)

Registration and Fees

Tuition fees, including tuition material are 550 €. On-line registration will be available during the second semester of the term 2008-09 through the web of the UB (University of Barcelona). An official diploma of extension course of the UB and UdL will be delivered to the participants after a positive evaluation.

Accommodation

Several accommodation facilities at reduced rates are available in the campus and surrounding areas.



Barcelona, Spain

Call for New Volunteer: Commission 1.1 Website

The Commission 1.1 website was established in 2002 when Brenda Buck was elected 2nd Vice Chair. After she was elected chair in 2006, Phil Owens and Brad Lee (Purdue University, Indiana USA) volunteered to take over maintaining the Commission 1.1 Website in 2006.

We need a volunteer to manage the website in 2010 at the end of the World Congress when Phil and Brad's service commitment expires.

If you care about soil micromorphology, Please consider doing this activity!!!



Thin Section of salt-cemented soil in Atacama Desert, from Mike Howell

New Elected IUSS Officers

Congratulations to our newly elected officers!

Election Results for IUSS officers (2010-2014):

Commission 1.1 Soil Morphology & Micromorphology:

Rosa M. Poch (Spain) – Chair;

Martine Gerard (France) – Vice Chair;

Division I Soils in Space and Time: Karl Stahr, (Germany) – Chair.

New Publications

Methods of Soil Analysis. Part 5. Mineralogical Methods, 2008, by A. Ulery and L.Drees (eds)



Georges Stoops Multilingual translation of 220 terms of the “Guidelines for analysis and description of soil and regolith thin sections” – in 14 European languages.

