



15th INTERNATIONAL CONFERENCE ON SOIL MICROMORPHOLOGY

Universidad Nacional Autónoma de México (UNAM)
Colegio de Postgraduados

With mid-and post-conference field trips

Mexico city, November 27 – December 5 2016

FIRST ANNOUNCEMENT

Fifty-eight years ago the first Meeting on soil micromorphology summarized research into soil components, features and processes at micro-scale. Today, new application fields, beyond the “micropedology” give new impetus to micromorphology: environmental sciences, geoarchaeology, forensics, new materials research, among others. The 15th International Conference on Soil Micromorphology (15ICSM) to be held in Mexico, intends to develop these opportunity fields together with traditional research themes.

CONFERENCE ORGANIZERS:

- International Union of Soil Science, Division 1. Soil in Space and Time, Commission 1.1 - Soil morphology and micromorphology; 1.3 - Soil Genesis, 1.6 - Paleopedology.
- La Sociedad Mexicana de la Ciencia del Suelo.
- Instituto de Geología, Universidad Nacional Autónoma de México (UNAM).
- Colegio de Posgraduados, Campus Montecillo, Texcoco Estado de México.

- **NATIONAL ORGANIZING COMMITTEE:**
- Sergey Sedov – Chairman // Instituto de Geología, UNAM - serg_sedov@yahoo.com
- Héctor Cabadas – Secretary // Universidad Autónoma del Estado de México – hvcabadasb@uaemex.mx, geocabadas@hotmail.com
- Elizabeth Solleiro – Instituto de Geología, UNAM – solleiro@geologia.unam.mx
- Jaime Díaz // Instituto de Geología, UNAM – biotic78@yahoo.es
- Tamara Cruz // Instituto de Geología, UNAM - tamczyc@yahoo.com.mx
- Georgina Ibarra // Instituto de Geología, UNAM – gigiotas81@yahoo.com.mx
- Ma. del Carmen Gutiérrez // Colegio de Posgraduados, Montecillo, México - castor@colpos.mx
- Carlos Alberio Ortiz Solorio // Colegio de Posgraduados, Montecillo

- Patricio Sánchez Guzmán // Colegio de Posgraduados, Montecillo
- Edgar Vladimir Gutiérrez Castorena // Colegio de Posgraduados, Montecillo
- Enrique Suástegui Méndez // Colegio de Posgraduados, Montecillo

- **HONORARY SCIENTIFIC COMMITTEE**

- J. Aguilar, H.P. Blume, A. Bronger, D. Davidson, C. Dorronsoro, H. Eswaran, E.A. FitzPatrick, M. Gerasimova, R. Gilkes, A. Jongmans, T. Keli, F. Labib, R. Langohr, D. Magaldi, S. Mahmoodi, A. Mermut, R. Miedema, H. Mücher, S. Nortcliff, S. Shoba, G. Stoops, T. Tursina, V. Targulian, B. Van Vliet-Lanoë, L. Wilding, S. Zauyah.

- **SCIENTIFIC COMMITTEE**

- Karl Stahr; Joselito Arocena; Octavio Artieda; Mercè Bergadà; Amy Brock-Hon; Brenda Buck; M Agnès Courty; Thilo Eickhorst; Ángel Faz; Dian Fiantis; Martine Gerard; Xiubin He; Danny Itkin; Selim Kapur; Farhad Khormali; Maja Kooistra; Irina Kovda; Peter Kühn; Richard MacPhail; John Menzies; Curtis Monger; Héctor Morrás; Przemyslaw Mroczek; Marcello Pagliai; Rosa M Poch; Elvira Roquero; Rafael Rodríguez; Daniela Sauer; Albert Solé-Benet; Fabio Terribile; Luca Trombino; Alexander Tsatskin; Jaap Van der Meer; Íñigo Virto;

SCIENTIFIC PROGRAM:

The Preliminary Program follows recommendation of the Business Meeting of the last 14th IWMSM to amplify significantly the scientific scope of the forthcoming Conference. It integrates corrections, comments

and proposals of various experts in different fields of soil micromorphology and now is offered as the base for abstract submission. The final Program will depend upon the number of submitted abstracts: the topics could be left unchanged, split, joined together or cancelled to produce the list of scientific sessions in May 2016.

- 1) Soil ecosystem and agrosystem services: micromorphological criteria for soil quality, soil degradation, sustainable functioning specified for different soil and land-use types.
- 2) Micromorphology of key pedogenetic processes. Linking microscopic observations and analytical data for process identification and modeling, among them:
 - Microscopic features of mineral alteration and geochemical indices of weathering.
 - Pedogenic carbonates formation as identified by their crystal morphology and geochemical signatures.
 - Quantitative assessment of the degree of soil formation through micromorphological analyses, possibly combined with other techniques.
 - Detecting recent changes in soils, caused by changes in climate, vegetation, land-use and other factors.

Combination and interaction of diagnostic features of different processes on micro-scale. Microscopic evidences for developing polygenetic models of soil formation and tracing soil evolution pathways.

2a) Regional problems of micromorphological studies of soil genesis and soil classification:

- Soils of tropical and arid regions
- Soils and geomorphic processes in karstic and volcanic landscapes

2b) Contribution of micromorphology to national and international soil classifications: reality and potential.

- 3) Microscopic indicators of incipient pedogenesis on natural and artificial surfaces, biofilms.

Micromorphological methods are especially effective for identification of the earliest stages of the soil and regolith development. This topic includes studies of:

- Biocrust development in natural extreme environments: periglacial environments of Antarctica and Greenland, hyper-arid deserts, high mountains.
- Early soil and ecosystem development on the fresh surfaces in profoundly disturbed landscapes (quarries and tailings, eroded land surfaces, military polygons etc.).

4) Soil-biota interactions on microscale:

- Rhizosphere – soil interface processes.
- Effects of mesofauna on soil porosity and aggregation; feeding features.
- Bacterial films, exocellular polymers as agents of soil microstructure development.

Mineral and organic biogenic components, materials and features under microscope: biomineralization, opaline phytoliths, plant tissues, microfossils as a record of ecosystem dynamics.

5) Pedogenesis of anthropogenic soils and ecosystems: micromorphological features and indicators in soils of urban landscapes, industrial zones, landfill sites, agricultural substrates

Contaminants on microscale documented by microanalysis: towards understanding of migration and adsorption processes and sites

Biodegradation of artificial materials in soil and soil-like systems, biodeterioration of historical monuments.

6) Micro-paleopedology: paleosol-sedimentary sequences (loessic, volcanic, alluvial) and surface paleosols under the microscope. Micromorphological tools to improve resolution of paleopedological records and correlate them with global climate proxies. Micromorphological indicators of past environmental conditions.

7) Archaeological soil micromorphology: site-formation processes, ancient cultural landscapes, microartifacts; problems of conservation of archaeological heritage.

8) Novel methods and techniques and quantitative approaches in micromorphological research and problems they may help to solve:

- Combining microscopy and microanalytical techniques: micro XRF, micro XRD, micro gas chromatography/mass spectrometry on undisturbed samples and thin sections
- X-ray tomography and perspectives of three-dimensional soil micromorphological analysis.
- New opportunities in electron microscopy and microanalysis, experiences in applying environmental SEM and tunnel electron microscopy to soil objects.
- Computer techniques of micromorphometric research: towards quantification of porosity, structure, pedofeatures.

9) New opportunity fields for soil micromorphology:

- Application of micromorphology to geology and material science
- Forensic applications.
- Extraterrestrial regoliths.
- Subaqueous soils – can they be sampled and studied in thin sections?

9a) Micromorphological evidences of natural and technogenic catastrophes. Short-term but violent events, both natural (meteorite falls, volcanic eruptions, earthquakes, hurricanes, tsunamis) and human-induced (nuclear tests, industrial catastrophes, military clashes) catastrophic events, affect dramatically landscapes and societies. Soils and near-surface terrestrial sediments receive the materials and impacts generated by catastrophic events which produce recognizable and persistent microscopic evidences. Study of these features and linking them to the type and scale of the catastrophic processes both recent and ancient are expected within this topic.

CONFERENCE SCHEDULE:

The Conference organizers are planning a four-day program of oral and poster sessions, a micromorphology course and two (mid and post) conference tours.

November 26-27, 2016 – Micromorphology course with special attention to tropical, arid and volcanic soils and paleosols.

November 28 - 30. 2016 – Registration, scientific sessions. Conference oral and poster sessions at UNAM, Mexico City.

December 1st., 2016 – Mid-conference excursion

December 2nd., 2016 – Scientific sessions, Business Meeting of Commission 1.1. Soil Morphology and Micromorphology

December 3-5, 2016 – Post-Conference excursion.

Both oral and poster presentations are welcome.

CONFERENCE TOURS:

1. Mid-conference one-day field trip to Cuicuilco and San Gregorio site (South of Basin of Mexico) archaeo-urban soils in archaeological sites. In these sites we can observe:

- Properties of the paleosols buried beneath the lava flow of Xitle volcano.
- First urban center in the south of Basin of Mexico
- Soil diversity and landscape evolution before and after the eruption of the Xitle volcano.

The cost is included in the registration fee.

2. Post- conference three-day field trip from Teotihuacan. It includes the visit to Teotihuacan archaeological zone. This excursion covers soil topo-chrono-climosequences, formed from different volcanic materials and the relation with archaeology.

First day. Teotihuacan archaeological zone: Visit to the key section of the Black San Pablo Paleosol – the soil used by the Teotihuacans. Visit to

Cerro Gordo and Sierra Patlachique to observe the oldest paleosols in the valley and the intensive erosion processes of the area.

Second day. Tlaxcala - Barranca Tlalpan: The oldest volcanic paleopedological record in Mexico with the Brunhes-Matuyama boundary inside the sequence.

Third day: Tepetates (indurated volcanic materials) at Texcoco and their functioning in the agroecosystems.

The cost of this three-day excursion is 250 €.

The payment should be done by a bank deposit to the account, indicated below, before June, 2016.

REGISTRATION FEE BEFORE JUNE, 2016

The early registration fee for full participants at the Conference will be 200 €; the student fee will be 150 €, with appropriate verification of student status. This will cover all sessions, abstract volume, program, bag with conference materials, coffee during breaks, lunches during the session days, transportation from sede-hotel to meeting place and from meeting place to the hotel at the beginning and the end of sessions.

Registration after June 1st, 2015 : an additional fee of 30 € will be added to the above mentioned conference fees.

Payment of registration and excursion fees should be made in € by bank deposit to:

Transfer in USD

Bank name: JP Morgan Chase Bank, N.A.

Account name: Universidad Nacional Autónoma de México

Client address: Torre de rectoría, piso Mezzanine, Colonia Ciudad Universitaria, Delegación Coyoacán, Mexico City, 04510, México

Banks address:2900 Woodridge, 1st floor, Houston, Tx 77087,USA

Account number:00101693118

ABA or Routing number:111000614

SWIFT or IBAN: Chasus33

Transfer for national participants

Bank Name: BBVA Bancomer

Account number: 0446634494

Office: 7684

Plaza: 001 Cd. de México

CLABE: 012 180 00446634494 2

Address: Bancomer SA, Av. Universidad 1200 Col. Xoco CP 03339, México DF.

Beneficiary: Universidad Nacional Autónoma de México

Please note that **the sender must pay all bank charges**. Once you have made the transfer, scan the voucher and send it by email to Héctor Cabadas hvcabadasb@uaemex.mx; geocabadas@hotmail.com or Georgina Ibarra gigiototes81@yahoo.com.mx.

Indicate in the receipt the kind of payment: registration fee or (pre, post) conference excursion.

The delivery of this receipt is necessary in order to confirm your registration.

ABSTRACTS

Contributors are invited to submit their papers electronically. Please prepare your abstract in English, Times 12 font, single spaced on one letter-size page including line drawings, tables, etc., within the format 2 cm free space on each margin

Contributors will be informed within 4 weeks about acceptance as oral or poster presentation. A booklet of abstracts will be issued at the start of the meeting.

All abstracts must arrive latest by **May 31st, 2016**:

Each oral presentation will be 15 minutes in length and 5 minutes for questions. Computer system for Power point presentations are available. If you need additional equipment contact us.

The posters will stay on exhibition during the complete symposium. A special session for poster presentations is planned. Boards for poster presentations are 90 cm wide and 120 cm long, vertical orientation.

ACCOMMODATION:

Several hotels and hostels in Coyoacán – the touristic area of Mexico City will be offered for accommodation of participants. The approximate prices are given in the examples below. Further information will be available at the Conference site and in the second announcement.

HOTEL	Price per night (USD)
Hostal Frida Mina No. 54, Col. del Carmen Coyoacán C.P. 04100, México D.F. Tel: +52 (55) 5659 7005 Cel: +52 (1) 55 1649 9568 Cel: +52 (1) 55 9199 0161 http://www.hostalfridabyb.com hostalfrida@gmail.com or reservaciones@hostalfridabyb.com	Single/double room: 55 USD including taxes
Hostel La Encantada Guerrero 108, Col. Del Carmen,	Suite: 30 USD

Coyoacán, México D.F. 04100 la.encantada2009@hotmail.com http://www.hostallaencantada.com	Standard room: 20 USD
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PASSPORT AND VISA REQUIREMENTS

Please, to verify if your country of citizenship requires visa, follow the next link of the Mexican Ministry of Foreign Affairs:

http://www.inm.gob.mx/index.php/page/Paises_Visa/en.html

In case you need visa to enter the country, please find the steps to get it here:

<http://www.sre.gob.mx/en/index.php/requirements-to-enter-mexico>

IMPORTANT DEADLINES	
31 March, 2016	Second announcement
31 May, 2016	Submission of registration form
31 May, 2016	Abstract submission
1st. August, 2016	Notification about visa support
September, 2016	Abstracts acceptance and publication of the 3 rd Announcement
June, 2016	Payment of reduced registration fee
August, 2016	Payment of the excursion fees

[THE CONFERENCE SITE will be opened before December 10, 2015](#)

where additional information about venue, accommodation and support for young scientists will be included.

Conference languages will be English, no translation will be available.

All colleagues interested in participation in this Conference are asked to fill the registration form at the end of this Announcement and send it back by e-mail to this address:

Dr. Héctor Cabadas

E-mail: 15icsm@geologia.unam.mx

REGISTRATION FORM:

Please fill and send this registration form to Héctor Cabadas before May 31st. 2016.

I intend to participate in the International “15th International Conference on Soil Micromorphology” 15ISCM in Mexico City, November 27 - December 5, 2016.

Name:.....

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Institution:.....

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Postal

Address:.....

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Phone:.....

Fax:.....

E-mail:

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I intend to submit a paper entitled:

Oral:

Poster: _____

I intend to participate in Conference tours: Pre-Conference ____ Post-Conference ____

Date:..... Signature:.....