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**COMMEMORATIVE CONFERENCE "EL CHICHÓN VOLCANO: TWENTY-FIVE YEARS LATER"**

**March 19-25, 2007**

**PROGRAM**

MONDAY, MARCH 19

16:00-19:00 Registration of participants at Hotel Mansión del Valle  
19:00-21:00 Ice breaker at Museo del Ámbar

TUESDAY, MARCH 20, 2007

8:00-8:30 Welcoming ceremony

MORNING SESSION (8:30-13:30)

**1. THE 1982 ERUPTION: HISTORY AND LESSONS**

Chairperson: *Tom Casadevall*, USGS, Denver, USA

1.1 *René Canul and Víctor Rocha*, Comisión Federal de Electricidad, Mexico  
The Geological Report of "El Chichón" Chis. Geothermal Zone  
8:30-8:45

1.2 *Robert Tilling*: US Geological Survey, USA  
El Chichón's "Surprise" eruption in 1982: Lessons for Reducing Volcano Risk  
8:45-9:15

1.3 *Servando de la Cruz*, Instituto de Geofísica, UNAM, Mexico  
A natural phenomenon transforming into a disaster: a personal experience.  
9:15-9:45

1.4 *Wendell Duffield*, Northern Arizona University, Flagstaff, AZ, USA  
Oral tradition, El Chichón, and beyond  
9:45-10:15

1.5 *Juan Manuel Espíndola*, Instituto de Geofísica, UNAM, Mexico  
A review on the seismicity accompanying the 1982 activity of El Chichón  
10:15-10:30

Coffee Break: 10:30-11:00

- 1.6 *Johan C. Varekamp et al.*, Wesleyan University, USA  
The volatiles of El Chichón: in the air, on the ash, and in the crater lake  
11:00–11:30
- 1.7 *Ignacio Galindo*, Centro Universitario de Investigaciones en Ciencias del Ambiente, Universidad de Colima, Mexico  
Physical properties of ash from El Chichón eruptions and regional extinction of short-wave radiation as a measure of the movement of the stratospheric ash cloud  
11:30–12:00
- 1.8 *Arlin Krueger*, Joint Center for Earth Systems Technology, University of Maryland, Baltimore, USA  
The sulfur dioxide clouds from El Chichón: A reevaluation  
12:00-12:30
- 1.9 *William I. Rose*, Geol. Eng. & Sciences Michigan Technological University Houghton, MI, USA  
Distal fallout of fine ash during the 1982 El Chichón eruptions  
12:30-13:00

Lunch at El Carmen: 13:00-14:30

AFTERNOON SESSION (14:30-17:30)

## 2. EXPLOSIVE VOLCANISM

Chairperson: *Marcus Bursik*, University at Buffalo, New York, USA

- 2.1 *Setsuya Nakada*, Earthquake Research Institute, University of Tokyo, Tokyo, Japan  
Caldera-forming eruption at Miyakejima (Japan) and the role of water table  
14:30-15:00
- 2.2 *Gerardo Aguirre-Díaz*, Centro de Geociencias, Campus UNAM, Juriquilla, Querétaro, Mexico  
Active collapse-calderas of the Mexican Volcanic Belt and possible volcanic hazards  
15:00-15:15
- 2.3 *Jersy Mariño et al.*, Instituto Geológico Minero y Metalúrgico (INGEMMET), Lima, Perú  
Evolution of the eruption of the Ubinas Volcano (Perú) 2006  
15:15-15:30
- 2.4 *Roberto Sulpizio et al.*, University of Bari, Bari, Italy  
Large scale experiments on the mechanics of pyroclastic flows: design, engineering and first results  
15:30-15:45

- 2.5 *Roberto Sulpizio et al.*, University of Bari, Bari, Italy  
En-masse versus aggrading deposition in small-scale pyroclastic and volcanoclastic flows: field evidences for a reconciliation  
15:45-16:00

Coffee Break: 16:00-16:30

### 3. TECTONICS AND REGIONAL GEOLOGY

Chairperson: *Marco Guzmán-Speziale*, Centro de Geociencias, UNAM, Mexico

- 3.1 *Marco Guzmán-Speziale*, Centro de Geociencias, Campus UNAM, Juriquilla, Querétaro, Mexico  
An overview of the seismotectonics of southeastern Mexico  
16:30-16:45
- 3.2 *Juan Carlos Mora et al.*, Instituto de Geofísica, UNAM, Mexico  
A model to explain the magmatism and deformation of Sierra de los Altos de Chiapas, Mexico  
16:45-17:00
- 3.3 *Armando García-Palomo*, Instituto de Geología, UNAM, Mexico  
A pull-apart basin: Origin of El Chichón volcano  
17:00-17:15
- 3.4 *Carlos Borrero*, Depto. de Ciencias Geológicas, Universidad de Caldas, Manizales, Colombia  
The late Pliocene-early Pleistocene effusive activity related with the Nevado del Ruiz Volcano, Colombia  
17:15-17:30

POSTER PRESENTATIONS (17:30-19:00)

### 1. THE 1982 ERUPTION: HISTORY AND LESSONS

- 1.10 *M.A. Hernández-Moreno and Silvia Ramos*, Lab. de Ciencias de la Tierra y el Medio Ambiente, UNICACH, Chiapas, Mexico  
Identification of algae in the crateric lake of El Chichón volcano, Chiapas, Mexico
- 1.11 *D. Estrada-Tevera and Silvia Ramos*, Lab. de Ciencias de la Tierra y el Medio Ambiente, UNICACH, Chiapas, Mexico  
Preliminary studies of geomorphology and ecological succession of El Chichón volcano
- 1.12 *Silvia Ramos*, UNICACH, Chiapas, Mexico  
The environmental changes of the El Chichón volcano, after 25 years of its eruption

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- 1.13 *Silvia Ramos* and *D. Flores-Román*, UNICACH, Chiapas, Mexico  
The soil regeneration in the El Chichón volcano area, State of Chiapas, Mexico
- 1.14 *Silvia Ramos* and *D. Flores-Román*, UNICACH, Chiapas, Mexico  
The volcanic soils of the Soconusco, State of Chiapas, Mexico
- 1.15 *Estrada-Cristóbal* et al., Lab. de Ciencias de la Tierra y el Medio Ambiente, UNICACH, Chiapas, Mexico  
Proposal of path interpretation in the El Chichón volcano, Chapultenango, Chiapas, Mexico
- 2. EXPLOSIVE VOLCANISM**
- 2.6 *Silvia Sánchez* et al. Posgrado en Ciencias de la Tierra, Instituto de Geofísica, UNAM, Mexico  
The 900 yr BP pumice flow deposit of El Chichón, Chiapas, Mexico: Distribution, stratigraphy, and chemistry of juvenile products
- 2.7 *Miguel A. Alatorre* et al., Posgrado en Ciencias de la Tierra, Instituto de Geofísica, UNAM, Mexico  
Fragmentation threshold and fragmentation efficiency of samples from Popocatepetl volcano: an experimental study
- 2.8 *F. Castañeda* et al., Escuela de Ciencias de la Tierra, Instituto Politécnico Nacional, Mexico  
Quantitative physical-chemical analysis of the 2005 ash fall from Volcán de Colima
- 2.9 *Abel Cortés-Cortés* and *J. L. Macías*, Observatorio Vulcanológico de Colima, Universidad de Colima, Mexico  
Debris avalanche deposits of the SE sector of Nevado de Colima volcano, Mexico
- 2.10 *José Ramón Torres* et al., Instituto de Geología, Universidad Autónoma de San Luis Potosí, San Luis, Mexico  
Textural and petrographic characteristics of the pyroclastic dikes associated to the Panalillo Ignimbrite in the San Luis Potosí Volcanic Field, Mexico
- 2.11 *Yasuhiro Ishimine*, National Research Institute for Earth Science and Disaster Prevention, Japan  
A simplified one-dimensional model of volcanic plumes
- 2.12 *Alejandro Pinilla* et al., Universidad de Manizales, Colombia  
Historical evolution of the volcanic deposition in the “Altiplano Nariñense” Colombian southwest
- 2.13 *Teófilo Hernández* et al., Centro Nacional de Prevención de Desastres (CENAPRED), Mexico  
Modeling pyroclastic flows with the Program TITAN2D for the eruption of 1982 in El Chichón volcano, Mexico
- 2.14 *Lourdes Godínez* et al., Instituto de Geografía, UNAM, Mexico  
The 1793 eruption of San Martín volcano (Los Tuxtlas, Veracruz, Mexico)

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### 3. TECTONICS AND REGIONAL GEOLOGY

- 3.5 *Juan Carlos García y Barragán* et al., ERNO, Sonora, Instituto de Geología, UNAM, Mexico  
Evidence of Cretaceous volcanic activity in northern Sonora, Mexico
- 3.6 *Raymundo Martínez-Serrano* et al., Instituto de Geofísica, UNAM, Mexico  
Evidences for different magmatic sources in the Iztaccíhuatl volcanic complex from geochemical and isotopic evidences
- 3.7 *P. A. Navarro* et al., Instituto Geológico Minero y Metalúrgico, Lima, Perú  
Cenozoic volcanism in western cordillera of northern Perú, Province of Cajamarca (7°S-7°30'S)
- 3.8 *Marcus Bursik*, University at Buffalo, New York, USA  
Tectonic control of shallow manifestations of magmatism: example from Mono-Inyo Craters, California, USA

WEDNESDAY MARCH 21, 2007

MORNING SESSION (8:00-13:00)

### 4. THE 1982 ERUPTION: ADVANCES, NEW ASPECTS, AND PERSPECTIVES

Chairperson: *Robert Tilling*, USGS, Menlo Park, USA

- 4.1 *John Eichelberger*, Geophysical Institute, University of Alaska Fairbanks, USA  
El Chichón: An explosive end-member among long repose period, recharged, crust-resident magma systems  
8:00-8:30
- 4.2 *Yuri Taran*, Instituto de Geofísica, UNAM, Mexico  
El Chichón volcano-hydrothermal system: More questions than answers  
8:30-9:00
- 4.3 *Franco Tassi*, University of Florence, Italy  
Temporal variability of hydrocarbons composition in the volcanic/hydrothermal system of El Chichón volcano (Chiapas State, Mexico): 7 years of discontinuous geochemical monitoring.  
9:00-9:30
- 4.4 *Maria Aurora Armienta* et al., Instituto de Geofísica, UNAM, Mexico  
Hydrogeochemical evolution of El Chichón crater lake: implications for hazard assessment  
9:30-9:45
- 4.5 *Randy White* et al., USGS, Menlo Park, USA  
What's next for El Chichón? Probable dome extrusion during the next few decades and the likely precursory seismicity  
9:45-10:00

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4.6 *Vyacheslav Zobin and Zenón Jiménez*, Observatorio Vulcanológico de Colima, Universidad de Colima, Mexico

Some regularity in the process of reactivation of dormant andesitic and dacitic volcanoes and the specific features of the 1982 El Chichón Volcano, Mexico reactivation

10:00-10:15

4.7 *Silvia Ramos et al.*, Universidad de Ciencias y Artes de Chiapas, Mexico

Government actions in the monitoring of El Chichón volcano

10:15-10:30

Coffee Break: 10:30-11:00

4.8 *Tom Casadevall*, USGS Denver, USA

Volcanic ash advisory centers: mitigating volcanic ash hazards in the air and on the ground

11:00-11:30

4.9 *Kevin M. Scott*, CVO, USGS, Vancouver

Mitigating risks of future disasters from lahars transformed from flood surges released from lakes dammed by volcanic flows- Lessons from the geological record at El Chichón and Mount St. Helens

11:30-12:00

4.10 *Michael F. Sheridan*, Center for geohazards studies, University at Buffalo, USA

Computer simulation of granular flows across an abrupt change in slope, application to El Chichón

12:00-12:30

4.11 *Lucia Capra et al.*, Centro de Geociencias, Campus UNAM, Juriquilla, Querétaro, Mexico

Flow simulations reproducing the 1982 eruption of El Chichón volcano, Mexico

12:30-12:45

4.12 *José Luis Macías*, Instituto de Geofísica, UNAM, Mexico

Hazards map of El Chichón Volcano, Chiapas, Mexico: Constraints posed by eruptive history and computer simulations

12:45-13:00

Lunch at Santo Domingo: 13:00-14:30

AFTERNOON SESSION (14:30-17:30)

**5. STRATIGRAPHY AND ERUPTIVE MECHANISMS**

Chairpersons: *José Luis Arce*, Instituto de Geología, UNAM, and *Raymundo Martínez-Serrano*, Instituto de Geofísica, UNAM, Mexico

5.1 *Teresa Scolamacchia*, Instituto de Geología, UNAM, Mexico

What happened at Esquípula Guayabal between March 28 and April 4, 1982?

14:30-14:45

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5.2 *Claus Siebe et al.*, Instituto de Geofísica, UNAM, Mexico  
Are Humboldt's "hornitos" at the Jorullo volcanic complex in part hummocks of debris avalanche deposits? A contribution to the 250<sup>th</sup> anniversary of its birth in a sugar cane field  
14:45-15:00

5.3 *Marie-Noel Guilbaud et al.*, Instituto de Geofísica, UNAM, Mexico  
Role of ascent-degassing on magma and lava rheology during the 1783-84 Laki eruption, South Iceland  
15:00-15:15

**6. CHEMISTRY AND PETROLOGY OF SULFUR-RICH MAGMAS**

Chairperson: Juan Carlos Mora, Instituto de Geofísica, UNAM, Mexico

6.1 *Juan Carlos Mora et al.*, Instituto de Geofísica, UNAM, Mexico  
The Chiapanecan Volcanic Arc (Central Area), Chiapas, Mexico  
15:15-15:30

6.2 *James Gardner et al.*, Department of Geological Sciences, Jackson School of Geosciences, The University of Texas at Austin, USA  
Dynamics of the El Chichón magma system as recorded by compositional zonations within plagioclase phenocrysts  
15:30-15:45

6.3 *Paul Layer and D. Jones*, Geophysical Institute, University of Alaska Fairbanks, Fairbanks, USA  
Temporal variations of argon isotopes in plagioclase and hornblende  
15:45-16:00

6.4 *N. Vigouroux et al.*, Dep. Earth Sciences, Simon Fraser University, Burnaby, B.C. Canada  
Sulfur contents of primitive mafic arc magmas: effects of sulfur speciation and magma composition  
16:00-16:15

Coffee Break: 16:15-16:45

**7. VOLCANO MONITORING**

Chairperson: *Juan Manuel Espíndola*, Instituto de Geofísica, UNAM, Mexico

7.1 *David Novelo et al.*, Instituto de Geofísica, UNAM, Mexico  
Temporal variations of 1/Qc and b values associated to the December 2000-January 2001 volcanic activity at Popocatepetl volcano, Mexico  
16:45-17:00

7.2 *Francisco Núñez-Cornú et al.*, Centro de Sismología y Volcanología de Occidente, Universidad de Guadalajara. Puerto Vallarta, Jalisco, Mexico  
Explosive events at Colima Volcano in 2005: Analysis of seismic signals  
17:00-17:15

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- 7.3 *V. Aguilar*, Instituto Geofísico, Universidad Nacional de San Agustín de Arequipa, Perú  
Evolution and seismic crisis of the Ubinas volcano since April 18 to June 8, 2006  
17:15-17:30

POSTER PRESENTATIONS (17:30-19:00)

**5. STRATIGRAPHY AND ERUPTIVE MECHANISMS**

- 5.4 *Carlos Navarro* et al., Observatorio Vulcanológico de Colima, Universidad de Colima, Mexico  
The 1913 VEI-4 plinian eruption of Volcan de Colima (Mexico): Tephrochronology, petrology, and pumice modeling
- 5.5 *Sergio Salinas*, et al., Posgrado de Ciencias de la Tierra, Instituto de Geofísica, UNAM, Mexico  
Evolution of Ceboruco Volcano and associated products of the inner caldera
- 5.6 *Katrin Sieron* and *Claus Siebe*, Posgrado de Ciencias de la Tierra, Instituto de Geofísica, UNAM, Mexico  
New radiocarbon dates for Ceboruco Volcano (Nayarit) and surrounding monogenetic vents
- 5.7 *I. Herrera* et al., Escuela de Ciencias de la Tierra, Instituto Politécnico Nacional, Mexico  
Preliminary geology of La Corona Volcano, south of Sierra de las Cruces, Central Mexico
- 5.8 *Hernando Rueda* et al., Posgrado de Ciencias de la Tierra, Instituto de Geofísica, UNAM, Mexico  
Pyroclastic sequences at the N-NE slopes of Tláloc Volcano, Sierra Nevada, Central Mexico
- 5.9 *Lilia Arana-Salinas*, and *Claus Siebe*, Posgrado de Ciencias de la Tierra, Instituto de Geofísica, UNAM, Mexico  
Popocatépetl's 5000 yr BP Plinian pumice fallout deposit: preliminary results
- 5.10 *Susana Ortiz-Hernández* et al., Instituto de Geología, UNAM, Mexico  
Las Cumbres Volcanic Complex, debris avalanche deposits: Eastern Trans-Mexican Volcanic Belt
- 5.11 *Hugo F. Murcia* and *José Luis Macías*, Posgrado de Ciencias de la Tierra, Instituto de Geofísica, UNAM, Mexico  
Lahar and flood deposits in the city of Tapachula, Chiapas: a latent hazard of the Tacaná Volcanic Complex and atmospheric events
- 5.12 *Damiano Sarocchi* and *José Luis Macías*, Instituto de Geología, UNAM, Mexico  
A clast-shape based discrimination diagram: a useful tool to characterize pyroclastic and epiclastic deposits
- 5.13 *José Didier Martínez-Sánchez* et al., Instituto de Geología, UNAM, Mexico  
La Gloria Volcanic Complex, debris avalanche deposits: Eastern Trans-Mexican Volcanic Belt

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- 5.14 *Shannon Kobs and Marcus I. Bursik*, Department of Geology, University at Buffalo, USA  
Tephrostratigraphy of the northeastern fall deposits from the 600 yr BP Inyo eruptions
- 5.15 *Denis Avellán-López et al.*, Posgrado de Ciencias de la Tierra, Instituto de Geofísica, UNAM, Mexico  
Tephrostratigraphy of the western part of the Managua, Nicaragua and the evolution of the Ticomo, Nejapa, and Asososca volcanoes
- 5.16 *Natalia Pardo and José Luis Macías*, Posgrado de Ciencias de la Tierra, Instituto de Geofísica, UNAM, Mexico  
Asososca volcano, the youngest maar on the outskirts of Managua City (Nicaragua)
- 5.17 *Hugo Delgado-Granados et al.*, Instituto de Geofísica, UNAM, Mexico  
Revisiting Jorullo volcano (Mexico): 230 years after the eruption

## 6. CHEMISTRY AND PETROLOGY OF SULFUR-RICH MAGMAS

- 6.5 *D. Jones et al.*, Geophysical Institute, University of Alaska Fairbanks, Fairbanks, USA  
Temporal variations in argon isotopes and plagioclase compositions from El Chichón Volcano
- 6.6 *Benjamin Andrews and James E. Gardner*, Department of Geological Science, Jackson School of Geosciences, The University of Texas at Austin, USA  
Magnitudes of magmas recharge events at El Chichón Volcano indicated by experimental petrology and compositional zoning in plagioclase and amphibole
- 6.7 *Carmen Jaimes-Viera et al.*, Posgrado de Ciencias de la Tierra, Instituto de Geofísica, UNAM  
New chronologic data from the central part of the Chiapanecan Volcanic Arc, Chiapas, México
- 6.8 *Juan Carlos Mora*, Instituto de Geofísica, UNAM  
Proposed model to explain the origin of alkaline-subalkaline coexisting magmas, in some volcanic fields
- 6.9 *Lorenzo Meriggi and José Luis Macías*, Posgrado de Ciencias de la Tierra, Instituto de Geofísica, UNAM  
The role of the subducted sediments in a magmatic arc: the case of Sierra de Chichinautzin Volcanic Field, Central Mexico
- 6.10 *M. Carrera-Muñoz et al.*, Escuela de Ciencias de la Tierra, Instituto Politécnico Nacional, México  
Petrology and geochemistry of the igneous rocks from the basement of the Tacaná Volcanic Complex, Chiapas

## 7. VOLCANO MONITORING

- 7.5 *César Morquecho et al.*, Centro Nacional de Prevención de Desastres (CENAPRED), Mexico  
Seismic instrumentation in Chichonal Volcano

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- 7.6 *A. Gómez-Vázquez* et al., Centro Nacional de Prevención de Desastres (CENAPRED), Mexico  
Basic deformation and thermal monitoring in El Chichón Volcano
- 7.7 *Tonatiuh Domínguez* et al., Observatorio Vulcanológico de Colima, Universidad de Colima, Mexico  
Investigating the deep seismic structure of Volcán de Colima, Mexico
- 7.8 *Araceli Zamora* et al., Posgrado de Ciencias de la Tierra, Instituto de Geofísica, UNAM, Mexico  
Crustal structure under Los Tuxtlas Volcanic Field, Veracruz, Mexico
- 7.9 *Juan Carlos Gómez* et al., Instituto Geofísico del Perú, Lima, Perú  
The 2006 Ubinas Volcano eruptive process, an insight from geophysical data and image processing
- 7.10 *J. C. Jiménez-Escalona* et al., Instituto de Geofísica, UNAM, Mexico  
Studying the eruptive clouds from Colima Volcano (Mexico) using MODIS images
- 7.11 *Raúl Arámbula* and *Carlos Valdés*, Instituto de Geofísica, UNAM, Mexico  
State of stress at Popocatepetl volcano, obtained with solutions of the plane of fault in the period of activity from 1996 to 2003
- 7.12 *Alicia Martínez* et al., Centro Nacional de Prevención de Desastres (CENAPRED) Mexico  
Seven years of seismic monitoring of Citlaltépetl volcano
- 7.13 *Nick Varley* et al., Facultad de Ciencias, Universidad de Colima, Mexico  
Recent activity at Volcán de Colima – Application of new monitoring techniques

THURSDAY MARCH 22, 2007

MORNING SESSION (8:00-12:30)

**8. GEOCHEMICAL MONITORING AND VOLCANO HYDROTHERMAL SYSTEMS**

Chairperson: *Yuri Taran*, Instituto de Geofísica, UNAM, Mexico

- 8.1 *Dmitri Rouwet* et al., Istituto Nazionale di Geofisica e Vulcanologia-Sezione di Palermo, Palermo, Italia  
He-C-N isotope systematics of gaseous emissions at El Chichón and its relationship with the tectonic setting  
8:00-8:15
- 8.2 *Nick Varley* et al., Facultad de Ciencias, Universidad de Colima, Mexico  
Post-eruptive degassing processes of El Chichón, Mexico  
8:15-8:30

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- 8.3 *Salvatore Inguaggiato et al.*, Istituto Nazionale di Geofisica e Vulcanologia-Sezione di Palermo, Palermo, Italia  
Geochemical monitoring of active volcanoes: an application to the 2002-2003 Stromboli (Italy) eruption  
8:30-8:45
- 8.4 *Laura Rosales-Lagarde et al.*, Earth and Environmental Sciences Department: New Mexico Institute of Mining and Technology, USA  
Possible regional groundwater connections: chemistry of H<sub>2</sub>S-rich springs east of El Chichón volcano  
8:45-9:00
- 9. RISK ASSESSMENT**  
Chairperson: *Lucia Capra*, Centro de Geociencias, UNAM, Mexico
- 9.1 *Sergio Rodríguez-Elizarrarás et al.*, Instituto de Geología, UNAM, Mexico  
Normal streamflows associated with high intensity rainstorms on the south flank of Pico de Orizaba volcano (Citlaltépetl), Mexico  
9:00-9:15
- 9.2 *Ricardo Saucedo et al.*, Instituto de Geología, Universidad Autónoma de San Luis Potosí  
The October 16, 1955, rain-triggered Atenquique debris flow at Nevado de Colima volcano, Mexico  
9:15-9:30
- 9.3 *Gerardo Carrasco et al.*, Centro de Geociencias, Campus UNAM, Juriquilla, Querétaro  
Volcanic hazards of inactive volcanoes, case study of Cerro Pizarro and Cofre de Perote, Eastern Mexico  
9:30-9:45
- 9.4 *G. Norini et al.*, Centro de Geociencias, Campus UNAM, Juriquilla, Querétaro  
Lateral collapse of south-east crater of Mount Etna volcano and hazard implication  
9:45-10:00
- 9.5 *A. Costa, et al.*, INGV-Sezione Osservatorio Vesuviano, Naples, Italy  
Hazard assessment from ash fallout at the Campi Flegrei caldera (Italy)  
10:00-10:15
- 9.6 *Roberto Sulpizio et al.*, University of Bari, Bari, Italy  
Can the Vesuvius' ash threaten the City of Rome? Answers from the late Quaternary geological record of central-southern Italy  
10:15-10:30

Coffee Break: 10:30-11:00

## 10. SOCIAL IMPACTS OF VOLCANISM

Chairperson: *Chris E. Gregg*, East Tennessee State University, USA

### 10.1 *Chris Gregg* and *Bruce Houghton*, East Tennessee State University, USA

Human behavior in response to warnings of volcanic eruptions

11:00-11:30

### 10.2 *Luisa Macedo* et al., Instituto Geológico Minero y Metalúrgico (INGEMMET), Lima, Perú

Education plan, diffusion and sensibilization about volcanic hazards in the Misti, Arequipa, Perú

11:30-11:45

### 10.3 *Juan Carlos Gavilanes-Ruiz* et al., Centro Universitario en Investigaciones en Ciencias del Ambiente, Universidad de Colima, Mexico

The influence of increased activity on the perception of volcanic risk: The case of Volcán de Colima, Mexico

11:45-12:00

### 10.4 *Cecilia Limón* and *José Luis Macías*, Instituto de Geofísica, UNAM, Mexico

Volcanic hazards and risk perception at the "Zoque" community of Chapultenango: El Chichón Volcano, Chiapas, Mexico

12:00-12:15

Lunch: 12:15-13:30

AFTERNOON SESSION (13:30-14:45)

## 11. VOLCANOES AND ARCHAEOLOGY

Chairperson: *Anabel Ford*, University of Santa Barbara, USA

### 11.1 *Anabel Ford* et al., University of Santa Barbara, USA

Is Volcán El Chichón the source of temper in Ancient Maya pottery?

13:30-14:00

### 11.2 *Kees Nooren*, Dept. Physical Geography, University of Utrecht, the Netherlands

The eruption history of El Chichón Volcano and its impact on the Maya lowlands

14:00-14:15

### 11.3 *Eliás Rodríguez-Vázquez* and *Pascual Tinoco-Quesnel*, Instituto de Geografía, UNAM, Mexico

Archaeological discovery at Tacaná Volcano

14:15-14:30

### 11.4 *R. Isaia* et al., Osservatorio Vesuviano, INGV, Italia

The Campanian Ignimbrite and Codola tephra layers: two temporal/stratigraphic markers for the early upper Palaeolithic in southern Italy and eastern Europe

14:30-14:45

POSTER PRESENTATIONS (14:45-16:15)

**8. GEOCHEMICAL MONITORING AND VOLCANO HYDROTHERMAL SYSTEMS**

- 8.5 *Dmitri Rouwet*, Istituto Nazionale di Geofisica e Vulcanologia-Sezione di Palermo, Palermo, Italia  
Sensibilization in volcanology: how can we start up a monitoring system with the help of the local people (Chapultenango, Chiapas)
- 8.6 *Dmitri Rouwet et al.*, Istituto Nazionale di Geofisica e Vulcanologia-Sezione di Palermo, Palermo, Italia  
Twelve years of fluid geochemical research of El Chichón volcano-hydrothermal system: past, present and future geochemical monitoring
- 8.7 *Martin Jutzeler* and *Nick Varley*, Universidad de Colima, Mexico  
VLF, geomagnetic and thermal camera survey of the 1982 crater of El Chichón
- 8.8 *Agnes Mazot* and *A. Bernard*, Instituto de Geofísica, UNAM  
Carbon dioxide degassing and thermal energy fluxes from the crater lake of Kelut volcano, eastern Java (Indonesia)
- 8.9 *María Martínez et al.*, Observatorio Vulcanológico de Costa Rica (OVSICORI), Universidad Nacional, Costa Rica  
The 2004-2006 extraordinary events at Poás volcano, Costa Rica
- 8.10 *Carlos Ramírez et al.*, Universidad de Costa Rica, Escuela Centroamericana de Geología, Red Sismológica Nacional (RSN), Costa Rica  
The 2006 phreatic activity of Poás Volcano
- 8.11 *Raúl Mora et al.*, Universidad de Costa Rica, Escuela Centroamericana de Geología, Red Sismológica Nacional (RSN), Costa Rica  
Recent fumarolic activity and sulfur eruptions at Poás Volcano, Costa Rica
- 8.12 *V. Cruz-Pauccara* and *Pablo Masías*, Instituto Geológico Minero y Metalúrgico INGEMMET, Lima, Perú  
Geochemistry of the thermal and cold waters around Misti Volcano, Perú

**9. RISK ASSESSMENT**

- 9.7 *Victor Carlos-Valerio et al.*, Servicio Geológico Metropolitano, Dirección General de Protección Civil, Instituto de Geología, UNAM, Mexico  
Slope instability of El Tenayo volcanic dome, Central Mexico
- 9.8 *Anja Mueller*, Department of Geological Sciences, Canterbury University, Christchurch, New Zealand  
Databases in volcanology

- 9.9 *Rita Fonseca et al.*, Instituto de Geofísica, UNAM, Mexico  
Ash fall impact from Colima volcano during May and June 2005
- 9.10 *Ana Mendoza-Rosas and Servando de la Cruz*, Posgrado de Ciencias de la Tierra, Instituto de Geofísica, UNAM, Mexico  
Hazard analysis of the Colima, Citlaltépetl, and Popocatepetl volcanoes, Mexico

## 10. SOCIAL IMPACT OF VOLCANISM

- 10.5 *Mirna Grisel García et al.*, Facultad de Ciencias, UNAM, Mexico  
Volcanic impact from ash fall on agave and sugar cane at Colima volcano
- 10.6 *Esperanza López and Mónica Encinas*, Facultad de Psicología, Universidad Autónoma de Morelos, Mexico  
Locus of control, stress and coping strategies of people exposed to a volcanic risk
- 10.7 *José G. Landín-Orozco et al.*, Facultad de Ciencias, Universidad de Colima, Mexico  
Volcanic risk perception of inhabitants living in three Colima's and Jalisco's communities
- 10.8 *José Castillo-Román et al.*, Centro Universitario para la Prevención de Desastres Regionales, Benemérita Universidad Autónoma de Puebla, Mexico  
Cartographic representation of the volcanic risk and territorial planning

Closure ceremony (16:15-16:45)

Cocktail party and dinner at Salón Lagunas: 17:00-22:00

## EXCURSION TO EL CHICHÓN

FRIDAY, MARCH 23 – SUNDAY, MARCH 25