AGENDA

Lake Chalco Drilling Project

ICDP Workshop

UNAM, Mexico City March 4-8, 2012

Unidad de seminarios "Ignacio Chávez", Jardín Botánico UNAM



Sunday, March 4

Evening reception (20:00-23:00)

Radisson Paraiso Hotel, Periferico sur and Insurgentes

Monday, March 5

Shuttles depart Radisson Hotel (8:30)

Welcome (9:00-9:20) (UNAM)

Elena Centeno, Instituto de Geología José Francisco Valdés, Instituto de Geofísica Dante Morán, DGAPA-UNAM

Review of workshop goals (9:20-9:30) (Erik Brown)

Geological setting Basin of Mexico and Chalco (9:30-11:50) (~25 min each)

Tectonic setting (Luca Ferrari, UNAM)

Volcanic history (Jose Luis Arce, UNAM)

Hydrological sustainability of the Valley of Mexico (Rubén Chávez Guillén CONAGUA,)

Hydrological setting (Oscar Escolero, UNAM)

Hydrology and subsidence (Enrique Cabral, UNAM) - Instrumentation of Chalco Wall

BREAK (11:50-12:10) Snacks & Coffee/Juice

Climate setting (12:10-14:00) (~25 min each)

Modern Climate of the Americas and the Chalco Region (Arturo Quintanar, UNAM) Past Climate Changes of North and Central America (Mark Brenner, U Florida) Past Climates and Biosphere Response in the Tropics (Mark Bush, Florida Inst Tech) Global Climate Setting Over Past 500 to 1000 ka (Peter Fawcett, U New Mexico)

MOVE from Geophysics Seminar Room to Unidad de seminarios "Ignacio Chávez" (14:00)

LUNCH (14:30-16:00)

Introductions around the room. (16:00-17:30)

One powerpoint slide only! Please email to Erik (<u>etbrown@d.umn.edu</u>) We expect to allot <2 minutes to each participant who wishes to discuss their interest in participation in the drilling program. This is not meant to be a presentation of prior research work.

General discussion and plans for tomorrow's breakouts (17:30-18:00) (Erik)

Tuesday, March 6

Shuttles depart Radisson Hotel (8:30)

State of knowledge in Chalco coring (9:00-11:00) (15 min each)

Presentations of results from previous and recent cores from Chalco as well as the seismic survey.

History of Chalco coring efforts (Margarita Caballero) Stratigraphy and chronology (Beatriz Ortega) Palynology (Socorro Lozano) Diatoms (Margarita Caballero) Inorganic geochemistry (Erik Brown) Organic geochemical proxies (Joe Werne) Seismic results (Nigel Wattrus)

BREAK (11:00-11:30)

Science Working Groups (11:30-13:00)

Charge: Define the most pressing research questions to be answered via the drilling project, and specifically how drilling will address them. This is aimed at broader scientific questions, with no regard to methodologies.

We will work in groups to discuss the major scientific questions to be answered with the drilling project, methods, and how drilling in Chalco will address science priorities. Participants are encouraged to attend multiple working group meetings.

Suggested working groups (other possibilities can be considered at this time):

Proposed working group: Leaders

Paleoecological responses to climatic and volcanic forcing: Mark Bush & Sheri Fritz Hazards and societal impacts: Leonardo Guzmán Ramírez, Alejandra Arciniega, Victoria Smith Paleoclimate: significant issues on 500 to 1000 ka timescales: Ingrid Hendy, Peter Fawcett Paleohydrology: water resources & response to climate forcing: Blas Valero Garcés, Eric Morales

Reports of Science Working Groups (13:00-13:30)

Coring Logistics and Methods—Overview (13:30-14:00)

ICDP, Jochem Kück DOSECC – Dennis Nielson LacCore – Anders Noren

LUNCH (14:00-15:30)

Logistics and Methods Working Groups (15:30-17:00)

How can we best address scientific questions in the context of lake drilling? What types of samples are needed? What are the field and core curation requirements for methods that are needed? Participants are encouraged to attend multiple working group meetings.

Proposed working group

Chronology
Down hole logging
Sedimentology/stratigraphy/physical properties
Geological/geophysical context
Aquatic ecological proxies
Terrestrial ecological proxies
Geochemical tools
Modeling & data analysis

Leader

David McGee, Julie Bowles Henrike Baumgarten, Rob Stuart Erik Morales, Frank Preusser Nigel Wattrus, Sebastian Watt Antje Schwalb, Liseth Perez Alberto Araneda, Alexander Correa Metrio Priyardarsi Roy, Sergio Contreras Quintana Peter Fawcett, Graciela Herrera

Other working groups suggested by participants?

Reports of Logistics and Methods Working Groups (17:00-18:00)

Wednesday, March 7

SITE VISIT 7:00 - 12:00

Trip to visit Chalco site – split in to two groups, one will go directly to drilling site, the other will climb a nearby hill (somewhat rugged hiking) to get a broad view of the basin.

BOXED LUNCH

Depart Chalco site 12:00

Tour 14:00-18:00

Trip to old city center (Museum of Anthropology)

CONFERENCE DINNER 18:30- 20:00 at restaurant in Polanco

Thursday March 8

Open discussion of workshop results including: (9:00-11:00)

Major goals of drilling Technical drilling needs Broader societal impacts Funding strategies Other

BREAK (11:00-11:30)

Continued open discussion of workshop results including: (11:30-14:00)

Major goals of drilling Technical drilling needs Broader societal impacts Funding strategies Other

Closing of workshop (14:00)

LUNCH On your own....