

Limnogeology: lessons from ancient lakes

Fecha: 22-26 de septiembre de 2014

Lugar: INGEIS-UBA, C.A.B.A

Responsables: Dras. Elizabeth Gierlowski-Kordesch, Ohio University y Cecilia Benavente, IANIGLA CONICET

Idioma: Inglés

Modalidad: Clases teóricas que requieren la lectura previa de material específico para su discusión y observación de cortes delgados

Carga horaria: 40 hs totales

Inscripción e informes: cabenavente@mendoza-conicet.gob.ar

Programa

1. General Overview

1.1 - Lakes as highly diverse unique environments

- a) Origin and distribution of lakes; b) Different lake types (saline, playas, volcanic, glacier)

1.2 - Lacustrine processes

- a) Physical attributes of lakes; b) Chemical attributes of lakes; c) Biological attributes of lakes

1.3 - Controls of lacustrine sedimentation

- a) Tectonics; b) Climate; c) Basin morphometry; d) Hydrology

2. Lacustrine Facies models

2.1 - Carbonate lakes

- a) Depositional processes; b) Facies types: lacustrine and palustrine; c) Example: Triassic carbonate lakes from Argentina; d) Thin section analysis

2. Lacustrine Facies models

2.2- Saline lakes

- a) Playa-lakes; b) Peripheral clastic aprons and dry mudflat; c) Saline mudflats and pans; d) Springs; e) Groundwater; f) Evaporites; g) Thin section analysis

2. Lacustrine Facies models

2.3 - Siliciclastic-dominated lakes

- a) Lamination; b) Offshore; c) Deltas; d) Shorelines

3. Lake types

3.1 - Lake classification and lacustrine sequence stratigraphy

a) Overfilled lake types; b) Balanced-fill lake types; c) Underfilled lake types; d) Lacustrine organic sediments and oil shales

4. Case studies

Bibliografía

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- Renaut R.W. Tiercelin J. 1994. Lake Bogoria, Kenya Rift Valley-A sedimentological overview. En: Renaut R. W. Last W. M. (eds.), *Sedimentology and Geochemistry of Modern and Ancient Saline Lakes*. 50 Society for Sedimentary Geology Special Publication, 101-123.
- Rosen M.R. 1994. The importance of groundwater in playas: A review of playa classifications and the sedimentology and hydrology of playas. *Geological Society of America Special Paper*, 289: 1-18.