GUIDELINES FOR AUTHORS

Abstracts may be written in Spanish or English and must have a maximum length of 500 words. In addition, they must contain, in order of appearance:

1. **TITLE** (font Arial No. 12, Bold, uppercase, centered alignment).
2. **List of authors** (font Arial No. 11, Bold, uppercase and lowercase letters, centered alignment).
3. *Affiliations* (font Arial No. 10, Italics, uppercase and lowercase letters, centered alignment, INDICATE THE MAIL OF THE AUTHOR WHO WILL SUBMIT THE WORK THROUGH AN ASTERISK (\*) AND PLACE THE ADDRESS AND ADDRESS CODE OF THE ADSCRIPTION).
4. Abstract (Arial font No. 11, uppercase and lowercase, justified alignment).
5. **Keywords** (Arial font No. 11, bold, uppercase and lowercase, alignment to the left). Place 4 to 5 non-bold keywords (Arial font No. 11, uppercase and lowercase, alignment to the left).

Here is an example:

**PROVENANCE ANALYSYS OF JURASSIC SANDSTONES FROM THE XOXO BASIN: IMPLICATIONS FOR THE RECONSTRUCTION OF PANGEA BREAKUP**

**Alberto García1\*, Rachel M. Moras-Calderón2, Klaus Schpater3**

*1 Instituto de Geología, Universidad Nacional Autónoma de México, 04510, Ciudad de México, México (\*e-mail: agarcia@unam.mx). 2 Posgrado en Ciencias de la Tierra, Universidad Nacional Autónoma de México, 04510, Ciudad de México, México. 3 Centro de Geociencias, Universidad Nacional Autónoma de México, Campus Juriquilla, 76230, Querétaro, Mexico.*

The structural evolution that accompanied the break-up of Pangea during Jurassic time has been constrained in Mexico only at the regional scale on the basis of global plate tectonics and geometric considerations. According to available regional-scale reconstructions, the Jurassic tectonic evolution of Mexico was characterized by: 1) anticlockwise rotation of the Yucatán block along NNW-trending dextral faults and 2) sinistral block motions along W- to WNW-trending faults, which are geometrically needed to restore southern and central Mexico to the north-west of its present position during early Mesozoic time and avoid the overlap between North and South America in the reconstruction of Pangea. Reports of W- to WNW-trending sinistral faults that were active in Mexico during Jurassic time are presently few, and the existence, extension, and age of some of these structures have been questioned by many authors. In this work, we present the provenance analysis from a Jurassic clastic succession deposited within the Otlaltepec Basin in southern Mexico. Whole-rock sandstone petrography integrated with chemical analysis of detrital garnet and U–Pb detrital zircon geochronology points out that the analyzed stratigraphic record was deposited during rapid exhumation of the Totoltepec pluton along the Matanza fault, which is a W-trending sinistral normal fault that extends along the southern boundary of the Otlaltepec Basin. U– Pb zircon ages and biostratigraphic data bracket the age of the Matanza fault between 163.5±1 and 167.5±4 Ma. This indicates that the Matanza fault was involved in the crustal attenuation that accompanied the break-up of Pangea and that sinistral motion of continental blocks along W-trending structures was taking place in southern Mexico as predicted by global plate tectonic reconstructions.

**Keywords:** Pangea break-up, Jurassic, Matanza Fault, southern México.