

## **80<sup>th</sup> anniversary of Parícutin volcano, February 19-24, 2023**

### **Pre-conference field trip**

**“Geology and volcanotectonics in Morelia and the northern part of the Michoacán-Guanajuato Volcanic Field” (2 days): Friday 17 – Saturday 18, February 2023**

Departure from Morelia

**Participants:** Minimum: 5; maximum: 10.

**Vehicles:** 1 Van

**Leaders:** Martha Gabriela Gómez-Vasconcelos\*, Denis Ramón Avellán, Guillermo Cisneros-Máximo, José Luis Macías, Giovanni Sosa-Ceballos

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**Objective:** Visit some volcanoes around Morelia and in the northern Michoacán-Guanajuato Volcanic Field, and discuss tectonic control in volcanism.

### **References:**

Avellán, D. R., Cisneros-Máximo, G., Macías, J. L., Gómez-Vasconcelos, M. G., Layer, P. W., Sosa-Ceballos, G., & Robles-Camacho, J. (2020). Eruptive chronology of monogenetic volcanoes northwestern of Morelia—Insights into volcano-tectonic interactions in the central-eastern Michoacán-Guanajuato Volcanic Field, México. *Journal of South American Earth Sciences*, 100, 102554.

Gómez-Vasconcelos, M. G., Macías, J. L., Avellán, D. R., Sosa-Ceballos, G., Garduño-Monroy, V. H., Cisneros-Máximo, G., ... & Pertou, M. (2020). The control of preexisting faults on the distribution, morphology, and volume of monogenetic volcanism in the Michoacán-Guanajuato Volcanic Field. *GSA Bulletin*, 132(11-12), 2455-2474.

Gómez-Vasconcelos, M.G., Avellán, D.R, Macías, J.L., Cisneros-Máximo, G., Sánchez-Núñez, J.M., Miggins, D.P. (2022). New Insights into Feeder Dike Swarms in Scoria Cones and Their Structural Control: A Case Study in the Michoacán- Guanajuato Volcanic Field. *GSA Today*. 33.

### **Itinerary**

**Friday, February 17:** departure at 8 am from Morelia city center. Visit a quarried scoria cone with an exposed feeder dike swarm in Valle de Santiago. Discuss the tectonic control in the volcanic distribution and eruptive dynamics. Lunch and return to Morelia.

**Saturday, February 18:** departure at 8 am from Morelia city center. Visit the Atécuaro caldera ignimbrite (local basement) and Morelia's monogenetic volcanoes. Visit the Tetillas volcano and the Molcajete lava tubes. Discuss the tectonic control on monogenetic volcanism. Lunch and return to Morelia.

**Fee:** 100 USD. Includes transport and lunch. Does not include accommodation.