

Early Career Research Profiles

This profile series on young members of INHIGEO is to create a space where early career scholars can present their studies and research interests within the history of the geological sciences to the whole membership and anyone who receives the newsletter, in order to highlight their field of expertise. It is hoped this will lead to contacts and collaborations for the future through our extensive network. Our third profile is on a PhD graduate from Mexico.

Name: **Lucero Morelos-Rodríguez**

Studies: PhD in History, National Autonomous University of Mexico, Mexico, 2014.

Title of PhD thesis: History of geological sciences in Mexico: from government entity to university institute (1886-1929).



As part of my dissertation, I studied the origins of the Institute of Geology as part of Universidad Nacional Autónoma de México (UNAM). The main establishment in Mexico for the teaching, research, and dissemination of the geological sciences, it is an institution with a long history and a great scientific legacy. It dates back to the 19th century, since it is the heir to the Geological Institute of Mexico (1888), the first institute in the Mexican republic to carry out research in the geological sciences and to study the country's territory from three points of view: scientific, technical, and industrial. It was conceived by the mining engineer Antonio del Castillo (1820–1895) to meet the need to scientifically explore the country's latent mineral wealth, for which reason its functions included: mapping regions whose lithology and resources were unknown, providing specialized services to the public—the analysis and classification of water, rocks, land, fossils, minerals, and oil—and creating a geological and paleontological museum for the nation. From 1888 to 1917, the institution was part of the Ministry of Development, Colonization, Industry, and Commerce (Ministerio de Fomento, Colonización, Industria y Comercio). In 1917, the Venustiano Carranza administration promulgated a new constitution, reformed governmental administration, and created the Ministry of Industry, Commerce, and Labor (Secretaría de Industria, Comercio y Trabajo), which was responsible for all questions related to industries such as mining and oil. Although it lapsed somewhat between 1917 and 1929, during the armed conflict of the Mexican Revolution (1910–1920), the Institute of Geology of Mexico was assigned to the Department of Geological Studies and Explorations, with the task of carrying out applied science through the study of new and old mining areas and the location of aquifers.

A new scenario emerged in 1929 when the administration of President Emilio Portes Gil enacted the Organic Law of the National University, granting the latter university autonomy, which also allowed institutions of a scientific nature such as the National Astronomical Observatory, the National Library, the Department of Biological Studies, and the National Geological Institute to carry out research as one of their substantive activities. On November 16, 1929, the former Department of Geological Studies and Explorations was incorporated in the most important scholarly institution of Mexico under the name of the Institute of Geology.

In sum, I investigated the main administration changes in the geological institution and the main characters in the development to Geology in Mexico.

Research interests: She specializes in social history of geology in Mexico. Her research interests include history of mining practices, and the history of scientific institutions and key personalities who promoted scientific activities in Mexico during the nineteenth century and twentieth centuries.

Fig. 1. The earliest known photo from 1896 of the great meteorites at the National School of Engineering of Mexico (Palacio de Minería). From the left Chupaderos II, Zacatecas, Adargas, and Chupaderos I. Source: Historical Archive of Institute of Geology, UNAM.



Publications (3):

L. Morelos-Rodríguez, “Dolores Rubio Ávila. The First Female Engineering Scholar and Academic in Mexico, 1910”, in: *Physis. Rivista Internazionale di Storia della Scienza*, vol. LVI, Nuova Serie, Fasc. 1-2, 2020, p. 351-367. Available in: http://media.olschki.it/data/Prosp/PRGR/physis_R06/R06202101.pdf

L. Morelos-Rodríguez, “The Mexican Geological Society in its early years (1904-1912)”, in: *Boletín de la Sociedad Geológica Mexicana*, vol. 74, no. 1, 2022, pp. 1-57. Available in: http://boletinsgm.igeolcu.unam.mx/bsgm/vols/epoca04/7401/A301121_Morelos.pdf

L. Morelos-Rodríguez, Lucero, *El Parícutin en 100 imágenes. Historia gráfica del nacimiento del volcán más joven de América [The Parícutin in 100 images. Graphic History of the birth of the youngest volcano in America]*, México, Historiadores de las Ciencias y las Humanidades, 2022, 125 p. Available in: <https://drive.google.com/file/d/1R8lyRt9Cn5Xlc9jHeYjhHpn3dRKxQR1N/view>

Contact: Lucero Morelos-Rodríguez, Instituto de Geología, Universidad Nacional Autónoma de México, Jaime Torres Bodet 176, Santa María la Ribera, Cuauhtémoc, 06400, CDMX, México; lucromr@geologia.unam.mx