

**Alliance of Mexican-Indian Geoscientific Opportunities**  
**WORKSHOP ON WATER, CLIMATE CHANGE AND DISASTERS**  
**29<sup>th</sup> to 31<sup>st</sup> May 2019, Mexico City**  
**P r o g r a m**

**Auditorio Ricardo Monges López – Instituto de Geofísica, UNAM**

**29 May 2019**

<b>08:45 – 09:15</b>	<b>Registration</b>
<b>09:15 – 09:30</b>	<b>Inauguration ceremony</b>
<b>W A T E R   S E S S I O N</b>	
<b>09:30 – 10:15</b>	<b>Mathematical modeling of groundwater flow and nitrate transport in the Mexico City aquifer</b> <i>Dr. Graciela Herrera-Zamarrón, Institute of Geophysics, UNAM</i>
<b>10:15– 11:00</b>	<b>Inverse mass balance modeling using NETPATH code to identify the major subsurface hydrogeochemical processes in hard rock aquifer</b> <i>Dr. T. Subramani, College of Engineering Guindy, Anna University</i>
<b>11:00 – 11:15</b>	<b>Discussion</b>
<b>11:15 – 11:30</b>	<b>Coffee break</b>
<b>11:30 – 12:15</b>	<b>Hydrogeological studies in Mexico City: groundwater flow modeling, land subsidence and deep exploration</b> <i>Dr. Eric Morales-Casique, Institute of Geology, UNAM</i>
<b>12:15 – 13:00</b>	<b>Groundwater investigations in the Faculty of Engineering, UNAM</b> <i>Dr. José Antonio Hernández-Espriú, Faculty of Engineering, UNAM</i>
<b>13:15 – 15:00</b>	<b>Lunch break<sup>1</sup></b>
<b>15:00 – 15:45</b>	<b>Groundwater dynamics in coastal aquifers: controls on salinization, seawater cycling and chemical fluxes</b> <i>Dr. K. Srinivasamoorthy, Department of Earth Sciences, Pondicherry University</i>
<b>15:45 – 16:30</b>	<b>Challenges and opportunities in the application of the Regional Groundwater Flow Systems approach</b> <i>Dr. Oscar Arnoldo Escolero-Fuentes, Institute of Geology, UNAM</i>
<b>16:30 – 16:45</b>	<b>Discussion</b>
<b>16:45 – 17:00</b>	<b>Coffee break</b>
<b>17:00 – 17:45</b>	<b>Fluoride and nitrate contamination in hard rock aquifers: Potential health risk assessment</b> <i>Dr. D. Karunanidhi, Sri Shakthi Institute of Engineering and Technology</i>
<b>17:45 – 18:30</b>	<b>Effects of the M7.1 earthquake of 19th September 2017 in springs and wells of Morelos state Mexico</b> <i>M.I. Carlos Gutierrez-Ojeda, Mexican Institute of Water Technology (IMTA)</i>
<b>18:30 – 18:45</b>	<b>Discussion</b>
<b>30 May 2019</b>	
<b>09:00 – 14:00</b>	<b>Field visit (Ciudad Universitaria – Xochimilco – Ciudad Universitaria)<sup>2</sup></b> <i>Coordinators: Ing. Alberto Arias Paz, Faculty of Engineering, UNAM and Dr. Claudia Arango-Galván, Institute of Geophysics, UNAM</i> <i>Departing point: Parking area of Instituto de Geología, UNAM</i>
<b>17:00 – 18:00</b>	<b>Cultural event (Pancha Bhoota, los cinco elementos de la naturaleza con la danza Bharatanatyam)</b> <i>Performer: Ernesto de la Teja, Casa de Cultura de India en México A.C.</i> <i>Venue: Museo de Geología, Jaime Torres Bodet No. 176, Santa María La Ribera</i>

## Auditorio Ricardo Monges López – Instituto de Geofísica, UNAM

31 May 2019

### DISASTERS SESSION

09:30 – 10:15	<b>Understanding Disaster Risk and Disasters</b> <i>Dr. Irasema Alcántara-Ayala, Institute of Geography, UNAM</i>
10:15 – 11:00	<b>Coastal zone multi-hazard vulnerability assessment along the South-East coast of India</b> <i>Dr. G. Muthusankar, French Institute of Pondicherry</i>
11:00 – 11:15	<b>Discussion</b>
11:15 – 11:30	<b>Coffee break</b>

### CLIMATE CHANGE AND PALEOCLIMATE SESSION

11:30 – 12:15	<b>The monsoon of North America: Observational and modelling activities</b> <i>Dr. Ignacio Arturo Quintanar-Isaías, Centre for Atmospheric Sciences, UNAM</i>
12:15 – 13:00	<b>Climate change Evaluation and its impact assessment in the Cauvery delta region (south India) using Geospatial Technology</b> <i>Dr. C. Lakshumanan, Centre for Remote Sensing, Bharathidasan University</i>
13:00 – 13:15	<b>Discussion</b>
13:15 – 15:00	<b>Lunch break<sup>1</sup></b>
15:00 – 15:45	<b>Paleoclimate change in Latin America over the last 2000 years</b> <i>Dr. Abdel Sifeddine, Representative of IRD in Mexico</i>
15:45 – 16:30	<b>The answer is blowing in the wind: Climate Variability during Holocene in the Gulf of California</b> <i>Dr. Ligia Lucina Pérez-Cruz, Institute of Geophysics, UNAM</i>
16:30 – 16:45	<b>Discussion</b>
16:45 – 17:00	<b>Coffee break</b>
17:00 – 17:45	<b>Carbon isotopes in sediments and groundwater: tools for chronology and paleoclimate studies</b> <i>Dr. Laura Beramendi Orosco, Institute of Geology, UNAM</i>
17:45 – 18:30	<b>Responses of the arid ecosystems of Mexico to the late Quaternary global climate changes</b> <i>Dr. Priyadarsi D. Roy, Institute of Geology, UNAM</i>
18:30 – 18:45	<b>Discussion</b>
18:45 – 18:50	<b>Closing ceremony</b>

3 – 7 June 2019

09:00 – 19:00	<b>Post-Workshop field visit (Ciudad Universitaria – El Potosí Basin – Cieneguilla Basin – Ciudad Universitaria)<sup>3</sup></b> <i>Coordinator: Dr. Priyadarsi D. Roy, Institute of Geology, UNAM</i> <i>Departing point: Parking area of Instituto de Geología, UNAM</i>
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<sup>1</sup> No lunch will be provided for assistants.

<sup>2</sup> Limited availability. Organizing Committee will only provide transportation. Each participant is responsible for her/his own insurance and security.

<sup>3</sup> Only for foreign experts.