# Form IV



# **2023** – Meeting Report

**IGCP Project number and Title: IGCP-669** Identification of seismogenic faults in populated areas of Latin America and its incorporation into seismic hazard assessment

## 1. MEETING(S):

Three different on-site meetings were hold at Italy (Rome, 14 July, within the INQUA meeting), Mexico (Pto. Vallarta, 29 October, within the UGM meeting) and Ecuador (Ikiam, during the REDU meeting) as specified below. We had an online meeting on the 18<sup>th</sup> December to sum up results of the project.

### 2. SCOPE AND RESULTS OF MEETING:

#### Scope of Meeting

This year, we did not have a plenary meeting, as we had in 2022 (which was hold online). Instead, we have split the activity in three separate on-site meetings. These meetings have led us focus on the particular priorities of different countries and allowed to have a more direct contact with young researchers that are increasingly joining the group. Project proposers and regional contact-points met in an online meeting on the 18th of December 2023.

#### Achievements of Meeting

We attach material that compile most of the contributions made by the project members in these 3 meetings:

INQUA 2023. A total of 7 contributions (5 orals and 2 posters) were presented (among 15 evaluated) in the 184 special session of the INQUA congress, focused on the IGCP 669 under the title "Seismic hazard assessment in populated areas of Latin America: incorporating seismogenic faults" <u>https://inquaroma2023.org/conference-sessions/</u>. The other 8 contributions finally were not presented (authors did not register). The session was led by María Ortuño, Magdalena Velázquez-Bucio, Pierre Lacan, Octavi Gómez-Novell and Stella Moreiras. See attached abstracts.

After the session, hold on the 14 of July, we had a Group Meeting with more than 15 participants, member of the group, were we could discuss the next steps, concerns and proposals for the coming year.

2) UGM 2023. A total of 13 contributions were presented in the Special Session of OLLIN IGCP 669 hold in the Union Geofisica Mexicana UGM 2023 annual meeting 29 october-3<sup>rd</sup> November in Puerto Vallarta (Mexico) (<u>https://www.raugm.org.mx/resumenes/sessions/session.php?sessionID=21</u>)

The session was entitled OLLIN-IGCP669 Central Mexico: Seismic hazards in the Transmexican Volcanic Belt: advances in neotectonics, paleoseismology, historical and instrumental seismicity (SE01 at <a href="https://raugm.org.mx/?lang=en#sessions">https://raugm.org.mx/?lang=en#sessions</a>) and the conveners were Pierre Lacan, Gerardo Suarez and Ramón Zúñiga. (check the abstract list and the twitter posts for an extended graphical report).

- 3) **REDU** 2023. Α total of 4 communications and invited one talk (https://www.ikiam.edu.ec/ciredu/index.php/conferencistas-invitados/) by M. Ortuño- under the frame of the IGCP 669 project were presented in the X CIREDU international meeting https://www.ikiam.edu.ec/ciredu/. After the meeting, a special short course on Active tectonics promoted by members of the project was conducted (6h long), including a short-filed trip to one of the outcrops studied by the group in the Ikiam university (check de social media for an extended graphical report).
- 4) **Online meeting** to roll-up conclusions and next steps derived from the three local meetings

### Outcome of Meeting

Main outcomes of the different meetings are summarized as follows:

-There is a general satisfaction derived from the increasing involvement of young scientists that are starting to use fault2sha tools in the regional studies.

-We agreed that we still have to involve a larger number of modellers and seismologists in the group activities in order to have a larger impact on the final aim (introducing the faults in the SHA official and reference maps). Also, we need to be more connected with industry (such as colleagues working on critical facilities, i.e., electrical dams and nuclear power plants, )

-There is interest in promoting the creation of a fourth group focused in Central America. Next year LAQS meeting will be in Costa Rica, so we could benefit of the local contact (Alejandro Arguello) to start a new study area covering Nicaragua, Costa Rica, Salvador. We could also create this group more effectively through inviting Spanish colleagues in the Universidad Complutense de Madrid who have been already collaborating with El Salvador colleagues.

-We have been decided by consensus to renew the coordination in the: NSAPB-Ecuador-Colombia-Venezuela region (New Coordinator Oswaldo Guzmán, IKIAM university). The other regions remain as in 2022 (TMVB-Mexico, coordinated by P. Lacan, UNAM; and Central-South Andes, coordinated by S. Moreiras, CONICET-Argentina and C. Benavente IGMyM, Perú; Europe, coordinated by M. Ortuño, Univ. Barcelona and J. García Mayordomo IGME-Spain).

-We decided to focus the activities of next year around the INQUA-Pata days meeting in Chile from 4-11 October (https://www.patadayschile.cl/), where a single annual meeting could be hold. Also, we remark the positive feedbacks from the first training school in Colombia and plan to organize a second training school (replicating more or less the first one) in Mendoza, under the main organization of Stella Moreiras and connected with the Geological Congress of Argentina (San Juan, 17-22 November: https://www.congresogeologico.org.ar/).

-Stella Moreiras and Pierre Lacan are in charge of proposing an special issue of the IGCP669 in the Journal of South American Earth Sciences for the coming year.

Signature of Project Leader and Date