

Newsletters

Vol. 2 No. 12 December 1, 2024

More reliable physics in seismic hazard assessment (SHA) for disaster risk reduction (DRR)
(More reliable physics in SHA for DRR)

This issue

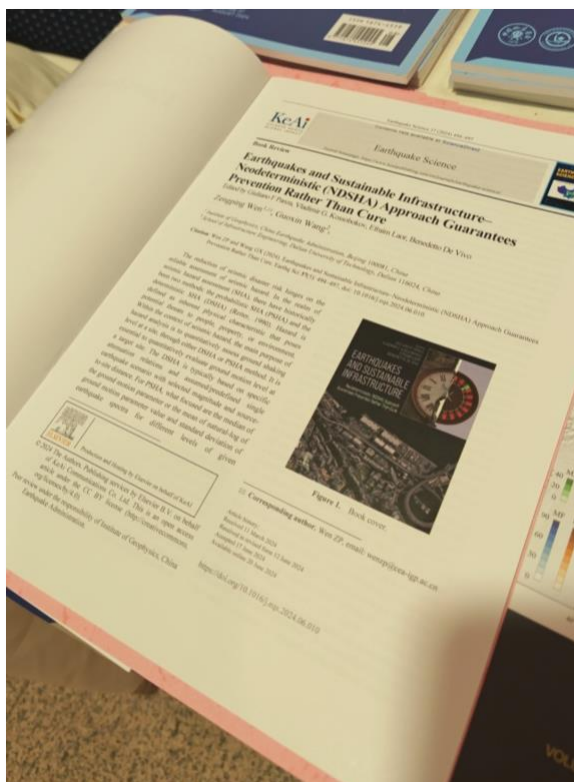
JWG took part in the 15th General Assembly (GA) of Asian Seismological Commission (ASC)
The preparatory Joint Working Group on Neo-Deterministic Seismic Hazard Assessment (pJWG
NDSHA): updating
(A letter released in ASC GA 2024)

JWG took part in the 15th General Assembly (GA) of Asian Seismological Commission (ASC)

On November 3~7, 2024, the 15th General Assembly (GA) of the Asian Seismological Commission took place in Antalya, Türkiye. The goal of the GA is to bring together scientists who have made significant contributions to seismology and earthquake-related studies. With the help of Dr. Jing Huang, Prof. Zhongliang Wu, Prof. Guoxin Wang, Prof. Antonella Peresan, Prof. Fabio Romanelli, Prof. Giuliano Panza, and all our editors who contributed to session 15, JWG successfully participated in the GA and the special session 15 was successfully held. A poster containing the main information of JWG, e.g., the scope, scientific/technical advisory board, and the leading light of NDSHA (Prof. Panza) was exhibited with the journal *Earthquake Science*. Meanwhile, the published [book review](#) of [Earthquakes and Sustainable Infrastructure–Neodeterministic \(NDSHA\) Approach Guarantees Prevention Rather Than Cure](#) was printed for participants.



A poster of JWG was exhibited with EQS.



The printed review of Wen and Wang (2024) was exhibited with EQS.

(The two photos above are from Dr. Jing Huang)

**The preparatory Joint Working Group on Neo-Deterministic Seismic Hazard Assessment (pJWG NDSHA): updating
(A letter released in ASC GA 2024)**

The preparatory Joint Working Group on Neo-Deterministic Seismic Hazard Assessment (pJWG NDSHA) belongs to both the Asian Seismological Commission (ASC) and the African Seismological Commission (AfSC), launched in mid-2023 associated with the International Union of Geodesy and Geophysics (IUGG) General Assembly in Berlin. In 2023 to 2024 some activities were tested and practiced, with limited but prospective results. The pJWG cosponsored the 13th International Workshop on Statistical Seismology (statsei-13) conference in Shenzhen, and joined in the pre-statsei workshop, Earthquake hazard assessment as a platform of dialogue: ACES, CSEP, CSES, NDSHA, and others, in Beijing, in both of which dialogue between the NDSHA and other SHA approaches was facilitated. In response to the 2023 Morocco earthquake, a pJWG Webinar was organized. The pJWG has now covered experts from some 20 countries or regions in Asia and Africa. The monthly JWG Newsletter plays an active role in networking the group with opening borders.

In the African side, in the newly founded African Disaster Mitigation Research Center (ADMIR), the pJWG's scientific and logistic activities are prioritized on the agenda for 2024. Participation in the ASC GA, the European Seismological Commission (ESC) GA, and the AfSC GA has been one of the

important activities of the pJWG since 2024, in which the experiences and lessons will be beneficial for contributing to the 2025 International Association of Geomagnetism and Aeronomy (IAGA) - The International Association of Seismology and Physics of the Earth's Interior (IASPEI) GA, and beyond.

In science, the paper of Panza and Bela (2019), both being scientific advisors of the pJWG, was elected as the best paper 2023 by Elsevier, echoing the increased impact of NDSHA. The necessity of the development and application of NDSHA has been proved by recent earthquakes which caused disasters with record-breaking features within other SHA paradigms but well predicted by the NDSHA. Yet regional unbalance in the development and application of NDSHA calls for a joint endeavor with international and interdisciplinary characteristics.

We acknowledge the guidance and endorsement of the ASC and AfSC as well as local institutions such as the Institute of Geophysics, China Earthquake Administration. We thank the helps from other agencies and/or organizations such as the journal *Earthquake Science*. We hope to eliminate the word 'preparatory' sometime in future. Before this goal is realized, there are much to be considered, planned and implemented.

Contact address:

Yan Zhang: zhangyan@cea-igp.ac.cn | Mohamed El Gabry: elgabrymn@gmail.com