



GENERALITAT  
VALENCIANA

Conselleria de Innovación, Universidades,  
Ciencia y Sociedad Digital CIAORG/2022/45

# 13th Int. Workshop on Seismic Microzoning and Risk Reduction

**13IWSMRR**



*The 1829 Torrevieja earthquake*



## PROGRAM

UNIVERSITY OF ALICANTE

November 30 – December 01, 2023 Alicante (Spain)

Starting	Ending	<b>Program: ORAL PRESENTATIONS - THURSDAY 30 NOVEMBER 2023</b>
8:00	9:00	Conference room “Rafael Altamira” of the <a href="#">Sede Universitaria Ciudad de Alicante</a> , (University of Alicante) located in Alicante city REGISTRATION
9:00	9:30	WELCOME & OPENING
9:30	10:30	<b>KEYNOTE LECTURE.</b> IMPORTANCE OF USING MICROTREMOR OBSERVATIONS IN SEISMIC MICROZONING STUDIES FOR UNDERSTANDING SOIL CONDITION IN SEISMIC RISK REDUCTION PROCEDURES Prof. Enomoto Takahaisa
10:30	11:00	COFFEE BREAK
		<b>Conveners:</b> Dr. Sergio Molina and Dr. Juan J. Galiana Merino
11:00	11:15	Site response estimate based on moderate earthquake acceleration records. by Julijana Bojadjieva, Kemal Edip, Vlatko Sheshov and Aleksandra Bogdanovic
11:15	11:30	Ground motion and seismic damage characteristics in the Santa Fe-Atarfe 2021 series by Gerardo Alguacil, Leandro Morillas, Mercedes Feriche
11:30	11:45	Reproducibility of seismic ground motion amplification and residential housing damage in the Fukushima area by Yoshiharu Shumuta, Tsutomu Ochiai, Taichi Tenjin
11:45	12:00	Probabilistic Seismic Hazard Assessment in the Enriquillo basin and surrounding Sierras de Neiba and Bahoruco, southwestern Dominican Republic by Javier Escuder Viruete, María Betania Roque, Yésica Pérez, Francisco José Fernández, Fernando Pérez Valera
12:00	12:15	Seismic hazard assessment in the Ocoa bay area (southern Dominican Republic) based on probabilistic models and macroseismic data by Fernando Pérez Valera, Javier Escuder Viruete, Francisco José Fernández
12:15	12:30	An Urban Strong Ground Motion Network in the city of Chania (Western Crete, Greece). A tool for a microzonation study. by Georgios Chatzopoulos, Filippos Vallianatos, John P. Makris, George Hloupis, Ilias Papadopoulos, Maria Kouli, Vasilios Saltas.
12:30	12:45	A new tool for seismic risk and loss assessment and multi-criteria decision making. by Chen Huang, Sergio Molina-Palacios and Abdelghani Meslem
12:45	13:00	Structural Diagnosis of Aged Steel Truss Bridges through Ambient Vibration Analysis Aleksandra Bogdanovic, Julijana Bojadjieva, Kemal Edip and Vlatko Sesov
13:00	15:00	LUNCH : Catering served in the same room as the coffee break (included with the registration)

		<b>KEYNOTE LECTURE.</b> EARTHQUAKE EARLY WARNING AND RAPID RESPONSE TO EARTHQUAKES: TOWARDS AN EFFECTIVE RISK REDUCTION STRATEGY Dr. Elisa Zuccolo
15:00	16:00	
		<b>Conveners:</b> Dr. Sergio Molina and Dr. Juan J. Galiana Merino
16:00	16:15	Preliminary analysis of raspberry shake-based data on instrumented building: the case study of hospital (Orihuela, Spain) by Alireza Kharazian, Juan José Galiana-Merino, Juan Luis Soler Llorens, Sergio Molina, Jose Antonio Huesca Tortosa, Gonzalo Ortuño Saez, Arianna Guardiola Villora, Igor Gómez Doménech and David Montiel López
16:15	16:30	Determination of the degree of seismic vulnerability of buildings in Vega de Granada by Hellín Rodríguez, Juan José; Valverde Palacios, Ignacio; García Jerez, Antonio; Alguacil De La Blanca, Gerardo; Navarro Bernal, Manuel; Feriche Fernández-Castanys, Mercedes; Martínez Pagán, Pedro
16:30	17:00	COFFEE BREAK
17:00	17:15	Seismic hazard in the Central Betic Cordillera (S Spain). Insights from geological characterization of the Baza and Galera Faults by Iván Medina-Cascales, Iván Martín-Rojas, José Antonio Peláez, Francisco J. García Tortosa, Pedro Alfaro
17:15	17:30	Historical damaging earthquakes: How NOT to forget? Yolanda Torres, Sandra Martínez-Cuevas, Héctor Fernández-Montero, Humberto Sanz de Torres, Alejandra Staller and Jorge Gaspar-Escribano
17:30	17:45	Time-dependent seismic hazard assessment. A case of study for south-eastern Spain by David Montiel-López, Sergio Molina, Juan José Galiana-Merino, Igor Gómez, Alireza Kharazian, Juan Luis Soler-Llorens, Arianna Guardiola-Villora, José Antonio Huesca-Tortosa and Gonzalo Ortuño-Sáez
17:45	18:00	Evaluation and selection of fragility curves for seismic risk studies based on a new methodology. An application for the main construction typologies of Central America Maribel Jiménez-Martínez, Orlando Hernández-Rubio, Lisandra Hernández, Laura Navas-Sánchez, Beatriz González-Rodrigo, Luis Diego Dávila-Migoya, Belén Orta-Rial, Diego Hidalgo-Leiva
21:00		GALA DINNER

Starting	Ending	<b>Program: ORAL PRESENTATIONS - FRIDAY 01 DECEMBER 2023</b>
8:00	8:30	Arrival to the conference room (Salón “ <a href="#">Alfredo Orts</a> ” – Edificio de Optica. Univ. Alicante, S. Vicente del Raspeig) and poster hanging. <b>Bus will depart at 08:00 from “Puerta del Mar” bus stop (close to <i>Dormir de Cine</i> Hotel) for all participants staying in Alicante city</b>
9:00	10:00	<b>KEYNOTE LECTURE.</b> MODELING NOISE HORIZONTAL-TO-VERTICAL SPECTRAL RATIO IN IRREGULAR LAYERS Prof. Francisco Sanchez Sesma
		<b>Conveners: Dr. Sergio Molina and Dr. Igor Gómez Doménech</b>
10:00	10:15	SISCOVA: The seismic network of the Valencia region by J. Delgado
10:15	10:30	Ongoing study on a scaled steel framed structure in a shaking table: preliminary results on the relation between fundamental period variations and damage by Luis G. Pujades, Alejo Martín, Oriol Caselles, Yeudy F. Vargas-Alzate and J. Ramón González-Drigo
10:30	11:00	<b>COFFEE BREAK</b>
11:00	11:15	Seismic risk assessment by considering the inelastic properties of the soil via Multi-Regression models by Zapata-Franco, A.M., Vargas-Alzate, Y.F., Pujades L.G. and Gonzalez-Drigo J.R.
11:15	11:30	Rocking vibration characteristics of structures on sliding type seismic isolation system and and its numerical analysis by Yukinaga OGASAWARA, Katsumi KURITA, Shigeru AOKI, Yoshiya ODA and Hikaru OTA
11:30	11:45	Commonalities found in analyses of vibration-assisted manufacturing and seismic response by Shigeru Aoki and Katsumi Kurita
11:45	12:00	Evidences of directional soil response comporment by Luis José Lucas Rojas, Oriol Caselles, Victor Salinas, Vega Pérez-Gracia, Jaume Clapes
12:00	12:15	New absorbing infinite elements by Kemal Edip, Vlatko Sheshov, Julijana Bojadjieva and Aleksandra Bogdanovic
12:15	12:30	Seismic evaluation of part of a RC asymmetric hospital building using different analysis techniques: a case study in Orihuela, Spain by Alireza Kharazian, Arianna Guardiola Villora, Gonzalo Ortuño Saez, Sergio Molina, Juan José Galiana-Merino, Juan Luis Soler-Llorens, Jose Antonio Huesca Tortosa, Igor Gómez Doménech and David Montiel López
12:30	12:45	New approach to seismic risk for Guatemala City: update exposure model and vulnerability model Luis Diego Dávila Migoya, Carlos Gamboa Canté, María Belén Benito Oterino and José Manuel Cabrero Ballarín
12:45	13:00	A study of overturning prevention on cultural properties by seismic ground motion - In case of fixed exhibits by nylon guts and its effects by Katsumi KURITA, Shigeru AOKI, Ejiro INAMURA
13:00	15:00	<b>LUNCH: Menu served at the Club Social II restaurant at the university of Alicante (Included with the registration)</b>

		<b>KEYNOTE LECTURE.</b> ESTIMATING S-WAVE VELOCITY MODEL FROM HORIZONTAL-TO-VERTICAL SPECTRAL RATIO BASED ON SUPERVISED MACHINE LEARNING Dr. Koichi Hayashi
15:00	16:00	
		<b>Conveners:</b> Dr. Juan Luis Soler-Llorens and Dr. Boualem Youcef Nassim Benabdeloued
16:00	16:15	Structural damage survey on buildings in the area of Adassil, Amizmiz, Tafeghaghte and Talet N'Yaaqoud (Morocco) by Beatriz González, Laura Navas, Juan Gregorio Rejas, Orlando Rubio and Belén Benito
16:15	18:00	Poster session
18:00	18:15	CLOSING CEREMONY
18:15		COCKTAIL

## INFORMATION DETAILS

### Detailed Information

(Registration fees, accommodation, important dates, presentation guidelines, etc.) can be found at the URL address:

<https://riesgosismico.es/13-iwsmrr/>

For more information, questions, please contact the workshop secretariat: [13iwsmrr@gmail.com](mailto:13iwsmrr@gmail.com)

Or contact directly with Sergio Molina e-mail: [sergio.molina@gcloud.ua.es](mailto:sergio.molina@gcloud.ua.es)

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