

<17WCEE : Category List>

1. Engineering Seismology

- a. Active fault and paleo seismology
- b. Source characterization
- c. Hazard assessment
- d. Ground motion studies
- e. Seismic network and monitoring
- f. Path and site effect
- g. Site and damage investigation
- h. General seismology and geology
- i. Others

2. Seismic Performance of Structures

- a. Design ground motion
- b. Seismic design and design code
- c. Buildings
- d. Bridges and infrastructures
- e. Lifeline systems
- f. Energy facilities/Nuclear Power Plant
- g. Seismic isolation and vibration control
- h. Equipment and piping system
- i. Experimental works and physical modeling
- j. Case study of performance based seismic design
- k. Others

3. Assessment and retrofitting of structures

- a. Seismic design and design code
- b. Buildings
- c. Bridges and special structures
- d. Heritage structures
- e. Non-structural components
- f. Experimental works and physical modeling
- g. Case study of seismic retrofit
- h. Others

4. Geotechnical Earthquake Engineering

- a. Slope failure
- b. Ground failure, liquefaction and soil improvement
- c. Soil-structure interaction
- d. Shallow and deep foundation
- e. Experimental works and physical modeling
- f. Others

5. Tsunami Disaster

- a. Source characterization
- b. Hazard assessment
- c. Wave propagation
- d. Tsunami-induced damage
- e. Early warning
- f. Evacuation issues
- g. Others

6. Preparedness and Emergency Management

- a. Damage estimation
- b. Rapid structural assessment
- c. Immediate response
- d. Short-term logistics
- e. Human behavior
- f. Management policy
- g. Early warning
- h. Others

7. Social and Economic Aspects

- a. Impact and indirect consequences
- b. Awareness and preparedness
- c. Public policy
- d. Recovery and resilience
- e. Financial and insurance policies
- f. Risk communication
- g. Education and outreach
- h. Ethical and legal issues
- i. Case study of seismic performance assessment
- j. Others

8. Seismic Loss and Risk Management

- a. Exposure and vulnerability
- b. Loss estimation
- c. Risk assessment
- d. Numerical modeling and application
- e. Earthquake insurance
- f. Fire following earthquake
- g. Others

9. Innovative Technology

- a. ICT and IoT
- b. Remote sensing and UAV
- c. AI and big data analytics
- d. New computational science
- e. Others

10. Lessons Learnt from Earthquakes

- a. Recent earthquakes and Tsunami
- b. History of earthquake engineering
- c. Others

11. Others

- a. Others