PROGRAMME BOOK

7 ICEES
7th International Conference on Earthquake Engineering and Seismology

18 WCSI
18th World Conference on Seismic Isolation, Energy Dissipation and Active Vibration Control of Structures

Antalya, Turkey 6-10 November 2023

6-10 NOVEMBER 2023

ANTALYA, TÜRKİYE

18 WCSI

18th World Conference on Seismic Isolation, Energy Dissipation and Active Vibration Control of Structures

7 ICEES

7th International Conference on Earthquake Engineering and Seismology

Xanadu Resort Hotel & Convention Center

18wcsi-7icees.org

ASSISi Anti-Seismic Systems International Society

DEPREM İZOLASYON DERNEĞİ
Turkish Association for Seismic Isolation

TÜRKİYE DEPREM MÜHENDİSLİĞİ DERNEĞİ
EARTHQUAKE ENGINEERING ASSOCIATION OF TURKEY

WELCOME MESSAGE


Dear Colleagues,

The 18th World Conference on Seismic Isolation, Energy Dissipation, and Active Vibration Control of Structures (18WCSI) is organized by the Turkish Association for Seismic Isolation (TASI) and patronaged by Anti Seismic Systems International Society (ASSISi). The conference will be a joint conference with the 7th International Conference on Earthquake Engineering and Seismology (7ICEES). The conference will be held on 6-10 November 2023 in Antalya, Turkey with the participation of international and national academicians, experts, practicing engineers, manufacturers, and people from other related fields of seismic isolation. The conference will include keynote lectures from the world's renowned experts and sessions with presentations on the most recent studies related to seismic isolation and energy dissipation devices. On behalf of the Local Organizing Committee of 18WCSI, we invite you to participate and submit related papers in this four-day international conference to discuss and evaluate the state-of-the-art advances and future perspectives in seismic isolation and energy dissipation applications worldwide. We kindly ask you to visit the official conference website (www.18WCSI.org) for detailed information on important deadlines, venue, and registration process. We are looking forward to hosting you in Antalya

On behalf of the Local Organizing Committee,

Mustafa ERDİK
Honorary Chair(18WCSI)
Founding Honorary Member (TASI)

Bahadır ŞADAN
Chair (18WCSI)
President (TASI)

WELCOME MESSAGE


Dear Colleagues,

On behalf of the Earthquake Engineering Association of Turkey (EEAT) as the main organizer and the Department of Civil Engineering at Alanya Alaaddin Keykubat University as the local host, it is our great honor to invite you to the 7th International Conference on Earthquake Engineering and Seismology (7ICEES), which will be a joint event with the 18th World Conference on Seismic Isolation, Energy Dissipation and Active Vibration Control of Structures (18WCSI) and held together during 6-10 November 2023 at Xanadu Resort Convention Center, Belek, Antalya, Türkiye. Turkey has been subjected to devastating earthquakes in the past, and the raise of public awareness in Turkey raised significantly after the 1999 Kocaeli earthquake. The public and private sectors took immediate actions against earthquakes. Since then, a number of earthquake awareness programs have been initiated and risk reduction methodologies have been implemented for all types of structures. In addition to structures, the implementation of proper structural or non-structural risk mitigation tools for critical infrastructure is also required for safety purposes and to reduce the insurance premiums of the facilities. Thus, this conference aims not only to bring together scientists, professionals, governmental officials, and NGOs working in the field of earthquake engineering and seismology but also to discuss the current problems in earthquake engineering-related problems. It will provide a unique opportunity for exchanging ideas and help create contacts among scientist for future bilateral and multi-lateral scientific cooperation nationally and internationally. We are looking forward to your participation and support of this joint conference, which will be held at Belek Antalya, Türkiye; one of the most attractive and touristic places in the world with numerous natural and historical places to visit in the turquoise blue Mediterranean region. We kindly ask you to visit the conference website https://18wcsi- 7icees.org/7icees for detailed information.

On behalf of the Local Organizing Committee,

Best Regards,
Murat Altuğ Erberik President of EEAT

M. Eren Uçkan Head of 7ICEES
Organizing Committee

18WCSI PROGRAM - SESSIONS OVERVIEW

TIME	7 Nov, Tue	8 Nov, Wed	9 Nov, Thu	10 Nov, Fri
09.00	OPENING SPEECHES	KEYNOTE 4 (P. GULKAN)	"KEYNOTE HALUK SUCUOĞLU"	ATATÜRK COMMEMORATION CEREMONY
09.15				"KEYNOTE TAIKI SAITO"
09.30				
09.45		PARALLEL SESSION 4: 13668 13489 13503 / 13697 13685 13537 / 13488 13699 13863 / 13769 13684 14044 / 13886 13733 13932	PARALLEL SESSION 8: 13624 13514 13617 / 14522 13605 13821 / 13820 13649 13924 / 13453 13856 13874 / 13529 13899 13672	
10.00	PLATINIUM SPONSOR PRESENTATIONS			INVITED SPEECH (YING ZHOU)
10.15				PARALLEL SESSION 12: 13933 / 13895 / 14525
10.30				
10.45	COFFEE BREAK	COFFEE BREAK	COFFEE BREAK	
11.00	KEYNOTE 1 (M. ERDIK)			
11.15		PARALLEL SESSION 5: "INVITED SPEECH PAOLO CLEMENTE"	PARALLEL SESSION 9: "INVITED SPEECH IAN AIKEN"	
11.30				CLOSING SESSION
11.45	PARALLEL SESSION 1: 14471 14141 / 13640 13492 / 13675 13400 / 13913 13674 / 14526 13795	13491 13773 13864 / 13927 13907 13882 / 13401 13996 13884	13761 13644 13654 / 13681 13648 13746 / 13715 13989 13833	
12.00				
12.15				
12.30				
12.45				
13.00	LUNCH	LUNCH	LUNCH	
13.15				
13.30				
13.45		"KEYNOTE GIAN MICHELE CALVI"	"KEYNOTE ANTONIO BOBET"	
14.00	"KEYNOTE (M. Hori)			
14.15		PARALLEL SESSION 6: 13660 13785 13545 / 13667 13839 13867 / 13889 13845 13950 / 13628 13897 14128 / 13890 14413 14172	PARALLEL SESSION 10: "INVITED SPEECH MINEO TAKAYAMA" / 13779 13658 / 13787 13725 / 14444 14438	
14.30				
14.45	PARALLEL SESSION 2: 13436 13664 / 13844 13757 / 13923 13811 / 13642 13430 / 13829 13498			
15.00				
15.15				
15.30				
15.45				
16.00	COFFEE BREAK	COFFEE BREAK	COFFEE BREAK	PRESENTATION DURATIONS: Keynotes: 30min. Presentation + 10min Q/A. Invited Speeches: 20min. Presentation + 5min Q/A. Regular: 12min. Presentation + 3min Q/A
16.15	PARALLEL SESSION 3: "INVITED SPEECH ATİLA ZEKİOĞLU"	PARALLEL SESSION 7: "INVITED SPEECH MEHMET ÇELEBİ" / 13659 14139 / 13806 13721 / 13903 13606	PARALLEL SESSION 11: "INVITED SPEECH MURAT DİCLELİ" / 13433 13647 / 13835 13848 / 13673 13981	
16.30				
16.45				
17.00	14111 14102 / 13986 13776 / 13730 14424			
17.15				
17.30			ASSISI GENERAL ASSEMBLY	
17.45	"KEYNOTE MICHAEL CONSTANTINOU"			
18.00				
		20.30-23.00 GALA COCTAIL		

POSTERS: 13696, 13700, 13840, 13865, 13939, 14010, 13641, 13543

- Martelli Zhou Joint Hall
- Fulin Zhou Hall
- Alessandro Martelli Hall
- Nathan Newmark Hall
- Bolton Seed Hall
- Keiti Aki Hall
- James Kelly Hall

7ICEES PROGRAMME - SESSIONS OVERVIEW

TIME	7 Nov, Tue	8 Nov, Wed	9 Nov, Thu	10 Nov, Fri
09.00	OPENING SESSION	KEYNOTE 4 (P. GULKAN)	KEYNOTE 6 (H. SUCUOGLU)	ATATÜRK COMMEMORATION CEREMONY
09.15				KEYNOTE 8 (T. SAITO)
09.30				
09.45		PARALLEL SESSION 4: 13780 13827 / 13900 13762 / 14032 13789 / 13422 13887 / 14033 13797	PARALLEL SESSION 8: 13474 13528 / 13978 13509 / 13404 13814 / 13615 13485 / 14115 13383	
10.00	PLATINIUM SPONSOR PRESENTATIONS			INVITED SPEECH (YING ZHOU)
10.15				PARALLEL SESSION 12: 13669 13472 / 14446 13984 / 13876 14469 / 13556
10.30				
10.45	COFFEE BREAK	COFFEE BREAK	COFFEE BREAK	
11.00	KEYNOTE 1 (M. ERDIK)			
11.15		PARALLEL SESSION 5: 14404 13499 / 14465 13815 / 14199 13931 / 13877 13382 / 13904 14312	PARALLEL SESSION 9: 13395 14001 Theme (S.Karamanos) / 14116 13794 / 13830 13792 14285 / 14420 13507 13657 / 14163 13855 / 14015	
11.30				CLOSING SESSION
11.45	PARALLEL SESSION 1: Theme (S. Akkar) 14451 / 13994 14490 / 13734 13866 / 13880 14532			
12.00				
12.15				
12.30		13758		
12.45				
13.00	LUNCH	LUNCH	LUNCH	
13.15				
13.30				
13.45		KEYNOTE 2 (M. CALVI)	KEYNOTE 7 (A. BOBET)	
14.00	KEYNOTE 2 (M. HORI)			
14.15		PARALLEL SESSION 6: Theme (A. Sextos) 14094 13917 / 14121 13915 / 13791 13770 13912 / 13783 13612 13916 / 14531 13719 13914	PARALLEL SESSION 10: 14421 13631 13549 / 13420 13413 13412 / 14433 13367 13490 / 13670 13804 13414 / 13694 14530 14468	
14.30				
14.45	PARALLEL SESSION 2: Theme (H. Yamanaka) JICA Special Session / 13982 / 13739 / 13872			
15.00				
15.15				
15.30				
15.45				
16.00	COFFEE BREAK	COFFEE BREAK	COFFEE BREAK	
16.15	PARALLEL SESSION 3: 14414 13421 / 13803 13902 / 13818 13788 / 13726 13419 / 13869 13510	PARALLEL SESSION 7: 14540 13698 14412 / 13755 13687 14101 / 13786 14431 / 13816 14419 / 13728 13910 / 13707 14441	PARALLEL SESSION 11: Theme (M. Zare) 13627 / 13807 / 14529 13868 / 14005 13819 / 13873 13851 / 14439	
16.30				
16.45				
17.00				
17.15				
17.30	KEYNOTE-3 (M. CONSTANTINOU)			
17.45				
18.00				
		20.30-23.00 GALA COCTAIL		

POSTERS: 13372, 13478, 13543, 13682, 13708, 13713, 13764, 13831, 14004, 14533

- Martelli Zhou Joint Hall
- Fulin Zhou Hall
- Alessandro Martelli Hall
- Nathan Newmark Hall
- Bolton Seed Hall
- Keiti Aki Hall
- James Kelly Hall

09.00 10.00	OPENING SESSION		
10.00-10.45	PLATINIUM SPONSOR PRESENTATION	**Room:** Martelli-Zhou Joint Hall	**Session Chair:**
10.40-11.00	**COFFEE BREAK**		
11.00-11.45	**KEYNOTE: Design Basis Ground Motion for Seismic Isolation Applications (Mustafa Erdik)**	**Room:** Martelli-Zhou Joint Hall	**Session Chair:** Bahadır Şadan
11.45-13.00	**PARALLEL SESSIONS - 1**		
	SESSION S1-A	**Room:** Martelli-Zhou Joint Hall	**Session Chair:**
11.45-12.00	**14471**	**A Review on the Base Isolation Systems with Innovative Solutions: The Negative Stiffness Devices and Adaptive Isolators** A. REZA ELAHI (POLITECNICO DI TORINO), A. CARDONI (POLITECNICO DI TORINO), G. PAOLO CİMELLARO (POLITECNICO DI TORINO)	
12.00-12.15	**13640**	**Seismic base-isolation design of multi-tower high-rise buildings with large podium in highly seismic zones** W. WEN (Quakesafe Technologies Co.,Ltd), W. LU (Tongji University), X. AN (Quakesafe Technologies Co.,Ltd)	
12.15-12.30	**13675**	**Experimental Evaluation of Impact Force Caused by Collision of Expansion Joints for Seismic Isolated Structures** S. KISHIKI (TOKYO INSTITUTE OF TECHNOLOGY), K. SUDO (TOKYO INSTITUTE OF TECHNOLOGY), T. TSUJIKAWA (KANESO), A. NAKAMURA (KANESO)	
12.30-12.45	**13913**	**SEISMICALLY ISOLATED BUILDINGS WITH GREEN ROOFS FOR SUSTAINABLE CITIES** M. HACIEMIROGLU (SISDEC ENGINEERING), A. OZENIR (KOCAELI UNIVERSITY), C. ALHAN (ISTANBUL CERRAHPASA UNIVERSITY)	
12.45-13.00	**14526**	**Jorge Chávez Airport in Perú, world's largest seismically isolated airport: experience and challenges from the design and manufacturing perspective** I. VIAL , M. RENDEL , C. FRINGS	

	SESSION S1-B	**Room:** Kelly Hall	**Session Chair:**
11.45-12.00	**14141**	**A new developed tuned liquid column gas damper for vertical control: theoretical and experimental study** Y. LIU (GUANGZHOU UNIVERSITY), K. LIU (Xi an University of Architecture and Technology)	
12.00-12.15	**13492**	**GA-BASED OPTIMISATION OF DISSIPATIVE KNEE BRACED STEEL FRAMES** N. BOURAHLA (ECOLE NATIONALE POLYTECHNIQUE), A. HANNACHI (ECOLE NATIONALE POLYTECHNIQUE)	
12.15-12.30	**13400**	**Newly developed economic hysteretic dampers for effective seismic building protection** P. HUBER (MAURER SE), F. WEBER (MAURER SWITZERLAND GMBH)	
12.30-12.45	**13674**	**IMPROVEMENT OF TMD-BOOSTER PERFORMANCE BY INTRODUCING DISPLACEMENT FEED-BACK CONTROL** T. WACHI (YACMO CO,.LTD.), T. IGUCHI (YACMO CO,.LTD.), Y. NISHIYAMA (YACMO CO,.LTD.), S. YAMANO (YACMO CO,.LTD.), J. CHOI (YACMO CO,.LTD.), H. FUNAKI (YACMO CO,.LTD.)	
12.45-13.00	**13795**	**Comprehensive Study on Heat Flow Characteristics in Viscoelastic Dampers by Three-Dimensional Finite Element Analysis** D. MONTELLANO OSABEL (TOKYO INSTITUTE OF TECHNOLOGY), K. KASAI (TOKYO INSTITUTE OF TECHNOLOGY), D. SATO (TOKYO INSTITUTE OF TECHNOLOGY)	
13.00-14.00	**LUNCH**		
14.00-14.45	**KEYNOTE: Integrated Earthquake Simulation Enhanced with High Performance Computing (Muneo Hori)**	**Room:** Martelli-Zhou Joint Hall	**Session Chair:** A. Askan (METU)
14.45-16.00	**PARALLEL SESSIONS - 2**		
	SESSION S2-A	**Room:** Martelli-Zhou Joint Hall	**Session Chair:**
14.45-15.00	**13436**	**A MACHINE LEARNING-BASED HYBRID SEISMIC ANALYSIS OF BASE ISOLATED BUILDINGS** M. SUKRU YAVAS (TOYOHASHI UNI OF TECHNOLOGY), Z. GAO (TOYOHASHI UNI OF TECHNOLOGY), N. MEKAOUI (MOHAMMED V UNIVERSITY), T. SAITO (TOYOHASHI UNI OF TECHNOLOGY)	
15.00-15.15	**13844**	**Shaking table test of a full-scale bolt-connected concrete sandwich wall panel structure with friction-strip coupled damper** F. XIONG (SICHUAN UNIVERSITY), Y. WANG (SICHUAN UNIVERSITY), Y. LIU (SICHUAN UNIVERSITY)	
15.15-15.30	**13923**	**Numerical simulation of push-and-release tests of hybrid isolation systems** F. MICOZZI (UNICAM), ALBERTO POETA (UNICAM), L. GIOIELLA (UNICAM), L. RAGNI (UNIVPM), A. DALLASTA (UNICAM)	
15.30-15.45	**13642**	**EXPERIMENT ON VERIFICATION OF MEASURING SYSTEM OF EXPERIMENTAL SYSTEM FOR FULL-SIZE SEISMIC ISOLATOR** K. SAKAI (TOKYO TECH), M. KOBAYASHI (TOKYO TECH), ICHIRO HIRANO (TOKYO TECH), M. KUROSAWA (TOKYO TECH), S. KISHIKI (TOKYO TECH), Y. TAKAHASHI (TOKYO TECH)	
15.45-16.00	**13829**	**High-performance Japanese dynamic testing system for seismic isolation bearings: E-Isolation** Y. TAKAHASHİ (KYOTO UNİVERSİTY), T. TAKEUCHİ (TOKYO TECH.), S.KİSHİKİ (TOKYO TECH.), Y. SHİNOZAKİ (TAİSEİ CORPORATİON), M. YONEDA (TOKYO TECH.), KOİCHİ KAJİWARA (NİED), AKİRA WADA (TOKYO INSTİTUTE OF TECHNOLOGY)	

	SESSION S2-B	**Room:** Kelly Hall	**Session Chair:**
14.45-15.00	**13664**	**SEISMIC ISOLATION SYSTEMS IN THE REPUBLIC OF KAZAKHSTAN: PAST AND PRESENT** VV. LAPIN (JSC Kazakh research institute of construction and architecture), Y. SHOKBAROV (JSC Kazakh research institute of construction and architecture, G. TEMIRALIULY (JSC Kazakh research institute of construction and architecture)	
15.00-15.15	**13757**	**FIRST APPLICATION OF MODERN BASE ISOLATION SYSTEM IN PRIVATE RESIDENTIAL HOUSE IN INDONESIA** T. SURYADI (FREYSSINET TOTAL TECHNOLOGY)	
15.15-15.30	**13811**	**STATE OF THE ART OF SEISMIC ISOLATION IN RUSSIA** A. BUBIS (TSNIISK NAMED AFTER VA KUTCHERENKO)	
15.30-15.45	**13430**	**Designing a base isolated building according to the Italian technical code** G. BUFFARINI (ENEA, ITALY), P. CLEMENTE (EENEA, ITALY), C. ORMANDO (UNIVERSITY OF TOR VERGATA), F. SCAFATI (UNIVERSITY OF L'AQUILA)	
15.45-16.00	**13498**	**NEWLY CONSTRUCTED BUILDINGS WITH SEISMIC ISOLATION IN ROMANIA |** S. MARIN (DI&A DESIGN CONSULTING SRL), D. IANCU (DI&A DESIGN, CONSULTING SRL), A. DUTU (TECHNICAL UNIVERSITY OF CIVIL ENGINEERING BUCHAREST)	
16.00-16.15	**COFFEE BREAK**		
16.15-16.45	**INVITED SPEECH: Learnings from S/M/L/XL Seismic Isolation Projects, and What's Next? (Atila Zekioglu)**	**Room:** Martelli-Zhou Joint Hall	**Session Chair:**
11.45-13.00	**PARALLEL SESSIONS - 3**		
	SESSION S3-A EPS Special Session	**Room:** Martelli-Zhou Joint Hall	**Session Chair:**
16.45-17.00	**14111**	**Seismic Performance and Resilience Comparison of three Designs of a 6-story Steel Building in Los Angeles: Special Moment Frames (SMFs), Base Isolated SMFs, SMFs with Viscous Dampers** A. MOKHA (EPS)	
17.00-17.15	**13986**	**New Generation Structural Seismic Isolation System, Particularities and State of the Applications** A. KASIMZADE (AZERBAIJAN UNI OF ARCH AND CONST / ONDOKUZ MAYIS UNIV.), E. NEMATLI (AZERBAIJAN UNI OF ARCH AND AZERBAIJAN UNI OF ARCH AND CONST), M. KURUOGLU (DOKUZ EYLUL UNIVERSITY)	
17.15-17.30	**13730**	**STRUCTURAL RESILIENCE: A BASIC REQUIREMENT OF SEISMIC PROTECTED STRUCTURES** M. SARTORI (FREYSSINET PRODUCT COMPANY ITALIA), S. BARONE (FREYSSINET PRODUCT COMPANY ITALIA), M. AMBOR (FREYSSINET PRODUCT COMPANY ITALIA), I. ZIVANOVIC (FREYSSINET)	

	SESSION S3-B	**Room:** Kelly Hall	**Session Chair:**
16.45-17.00	**14102**	**FIRST SEISMIC ISOLATION EXAMPLE IN EXISTING STRUCTURES IN TURKEY** H. KARAYIGIT (FREYSAS FREYSSINET YAPI SISTEMLERI A.S.), C. NOYAN OZEL (FREYSAS FREYSSINET YAPI SISTEMLERI A.S.)	
17.00-17.15	**13776**	**STUDY ON THE RELOCATION OF EXISTING BUILDING AND SEISMIC ISOLATION DESIGN – ILLUSTRATED BY THE KAOHSIUNG BUDDHIST HALL** C. SHIH (TNSEA, TAINAN STRUCTURAL ENGINEERS ASSOCIATION), C. TU (FENG CHIA UNIVERSITY), Z. TSAI (JUSTIN C. H. SHIH STRUCTURAL ENGINEER & ACCOCIATES)	
17.15-17.30	**14424**	**Innovative Retrofitting of Existing Concrete Buildings: Cross-Laminated Timber Shear Walls with Integrated Dampers |** M. YAZDINEZHAD (The CanRan Group Inc.), B. REZA (THE CANRAN GROUP INC.), M. Johnston (THE CANRAN GROUP INC.), J.Taylor (THE CANRAN GROUP INC.), S. TESFAMARIAM (University of Waterloo)	
17.30-18.15	**KEYNOTE: Three-dimensional Seismic Isolation: Developments, applications, challenges and benefits. (Michael C. Constantinou)**	**Location:** Martelli-Zhou Joint Hall	**Session Chair:** Natali Sigaher

09.00 10.00	OPENING SESSION		**Room:** Martelli-Zhou Joint Hall	
10.00-10.45	PLATINIUM SPONSOR PRESENTATIONS		**Room:** Martelli-Zhou Joint Hall	
10.45-11.00	**COFFEE BREAK**			
11.00-11.45	**KEYNOTE: Design Basis Ground Motion for Seismic Isolation Applications (Mustafa Erdik)**		**Room:** Martelli-Zhou Joint Hall	**Session Chair:** B. Sadan (MEF Uni.)
11.45-13.00	**PARALLEL SESSIONS - 1**			
	SESSION S1-T5 (2023 Kahramanmaras Earthquakes Special Session I)		**Room:** N. Newmark Hall	**Session Chair:** O. Kale (TED Uni.)
11.45-12.15	**Theme**	**TCIP loss estimations for the Feb. 6th 2023 Kahramanmaras Earthquakes** S. Akkar (T-RUPT), U. Yazgan (ITU), N. Acikgoz (T-RUPT), O. Ulku (T-RUPT), A. T. Atici (T-RUPT), E. Yildirim (T-RUPT), O. Kale (TED Uni)		
12.15-12.30	**13994**	**The 2023 Southeast Turkiye seismic sequence: Rupture of a complex fault network** P. Buyukpinar (GFZ Potsdam), G. M. Petersen (GFZ Potsdam), F. O. V. Sanhueza (GFZ Potsdam), M. Metz (GFZ Potsdam), S. Cesca (GFZ Potsdam), K. Akbayram (Bingol Uni.), J. Saul (GFZ Potsdam), T. Dahm (GFZ Potsdam)		
12.30-12.45	**13734**	**Fling-step effects observed in Mw 7.8 Kahramanmaras-Pazarcık Earthquake** A. Icen (Munzur Uni.), O. Kale (TED Uni.), M. A. Sandikkaya (Hacettepe Uni.), B. Guryuva (Hacettepe Uni.), O. Okcu (Hacettepe Uni.)		
12.45-13.00	**13880**	**A Methodology for assessment of urban seismic resilience: Turkoglu, Kahramanmaras case study** M. F. Aydin (TED Uni.), A. Altindal (METU), A. Askan (METU), A. Kop (Sutcu Imam Uni.), A. Celik (METU), C. Erkmen (AFAD), E. Pekkan (Eskisehir Tech. Uni.), H. Uygucgil (Eskisehir Tech. Uni.), H. Koska (Sutcu Imam Uni.), K. Tekin (AFAD), M. S. Balaban (METU), M. Tun (Eskisehir Tech. Uni.), M. A. Erberik (METU), M. K. Kockar (Hacettepe Uni.), N. Kilic (AFAD), S. Karimzadeh (METU), S. Mutlu (Eskisehir Tech. Uni.), V. Yildirim (Eskisehir Tech. Uni.)		
	SESSION S1-T2 (Geotechnical Earthquake Engineering I)		**Room:** B. Seed Hall	**Session Chair:** E. Gok (Dokuz Eylul Uni.)
11.45-12.00	**14451**	**On the influence of physical fields caused by seismic activation on the intensification of landslide processes** F. Gabibov (Azerbaijan Scientific Research Institue of Construction and Architecture)		
12.00-12.15	**14490**	**Modular flexible foundation system for mitigation of multiple hazards** I. G. Baykal (Bogazici Uni.)		
12.15-12.30	**13866**	**Experimental study on effectiveness of tire waste-sand cushion on seismic performance of retaining wall** A. Edincliler (Bogazici Uni.)		
12.30-12.45	**13984**	**Effects of shear wave velocity uncertainties on the geoTech.nical and geophysical analysis of an urban site (Oran, Algeria)** S. M. Elachachi (Uni. of Bordeaux), M. Mekki (USTO), M. Hemsas (Uni. of Mascara)		
13.00-14.00	**LUNCH**			
14.00-14.45	**KEYNOTE: Integrated Earthquake Simulation Enhanced with High Performance Computing (Muneo Hori)**		**Room:** Martelli-Zhou Joint Hall	**Session Chair:** A. Askan (METU)
14.45-16.00	**PARALLEL SESSIONS - 2**			
	SESSION S2-T5 (2023 Kahramanmaras Earthquakes Special Session II)		**Room:** N. Newmark Hall	Session Chairs: A. Askan (METU) , S. Unsal Oral (Baskent Uni.)
14.45-15.15	**Theme**	**Temporary strong motion observation in damaged areas of the 2023 Kahramanmaras Earthquakes with a focus on local site effects** H.Yamanaka (Tokyo Inst. of Tech.)		
15.15-15.30	**13982**	**Production of GIS-based predicted Vs30 maps for Turkiye by combining geological and high-resolution topographical digital maps** G. Sahin (Hacettepe Uni.), K. Okalp (Hacettepe Uni.), M. K. Kockar (Hacettepe Uni.), M. T. Yılmaz (METU), A. Jaleforouzan (METU), H. Akgun (METU), F. A. Temiz (AFAD), M. A. Erberik (METU), A. Askan Gundogan (METU)		
15.30-15.45	**13739**	**Liquefaction-induced ground deformations at a metallurgical facility in Dortyol-Hatay-Turkiye after the February 6 Kahramanmaras earthquake sequence** E. Cakır (METU), K. O. Cetin (METU)		
15.45-16.00	**13872**	**Field observation of earthquake-induced settlement effects on Hatay Airport region during M 7.8 Kahramanmaras earthquake in Turkey** S. Unsal Oral (Baskent Uni.)		
	SESSION S2-T9 (JICA Special Session)		**Room: B.** Seed Hall	**Session Chairs:** A. A. Dindar (Gebze Tech. Uni.), A. Celik (JICA)

14.45-15.00		**JICA's Cooperation for disaster management and seismic resilience in Turkiye and the other countries** Y. Tanaka (JICA Chief Representative)		
15.00-15.15		**Establishment of a research and education complex for developing disaster-resilient societies project SATREPS-MARTEST: Targets, actions, outputs** C. O. Sozdinler (Gebze Tech. Uni.)		
15.15-15.30		**Potential use of fiber optic cables in seismology and earthquake engineering: DAS example** A. A. Dindar (Gebze Tech. Uni.)		
15.30-15.45		**How to pursue the rational design and construction of architectural structures with guarantee of safety** A. Wada (Tokyo Institute of Technology)		
15.45-16.00		**Seismic technology of Japan and our company** Tolga Onal (Kawakin Core-Tech. Co., Ltd. Istanbul)		
16.00-16.15	**COFFEE BREAK**			
16.15-17.30	**PARALLEL SESSIONS - 3**			
	SESSION S3-T5 (2023 Kahramanmaras Earthquakes Special Session III)		**Room:** N. Newmark Hall	**Session Chair:** U. Hancilar (Bogazici Uni. KOERI)
16.15-16.30	**14414**	**Rapid characterization and field-based performance assessment of structures from the M7.8 Kahramanmaras earthquake sequence** K. Jaiswal (U.S. Geological Survey), A. Askan (METU), U. Hancılar (Bogazici Uni. KOERI), A. Rao (GEM Foundation), L. Martins (GEM Foundation), M. A. Erberik (METU), E. Cakti (Bogazici Uni. KOERI), M. Kocckar (Hacettepe Uni.), M. F. Aydın (METU), T. Tetik (Bogazici Uni. KOERI), G. Muratoglu (METU), K. Albayrak (METU), O. Altay (Bogazici Uni. KOERI)		
16.30-16.45	**13803**	**Structural performance of R/C buildings in 2023 Kahramanmaras earthquakes under the lens of Hassan index** M. E. Yildirim (Eskisehir Osmangazi Uni.), C. Yesilyurt (IZTECH), U. Gozun (IZTECH), B. Ozturk (Hacettepe Uni.), C. Donmez (IZTECH)		
16.45-17.00	**13818**	**Analyzing structural performance of buildings in the Kahramanmaras earthquakes: The role of structural systems** M. F. Aydın (TED Uni.), M. E. Yildirim (Eskisehir Osmangazi Uni.), F. B. Koroglu (Harran Uni.), E. Sonmez (Izmir Uni. of Economics)		
17.00-17.15	**13726**	**Assessment of seismic performance degradation of RC building frames under the Kahramanmaras earthquake sequence** T. Yilmaz (Ozyegin Uni.), O. C. Aygin (Ozyegin Uni.)		
17.15-17.30	**13869**	**Field observations for industrial buildings after 2023 Kahramanmaras earthquakes** G. Sagbas (Ozyegin Uni.), R. Sheikhi (Ozyegin Uni.), K. Sarikaya (Ozyegin Uni.), D. Deniz (Ozyegin Uni.)		
	SESSION S3-T3 (Seismology I)		**Room:** B. Seed Hall	**Session Chair:** G. Tanircan (Bogazici Uni.)
16.15-16.30	**13421**	**Nonparametric ground motion models of cumulative absolute velocity and peak ground velocity for the Italian dataset** A. Mohammadi (Uni. of Minho), S. M. S. Hussaini (Uni. of Minho), D. Caicedo (Uni. of Minho), S. Karimzadeh (Uni. of Minho), P. B. Lourenco (Uni. of Minho)		
16.30-16.45	**13902**	**An updated strong-motion database of Turkiye (SMD-TR)** M. A. Sandikkaya (Hacettepe Uni.), B. Guryuva (Hacettepe Uni.), O. Kale (TED Uni.), O. Okcu (Hacettepe Uni.), S. Akkar (T-RUPT Tecnology Inc.), A. Icen (Munzur Uni.), E. Yenier (Haley & Aldrich Inc.)		
16.45-17.00	**13788**	**Canakkale basin strong ground motion network** H. A. Alcik (Bogazici Uni.), G. Tanircan (Bogazici Uni.), S. Oztoprak (Istanbul Uni. Cerrahpasa), O. Eyisuren (Canakkale Municipality), A. Korkmaz (Bogazici Uni.)		
17.00-17.15	**13419**	**The prediction of peak ground velocity (PGV) and cumulative absolute velocity (CAV) of earthquakes using machine learning techniques** F. Kuran (Bogazici Uni.), G. Tanircan (Bogazici Uni.), E. Pashaei (Istanbul Gelisim Uni.)		
17.15-17.30	**13510**	**Friction and interfacial slip using the Burridge-Knopoff mode** A. Amireghbali (METU), T. Ilgin Ozcan (METU), D. Coker (METU)		
17.30-18.15	**KEYNOTE: Three-dimensional Seismic Isolation: Developments, applications, challenges and benefits (Michael Constantinou)**		**Location:** Xanadu Amphitheatre	**Session Chair:** A. N. Sigaher (MEF Uni.)

09.00-09:45	**KEYNOTE: Integrated Earthquake Simulation Enhanced with High Performance Computing (Muneo Hori)**		**Room:** Zhou Hall	**Session Chair:** A. Irfanoglu (Purdue Uni.)
09.45-11.00	**PARALLEL SESSIONS - 4**			
	SESSION S4-A		**Room:** Zhou Hall	**Session Chair:**
09.45-10.00	**13668**	**SEISMIC RETROFIT USING TUNED MASS SYSTEMS** P. NAWROTZKI (GERB Schwingungsisolierungen GmbH Co.KG), D. SIEPE (GERB Schwingungsisolierungen GmbH Co.KG)		
10.00-10.15	**13697**	**Seismic Retrofitting of Reinforced Concrete Buildings with Rotational Friction Dampers** I. MUALLA (DAMPTECH), SUAT Yildirim (PROMER)		
10.15-10.30	**13488**	**Optimal Viscous Damper Distribution for Seismic Rehabilitation of Building Structures with Soft Story Irregularity** Arcan Koroglu (Hacettepe Uni.), Baki Ozturk (Hacettepe Uni.), Huseyin Cetin (Nigde Omer Halisdemir Uni.), Ersin Aydin (Nigde Omer Halisdemir Uni.		
10.30-10.45	**13769**	**Design of seismic retrofitting using Viscous Dampers: A case study from a school building** M. GORKEM YILDIZ (SISMODINAMIK), C. TUZUN (YAŞAR UNI), G. TANIRCAN (BOGAZICI UNI)		
10.45-11.00	**13886**	**FRAGILITY ASSESSMENT OF FE-SMA-BASED BUCKLING-RESTRAINED BRACED FRAMES SUBJECTED TO FAR-FIELD AND NEAR-FAULT GROUND MOTIONS** S. JENA (INDIAN INSTITUTE OF TECHNOLOGY DELHI), D.YADAV (INDIAN INSTITUTE OF TECHNOLOGY JAMMU), D. RANJAN SAHOO (INDIAN INSTITUTE OF TECHNOLOGY DELHI)		
	SESSION S4-B		**Room:** Martelli Hall	**Session Chair:**
09.45-10.00	**13489**	**Base isolation of rocking systems: a rotation-based design procedure** G. DESTRO BISOL (UNİVERSITY OF ROME LA SAPİENZA), M. DEJONG (UNIVERSITY OF CALIFORNIA, BERKELEY), D. LIBERATORE (SAPIENZA UNİVERSITY OF ROME), L. SORRENTINO (SAPIENZA UNIVERSITY OF ROME)		
10.00-10.15	**13685**	**Performance study on self-centering wall structures with infill walls** X. ZHU (TONGJI UNIVERSITY), H. WU (TONGJI UNIVERSITY), Y.ZHOU (TONGJI UNIVERSITY)		
10.15-10.30	**13699**	**Experimental examinations of free-standing structures with/without cushion stoppers for the suppression of the residual sliding displacement** R. ENOKIDA (TOHOKU UNIVERSITY), T. NISHIO (TOHOKU UNIVERSITY), KOHJU IKAGO (TOHOKU UNIVERSITY)		
10.30-10.45	**13684**	**Enhancing the Performance of Low-Prestressed Self-Centering Energy-Dissipative Braces** Y XIAO (TONGJI UNIVERSITY), H. BAI (TONGJI UNIVERSITY), Y. ZHOU (TONGJI UNIVERSITY), M. EBERHARD (UNIVERSITY OF WASHINGTON), JOHN F. STANTON (UNIVERSITY OF WASHINGTON)		
10.45-11.00	**13733**	**SEISMIC PERFORMANCE OF SPLIT-FOUNDATION FRAME STRUCTURES WITH INTER-STORY SEISMIC ISOLATION** B. Jiang (Chongqing University), Y. Li (Chongqing University), Y. Tang (Chongqing University), S. Ji (Chongqing University), Y. Li (Chongqing University)		
	SESSION S4-C		**Room:** Kelly Hall	**Session Chair:**
09.45-10.00	**13503**	**Capacity Spectrum Based Seismic Response Prediction of Vibration-Controlled Ceiling Structures Employed Pulley Mechanism** R. MAJİMA (TOYOHASHI UNIVERSITY OF TECHNOLOGY)		
10.00-10.15	**13537**	**NOVEL METAFOUNDATIONS FOR SEISMIC PROTECTION OF INDUSTRIAL PROCESS PLANT COMPONENTS** T. GUNER (UNIVERSITY OF TRENTO), O. SALVATORE BURSI (UNIVERSITY OF TRENTO), M. BROCCARDO (UNIVERSITY OF TRENTO)		
10.15-10.30	**13863**	**DYNAMIC BEHAVIOR ANALYSIS OF NON-STRUCTURAL COMPONENTS WITH VIBRATION ISOLATING SUPPORTS** K. ENES KUYUMCU (ISTANBUL TECHNICAL UNIVERSITY), F. SUTCU (ISTANBUL TECHNICAL UNIVERSITY)		
10.30-10.45	**14044**	**BASE ISOLATION AS A SOLUTION FOR PROTECTING THE LABORATORY BUILDINGS AND EQUIPMENT: A CASE STUDY FROM NOVI SAD, SERBIA |** M. MARINKOVIC (UNIVERSITY OF BELGRADE), C.BUTENWEG (SDA-ENGINEERING GMBH)		
10.45-11.00	**13932**	**Structural System Identification of Nonlinear Energy Sink with Negative Stiffness using Fourier Neural Operator |** S. DAS (UNIVERSITY OF WATERLOO), S. TESFAMARIAM (UNIVERSITY OF WATERLOO), C. VENTURA (THE UNIVERSITY OF BRITISH COLUMBIA)		
11.00-11.15	**COFFEE BREAK**			
11.15-11.45	**INVITED SPEECH: Experimental seismic behaviour of an isolation system including HDRB's and SD's under low energy earthquakes (Paolo Clemente)**			**Session Chair:**
11.45-12.30	**PARALLEL SESSIONS -5**			

	SESSION S5-A		**Room:** Zhou Hall	**Session Chair:**
11.45-12.00	**13491**	**Investigation of a New Three Dimensional Seismic Isolation (3DSI) System for Near-Field Ground Motions** M. POURMASOUD (ROBINSON SEISMIC LTD)		
12.00-12.15	**13927**	**DEVELOPING, TESTING AND APPLICATION OF THE 3D BCS BASE CONTROL ISOLATION SYSTEM WITH 3D VISCODAMPERS |** V. KOSTAREV (CKTI-VİBROSEİSM (CVS)), P. NAWROTZKI (GERB), A. KULTSEP (CVS), P. VASILYEV (CVS)		
12.15-12.30	**13401**	**TECHNICALLY EFFECTIVE AND ECONOMIC SEISMIC ISOLATION AND NOISE INSULATION WITHIN ONE DEVICE |** P. HUBER (MAURER SE), F. WEBER (MAURER SWITZERLAND GMBH)		
	SESSION S5-B Hirun Special Session		**Room:** Martelli Hall	**Session Chair:**
11.45-12.00	**13773**	**Real-Complex Hybrid Modal Response Spectrum Method for Seismically Base-Isolated Structures** P. TAN (GUANGZHOU UNIVERSITY), S. LI (GUANGZHOU UNIVERSITY), Y. CHEN (GUANGZHOU UNIVERSITY)		
12.00-12.15	**13907**	**INFLUENCE OF SHEAR STRAIN LIMIT FOR LEAD RUBBER BEARINGS (LRBs) ON THE DESIGN OF SEISMICALLY ISOLATED BUILDINGS |** M. HACIEMIROGLU (SISDEC ENGINEERING), A. OZENIR (KOCAELI UNIVERSITY), C. ALHAN (ISTANBUL CERRAHPASA UNIVERSITY)		
12.15-12.30	**13996**	**Design spectra for Intermediate Isolation Systems: closed-form relationship based on application of pole allocation method |** F. ESPOSITO (UNIVERSITY OF NAPLES FEDERICO II), D. FAIELLA (UNIVERSITY OF NAPLES FEDERICO II), Y. IKEDA (KYOTO UNİVERSİTY), E. MELE (UNIVERSITY OF NAPLES FEDERICO II)		
	SESSION S5-C		**Room:** Kelly Hall	**Session Chair:**
11.45-12.00	**13864**	**BENEFITS OF USING DIFFERENT TYPES OF ISOLATORS** M. FIRAT KARAPINAR (FAGO TEKNOLOJI SISMIK IZOLASYON A.Ş), B. KAHVECIOGLU (FAGO TEKNOLOJI SISMIK IZOLASYON A.S), G. SHENG AO (FAGO TEKNOLOJI SISMIK IZOLASYON A.S)		
12.00-12.15	**13882**	**Influence of dynamic properties variability of elastomeric bearings on the seismic response of base-isolated structures** L. RAGNI (UNI POLITECNICA DELLE MARCHE), F. MİCOZZI (UNI OF CAMERINO), L. GIOIELLA (UNI OF CAMERINO), V. QUAGLINI (POLITEC DI MILANO), A. DALLASTA (UNI OF CAMERINO)		
12.15-12.30	**13884**	**RE-EVALUATION OF DESIGN ALTERNATIVES FOR A SEISMICALLY BASE-ISOLATED VERTICALLY IRREGULAR STRUCTURE IN THE AFTERMATH OF KAHRAMANMARA EARTHQUAKES** E. BILGE YAZICIOGLU (BILGESEL PROJE LTD. ŞTI.), V.E HATUN AKANSEL (MUGLA SITKI KOCMAN UNIVERSITY), K. KADAS (MIDDLE EAST TECHNICAL UNIVERSITY)		
12.30-13.30	**LUNCH**			
13:30-14:15	**KEYNOTE: Seismic Isolation in Loss-Based Design (Gian Michele Calvi)**		**Room:** Zhou Hall	**Session Chair:** Cem Yenidoğan
14.15-15.30	**PARALLEL SESSIONS - 6**			
	SESSION S6-A		**Room:** Zhou Hall	**Session Chair:**
14.15-14.30	**13660**	**SEISMIC ISOLATION OF HOSPITALS THROUGH FLUID VISCOUS DAMPERS COMBINED WITH ISOLATORS** M. GABRIELLA CASTELLANO (FIP MEC SRL), A. EVİNA PIGOUNI (FIP MEC SRL), L. MARCOLIN (FIP MEC SRL), S. INFANTI (FIP MEC SRL)		
14.30-14.45	**13667**	**SEISMIC PROTECTION OF BUILDINGS BY VISCOUS WALL DAMPERS** D. SIEPE (GERB Schwingungsisolierungen GMBH & CO.KG), P. NAWROTZKI (GERB Schwingungsisolierungen GmbH Co.KG)		
14.45-15.00	**13889**	**A NEW BENDING-SHEAR MODEL FOR SUPER TALL BUILDING WITH VARIOUS TYPES OF DAMPERS** YU MU (TOKYO TECH), K. KASAI (TOKYO TECH), D. SATO (TOKYO TECH), K. WATAI (TAKENAKA CORP), N. IINO (TAKENAKA CORP), KENSAKU KANEKO (OSAKA METROPOLITAN UNIVERSITY)		
15.00-15.15	**13628**	**Model Reference Predictive Control Method for Building Mass Damper** Y. TOMIYOSHI (SHIMIZU CORP), N. YOSHIDA (SHIMIZU CORP), S. KOTSUKI (SHIMIZU CORP), A. FUKUKITA (SHIMIZU CORP), M. TAKAHASHI (KEIO UNIVERSITY)		
15.15-15.30	**13890**	**Resilience of energy dissipation added seismic isolated structure** A. KARABACAK (YILDIZ TEKNIK ÜNIVERSITY), E. SENGUL KARABACAK (ISTANBUL TEKNIK UNIVERSITESI), K. PEKER (ERDEMLI PROJE VE MÜSAVIRLIK SAN. TIC. LTD. STI)		
	SESSION S6-B		**Room:** Martelli Hall	**Session Chair:**
14.15-14.30	**13785**	**Experimental study on elastic sliding bearings with rotational deformation capacity** T. MORI (DAIWA HOUSE), K. SAITOH (DAIWA HOUSE), A. NAGAHAMA (DAIWA HOUSE), K. HIRAI (KUROSAWA CONSTRUCTION), KAZUHIRO KOUZU (KUROSAWA CONSTRUCTION), TAKAHIRO KOIZUMI (BBM), HIROSHI SUGIYAMA (BBM), FATIH SUTCU (ISTANBUL TECHNICAL UNIVERSITY), MASARU KIKUCHI (HOKKAIDO UNIVERSITY)		

14.30-14.45	13839	**EXPERIMENTAL INVESTIGATION OF METALLIC SLIT DAMPER SUBJECTED TO COMBINED BENDING AND SHEAR ACTIONS** M. JADHAV (IIT ROORKEE), S. SHIRADHONKAR (IIT ROORKEE)		
14.45-15.00	13845	**Experimental investigation on the seismic performance of a self-centering frame structure infilled with masonry infill walls** Y. LU (SOUTHEAST UNIVERSITY), Q. LV (SOUTHEAST UNIVERSITY), YE LIU (SICHUAN UNIVERSITY)		
15.00-15.15	13897	**NUMERIC COMPARISONS ON THE MECHANICAL BEHAVIOR OF SOME METALLIC YIELDING TYPE HYSTERETIC ENERGY DISSIPATION DEVICE COMPONENTS** A.KARABACAK (YILDIZ TEKNIK UNIVERSITY), K. PEKER (ERDEMLI PROJE VE MUSAVIRLIK SAN. TIC. LTD. STI), F. ALEMDAR (YILDIZ TEKNIK UNIVERSITY)		
15.15-15.30	14413	**Seismic Response Analysis of Seismic Isolated Building and Production test results of Isolation Devices |** W. LEE (ECONING CO., LTD.), K. LEE (HANYANG UNIVERSITY), K. HWANG (ECONING CO., LTD), J. KANG (SEOUL INSTITUTE OF TECHNOLOGY), J.YANG (UNISON HKR CO. LTD.)		
	SESSION S6-C		**Room:** Kelly Hall	**Session Chair:**
14.15-14.30	13545	**A seismically-isolated building design example using Response History Analysis method based on Japanese code** D.FENG (FUJITA CORP.)		
14.30-14.45	13867	**THE SEISMIC ACTION AND SEISMIC ISOLATION DESIGN COMPARISON BETWEEN CHINESE,TURKEY FOR BUILDINGS** G. SHENG AO (FAGO TEKNOLOJI SISMIK IZOLASYON A.S.), BO CHENG (FAGO TEKNOLOJI), B. KAHVECIOGLU (FAGO TEKNOLOJI), M. FIRAT KARAPINAR (FAGO TEKNOLOJI)		
14.45-15.00	13950	**DEVELOPMENT OF SEISMIC ISOLATION AND ENERGY DISSIPATION TECHNOLOGY IN TAIWAN |** W. LIN (NATIONAL CENTER FOR RESEARCH ON EARTHQUAKE ENGINEERING), C. YU.IWAN UNIVERSITY)		
15.00-15.15	14128	**A COMPARISON STUDY ON SEISMICALLY BASE ISOLATED STRUCTURES WITH DIFFERENT RESPONSE MODIFICATION FACTORS** E. CAN OZKUZUCU (FAMER GROUP)		
15.15-15.30	14172	**OPTIMUM DESIGN OF BASE ISOLATION AND TMD ON A MID-RISE STRUCTURE** M. ROOZBAHAN , N. BISHTAWI , B. SONMEZ , G. TURAN		
15.30-15.45	**COFFEE BREAK**			
15.45-16.15	**INVITED SPEECH: Successes of Base-Isolation to Reduce Earthquake Forces on Structures: Real-Life Examples (Mehmet Çelebi)**		**Room:** Zhou Hall	**Session Chair:**
16.15-17.00	**PARALLEL SESSIONS -7**			
	SESSION S7-A TIS Special Session		**Room:** Zhou Hall	**Session Chair:**
16.15-16.30	13659	**SEISMIC RETROFIT OF BUILDINGS WITH SEISMIC ISOLATION: THE ITALIAN EXPERIENCE** M. GABRIELLA CASTELLANO (FİP MEC SRL)		
16.30-16.45	13806	**The use of seismic isolation for the seismic rehabilitation of a RC building** C. GIARLELIS (EQUIDAS CONSULTING ENGINEERS), D. KOUFALİS (EQUIDAS CONSULTING ENGINEERS)		
16.45-17.00	13903	**RETROFITTING OF AN INDUSTRIAL FACILITIY USING SEISMIC DAMPER WITHOUT STOPPING PRODUCTION |** S. YILDIRIM (PROMER CONSULTANCY ENGINEERING INC), Y. İLKAY TONGUC (PROMER)		
	SESSION S7-B		**Room:** Martelli Hall	**Session Chair:**
16.15-16.30	14139	**Vertical Load Effect on Seismic Base Isolation Systems** B. BOZKURT (DESTECH MUHENDISLIK VE MUŞAVIRLIK A.S.)		
16.30-16.45	13721	**Seismic environment within the ITER reactor building: methodology, bounding of uncertainties and results** C. MELÉNDEZ (ESTEYCO), F. RUEDA (ESTEYCO MECHANICS), L. MAQUEDA (ESTEYCO MECHANICS), V. DOMINGUEZ (ESTEYCO MECHANICS), D. ALONSO (EST), F.BELTRÁN (BELGAR), D. COMBESCURE (FUSION FOR ENERGY (F4E)), X. ZHANG (FUSION FOR ENERGY (F4E)), T. SCHÍOLER (ITER ORGANIZATION), L. PATISSON (ITER ORGANIZATION)		
16.45-17.00	13606	**PROBABILITY BASED OPERATIONAL ANALYSIS OF STRUCTURES EQUIPPED WITH TUNED MASS DAMPER** Ç.HIZAL (EGE UNIVERSITY), G. TURAN (IZMIR INSTITUTE OF TECHNOLOGY), H. CEYLAN (IZMIR INSTITUTE OF TECHNOLOGY), E.ERCAN (EGE UNIVERSITY)		

09.00-09:45	**KEYNOTE: Is the Design Spectrum Defined by Response at Two Periods Safe Enough?** **(H. Polat Gulkan**		**Room:** N. Newmark Hall	**Session Chair:** A. Irfanoglu (Purdue Uni.)
09.45-11.00	**PARALLEL SESSIONS - 4**			
	SESSION S4-T6 (Special Session by COSMOS Ground Motion Simulation Working Group I)		**Room:** N. Newmark Hall	**Session Chair:** A. Askan (METU)
09.45-10.00	13780	**Developing international standards and guidelines for curating, disseminating, and validating simulated earthquake ground-motion data** B. Aagaard (U.S. Geological Survey), A. Askan (METU), S. Rezaeian (U.S. Geological Survey), S. Ahdi (U.S. Geological Survey), A. Yong (U.S. Geological Survey)		
10.00-10.15	13900	**BB-SPEEDset: A validated dataset of simulated earthquake ground motions for engineering aims** C. Smerzini (Politecnico di Milano), R. Paolucci (Politecnico di Milano), M. Vanini (Politecnico di Milano)		
10.15-10.30	14032	**Physics-based ground motion parameter maps: Numerical simulations and data assimilation** L. Ramirez-Guzman (UNAM)		
10.30-10.45	13422	**Stochastic ground motion simulation for the 9th July 1998 Faial earthquake using source-based and site-based stochastic methods** S. M. S. Hussaini (Uni. of Minho), S. Karimzadeh (Uni. of Minho), S. Rezaeian (U.S. Geological Survey), P. B. LourenCo (Uni. of Minho)		
10.45-11.00	14033	**Stochastic modeling and simulation of near-fault earthquake ground motions** M. Dabaghi (American Uni. of Beirut)		
	SESSION S4-T1 (Structural Earthquake Engineering I)		**Room:** B. Seed Hall	**Session Chair:** G. Tanircan (Bogazici Uni.)
09.45-10.00	13827	**The seismic rehabilitation of the Hadrian's Reservoir in Athens** C. Giarlelis (Equidas Consulting Engineers), E. Matragos (Engineering Consultants Network), A. Ranios (EYDAP)		
10.00-10.15	13762	**Expeditious methods for the out-of-plane seismic safety assessment of URM walls in Europe** V. Bernardo (Uni. Of Minho), A. Campos Costa (National Lab. for Civil Eng.), P. B. Lourenco (Uni. Of Minho)		
10.15-10.30	13789	**Out-of-plane behavior of infill walls under seismic loads** S. Aktas (METU), B. Binici (METU), A. Yakut (METU), E. Canbay (METU)		
10.30-10.45	13887	**Analysis of in-plane behavior of URM wall with AEM and FEM** S. O. Akcan (Bogazici Uni.), S. A. Kilic (Bogazici Uni.), I. E. Bal (Hanze Uni. of Applied Science), M. C. Yalcin (Bogazici Uni.)		
10.45-11.00	13797	**Design and dynamic behavior of nonstructural components under seismic effects** O. Koz (ITU), F. Sutcu (ITU)		
11.00-11.15	**COFFEE BREAK**			
11.15-12.30	**PARALLEL SESSIONS - 5**			
	SESSION S5-T6 (Special Session by COSMOS Ground Motion Simulation Working Group II)		**Room:** N. Newmark Hall	**Session Chair:** S. Karimzadeh (Uni. Of Minho)
11.15-11.30	14404	**Variability of strong velocity pulses associated with directivity effects in recent moderate and large magnitude earthquakes in Turkey** E. Turker (GFZ Postdam), M.H. Yen (GFZ Postdam), M. Pilz (GFZ Postdam), F. Cotton (GFZ Postdam)		
11.30-11.45	14465	**A review of previous ground motion simulation and validation studies in Turkey and a recent simulated ground motion dataset** A. Altindal (ETH Zurich), A. Askan (METU)		
11.45-12.00	14199	**Effectiveness of synthetic ground-motions for unreinforced masonry structures: Application to a case study in Central Italy** M. Salvalaggio (Uni. of Minho), S. Karimzadeh (Uni. of Minho), P. B. Lourenco (Uni. of Minho)		
12.00-12.15	13877	**Effects of surface topography on seismic response of RC shear wall buildings** Y. Deniz (ITU), Z. T. Deger (ITU), W. Zhang (Texas Advanced Computing Center), E. Taciroglu (Uni. Of California)		
12.15-12.30	13904	**Machine learning for damage classification, risk mitigation, and post-earthquake management** F. Di Michele (INGV), O. Giannopoulou (GSSI), E. Stagnini (GSSI), D. Pera (UNIVAQ), B. Rubino (UNIVAQ), R. Aloisio (GSSI), A. Askan (METU), P. Marcati (GSSI)		
	SESSION S5-T4 (Current Research and Applications in Earthquake Engineering I)		**Room:** B. Seed Hall	**Session Chair:** B. Unutmaz (Hacettepe Uni.)
11.15-11.30	13499	**Seismic performance assessment of wheelchairs in buildings** G. Yao (National Cheng Kung Uni.), X.L. Lin (National Cheng Kung Uni.)		
11.30-11.45	13815	**Gender differences in human behaviors during an earthquake** M. Celik (Hasan Kalyoncu Uni.), B. Gurkan Ercan (Hasan Kalyoncu Uni.), A. Ayaz (Hasan Kalyoncu Uni.), H. Yakut Ipekoglu (Suleyman Demirel Uni.), F. Baltaci (Hasan Kalyoncu Uni.), M. Kurtoglu (Hasan Kalyoncu Uni.), S. Sevgican (Hasan Kalyoncu Uni.), H. C. Yardimci (Hasan Kalyoncu Uni.), S. Kucukyilmaz (Hasan Kalyoncu Uni.), C. G. Elkovan (Hasan Kalyoncu Uni.), B. Cayir (Hasan Kalyoncu Uni.), M. E. Duzcan (Hasan Kalyoncu Uni.), D. Sevin (Hasan Kalyoncu Uni.)		

11.45-12.00	13931	**Investigation of the impact of disaster events and coping strategies: The example of athletes students in a disaster area** T. Uluer (Cukurova Uni.) , Y. S. Eratli (Cukurova Uni.), E. Tiyekli (Cukurova Uni.)		
12.00-12.15	13382	**Investigation on the dynamic behavior of slag discharge plant by theoretical and experimental methods** G. Gursoy (Erdemir Engineering), H. Basdas (Erdemir Engineering)		
12.15-12.30	14312	**New contributions to understanding Earthquake Light, from the 2023 Turkish earthquakes** N. E. Whitehead (Whitehead Associates), U. Ulusoy (Hacettepe Uni.)		
12.30-12.45	13758	**Urban-scale earthquake risk management using structural health monitoring technology** S. Dincer (TDG), E. Aydin (TDG), E. C. Karanfil (TDG)		
12.30-13.30	**LUNCH**			
13.30-14.15	**KEYNOTE: Seismic Isolation in Loss-Based Design (Gian Michele Calvi)**		**Room:** Y. Zhou Hall	**Session Chair:** C. Yenidogan (Yildiz Tech. Uni.)
14.15-15.30	**PARALLEL SESSIONS - 6**			
	SESSION S6-T1 (Structural Earthquake Engineering II - Sponsored by Progetto)		**Room:** N. Newmark Hall	**Session Chair:** H. Sucuoglu (METU
14.15-14.45	**THEME**	**New Eurocode 8 - Part 2 provisions for considering asynchronous earthquake excitation in the design of bridges** A. Sextos (Uni. of Bristol)		
14.45-15.00	13791	**Influence of ground motion scaling on seismic response of bridges** A. Yakut (METU), M. Gozutok (METU), M. T. Yilmaz (METU)		
15.00-15.15	13783	**The effect of structural ductility on the selection of ground motion records** A. S. Gencoglu (ITU), F. Calim (ITU), E. Yuksel (ITU)		
15.15-15.30	14531	**Innovative integrated seismic-energy retrofit solutions for masonry** P. Morandi (Uni. of Pavia and Eucentre)		
15.45-16.00	14540	**Current challenges and future directions in energy based assessment and design** H. Sucuoğlu (METU), F.S. Alici (Baskent Uni.)		
16.00-16.15	13755	**Prioritisation of Italian residental buildings for seismic and energy efficiency performance upgrading** G. Mucedero (IUSS Pavia), R. Monteiro (IUSS Pavia)		
	SESSION S6-T2 (Geotechnical Earthquake Engineering II)		**Room:** B. Seed Hall	**Session Chair:** M. K. Kockar (Hacettepe Uni.)
14.15-14.30	14094	**Laboratory testing of an optical fiber-based monitoring system developed for earthquake-induced landslides** A. A. Kelam (METU), G. Sahin (Hacettepe Uni.), C. Demir (Hacettepe Uni.), Y. E. Kaya (Hacettepe Uni.), A. K. Karabulut (Hacettepe Uni.), B. Ural (Hacettepe Uni.), A. E. Özimsir (Hacettepe Uni.), M. K. Kockar (Hacettepe Uni.), H. Akgun (METU), A. Temiz (AFAD)		
14.30-14.45	14121	**Applicability of site amplification models for hard rock site conditions** O. Kanun (METU), Z. Gulerce (METU), O. Pekcan (METU)		
14.45-15.00	13770	**The rockfall induced by Mw 5.7 earthquake on April 22, 2022, near Stolac city (BiH)** T. Nikolic (Uni. Dzemal Bijedic Mostar), S. Zekan (Uni. of Tuzla), V. Sipka (Department for Civil Protection, City of Banja Luka)		
15.00-15.15	13612	**3D geotechnical design of soil-structure-pile interaction principles according to TBDY 2018** S. Unsal Oral (Baskent Uni.), E. N. Gunes (Hacettepe Uni.), B. Unutmaz (Hacettepe Uni.)		
15.15-15.30	13719	**Determining the root-soil structure effect on soil strength from direct shear test** E. Nacaroglu (Pamukkale Uni.), B. Yagcioglu (Pamukkale Uni.), G. N. Yuksel (Pamukkale Uni.), S. Toprak (Gebze Tech. Uni.)		
	SESSION S6-T7 (PARATUS Project Special Session I)		**Room:** K. Aki Hall	**Session Chair:** C. Yenidogan (Yildiz Tech. Uni.)
14.15-14.30	13917	**Spatial and temporal impact chain analysis on seismic risks of Istanbul** S. Kundak (ITU), C. Goksu (ITU), K. Y. Arslanli (ITU), A. A. Asici (ITU), D. Kalkanli (ITU)		
14.30-14.45	13915	**Using impact chain analysis for seismic risk reduction in Bucharest, Romania** G. Osaci-Costache (Uni. of Bucharest), D. Toma-Danila (Uni. of Bucharest), I. Armas (Uni. of Bucharest)		
14.45-15.00	13912	**Local natural events, cascading to cross regional risks and impacts along the main transit route from north and south in the Austrian Alps** T. Wenzel (Uni. of Vienna), P. Marr (Uni. of Vienna), T. Glade (Uni. of Vienna), K. Gspan (Asfinag Alpenstraße GMBH), A. Preißler (Asfinag Alpenstraße GMBH), F. Höfler (Asfinag Alpenstraße GMBH), M. Adams (BFW, Austrian Research Center for Forests), S. Cocuccioni (EURAC Research), M. Pittores (EURAC Research), M. Hurlimann (UPC BARCELONA Tech.), C. Van Westen (Uni. of Twente), F. Atun (Uni. of Twente)		
15.00-15.15	13916	**Natural disasters and housing affordability crisis in Turkey** K. Y. Arslanli (ITU), S. Kundak (ITU), C. Goksu (ITU), A. A. Asici (ITU)		

15.15-15.30	13914	**Multi-hazard dashboard for Caribbean islands – first design** J. Assink (KNMI), E. D. Zeeuw-van Dalfsen (KNMI), P. Kruiver (KNMI), H. de Vries (KNMI), E. Doornbos (KNMI), M. Brotons Blanes (Uni. of Barcelona), L. Savelberg (510 Red Cross), M. van den Homberg (510 Red Cross), B. Witvliet (Uni. of Twente), J. Szarzynski (United Nations Uni.), I. Manzella (Uni. of Twente ITC)		
15.30-15.45	**COFFEE BREAK**			
15.45-17.15	**PARALLEL SESSIONS - 7**			
	SESSION S7-T5 (2023 Kahramanmaras Earthquakes Special Session IV)		**Room:** B. Seed Hall	**Session Chair:** C. Donmez (IZTECH)
15.45-16.00	13698	**Damage of masonry infills in February 2023 Kahramanmaras earthquakes and isolation of infill walls as potential solution for the future** M. Marinkovic (Uni. of Belgrade), C. Butenweg (SDA Engineering GMBH)		
16.00-16.15	13687	**Effect of column-to-beam strength ratio on the damaged structure in the Kahramanmaras earthquake** F. Sondilek (METU Northern Cyprus Campus), A. C. Yagar (METU Northern Cyprus Campus), E. Sonmez (İzmir Uni. of Economics), A. S. Tasligedik (METU Northern Cyprus Campus)		
16.15-16.30	13786	**A discussion on the causes of the observed damages during the February 2023 Kahramanmaras earthquakes** E. Gultepe (IZTECH), H. G. Comlekoglu (IZTECH), B. Ozturk (Hacettepe Uni.), C. Donmez (IZTECH)		
16.30-16.45	13816	**Evaluation of the structural damage caused by the 2023 Turkiye earthquakes in light of the design-basis and measured ground motion intensities** F. B. Koroglu (Harran Uni.), E. Sonmez (Izmir Uni. of Economics), M. E. Yildirim (Eskisehir Uni.)		
16.45-17.00	13728	**Effect of vertical accelerations in Kahramanmaras earthquakes on the seismic performance of RC building frames** T. Yilmaz (Ozyegin Uni.)		
17.00-17.15	13707	**Reviewing the design criteria of TBDY-2018 for wall-frame systems after the 6 February 2023 earthquakes** I. Kazaz (Erzurum Tech. Uni.)		
	SESSION S7-T7 (PARATUS Project Special Session II)		**Room:** B. Seed Hall	**Session Chair:** C. Yenidogan (Yildiz Tech. Uni.)
15.45-16.00	14412	**The use of impact chains to describe complex cause-effect relationships within a systemic multi-sectoral and multi-hazard risk assessment** S. Cocuccioni (EURAC Research), M. Pittores (EURAC Research), I. Armas (Uni. of Bucharest), S. Kundak (ITU), P. Marr (Uni. of Vienna), E. D. Zeeuw-van Dalfsen (Royal Netherlands Meteorological Institute), M. Hurlimann (UPC Barcelonatech.), C. Van Westen (Uni. of Twente), F. Atun (Uni. of Twente)		
16.00-16.15	14101	**Systemic multi-sectoral and multi-hazard risk assessment in current and future scenarios: The PARATUS project** M. Hurlimann (UPC Barcelonatech.), P. Marr (Uni. of Vienna), T. Glade (Uni. of Vienna), N. Komendantova (IIASA), E. De Zeeuw-van Dalfsen (KNMI), I. Armas (Uni. of Bucharest), S. Kunda (ITU), N. Lantada (UPC), N. Pantaleoni Reluy (UPC), T. Wenzel (UNIVIE), D. Alkema (Uni. of Twente), C. Van Westen (Uni. of Twente), F. Atun (Uni. of Twente), S. Cocuccioni (EURAC)		
16.15-16.30	14431	**Forensic Analysis of historical disasters to develop quantifiable multi-hazard impact chains models** F. Atun (Uni. of Twente), R. Sliuzas (Uni. of Twente), F. Romagnoli (EURAC), I. Armas (Uni. of Bucharest), R. Mocanu (Uni. of Bucharest), S. Kundak (ITU)		
16.30-16.45	14419	**Development of a platform for the generation, visualisation and quantification of disaster impact chains** C. Van Westen (Uni. of Twente), I. Naz (Uni. of Twente), B. Van den Bout (Uni. of Twente), J. Flacke (Uni. of Twente), I. Manzella (Uni. of Twente), F. Atun (Uni. of Twente), P. Marr (Uni. of Vienna), G. Agmon (Netherlands Red Cross), B. Ottow (Netherlands Red Cross), M. Hurlimann (BarcelonaTECH UPC), Y. Kumar Pavan (BarcelonaTECH UPC), S. Cocuccioni (EURAC Research), L. Schollerer (German Aerospace Center), M. Kulakowska (Centre for Systems Solutions-Wrocław), B. Koelle (Red Cross and Red Crescent Climate Centre-The Netherlands), T. Ermolieva (IIASA-Austria), R. Twayana (AIT)		
16.45-17.00	13910	**Preliminary evaluation of impact chain and systemic effects of Kahramanmaras earthquakes** C. Goksu (ITU), S. Kundak (ITU), K. Y. Arslanli (ITU), A. A. Asici (ITU)		
17.00-17.15	14441	**Complementarity of field- and remote sensing-based damage assessments in the early analysis of shelter loss for the February 2023 Turkiye earthquakes |** C. Buznego Puerto (Netherlands Red Cross), M.J.C van den Homber (510, an initiative of the Netherlands Red Cross), J. 510, an initiative of the Netherlands Red Cross), S. Kundak (ITU), C. Goksu (ITU & Tashkent Uni. of Arch. and Civil Eng.), A. Yilmaz (ITU), A.A. Asici (ITU), N. Kerle (Faculty ITC, Uni. of Twente)		
20.00-23.00	**GALA COCTAIL**			

09.00-09:45	KEYNOTE: Seismic performance of the base isolated hospitals during the 6 February 2023 Kahramanmara Earthquakes (Haluk Sucuoglu)		Room: Zhou Hall	Session Chair: Cüneyt Tüzün
09.45-11.00	PARALLEL SESSIONS - 8			
	SESSION S8-A		Room: Zhou Hall	Session Chair:
09.45-10.00	13624	DESIGN FOR CONTINUED FUNCTIONALITY OF THE ADANA CITY HOSPITAL, A RESCUE HUB FOLLOWING THE 2023 TURKEY-SYRIA EARTHQUAKES A. AVIRAM (EARTHQUAKE PROTECTİON SYSTEMS), V. ZAYAS (EARTHQUAKE PROTECTION SYSTEMS), A. MOKHA (EARTHQUAKE PROTECTION SYSTEMS), S. LOW (EARTHQUAKE PROTECTION SYSTEMS)		
10.00-10.15	14522	Comparison of Seismic Performance of Base-Isolated and Conventional Hospital Buildings During the February 6, 2023, Kahramanmaras Earthquakes C YENIDOGAN		
10.15-10.30	13529	SEISMIC PERFORMANCE INVESTIGATION OF BASE ISOLATED HOSPITAL BUILDINGS AFTER KAHARAMANMARAS EARTHQUAKES K. KAATSIZ (BASKENT UNIVERSITY), F. SONER ALICI (BAŞKENT BASKENT UNIVERSITY), S. TANISER (TIS TEKNOLOJIK IZOLATOR SISTEMLERI), U.OZCAMUR (TIS TEKNOLOJIK IZOLATOR SISTEMLERI), H.SUCUOGLU (METU)		
10.30-10.45	13820	PERFORMANCE EVALUATION OF 8 BASE-ISOLATED HOSPITALS DURING 06.02.2023 EARTHQUAKES IN KAHRAMANMARAS, TURKEY U. OZCAMUR (TIS TEKNOLOJIK IZOLATOR SISTEMLERI), S. TANISER (MIDDLE EAST TECHNICAL UNIVERSITY), F. SONER ALICI (BASKENT UNIVERSITY), K. KAATSIZ (KAYSERI AHI EVRAN UNIVERSITY)		
10.45-11.00	13453	RECONSTRUCTION OF A DAMAGED REGION IN ANTAKYA WITH SEISMIC ISOLATION TECHNOLOGY D. KUBIN (PROTA ENGINEERING), UMIT KACMAZ (PROTA ENGINEERING), G. FEROĞLU (PROTA ENGINEERING), T. TANFENER (PROTA ENGINEERING), B. ELCIK (PROTA ENGINEERING), HALUK SUCUOĞLU (MIDDLE EAST TECHNICAL UNIVERSITY)		
	SESSION S8-B		Room: Martelli Hall	Session Chair:
09.45-10.00	13514	Dynamic characteristics of seismic isolation with quasi-zero stiffness and rotational inertia J. IBA (HOKKAIDO UNIVERSITY), K. WATANABE (SHIMIZU CORPORATION), K. MIYAMOTO (SHIMIZU CORPORATION), K. ISHII (HOKKAIDO) UNIVERSITY), MASARU KIKUCHI (HOKKAIDO UNIVERSITY)		
10.00-10.15	13605	Effect of Prestressing Level on a Lead Damper with Straight Shaft: An Experimental Investigation C. SOYDAN (TEKIRDAG NAMIK KEMAL UNIVERSITY), F. CALIM (ISTANBUL TECHNICAL UNIVERSITY), A. GULLU (TEXAS STATE UNIVERSITY), E. YUKSEL (ISTANBUL TECHNICAL UNIVERSITY)		
10.15-10.30	13649	SIGNIFICANTLY IMPROVED SEISMIC PROTECTION BY ADAPTIVE BASE ISOLATORS WITH VARIABLE LOW TO HIGH FRICTION PERFORMANCE P. HUBER (MAURER SE), F.WEBER (MAURER SWITZERLAND)		
10.30-10.45	13856	NUMERICAL AND EXPERIMENTAL STUDY OF SLOPED ROLLING-TYPE BEARINGS WITH AN ADDED ROTATIONAL INERTER S.-JUNG WANG (NATIONAL TAIWAN UNIVERSITY OF SCIENCE AND TECHNOLOGY), Y.A. LAI (NATIONAL TAIWAN UNIVERSITY OF SCIENCE AND TECHNOLOGY), C.H. YU (NATİONAL CENTER FOR RESEARCH ON EARTHQUAKE ENGİNEERİNG), J.S. HWANG (NATİONAL TAİWAN UNİVERSİTY OF SCİENCE AND TECHNOLOGY), K.C. CHANG (NATIONAL TAIWAN UNIVERSITY OF SCIENCE AND TECHNOLOGY)		
10.45-11.00	13899	Rethinking performance objectives for seismically isolated buildings in low-income regions A. ASTASIOS SEXTOS (UNIVERSITY OF BRISTOL)		
	SESSION S8-C		Room: Kelly Hall	Session Chair:
09.45-10.00	13617	Ultimate state performances experimental studies of large tonnage friction pendulum bearing | J. QIN (QUAKESAFE TECHNOLOGIES CO.,LTD), X. AN (QUAKESAFE TECHNOLOGIES CO.,LTD), Q. GUAN (QUAKESAFE TECHNOLOGIES CO.,LTD)		
10.00-10.15	13821	EVALUATION AND CLASSIFICATION OF EXPERIMENTAL TEST DATA FOR FRICTION PENDULUM DEVICES U. OZCAMUR (TIS TEKNOLOJIK IZOLATOR SISTEMLERI), S. TANISER (MIDDLE EAST TECHNICAL UNIVERSITY)		
10.15-10.30	13924	Resolving Measurement Problems of Existing 2D and 3D Dynamic Test Apparatus Part 1: Method and Experimental Results | K. KASAI (TOKYO INSTITUTE OF TECHNOLOGY), C. YU (NCREE, TAIWAN), S. PENG (NCREE, TAIWAN), YU MU (TOKYO INSTITUTE OF TECHNOLOGY), M. KIKUCHI (HOKKAIDO UNIVERSITY), M.TAKAYAMA (FUKUOKA UNIVERSITY)		
10.30-10.45	13874	High-Precision System with Load Cell Columns for 3D Dynamic Tests of Structural Members Part 1 – Historical Development and Project Overview K. KASAI (TOKYO INSTITUTE OF TECHNOLOGY), YU MU (TOKYO-TECH), D. OSABEL (TOKYO-TECH), A. SHEAGAY (UNIVERSITY OF AUCKLAND), K. KANEKO (OSAKA METROPOLITAN UNIVERSITY)		

10.45-11.00	13672	A NUMERICAL COMPARATIVE EFFICIENCY STUDY OF THE FOUR DIFFERENT TYPES OF SEISMIC ISOLATION SYSTEMS A. KULTSEP (CKTI-VIBROSEISM)		
11.00-11.15	COFFEE BREAK			
11.15-11.45	INVITED SPEECH: Creating Seismic Movement: A Perspective on the Evolution of Seismic Isolation (Ian Aiken)		Room: Zhou Hall	Session Chair:
11.45-12.30	PARALLEL SESSIONS - 9			
	SESSION S9-A		Room: Zhou Hall	Session Chair: Paolo Clemente
11.45-12.00	13761	Evaluation of tsunami loads on a seismically isolated building using 3D fluid analysis M. YAMAMOTO (TAKENAKA CORP), T. KINOSHİTA (TAKENAKA CORP), S. INOUE (TAKENAKA CORP.), N.KAMOSHITA (TAKENAKA CORP), T. SONE (TAKENAKA CORP), M. TAKAYAMA (FUKUOKA UNIVERSITY), K. MORITA (FUKUOKA UNIVERSITY)		
12.00-12.15	13681	Analysis and research on vertical isolation and energy dissipation design of building structure Q. GUAN (QUAKESAFE TECHNOLOGIES CO.,LTD)		
12.15-12.30	13715	Comparative study between moment-resisting structure using performance-based method and isolated structure in school building S. JI (CHONGQING UNIVERSITY), F. LI (CHONGQING UNIVERSITY), Y. LI (CHONGQING UNIVERSITY), Z. MA (CHONGQING UNIVERSITY)		
	SESSION S9-B EPS Special Session		Room: Martelli Hall	Session Chair:
11.45-12.00	13644	ENSURING EARTHQUAKE RESISTANCE OF FOSSIL POWER PLANTS STEEL FRAMES AND STEAM BOILERS A. ANUSCHENKO (CKTİ-VIBROSEISM LTD.)		
12.00-12.15	13648	Application of the non-classical modal superposition method in seismic analysis of NPPs civil structures V. KOROTKOV (SCIENTİFİC AND ENGINEERING CENTRE FOR NUCLEAR AND RADIATION SAFETY), P. RODİN (SCIENTİFİC AND ENGINEERING CENTRE FOR NUCLEAR AND RADIATION SAFETY)		
12.15-12.30	13989	Research on three-dimensional isolation technology of small nuclear facilities | Research on three-dimensional isolation technology of small nuclear facilities | Y. CHEN (GUANGZHOU UNIVERSITY), LI XU (GUANGZHOU UNIVERSITY), Y. ZHANG (GUANGZHOU UNIVERSITY), J. CHEN (GUANGZHOU UNIVERSITY), X. HUANG (GUANGZHOU UNIVERSITY), P. TAN (GUANGZHOU UNIVERSITY), F. ZHOU (GUANGZHOU UNIVERSITY)		
	SESSION S9-C		Room: Kelly Hall	Session Chair:
11.45-12.00	13654	EXPERIMENTAL EVALUATION OF VARIOUS DEPENDENCIES IN THE REDUCED AND FULL-SCALE NATURAL RUBBER BEARING M. KOBAYASHI (TOKYO INSTITUTE OF TECHNOLOGY), K. SAKAI (TOKYO INSTITUTE OF TECHNOLOGY), M. KUROSAWA (TOKYO INSTITUTE OF TECHNOLOGY), S. KISHIKI (TOKYO INSTITUTE OF TECHNOLOGY)		
12.00-12.15	13746	Comparative analysis of various techniques for determining the mechanical parameters of rubber isolation bearings J. DAİ (Institute of Engineering Mechanics, China Earthquake Administration), T. JIANG (Institute of Engineering Mechanics, China Earthquake Administration), Y. YANG (Institute of Engineering Mechanics, China Earthquake Administration), W. BAİ		
12.15-12.30	13833	EVALUATION OF LOW COST COMPONENT AND COMPOUND ELEVATED SEMI-BONDED CARBON FIBER-REINFORCED ELASTOMERIC ISOLATOR C. VENTURA (THE UNIVERSITY OF BRITISH COLUMBIA), H. ADİBNATANZİ (EP&C SEİSMİC ISOLATİON SYSTEMS INC.), S. TESFAMARİAN (THE UNIVERSITY OF BRITISH COLUMBIA)		
12.30-13.30	LUNCH			
13:30-14:15	KEYNOTE: Seismic Cracking of Earth Dams: Gatun Dam in the Panama Canal (Antonio Bobet)		Room: Zhou Hall	Session Chair:
14.15-14.45	INVITED SPEECH: The performance of seismically isolated buildings based on earthquake observation records in Japan (Mineo Takayama)		Room: Zhou Hall	Session Chair:
14.45-15.30	PARALLEL SESSIONS - 10			
	SESSION S10-A		Room: Zhou Hall	Session Chair:
14.45-15.00	13779	SEISMIC PERFORMANCE IMPROVEMENT OF A REINFORCED CONCRETE BUILDING WITH U-SHAPED METALLIC DAMPER H. TALHA SAHIN (ISTANBUL TECHNICAL UNIVERSITY), K. ATASEVER (MIMAR SINAN FINE ARTS UNI), O. CEM CELIK (ISTANBUL TECHNICAL UNI), P. LİN (NATIONAL CHENG KUNG UNI)		

15.00-15.15	13787	**Multi-stripe dynamic analysis of existing Italian residential RC buildings retrofitted by hysteretic energy dissipation bracing systems** A. DI CESARE (UNI OF BASILICATA), F. CARLO PONZO (UNI OF BASILICATA), N. LAMARUCCİOLA (UNI OF BASILICATA)	
15.15-15.30	14444	**AN ENERGY-BASED APPROACH FOR SEISMIC REHABILITATION: DESIGNING HYSTERETIC BRACINGS IN LOW-TO-MEDIUM RISE REINFORCED CONCRETE FRAMES |** R. RAHMAT RABI (SAPIENZA UNI OF ROME), G. MONTI (SAPIENZA UNI OF ROME)	
	SESSION S10-B	**Room:** Martelli Hall	**Session Chair:**
14.45-15.00	13658	**SEISMIC RESPONSE EVALUATION OF SEISMICALLY ISOLATED MOMENT-RESISTING FRAME BUILDINGS WITH RE-ENTRANT CORNERS** E. BILGE YAZICIOGLU (BILGESEL PROJE LTD. STI.), ALP CANER (METU)	
15.00-15.15	13725	**STUDY ON THE CALCULATION METHOD OF BASE SHEAR RATIO OF BASE-ISOLATED SPLIT-FOUNDATION STRUCTURE** Y. (CHONGQING UNI), Y. LI (CHONGQING UNI), B. JIANG (CHONGQING UNI), S. JI (CHONGQING UNI)	
15.15-15.30	14438	**DEVELOPMENT OF INNOVATIVE PILE FOUNDATIONS FOR SEISMIC ISOLATION OF THE STRUCTURES BUILT ON SWELLING CLAY SOILS |** F. GABIBOV (AZERBAIJAN SCI RES INST OF CONST AND ARCH)	
15.30-15.45	**COFFEE BREAK**		
15.45-16.15	**INVITED SPEECH: New Seismic Isolated Bridge Design Specifications of Türkiye: A Comparative Evaluation With Respect to European and Us Design Standards. (Murat Dicleli)**	**Room:** Zhou Hall	**Session Chair:**
16.15-17.00	**PARALLEL SESSIONS - 11**		
	SESSION S11-A TIS Special Session	**Room:** Zhou Hall	**Session Chair:**
16.15-16.30	13433	**SHAKE TABLE TESTS ON A BRIDGE SPAN SCALED MODEL SEISMICALLY ISOLATED BY DIFFERENT DEVICES** C. ORMANDO (UNIVERSITA DEGLI STUDI DI ROMA TOR VERGATA), P. CLEMENTE (ENEA), I. ROSELLİ (ENEA), F. SAITTA (ENEA), G. BUFFARINI (ENEA), A. COLUCCI (ENEA), M. BALDINI (ENEA), A. PİCCA (ENEA), C. CASTINO (SOMMA INTERNATIONAL SRL), A. MARIA CICALESE (SOMMA INTERNATIONAL SRL), P.BELLUCCI (ANAS SPA), F.CIARALLO (ANAS SPA)	
16.30-16.45	13835	**Effect of multidirectional ground motions on the performance of elastomeric base isolators in Base Isolated bridges.** C. VENTURA (THE UNIVERSITY OF BRITISH COLUMBIA), A. KEDARISETTI (THE UNIVERSITY OF BRITISH COLUMBIA)	
16.45-17.00	13673	**RECENT ADVANCEMENTS IN ROLLING ISOLATION SYSTEMS USING ELASTOMERIC SPHERES: NUMERICAL AND EXPERIMENTAL RESULTS** SERGIO REYES (ETH ZURICH), MICHALIS VASSILIOU (ETH ZURICH)	
	SESSION S11-B Fuji Special Sessi	**Room:** Martelli-Zhou Joint Hall	**Session Chair:**
16.15-16.30	13647	**TUNED MASS DAMPER FOR REDUCTION OF SEISMIC LOADS IN HIGH-RISE RESIDENTIAL BUILDINGS** D. BONDAREV (CKTI-VIBROSEISM)	
16.30-16.45	13848	**EVALUATION OF VISCOELASTIC COUPLING DAMPERS (VCDS) FOR SEISMIC PERFORMANCE OF REINFORCED CONCRETE HIGH RISE BUILDINGS** Y. BIRSEN (ISTANBUL TECHNICAL UNI)	
16.45-17.00	13981	**A CHART-BASED DESIGN PROCEDURE FOR INTERMEDIATE ISOLATION SYSTEM (IIS) IN EXISTING BUILDINGS |** F. ESPOSITO (UNIVERSITY OF NAPLES FEDERICO II), D. FAIELLA (UNIVERSITY OF NAPLES FEDERICO II), E. MELE (UNIVERSITY OF NAPLES FEDERICO II)	

09.00-09.45	**KEYNOTE: Seismic performance of the base isolated hospitals during the 6 February 2023 Kahramanmara Earthquakes (Haluk Sucuoglu)**	**Room:** Y. Zhou Hall	**Session Chair:** C. Tuzun (Yasar Uni.)
09.45-11.00	**PARALLEL SESSIONS - 8**		
	SESSION S8-T6 (Special Session by COSMOS Site Characterization Working Group I)	**Room:** N. Newmark Hall	**Session Chair:** A. Askan (METU), M. Pilz (GFZ Postdam)
09.45-10.00	13474	**Obtaining site effect-free hard-rock time series from the generalized inversion Tech.nique** M. Pilz (GFZ Potsdam), F. Cotton (GFZ Potsdam), C. Zhu (GFZ Potsdam), K. Nakano (3 Hazama Ando Corp.), H. Kawase (DPRI Kyoto)	
10.00-10.15	13978	**Out of the trashcan & into the project: Rendering seismic recordings usable at higher frequencies through noise modeling** O. J. Ktenidou (National Observatory of Athens)	
10.15-10.30	13404	**Magnitude dependency of spectral decay parameter (K) in Sivrice-Puturge segment related events of East Anatolian Fault (EAF)** Y. Biro (Consultant), B. Siyahi (TDMD), B. Akbas (Gebze Tech. Uni.)	
10.30-10.45	13615	**Evaluation of multivariate adaptive regression splines for prediction of kappa factor around western Turkey** T. O. Kurtulmus (Dokuz Eylul Uni.), F. Yerlikaya Ozkurt (Atilim Uni.), A. Askan (METU)	
10.45-11.00	14115	**Beyond site response: On the importance of installation conditions (depth, coupling, housing...) on the quality of seismic recordings** F. Hollender (CEA and ISTERRE), P. Rischette (CEA), N. Theodoulidis (ITSAK), Z. Roumelioti (U-PATRAS), V. Perron (CEA), P. Traversa (EDF)	
	SESSION S8-T1 (Structural Earthquake Engineering III)	**Room:** B. Seed Hall	**Session Chair:** B. Guldur Erkal (Hacettepe Uni.)
09.45-10.00	13528	**Effects of torsional flexibility in asymmetric systems** K. Kaatsiz (Baskent Uni.), H. Sucuoglu (METU)	
10.00-10.15	13509	**Seismic assessment of high voltage circuit breakers in power substations** F. S. Alici (Baskent Uni.), K. Kaatsiz (Ahi Evran Uni.), M. A. Erberik (METU)	
10.15-10.30	13814	**Static and seismic performance of long-span cable-stayed bridge using advanced hybrid cables** S. Vem (Roma Tre Uni.), F. Paolacci (Roma Tre Uni.), R. Nascimbene (Uni. School for Advanced Studies)	
10.30-10.45	13485	**Evaluation of internal load state for truss structures by using measured modal properties** G. Turan (IZTECH), H. Ceylan (IZTECH)	
10.45-11.00	13383	**Numerical analyses of the global response of cold formed steel shear wall with trapizoidal sheathing** I. Rouaz (CNERIB), I. Bennoui (CNERIB), S. A. Rafa (CNERIB), L. Derradji (CNERIB), R. Ebentafat (CNERIB)	
11.00-11.15	**COFFEE BREAK**		
11.15-12.45	**PARALLEL SESSIONS - 9**		
	SESSION S9-T6 (Special Session by COSMOS Site Characterization Working Group II)	**Room:** N. Newmark Hall	**Session Chair:** M. Pilz (GFZ Postdam)
11.15-11.30	13395	**VS profiles for Turkey** A. C. Sen (METU), Z. Cagnan (METU)	
11.30-11.45	14116	**Feedback from the characterisation of French (RAP and RLBP) and Greek (ITSAK) seismological stations: Focus on implemented methodologies** F. Hollender (CEA and ISTERRE), N. Theodoulidis (ITSAK), P. Rischette (CEA), I. Douste-Bacque (ISTERRE), M. Buscetti (CEA)	
11.45-12.00	13830	**Estimating site amplifications for an enhanced understanding of ground motion effects in northwestern Turkiye** G. Muratoglu (METU), A. Askan (METU)	
12.00-12.15	14420	**Importance of site effects on the spatial distribution of damages during the 2019 Le Teil (France) earthquake** C. Cecile (IRD), M. Al Jamal (Lebanese Uni.), A. Laurendeau (IRS), J. Regnier (Cerema), D. Mercerat (Cerema), M. E. Cushing (IRS), C. Gelis (IRS), M. Causse (UGE), S. Hok (IRS), R. Iskandar (LIG), P. Langlaude (Cerema)	
	SESSION S9-T4 (Current Research and Applications in Earthquake Engineering II)	**Room:** B. Seed Hall	**Session Chair:** C. Tuzun (Yasar Uni.)
11.15-11.30	14001	**Incorporating impedance functions for soil-structure interaction (SSI) analysis of structures** T. Tetik (Tekirdag Namik Kemal Uni.), E. Safak (Bogazici Uni. KOERI)	
11.30-11.45	13794	**The effects of RCC material variability on seismic response of gravity dams** Y. Arici (METU)	
11.45-12.00	13792	**The significance of vertical shaking on seismic response of gravity dams** Y. Arici (METU), B. O. Ay (METU), B. F. Soysal (Cankaya Uni.)	

12.00-12.15	13507	**A curation of image datasets for urban segmentation applications** M. Bayraktar (Hacettepe Uni.), Y. E. Bacik (Hacettepe Uni.), O. Sert (Hacettepe Uni.), A. Aldemir (Hacettepe Uni.), B. Guldur Erkal (Hacettepe Uni.)		
12.15-12.30	14163	**Development of seismic monitoring network for seismic assessment of buildings in Yasar University campus.** C. Tuzun (Yasar Uni.)		
12.30-12.45	13616	**A project case study of retrofitted concrete columns using ultra-high performance concrete: the historical site of Forest of Steles at the Great South Gate in Taiwan -** C.H. Shih (TnSEA Taiwan), T.C. Lin (SHIH-SEA Taiwan), F.Y. Hu (Eversolid Tech), C.H. Yen (National Cheng Kung Uni.), C.C. Hung (National Cheng Kung Uni.		
	SESSION S9-T8 (Seismic Performance of Industrial Structures and Infrastructure)		**Room:** K. Aki Hall	**Session Chair:** E. Uckan (Alanya Alaaddin Keykubat Uni.)
11.15-11.45	THEME	**Pipelines and geohazards** S. Karamanos (University of Thessaly		
11.45-12.00	14285	**Seismic monitoring of industrial facilities with an integrated BIM-SHM approach** C. Butenweg (FH Aachen Uni.. of Applied Sciences)		
12.00-12.15	13657	**Sloshing damping using vertical piles in a rectangular tank** M. Aksel (Alanya Alaaddin Keykubat Uni.), O. A. Tan (Alanya Alaaddin Keykubat Uni.), O. Atas (Alanya Alaaddin Keykubat Uni.), M. E. Uckan (Alanya Alaaddin Keykubat Uni.)		
12.15-12.30	13855	**A simplified approach for response analysis of buried steel pipes subjected to strike-slip faulting actions** D. Perdibuka (Edge Consulting Engineers), A. Edincliler (Bogazici Uni.), M. E. Uckan (Alanya Alaaddin Keykubat Uni.)		
12.30-12.45	14015	**An investigation on seismic behaviours of vertical and horizontal cylindrical liquid storage tanks** S. Ozturk (Fatih Sultan Mehmet Vakıf Uni.), A. Sari (ITU)		
12.30-13.30	LUNCH			
13.30-14.15	KEYNOTE: Seismic Cracking of Earth Dams: Gatun Dam in the Panama Canal (Antonio Bobet)		**Room:** N. Newmark Hall	**Session Chair:** H. Akgun (METU)
14.15-15.30	PARALLEL SESSIONS - 10			
	SESSION S10-T5 (2023 Kahramanmaras Earthquakes Special Session V)		**Room:** N. Newmark Hall	**Session Chair:** A. Komec Mutlu (Gebze Tech. Uni)
14.15-14.30	14421	**Soil liquefaction and effects on structures; case study in Adiyaman-Golbasi after the 06 Feb 2023 earthquakes in Turkiye.** N. Ecemis (IZTECH), M. Karaman (Karaman Engineering Project and Consultancy Co.), H. Valizadeh (Ozyegin Uni.), C. Donmez (IZTECH), K. D. Dalgic (IZTECH)		
14.30-14.45	13420	**Empirical scaling of source parameters for earthquakes on the East Anatolian Fault Zone, Turkey** O. Batman (Bogazici Uni.), G. Tanircan (Bogazici Uni.)		
14.45-15.00	14433	**Durational variability during the February 6, 2023, M7.8 Turkiye Kahramanmaras Pazarcık earthquake** K. O. Cetin (METU), A. Elsaid (TCDD Technical Engineering and Consultancy Corp. / METU)		
15.00-15.15	13670	**A comparative investigation of soil fundamental frequencies: A case study for Izmir Province** A. Komec Mutlu (Gebze Tech. Uni.), U. Mert Tugsal (Gebze Tech. Uni.), M. D. Samut Cambaz (Bogazici Uni. KOERI)		
15.15-15.30	13694	**Seismic soil liquefaction triggering performances of industrial facilities in Turkiye-Hatay-Dortyol Port region shaken by the February 6, 2023 Kahramanmaras earthquake sequence** A. Sahin (METU), K. O. Cetin (METU)		
	SESSION S10-T1 (Structural Earthquake Engineering IV)		**Room:** B. Seed Hall	**Session Chair:** Y. Arıcı (METU)
14.15-14.30	13631	**Analytical fragility assessment considering the structural aging** O. Cevik (Bogazici Uni.), U. Hancilar (Bogazici Uni. KOERI)		
14.30-14.45	13413	**Comparison of Hazus building capacity curves and pushover analysis curves for concrete moment frame type structures built in Turkey according to various seismic design levels** C. U. Demir (ITU), K. Peker (Erdemli Engineering and Consulting), B. Taskin (ITU)		
14.45-15.00	13367	**Implementation of adaptive modal pushover analyses (VMPA-A) to 20 story Los Angeles SAC steel building subjected to bi-directional ground motions** M. Surmeli (Bursa Tech. Uni.), E. Yuksel (ITU), O. Osmak (Istanbul Kultur Uni.)		
15.00-15.15	13804	**A discrete element reinforcement model for predicting crack widths on R/C members** N. Muka (METU), Y. Arici (METU)		
15.15-15.30	14530	**Enhancing seismic responses: Retrofitting 5 and 7-story RC frames with tension and compression RSFJ and SSI considerations in pulse-like earthquake scenarios** A. R. M. Alariyan (Eastern Mediterranean Uni.), M.C. Genes (Eastern Mediterranean Uni.)		

	SESSION S10-T3 (Seismology II)		**Room:** S. Aki Hall	**Session Chair:** A.C. Yalciner (METU)
14.15-14.30	13549	**Source characterization of moderate aftershocks in the East Anatolian Fault Zone** O. Batman (Bogazici Uni.), S. Akbasak (Bogazici Uni.), B. S. Demirtas (Bogazici Uni.), G. Tanircan (Bogazici Uni.)		
14.30-14.45	13412	**Earthquake epicenter forecast studies with single-station and multi-station algorithms using 30.10.2020 Sisam earthquake records** H. Turan (ITU), K. Peker (Erdemli Engineering and Consulting), B. Taskin (ITU)		
14.45-15.00	13490	**Determination of the preliminary velocity model using receiver function analysis method with DEUNET seismological observation network data** B. Kalkar (Dokuz Eylul Uni.), E. Gok (Dokuz Eylul Uni.)		
15.00-15.15	13414	**Performance of existing fling step predictive models with fling database of earthquakes in Turkey** E. Adanir (Bogazici Uni.), G. Tanircan (Bogazici Uni.)		
15.15-15.30	14468	**Analysis of tsunami following 06 February 2023 earthquake; lessons and future possibilities** A. C. Yalciner (METU), G. Guney Dogan (METU)		
15.30-15.45	COFFEE BREAK			
15.45-17.15	PARALLEL SESSIONS - 11			
	SESSION S11-T5 (2023 Kahramanmaras Earthquakes Special Session VI)		**Room:** N. Newmark Hall	**Session Chair:** M.K. Kockar (Hacettepe Uni.)
15.45-16.15	Theme	**How major and strong earthquake sequences show the inefficiency of seismic hazard zoning maps?: From Iran MW7.4:2017 to Turkiye 2023 MW7.8 and MW7.5** M. Z. Theme (IIEES)		
16.15-16.30	14529	**Enhancing earthquake damage assessment and response with data management and visualization** A. B. Ersoz, M. Altun, T. Teke, O. Aydogmus, F. Aydogan, E. Karaali, Y. E. Kaya, G. Kilic , M. A. Ozbilen , O. Pekcan		
16.30-16.45	14005	**The comparison of field survey-based MMI maps and numerical MMI maps using MARS and multiple regression methods for 6th of February 2023 Kahramanmaras earthquakes** K. Albayrak (METU), A. Askan (METU), F. Yerlikaya Ozkurt (Atilim Uni.)		
16.45-17.00	13873	**Evaluation of the February 6, 2023 earthquakes (MW 7.8 and MW 7.6) in Adıyaman by deterministic seismic hazard analysis** S. Okuyan Akcan (Bogazici Uni.), S. Tekin (Adiyaman Uni.), A. Yesilyurt (ITU)		
17.00-17.15	14485	**Rapid assessment of building damage distributions at regional and city scales in the immediate aftermath of the M7.7 Kahramanmaraş-Türkiye Earthquake** Ufuk Hancilar (Bogazici Uni.), Karin Sesetyan (Bogazici Uni.), Eser Cakti (Bogazici Uni.), Erdal Safak (Bogazici Uni.), Nurullah Acikgoz (Bogazici Uni.), Nesrin Yenihayat (Bogazici Uni.), Fatma S. Malcioglu (Bogazici Uni.), Kokcan Donmez (Bogazici Uni.), Tugce Tetik (Bogazici Uni.), Hakan Suleyman (Bogazici Uni.), Sahin Dede (Uni. College London), Sukran Acar (Bogazici Uni.)		
	SESSION S11-T1 (Structural Earthquake Engineering V)		**Room:** B. Seed Hall	**Session Chair:** F. Sutcu (ITU)
15.45-16.00	13627	**Seismic performance evaluation of a school building using linear elastic assessment procedure** E. Eren (METU), K. Kaatsiz (Ahi Evran Uni.), F. S. Alici (Baskent Uni.), M. A. Erberik (METU)		
16.00-16.15	13807	**Investigation of the seismic response of a substandard building with differential settlement by accounting for SSI effects** M. S. Parlak (Istanbul Bilgi Uni.), U. Yazgan (ITU)		
16.15-16.30	13868	**Seismic retrofit with external frames using disc anchors** H. T. sahin (ITU), F. Sutcu (ITU)		
16.30-16.45	13819	**The seismic behavior of a RC building on soft soil during the 2020 Samos Island (Aegean Sea) earthquake** C. Giarlelis (Equidas Consulting Engineers), C. Repapis (Uni. of West Attica), G. Mylonakis (Khalifa Uni.), A. Sextos (Uni. of Bristol), G. Manolis (Aristotle Uni.)		
16.45-17.00	13851	**Effect of location in plan of reinforced concrete shear walls on nonlinear behavior** S. Erden (Yıldız Tech. Uni.), B. Doran (Yıldız Tech. Uni.)		
17.00-17.15	14439	**Application of the non-classical modal superposition method in seismic analysis civil structures** V. Korotkov (Industrial and Nuclear Supervision Service of Russia), P. Rodin (Industrial and Nuclear Supervision Service of Russia		

18WCSI - 4th Day - 10 November (Friday)

09.00-09.15	ATATÜRK COMMEMORATION CEREMONY		**Room:** Martelli-Zhou Joint Hall	
09.15-10.00	KEYNOTE: Learning from the Past: The Resilient Design and Performance of Seismically Isolated Buildings in Japan (Taiki Saito)		**Room:** Martelli-Zhou Joint Hall	**Session Chair:** Fatih Sütçü
10.00-10.30	INVITED SPEECH: Intelligent Damage Detection and Prediction Method for Building Structures (Ying Zhou)		**Room:** Martelli-Zhou Joint Hall	**Session Chair:** I. Aiken (Seismic Isolation Engineering Inc.)
	SESSION S12- A Prota Special Session		**Room:** Martelli-Zhou Joint Hall	**Session Chair:**
10.30-10.45	13933	Seismic Risk Assessment of an Existing Petrochemical Plant with Base Isolation Technique: A Case Study A. MAJİDİAN (UNIVERSITY OF LIVERPOOL), L. DI SARNO (UNIVERSITY OF LIVERPOOL)		
10.45-11.00	13895	Experimental performance of friction pendulum base isolators for seismic protection of busts and statues L. DI SARNO (UNIVERİSTY OF NAPLES)		
11.00-11.15	14525	Monotonic Behavior of a Novel Energy Dissipative Mechanical Connector H. OZKAYNAK (BEYKENT UNI) , E. SENOL , E.YUKSEL(ITU), C. SOYDAN , M. SÜRMELI , K. KARAKUŞ , H. SARUHAN		
11.15-11.30	14140	Dynamic Characteristics of the Historical Foundation System for Energy Dissipation S. OH (PUSAN NATIONAL UNIVERSITY), D. YOO (PUSAN NATIONAL UNIVERSITY)		
11.30-12.00	CLOSING SESSION		**Room:** Martelli-Zhou Joint Hall	

7ICEES - 4th Day - 10 November (Friday)

09.00-09.15	ATATÜRK COMMEMORATION CEREMONY		**Room:** Martelli-Zhou Joint Hall	
09.15-10.00	KEYNOTE: Learning from the Past: The Resilient Design and Performance of Seismically Isolated Buildings in Japan (Taiki Saito)		**Room:** Martelli-Zhou Joint Hall	**Session Chair:** F. Sutcu (ITU)
10.00-10.30	THEME: Intelligent Damage Detection and Prediction Method for Building Structures (Ying Zhou)		**Room:** Martelli-Zhou Joint Hall	**Session Chair:** I. Aiken (Seismic Isolation Engineering, Inc.)
10.30-11.30	PARALLEL SESSIONS - 12			
	SESSION S12-T1 (Structural Earthquake Engineering VI)		**Room:** B. Seed Hall	**Session Chair:** U. Mert Tugsal (Gebze Tech. Uni.)
10.30-10.45	13669	Development of open source software for use in earthquake engineering applications: DARLA (v1.0) U. Mert Tugsal (Gebze Tech. Uni.), A. Komec Mutlu (Gebze Tech. Uni.), K. Ozdemir (Gebze Tech. Uni.)		
10.45-11.00	14446	Specifications and inspection methods for construction of earthquake resistant structures C. Goksu (ITU), Y. Akkaya (ITU)		
11.00-11.15	13876	Machine learning-based prediction of seismic failure mode of reinforced concrete structural walls Z. Tuna Deger (ITU), G. Taskin Kaya (ITU)		
11.15-11.30	13556	Comparative evaluation of scaling methods for seismic performance assessment of reinforced concrete buildings: A nonlinear time-history analysis study O. Karaalioglu (Gebze Tech. Uni.), U. Mert Tugsal (Gebze Tech. Uni.), A. Komec Mutlu (Gebze Tech. Uni.)		
	SESSION S12-T2 (Geotechnical Earthquake Engineering III)		**Room:** Zhou Hall	**Session Chair:** A. Arslan Kelam (Purdue Uni.)
10.30-10.45	13472	Effects of soil heterogeneities on its seismic responses A. Messaoudi (ENSTP), N. Mezouar (CGS), M. Hadid (ENSTP), N. Laouami (CGS)		
10.45-11.00	14532	Evaluation of the dynamic site effects by using site characterization and numerical methods: case study in Adapazari,Turki F. C. Yasar (Hacettepe Uni.), M. K. Kockar (Hacettepe Uni.)		
11.00-11.15	14469	3D finite element analyses on dynamic response of EPS geofoam highway embankment Y. S. Toksoy (Bogazici Uni.), A. Edincliler (Bogazici Uni.)		
11.30-12.00	CLOSING SESSION		**Room:** Martelli-Zhou Joint Hall	

18WCSI POSTER PRESENTATIONS

13696	"Application of large weight massweight mass damperers to improve the seismic resistance of buildings and structures O. Nesterova (St. Petersburh University of architecture and civil engineering), Oypashsha"
13700	"Methods of calculating the main parameters of elastoplastic seismic isolators D. Ostrovskaya (St. Petersburh University of architecture and civil engineering (SPBGASU)), Y. Rutman (St. Petersburh University of architecture and civil engineering (SPBGASU))"
13840	"Seismic damage mechanism and seismic resilience design method of subsea tunnels in unfavorable geological sections X. Huang (Guangzhou Uni.), J. Luo (Earthquake engineering research & test center), Y. Zhang (Earthquake engineering research & test center), J. LU (Earthquake engineering research & test center), J. Hong (Earthquake engineering research & test center)"
13865	"The usage of anti-tension material and its advantages B. Kahvecioglu (Fago teknoloji sismik izolasyon as.), Mehmet Firat Karapinar (Fago teknoloji sismik izolasyon as.), G. Sheng Ao (Fago teknoloji sismik izolasyon as.)"
13939	"Multi-cyclic characteristics of base-isolated buildings under long-period ground motions A. Shirayama (Tokushima Uni.), T. Yamashita (Dynamic control design office), S. ITO (Daiwa house industry Co. Ltd.)"
14010	"Parameter optimization and effect verification of mega-sub structure seismic reduction system Y. Zhang (Guangzhou Uni.)"
13641	"Method of replacing seismic isolator while maintaining the functionality of the seismically isolated building M. Nishino (Oiles Corporation)"

7ICEES POSTER PRESENTATIONS

13372	Vertical variability of shear modulus effects on the seismic responses of slopes H. B. M. Menoun (CNERIB), R. S. Ali (CNERIB), A. Hamid (CNERIB)
13478	Seismic resonance vulnerability assessment for different structural systems through soil characterization: Application in Guadalajara City, Mexico H. Salgado (Uni. Of Guadalajara), G. A. R. Gaytan (Uni. Of Guadalajara), A. Preciado (ITESO), A. Zamora (Uni. Of Guadalajara)
13543	GIS-based soili investigation of Balikesir (Northwest Turkey) with geophysical and geotechnical methods H. K. Erdonmez (Turkish Naval Forces Command), E. Gok (Dokuz Eylul Uni.), Y. Erzin (Manisa Celal Bayar Uni.)
13682	Determination of earthquake focal mechanism using artificial intelligence I. Kaftan (Dokuz Eylul Uni.), Y. Senol (Dokuz Eylul Uni.), B. Kalkar (Dokuz Eylul Uni.), E. Gok (Dokuz Eylul Uni.)
13708	Influence of type of steel reinforcement on seismic behavior of flanged and rectangular RC structural walls N. Samanta (Indian Inst of Tech.nology), K. Dasgupta (Indian Inst of Tech.nology)
13713	Collapse assessment of an elevated RC water tank in M7.7 Kahramanmaras earthquake (6 Feb 2023) O. Altay (Antalya Bilim Uni.), U. Hancilar (Bogazici Uni.)
13764	A comparative study for the seismic design of a sample masonry building regarding the evolution of Turkish earthquake codes Y. Semerdoken (METU), M. A. Erberik (METU)
13831	Performance evaluation of generic site amplification functions for ground motion simulations in northwestern Turkiye: a case study of the 1999 Duzce earthquake G. Muratoglu (METU), A. Askan (METU)
14004	Field survey-based intensity maps of the 6th of February 2023 Kahramanmaras earthquakes K. Albayrak (METU), M. F. Aydin (TED Uni.), A. Askan (METU), M. K. Kockar (Hacettepe Uni.), M. A. Erberik (METU)
14533	Probabilistic seismic hazard analysis of Izmir bay area K. Albayrak (METU), A. Askan (METU), O. Karagoz (Canakkale Onsekiz Mart Uni.), O. Tan (Istanbul Uni.)

B2B PROGRAM

DATE: 9.11.2023 TIME: 18:00-19:00

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MAURER SE is a leading specialist in mechanical engineering and steel construction with over 1,000 employees worldwide. The company is market leader in the area of structural protection systems (bridge bearings, roadway expansion joints, seismic devices, tuned mass dampers, and monitoring systems). It also develops and produces vibration isolation of structures and machines, roller coasters and observation wheels as well as special structures in steel construction. MAURER participates in many spectacular large-scale projects worldwide, like, for example, the world's biggest bridge bearings in Wazirabad, earthquake-resistant expansion joints for the world's longest suspension bridge, (1915Çanakkale), tuned mass dampers in the Baku and Socar Tower, or uplift bearings for the Zenit Arena in St. Petersburg. Complete structural isolations range from the Acropolis Museum in Athens to the new major airport in Mexico. Spectacular amusement rides include, for example, Umadum – the Munich Observation Wheel, BOLT™ - the first roller coaster on a cruise ship, the Rip Ride Rockit Roller Coaster in the Universal Studios Orlando, or the worldwide first duelling roller coaster at the Mirabilandia Park in Ravenna.

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6. Friction and Viscous Damper Applications for Existing and New Structures

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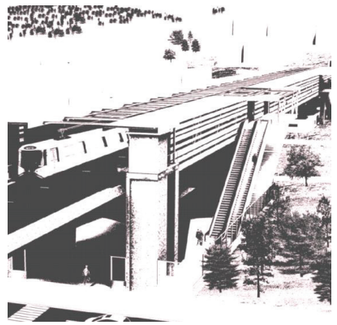
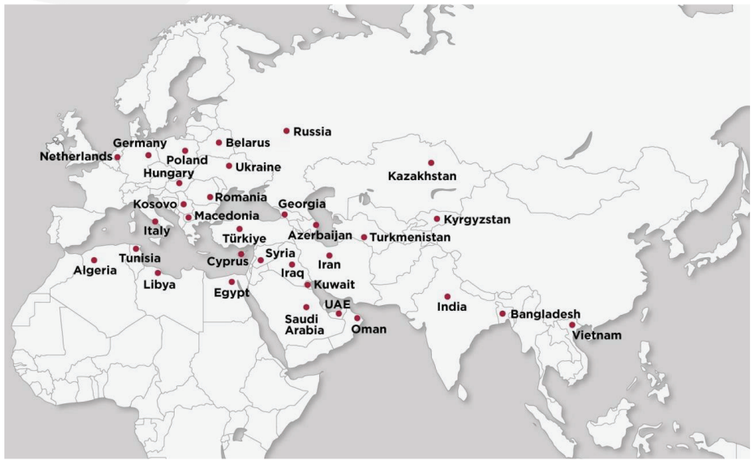
About Prota

Prota was founded in 1985 in Ankara, Turkiye In only a few years, it became one of Turkey's leading engineering, architecture and consultancy company with its specialized design approach and performance in a range of disciplines Prota operates within a strictly technical institutional structure that comprises engineers, architects and technicians as partners.



Project Locations



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EPS engineers are the world's leading seismic isolation engineering experts. Our state-of-the-art seismic isolation solutions have substantially improved the seismic performance for many of the world's most important seismically isolated structures, while significantly reducing construction costs.

EPS Triple Pendulum isolators comply with the Seismic Isolator Standard (SIS), which limits earthquake damage to less than 2% of a building's replacement cost, and thereby retain post-earthquake functionality. The seismic performance objective of the building code is to reduce the risk of collapse, and allow occupants to be able to walk out of a building after an earthquake. The standard practice of Structural Engineers has been to design new buildings for minimum compliance with the building code, which targets that less than 10% of new code compliant buildings will suffer collapse. Each year, when the code's maximum considered earthquake shaking occurs, the damage observed in new code compliant buildings is typically 100% of a building's replacement cost. Each year earthquakes cause hundreds of code designed buildings to collapse, with thousands more that remain standing but are later demolished, and millions more that suffer earthquake damage exceeding 30% of the building's replacement costs.

With EPS Triple Pendulum isolators a building avoids damage from earthquakes that are 10 times stronger than the earthquakes that damage new code compliant buildings. Construction costs are typically 2% to 10% more than construction costs for quality built building constructed only to reduce the risks of collapse to 10%. To date, 50 million square feet of hospitals have been constructed with Triple Pendulum isolators designed by EPS to retain post-earthquake functionality.

EPS Triple Pendulum isolators for continued functionality are an earthquake proven technology. The Adana & Elazig Hospitals, Acapulco Emergency Response Center, Texas Instrument's Philippines Medical Instruments Factory, 4 Ecuador bridges, and 2 Chile Liquid Natural Gas Tanks implemented Triple Pendulum isolators engineered by EPS according to the continued functionality criteria which formed the basis of the Continued Functionality Standard. These 10 essential structures experienced earthquakes shaking with strengths ranging from 2 to 4 times the building code's design basis earthquake, with all having damage of less than 2% of replacement costs, and all retaining 100% post-earthquake functionality. These same earthquakes caused hundreds of structures to collapse, and over 100,000 buildings to suffer damage exceeding 30% of replacement costs. This earthquake data confirms that EPS Triple Pendulum isolators compliant with the SIS reliably limit damage to 2% of building replacement costs.

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