

TURIN POLYTECHNIC UNIVERSITY IN TASHKENT
POLITECNICO DI TORINO



PROGRAM

of the International Scientific Conference

**IMPROVING EARTHQUAKE RESILIENCE OF
BUILDING STRUCTURES THROUGH
TECHNICAL CAPACITY BUILDING**

IERBS-2025

March 11-13, 2025

Tashkent

www.turin.uz

TURIN POLYTECHNIC UNIVERSITY IN TASHKENT
POLITECNICO DI TORINO



PROGRAM

of the International Scientific Conference

**IMPROVING EARTHQUAKE RESILIENCE OF
BUILDING STRUCTURES THROUGH
TECHNICAL CAPACITY BUILDING**

IERBS-2025

March 11-13, 2025

Tashkent

www.turin.uz



Dear Participants of the Conference!

On behalf of the Organizing Committee, we are pleased to invite you to take part in an international scientific and practical conference organized by Turin Polytechnic University in Tashkent in collaboration with Politecnico di Torino (Italy) on **Improving Earthquake Resilience of Building Structures Through Technical Capacity Building (IERBS-2025)**, which will take place on **March 11-13, 2025**.

Main sections of the Conference:

- Structural and seismic safety of buildings and structures, modern methods of calculation and design.
- Modern methods of determining seismic stability of cultural heritage objects.
- Modern architecture, energy-saving building materials and technologies.
- Prospects for applying foreign normative documents in urban planning and construction within the republic of Uzbekistan

The conference program includes Plenary (20 min) and Parallel Session (10 min) presentations.

Venue: Turin Polytechnic University in Tashkent, Tashkent, 100095, Kichik Halka Yuli str. 17,

Web-page: <https://turin.uz/uz/33253/>

E-mail: ierbs2025@polito.uz

Organizing Committee

Prof. Olimjon Tuychiev	Rector of Turin Polytechnic University in Tashkent, Chair
Dr. Alisher Ashurov	First Vice-Rector of Turin Polytechnic University in Tashkent, Co-Chair
Dr. Bakhtiyor Yokubov	Vice-Rector of Turin Polytechnic University in Tashkent, Co-Chair
Prof. Pier Paolo Riviera	Operating Project Manager of Turin Polytechnic University in Tashkent
Dr. Saidislomkhon Usmanov	Head of Civil Engineering and Architecture Department of Turin Polytechnic University in Tashkent, Co-Chair
Dr. Javlon Karimov	Head of Scientific Research and Master's Degree Department

Scientific Committee

Prof. Abbos Khodjayev	Civil Engineering and Architecture Department, TTPU
Prof. Fulvio Rinaudo	Politecnico di Torino, Italy
Prof. Gabriele Bertagnoli	Politecnico di Torino, Italy
Prof. Bakhrom Tulaganov	Tashkent University of Architecture and Civil Engineering
Prof. Khotamov Asadulla	Civil Engineering and Architecture Department, TTPU
Dr. Fabricio Barpi	Politecnico di Torino, Italy
Prof. Dinara Nazarova	Civil Engineering and Architecture Department, TTPU
Dr. Erkin Khaltursunov	Civil Engineering and Architecture Department, TTPU
Dr. Nilufar Tuxhboeva	Civil Engineering and Architecture Department, TTPU
Prof. Mukhiddin Juliev	Civil Engineering and Architecture Department, TTPU
Dr. Khusniya Zikrullayeva	Scientific Research and Master's Degree Department, TTPU
Begmurod Karimov	Civil Engineering and Architecture Department, TTPU
Tatyana Kim	Civil Engineering and Architecture Department, TTPU
Sarvar Saidrakhmonov	Civil Engineering and Architecture Department, TTPU
Shakhlo Mavlyanova	Strategic Development and International Relations Department, TTPU

Conference Secretary

Dr. Abdulaziz Azamatov	Civil Engineering and Architecture Department, TTPU
------------------------	---

PROGRAM OF THE CONFERENCE

March 11, 2025

TIME	EVENT	VENUE
13:30 – 14:00	Registration	Main entrance
14:00 – 14:45	Campus tour	
14:45 – 15:00	Opening ceremony	Yellow Hall (Building B)
	Signing Ceremony MoU	
15:00 – 17:00	Plenary talks	

OPENING CEREMONY

Moderator: Usmanov S. Head of Civil Engineering and Architecture Department of TTPU

Venue: Yellow Hall (Building B)

Zoom Meeting

<https://zoom.us/j/97288626326?pwd=006azaGehbTZQ58FvKxaNybCRbVTsr.1>

Meeting ID: 972 8862 6326

Passcode: 254708

TIME	SPEAKER	TITLE
14:45 - 15:00	Prof. Olimjon Tuychiev	Welcome Speech by the Rector of Turin Polytechnic University in Tashkent
	Prof. Diyorbek Bekmirzayev	Head of the Department for Coordination of Seismic Safety Issues of the Cabinet of Ministers (To be confirmed)
	Prof. Pier Paolo Riviera	Welcome Speech by the Operating Project Manager of Turin Polytechnic University in Tashkent
	Prof. A'zamiddin Qo'ldoshev	Welcome Speech by the Rector of Institute for Competence Development under the Ministry of Construction and Housing and Communal Services of the Republic of Uzbekistan
Signing Ceremony MoU between Turin Polytechnic University in Tashkent and Institute for Competence Development		

PLENARY TALKS

Moderator: Usmanov S. Head of Civil Engineering and Architecture Department of TTPU

Venue: Yellow Hall (Building B)

Zoom Meeting

<https://zoom.us/j/97288626326?pwd=006azaGehbTZQ58FvKxaNybCRbVTsr.1>

Meeting ID: 972 8862 6326

Passcode: 254708

TIME	SPEAKER	TITLE
15:00 – 15:20	Prof. Ismailov Vaxitxan (Director of the Institute of Seismology named after G.A. Mavlyanov of the Academy of Sciences of Uzbekistan)	ОЦЕНКА СЕЙСМИЧЕСКИХ ВОЗДЕЙСТВИЙ ПРИ РАЗЛИЧНЫХ СЦЕНАРНЫХ ЗЕМЛЕТРСЕНИЯХ НА ТЕРРИТОРИИ ТАШКЕНТА КАК ОСНОВА РАЗРАБОТКИ СИМУЛЯЦИОННОЙ МОДЕЛИ ИХ ПОСЛЕДСТВИЙ
15:20 – 15:40	Prof. Gabriele Bertagnoli (Politecnico di Torino, Italy)	HIGH-FIDELITY NL F.E.M. MODELING OF INFILLED FRAMES SUBJECTED TO SEISMIC LOADS
15:40 – 16:00	Prof. Bakhrom Tulaganov (Rector of Tashkent University of Architecture and Civil Engineering)	ASSESSMENT OF VULNERABILITY AND DAMAGE DEGREE BASED ON EMS-98 FOR TASHKENT CITY
16:00 – 16:20	Prof. Fulvio Rinaudo (Politecnico di Torino, Italy)	MONITORING SEISMIC ACTIONS WITH GEOMATIC'S TECHNOLOGIES
16:20 – 16:40	Faxriddinov Bosiddin (Ministry of Emergency Situations of the Republic of Uzbekistan, Republican Center for Seismic Prognostic Monitoring)	SEISMOLOGICAL AND COMPLEX FORECASTING MONITORING ON THE TERRITORY OF THE REPUBLIC OF UZBEKISTAN
16:40 – 17:00	Dr. Usmanov Saidislomkhon Head of Civil Engineering and Architecture Department of TTPU	MONITORING OF DYNAMIC CHANGES OF LEVEL OF DEFORMATION OF HISTORIC MASONRY BUILDINGS USING TERRESTRIAL LASER SCANNING TECHNOLOGY

PARALLEL SESSIONS

SECTION 1 - STRUCTURAL AND SEISMIC SAFETY OF BUILDINGS AND STRUCTURES, MODERN METHODS OF CALCULATION AND DESIGN

March 12, 2025

14:30 – 17:30

Chairman: Dr. E. Khaltursunov, Turin Polytechnic University in Tashkent

Secretary: Dr. A. Azamatov, Turin Polytechnic University in Tashkent

Venue: Yellow Hall

Zoom Meeting

<https://zoom.us/j/99903931783?pwd=iavPNqsQwQLuqd6gQC11NzJf9muROU.1>

Meeting ID: 999 0393 1783

Passcode: 445362

TIME	SPEAKER	TITLE
Main speakers		
14:30 – 17:30	Проф. Ходжаев Аббос Курилиш мухандислиги ва архитектура кафедраси, ТТПУ	СЕЙСМИК ХУДУДЛАРДА МЕЪМОРИЙ ОБИДАЛАР КОНСТРУКЦИЯЛАРИНИ МОДЕЛЛАШТИРИШ ВА ҲИСОБЛАШ УСУЛЛАРИНИ ТАКОМИЛЛАШТИРИШ
	Проф. Хотамов Асадулла Курилиш мухандислиги ва архитектура кафедраси, ТТПУ	СЕЙСМИК ХАВФНИ БАҲОЛАШДА ТУРАР ЖОЙ ФОНДИНИ ТАШКИЛ ЭТУВЧИ БИНОЛАРНИНГ ТЕХНИК ҲОЛАТИНИ МОНИТОРИНГ ҚИЛИШ МАСАЛАЛАРИ.
	Prof. Fabricio Barpi (Politecnico di Torino, Italy)	RECENT ADVANCEMENTS IN THE ITALIAN STANDARD FOR DAMS OF WATER RESERVOIRS
	Jonibek Bozorov O‘zbekiston Fanlar akademiyasi G‘. Mavlonov nomidagi Seysmologiya instituti	LOYSIMON GRUNTLARDA MUHANDIS-TEHNIK TAYYORGALIK ISHLARINI QURILISH MAYDONLARINING SEYSMIK HOLATIGA TA’SIRI
	Dr. Azamatov Abdulaziz Civil Engineering and Architecture Department of TTPU	USE OF VTOL AIRCRAFT FOR NATURAL DISASTER DAMAGE REDUCTION IN TALL BUILDINGS AND REMOTE RESIDENTIAL AREAS
	Begmurod Karimov Civil Engineering and Architecture Department of TTPU	MICROTREMOR MEASUREMENT OF A 12-STORY MONOLITHIC CONCRETE BUILDING USING A CRYSTAL-TYPE ACCELEROMETER
	Prof. Jalolliddin Yusupov Automatic Control and Computer Engineering Department of TTPU	FORMALLY VERIFIED IOT ARCHITECTURE FOR EARTHQUAKE DETECTION AND AUTOMATED SAFETY MEASURES

	Davron Nigmatov Civil Engineering and Architecture Department of TTPU	SEISMIC VULNERABILITY ASSESSMENT OF MULTI-STORY RESIDENTIAL BUILDINGS IN ANDIJAN USING MICRO- SEISMIC ANALYSIS AND FEM
--	---	---

SECTION 2 - MODERN METHODS OF DETERMINING SEISMIC STABILITY OF CULTURAL HERITAGE OBJECTS

March 12, 2025

14:30 – 17:30

Chairman: Prof. Mukhiddin Juliev, Turin Polytechnic University in Tashkent

Secretary: T. Kim, Turin Polytechnic University in Tashkent

Venue: Grey Hall

Zoom Meeting

<https://zoom.us/j/99903931783?pwd=iavPNqsQwQLuqd6gQC11NzJf9muROU.1>

Meeting ID: 999 0393 1783

Passcode: 445362

TIME	SPEAKER	TITLE
Main speakers		
14:30 – 17:30	Rayimkulov Akmal “Ipak yo‘li” xalqaro tadqiqot instituti	SAMARQAND VILOYATI MEMORIAL MAJMUALARNING ARXITEKTURAVIY SHAKLLANISHI VA ZIYORAT TURIZMIDAGI AHAMIYATI
	Yergasheva Nilufar Civil Engineering and Architecture Department of TTPU	DIGITAL DOCUMENTATION OF PRESENT CONDITION OF LANGAR OTA MAUSOLEUM
	Narkulov Olmosjon “Ipak yo‘li” xalqaro tadqiqot instituti	TARIXIY OBIDALARNI TA’MIRLASHDA ZAMONAVIY TEXNOLOGIYALARDAN FOYDALANISH
	Yarashev Fozilbek “Ipak yo‘li” xalqaro tadqiqot instituti	KATTAQO‘RG‘ON TUMANIDAGI XVIII-XX ASR MUHAMMAD AMIN NAQIBBEK MADRASANING ARXITEKTURASI
	Prof. Mukhiddin Juliev Civil Engineering and Architecture Department of TTPU	MONITORING AND ASSESSMENT OF MASS MOVEMENT PROCESSES IN UZBEKISTAN
	Джабборова Нигина Ташкентский Архитектурно Строительный Университет	СЦЕНАРНЫЙ РАСЧЕТ РИСКА, ПОВРЕЖДАЕМОСТИ И УЯЗВИМОСТИ ГОРОДСКОЙ ИНФРАСТРУКТУРЫ С ИСПОЛЬЗОВАНИЕМ МНОГОГРАННОГО МОДЕЛИРОВАНИЯ НА ОСНОВЕ ГИС

	Mirzayev Ibraxim, Toshkent davlat transport universiteti	BINOLARNI SEYSMIK TO 'LQINLARDAN QURUQ ISHQALANISH VA DEMPFERLAR YORDAMIDA HIMOYALASH
	Mo'minov Islombek Farg'ona politehnika instituti	QURILISHDA ENERGIYA SAMARADOR TEXNOLOGIYALAR VA INNOVATSIYALAR
	Sodiqov Mirzoxid Farg'ona politehnika instituti	BINOLARNING ENERGIYA SAMARADORLIGI VA MIKROIQLIMNI OPTIMALLASHTIRISHGA OID TADQIQOTLAR
	Tolipov Muzaffar Mirzo Ulug'bek nomidagi Samarqand davlat arxitektura- qurilish universiteti	REPAIR OF WATER PIPES BY LAYING POLYMER PIPES ON THEM (WITHOUT DESTROYING AND DESTROYING OLD ONES)
	Umurqulov Shaxzodbek Farg'ona politehnika instituti	CALCULATION OF HEAT LOSS THROUGH WINDOWS AND DOORS USING DIFFERENT MATERIALS AS AN EXAMPLE
	Xakimov Mirkomil Farg'ona politehnika instituti	QUYOSH HAVO ISITGICH QURILMALARINING ASOSIY TURLARI VA TASNIFLARI

SECTION 3 - MODERN ARCHITECTURE, ENERGY-SAVING BUILDING MATERIALS AND TECHNOLOGIES

March 12, 2025

14:30 – 16:30

Chairman: Prof. Nazarova Dinara, Turin Polytechnic University in Tashkent

Secretary: S. Saidrakhmonov, Turin Polytechnic University in Tashkent

Venue: B1

Zoom Meeting

<https://zoom.us/j/99903931783?pwd=iavPNqsQwQLuqd6gQC11NzJf9muROU.1>

Meeting ID: 999 0393 1783

Passcode: 445362

TIME	SPEAKER	TITLE
Main speakers		
14:30 – 16:30	Prof. Nazarova Dinara, Civil Engineering and Architecture Department of TTPU	THE ROLE OF ENERGY-EFFICIENT CONSTRUCTION IN SUSTAINABLE URBAN DEVELOPMENT
	Dr. Erkin Khaltursunov, Civil Engineering and Architecture Department of TTPU	ENHANCING ENERGY EFFICIENCY IN PUBLIC BUILDINGS THROUGH STRUCTURAL OPTIMIZATION AND ENERGY AUDITS
	Makhabuba Shermatova, Civil Engineering and Architecture Department of TTPU	PROSPECTS FOR INCREASING THE ENERGY EFFICIENCY OF BUILDINGS BY CONSTRUCTIVE AND TECHNICAL METHODS IN THE CONDITION OF UZBEKISTAN
	Kaldibayev Alibek, Civil Engineering and Architecture Department of TTPU	BIBLIOMETRIC ANALYSIS ON THE APPLICATION OF URBAN PLANNING METHODS FOR TRAFFIC MANAGEMENT
	Qozoqboyev Jasur, Toshkent-kimyo texnologiya instituti	IQLIMGA MOSLASHGAN ARXITEKTURA: ISSIQLIK IZOLYATSIYASI VA ENERGIYA SAMARADOR QOPLAMA TIZIMLARI
	Sodiqov Mirzoxid, Farg‘ona politexnika instituti	BINOLARNING ENERGIYA SAMARADORLIGI VA MIKROIQLIMNI OPTIMALLASHTIRISHGA OID TADQIQOTLAR (Online)
	Xakimov Mirkomil, Farg‘ona politexnika instituti	QUYOSH HAVO ISITGICH QURILMALARINING ASOSIY TURLARI VA TASNIFLARI
	Tolipov Muzaffar, Mirzo Ulug‘bek nomidagi Samarqand davlat arxitektura-qurilish universiteti	SUV QUVURLARINI ULARGA POLIMER QUVURLARNI TORTISH ORQALI YANGILASH (ESKILARINI YO ‘Q QILGAN HOLDA VA BUZMASDAN)

SECTION 4 - PROSPECTS FOR APPLYING FOREIGN NORMATIVE DOCUMENTS IN URBAN PLANNING AND CONSTRUCTION WITHIN THE REPUBLIC OF UZBEKISTAN

March 13, 2025

14:30 – 17:30

Chairman: Dr. N. Tukhboeva, Turin Polytechnic University in Tashkent

Secretary: N. Ergasheva, Turin Polytechnic University in Tashkent

Venue: Grey Hall

Zoom Meeting

<https://zoom.us/j/95553299796?pwd=1E0MgXhbCc8H0nGbQalXEmSazAyykE.1>

Meeting ID: 955 5329 9796

Passcode: 963603

TIME	SPEAKER	TITLE
Main speakers		
14:30 – 17:30	Dr. Nizomiddin Boronov, Civil Engineering and Architecture Department of TTPU	PROSPECTS FOR APPLYING FOREIGN NORMATIVE DOCUMENTS IN URBAN PLANNING AND CONSTRUCTION WITHIN THE REPUBLIC OF UZBEKISTAN
	Sanjar Anvarov, Civil Engineering and Architecture Department of TTPU	COMPARISON OF CONSTRUCTION PROGRESS BASED ON POINT CLOUD: A 3D LASER SCANNER APPROACH
	Xolbekov Sirojiddin, Toshkent arxitektura-qurilish universiteti	BINO VA INSHOOTLARDA ISSIQLIK YO ‘QOTILISHINI HISOBLASH ORQALI ENERGIYA TEJAMKOR QURILISH MATERIALLARINI QO ‘LLASH
	Akramov Xusniddin, Toshkent arxitektura-qurilish universiteti	QURILISH SIFATINI TA’MINLASH TIZIMI BILAN SEYSMIK XAVFSIZLIK KO’RSATKICHLARINI BOG’LIQLIGINI TADQIQ ETISH
	Расулжон Хамитов Ферганский государственный университет	АНАЛИЗ И РАСЧЕТ РАЗМЕЩЕНИЯ НАГРУЗОК НА МОНОЛИТНЫЕ ЖЕЛЕЗОБЕТОННЫЕ ПЕРЕКРЫТИЯ В МНОГОЭТАЖНЫХ ЗДАНИЯХ
	К.И. Махсимов, Ферганский государственный университет	ОБЕСПЕЧЕНИЕ НАДЕЖНОСТИ ОСНОВАНИЙ И ФУНДАМЕНТОВ В ЗАСОЛЕННЫХ ГРУНТАХ СЕЙСМИЧЕСКИХ РАЙОНОВ
	Abdulxayev Tolibjon Dolimjonovich FVV, Fuqaro muhofazasi instituti	YASHIL MAKON DASTURI DOIRASIDA ARHITEKTURA VA ENERGIYA TEJAMKOR MATERIALLAR TEXNOLOGIYASI

	Khusanova Khurshida Denau Institute of Entrepreneurship and Pedagogy	EARTHQUAKE-RESISTANT CONSTRUCTION TECHNOLOGIES IN RURAL AREAS
	Maxsimov Qosimxon Farg'ona politexnika institut	SHO'RLANGAN GRUNTLARDA QOZIQ POYDEVORLI QISHLOQ XO'JALIGI BINO VA INSHOOTLARINING ZILZILABARDOSHLIGI
	Василевич Юрий Владимирович, Белорусский национальный технический университет, Минск, Беларусь,	СОВЕРШЕНСТВОВАНИЕ МЕТОДИКИ ЗАЩИТЫ СООРУЖЕНИЙ ОТ ТЕПЛОВОГО ВОЗДЕЙСТВИЯ
	Галимова Лилия Институт гражданской защиты МЧС Республики Узбекистан	ПРОБЛЕМЫ ОБЕСПЕЧЕНИЯ СЕЙСМОСТОЙКОСТИ ЗДАНИЙ И СООРУЖЕНИЙ И ВОЗМОЖНЫЕ ПУТИ ИХ РЕШЕНИЯ

SECTION 1 - STRUCTURAL AND SEISMIC SAFETY OF BUILDINGS AND STRUCTURES, MODERN METHODS OF CALCULATION AND DESIGN

March 13, 2025

14:30 – 17:30

Chairman: Dr. E. Khaltursunov, Turin Polytechnic University in Tashkent;

Secretary: Dr. A. Azamatov, Turin Polytechnic University in Tashkent

Venue: Yellow Hall

Zoom Meeting

<https://zoom.us/j/95553299796?pwd=1E0MgXhbCc8H0nGbQalXEmSazAyykE.1>

Meeting ID: 955 5329 9796

Passcode: 963603

TIME	SPEAKER	TITLE
Main speakers		
14:30 – 17:30	Курбанов Т. С., Алимов Б. Г. Институт сейсмологии им. Г.А.Мавлянова АН.РУз.	МОМЕНТНАЯ МАГНИТУДА (M_w): СОВРЕМЕННЫЙ МЕТОД ОЦЕНКИ СИЛЫ ЗЕМЛЕТРЯСЕНИЙ.
	Mirzayev Ibraxim, Toshkent davlat transport universiteti	TURLI SEYSMIK TO'LOQLAR TA'SIRIDA BO'LGAN YER OSTI QUVURLARIDAGI DINAMIK JARAYONLARNING TAHLILI

	Рузимбоев Фаррух, Институт сейсмологии им. Г.А.Мавлянова АН.РУз.	МИКРОСЕЙСМИЧЕСКИЕ И СЕЙСМОРАЗВЕДОЧНЫЕ ИССЛЕДОВАНИЯ НА ФУНДАМЕНТНЫХ ОСНОВАНИЯХ ИСТОРИЧЕСКИХ ОБЪЕКТОВ РЕСПУБЛИКИ УЗБЕКИСТАН
	Yadigarov Eldor, G'. O. Mavlonov nomidagi seysmologiya institute O'. R. F A	NUKUS SHAHRI BOSH LOYIHASINI TAKOMILLASHTIRISHDA SEYSMOLOGIK TADQIQOT NATIJALARINING XUSUSIYATLARI
	Muhammadqulov Nurali G'. O. Mavlonov nomidagi seysmologiya institute O'. R. F A	INDIVIDUAL TURAR-JOY BINOSINING SEYSMIK MUSTAHKAMLIGINI HUDUDDA TARQALGAN GRUNT SHAROITIGA MOS SINTETIK AKSELEROGRAMMALARGA BAHOLASH
	Aktamov Bekzod, G'. O. Mavlonov nomidagi seysmologiya institute O'. R. F A	GRUNTLARNING SEYSMIK KO'RSATKICHLARI BO'YICHA SEYSMOGRUNT MODELLAR KATOLIGINI ISHLAB CHIQISH
	Yuldashev Erkin, G'. O. Mavlonov nomidagi seysmologiya institute O'. R. F A	NOYOBOBEKTLAR UCHUN LOKAL SEYSMIK KUZATUV TIZIMI
	Oripov Nozimjon, G'. O. Mavlonov nomidagi seysmologiya institute O'. R. F A	SHAHAR MUHITIDA TEXNOGEN SEYSMIK SHOVQINLARNING BINOLARGA REZONANS TA'SIRI
	Абдукадиров Ф.Э., Ташкентский государственный транспортный университет	НАПРЯЖЕННО-ДЕФОРМИРОВАННОЕ СОСТОЯНИЕ РИГЕЛЕЙ НЕСУЩИХ КОНСТРУКЦИЙ ПОД ВОЗДЕЙСТВИЕМ СЕЙСМИЧЕСКИХ ВОЗДЕЙСТВИЯХ
	Toshmuqumov Behzod, Mirzo Ulug'bek nomidagi Samarqand davlat arxitektura-qurilish universiteti	QIYALIK MASSIVIDAGI GRUNTLARNING TURG'UNLIK HOLATINI BUZILI SHI VA UNING OQIBATLARI



Little Ring Road 17, Almazar distrct,
100095, Tashkent city, Uzbekistan,
+99871 203 07 77
www.turin.uz