

## Invitation

On behalf of the Organizing Committee, we are pleased to invite you to attend the Sixth GeoChina International Conference 2021 to be held in Nanchang, China from July 19 to 21, 2021. This conference with theme of Civil & Transportation Infrastructures: From Engineering to Smart & Green Life Cycle Solutions is endorsed by a number of leading international professional organizations.

This conference will provide a showcase for recent developments and advancements in design, construction, and safety Inspections of transportation Infrastructures and offer a forum to discuss and debate future directions for the 21<sup>st</sup> century. Conference topics cover a broad array of contemporary issues for professionals involved in bridge, pavement, geotechnical, tunnel, railway, and emerging techniques for safety Inspections. You will have the opportunity to meet colleagues from all over the world for technical, scientific, and commercial discussions.

Nanchang is a famous historical and cultural city with a history of over 2,200 years. Long and splendid history endows the city with many cultural relics. The poetical Tengwang Pavilion has long been ranked first among the famous pavilions in the south of Yangtze River. Recent rapid construction in China has provided great opportunities for bridge, pavement, geotechnical, and tunnel engineers to use their knowledge and talents to solve many challenging problems involving highway bridge structures, pavements, materials, ground improvement, slopes, excavations, and tunnels with innovative solutions and cutting-edge technologies.

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## Important Dates

June 15, 2020, Deadline for Abstract submission  
June 30, 2020, Notify authors of accepted abstracts  
August 30, 2020, Deadline for full paper submission  
October 30, 2020, Notify authors of accepted paper  
January 30, 2021, Final camera-ready papers  
July 19-21, 2021-Conference

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## Conference Web Site

<http://geochina2021.geoconf.org/>



## First Announcement

**6<sup>th</sup> GeoChina International Conference  
Civil & Transportation Infrastructures:  
From Engineering to Smart & Green Life  
Cycle Solutions**

**July 19-21, 2021 • Nanchang, China**

**Hosted by: East China Jiaotong University  
in Cooperation with GeoChina Civil  
Infrastructure Association, and University  
of Oklahoma**

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## Conference Themes

### I: Transportation Geotechnical Engineering

- Non-Destructive Characterization of Geomaterials
- In-situ Test Methods for Site Characterization, Design and Quality Control of Earth Structures and Subgrades
- Soils and Rock Instrumentation, Behavior and Modeling
- Advances in Unsaturated Soil, Seepage, and Environmental Geotechnics
- Soil Behavior and Laboratory Testing
- Foundation Failure and Repair
- Earth Retaining Walls and Slope Stability
- Bridge Approach Embankment
- Geosynthetic Reinforced Soil Retaining Structure
- Engineering Issues in Ground Subsidence
- Dynamic Behavior of Soils and Foundations
- Physical, Numerical, Constitutive Modeling of Soil Behavior
- Innovative and Sustainable Geomaterials and Geosystems
- Transportation Issues in Developing Countries

### II: Pavement Engineering

- Airfield pavement analysis, rehabilitation and performance
- Recycled Asphalt Pavement
- Pavement Design, Modeling, Performance Evaluation, & Management
- Sustainable Long Life Pavement
- Ground Improvement, and Chemical / Mechanical Stabilization for Pavement and Geotechnical Applications
- Moisture Damage in Asphaltic Concrete Materials
- Geotechnical Properties and Their Effects on Portland Concrete Pavement Behavior and Performance
- Warm Mix
- Rehabilitation strategy selection and preventative maintenance treatments
- Accelerated Testing of Pavement Structures and Materials
- Material, Design, Construction, Maintenance and Testing of Pavement
- Asphalt Binder and Mixture Characterization
- Construction and Rehabilitation of Jointed Concrete Pavement, Reinforced Concrete Pavement, and Continuously Reinforced Concrete Pavement
- Bridges Deck Pavement
- Stabilization, Recycling, Foamed Bitumen and Emulsion, Granular Materials
- Roadway Widening
- NanoTechnology & Its Application to Civil Infrastructure
- Asphalt Mix-Design, HMA Testing, & Material Property Characterization

**Accepted papers will be published in Edited Books by Springer-DE which will be indexed in EI and submitted for inclusion in ISI "Thomson Reuters".**

**Selected papers from the conference may be considered for publications in the special issue/collections of** (1) Journal of Performance of Constructed Facilities, ASCE (SCI Indexed) (2) Journal of Testing and Evaluation, ASTM International (SCI Indexed), (3) International Journal of Geomechanics, ASCE (SCI Indexed) subjected to a full peer review process as set forth by the Editors of ASTM International, and ASCE.

As papers are accepted by ASCE, they will appear in a regular issue of the ASCE journal.

### III: Bridge Engineering

- Non-Destructive Evaluation, Inspection Technologies, Structural Health Monitoring, Remote Monitoring of Structures, Scour Assessment
- Seismic Design Issues for Bridges, and Underground Structures
- Design Methods and Materials, Innovative Repair Methods and Materials, Durable and Sustainable Designs, Innovative Materials, Advances in Foundation Design/Construction, Accelerated and/or Performance Based Design/Construction, Aesthetics and Environment
- State-of-the-Arts and State-of-the-Practices on Bridge Design, Construction and Maintenance.
- Special Foundation Treatment and Settlement Control Technology

### IV: Tunneling Engineering

- Tunnel Management and Inventory, Monitoring and Settlement Control
- Emerging Technologies, Lining Design & Precast Segment Advances
- Innovation in Tunneling Design, Construction, Repair, Rehabilitation
- Fire & Life Safety, Vulnerability & Security
- Tunneling in Soft Ground, Ground Conditioning and Modification
- Advanced prediction technology of tunnel construction geology
- Deep excavations and urban tunnelling

### V: Railroad Engineering

- Railway Track Substructure
- High Speed Rail System
- Seismic Design for Railway Structures
- Economics of Railway Engineering and Operations
- Structures, Maintenance and Construction

### VI: Dam, Geomatics, Geoscience, Geophysics, and Hazards

- Dam Engineering, Geo-Sciences, Geomatics, Geophysics, and Gravity
- Geophysical Testing in Civil and Geological Engineering in Transportation Geotechnical Engineering.
- Natural Hazard and Disaster Monitoring in Transportation Geotechnical Engineering.
- Seismically Induced Hazards and Mitigation in Transportation Geotechnical Engineering.
- Extreme-Hazard Resilient Structures - Risk/Reliability Assessments, Emergency Management Practices, Multi-hazard Design, Enhanced Post-Earthquake Serviceability, Scour Assessment and Restoration, Quality Control/Quality Assurance in Bridge Engineering.
- Geological Disaster Control Technology.

### VII: Innovative Technologies

- Design and analysis with Cloud computation
- Construction and O/M using BIM technology.
- Remote sensor monitoring
- 3D printing and other AI in civil engineering
- Green technology in civil & transportation engineering

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**The Official Language for the Conference is English**

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