International Association of Chinese Infrastructure Professionals (IACIP)

IACIP

GUIZHOU UNIVERSITY

The 8th International Conference on Transportation Infrastructure and Materials

Conference Manual

Date: July 25-29, 2025

Location: Guiyang,Guizhou

Program

Outline

Welcome Message

It is our great pleasure to host the 8th International Conference on Transportation Infrastructure and Materials (TIM 2025) in Guizhou University, from July 25–29, 2025. The conference is co-organized by the International Association of Chinese Infrastructure Professionals (IACIP) and Guizhou University.

The theme of the conference is "Advancing Digital, Smart, and Resilient Transportation Infrastructure." The event will bring together researchers, engineers, policymakers, and industry professionals to share cutting-edge research, technologies, and best practices in areas such as intelligent construction, infrastructure resilience, sustainable materials, digitalization, and cyber-physical systems.

With a rich program of keynote speeches, technical sessions, workshops, and networking opportunities, the conference is designed to inspire collaboration and advance the frontiers of transportation infrastructure research and practice.

We sincerely welcome you to Guiyang and Guizhou University to attend the TIM 2025 Conference.

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Pan Wu

Deputy President and Professor,
Guizhou University, China

Lu Gao

President of IACIP and Professor,
University of Houston, USA

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组织机构

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国际华人基础设施工作者协会(IACIP)

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Conference Agenda

会议日程

Date	Time	Meeting	Room
July 25, Friday	09:00-20:00	Registration 注册报到	1F, Lobby, Novotel Guiyang Panjiang
	14:30-17:30	Workshop: AI in Transportation Infrastructure 研讨会：交通基础设施人工智能	1004
July 26, Saturday	08:30-09:00	Opening Ceremony 开幕式	3001
	09:00-11:00	Keynote Presentations 主题演讲	3001
	11:00-11:10	Coffee Break 茶歇	
	11:10-12:30	Technical Sessions 技术会议 Simu-Live Session 1 录播+实时问答专场	3001,1004,1005, 2002,2004
	12:30-13:30	Lunch Break 午餐	
	13:30-16:00	Technical Sessions 技术会议 Young Scholars Forum 青年论坛 Meeting with Editors 主编交流会	1004,1005, 2002,2004
	16:00-16:20	Coffee Break 茶歇	
	16:20-18:30	Young Scholars Forum 青年论坛 Graduate Student Research Pitch Competition 研究生科研快讲竞赛	1004,1005, 2002,2004
	18:30-19:30	Dinner Break 晚餐	
	19:30-21:30	Young Scholars Forum 青年论坛 Graduate Student Research Pitch Competition 研究生科研快讲竞赛	1005, 2002
July 27, Sunday	08:30-09:30	Keynote Presentations 主题演讲	1001
	09:30-9:40	Coffee Break 茶歇	
	09:40-12:30	Technical Sessions 技术会议 Young Scholars Forum 青年论坛 Simu-Live Session 2 录播+实时问答专场	1001,1004, 1005,2004
	12:30-13:30	Lunch Break 午餐	
	13:30-16:00	Technical Sessions 技术会议 Young Scholars Forum 青年论坛	1001,1004 1005,2004
	13:30-14:00	Keynote Presentations 主题演讲	1001
	14:00-15:30	Young Scholars Forum 青年论坛 Career Development 职业发展论坛	1001,1004 1005,2004
	15:30-15:40	Coffee Break 茶歇	
	16:20-18:30	Young Scholars Forum 青年论坛 Career Development 职业发展论坛	1001,1004 1005,2004
	17:40-18:00	Closing Ceremony / Awards 闭幕式	1001
July 28, Monday	08:00-20:00	Technical Tours (Pingtang Sky Bridge, FAST Radio Telescope, etc.) 技术参观：平塘天空之桥、FAST 射电望远镜等	
July 29, Tuesday	All Day	Departure 离会	

Conference Agenda

Date	Time Slot					
July 25, Friday 7 月 25 日星期五	14:30-17:30	**Workshop**: AI in Transportation Infrastructure 研讨会：交通基础设施人工智能（Room1004）				
July 26,Saturday 7 月 26 日星期六	08:30-09:00	**Opening Ceremony/Group Photo** 开幕式 / 合影留念（Room3001）				
	09:00-09:40	**Keynote**: Prof. Fwa Tien Fang 大会特邀报告：Fwa Tien Fang 教授 / 新加坡工程院院士（Room3001）				
	09:40-10:20	**Keynote**: Prof. Kejian Ma 大会特邀报告：马克俭 教授 / 中国工程院院士（Room3001）				
	10:20-11:00	**Keynote**: Prof. Erol Tutumluer 大会特邀报告：Erol Tutumluer 教授（Room3001）				
	11:00-11:10	Coffee Break 茶歇				
	11:10-12:30	**S1:** Subgrade Materials and Engineering Properties 技术论坛 1: 路基材料与工程特性（Room3001）	**S2:** Recycled Asphalt and Sustainable Cold Mix Tech-nologies 技术论坛 2：再生沥青与绿色冷再生技术（Room1004）	**S3**: Asphalt Aging and Durability Performance 技术论坛 3：沥青老化与耐久性能分析（Room1005）	**S4:** Asphalt Performance Enhancement and Durability 技术论坛 4：沥青性能提升与耐久性研究（Room2002）	**Simu-Live Session 1:** Asphalt Research and Innovation 录播 + 实时问答专场 1：沥青研究与创新（Room2004）
	12:30-13:30	Lunch Break 午餐				
	13:30-16:00		**S5**: Pavement Materials and Structural Perfor-mance Evaluation **技术论坛5：**路面新材料与结构性能评价（Room1004）	**YS2:** Advances in Pavement and Geomaterials **青年论坛2：道路与岩土材料前沿**（Room1005）	**S6:** Sustainable Pavement Materials and Smart Construction 技术论坛 6：可持续铺面材料与智能建造（Room2002）	**Meeting with Editors** 主编交流会（Room2004）
			YS5: Functional and Smart Materials (part 1) 青年论坛5：功能与智能材料上)（Room1004）		**YS4:** Asphalt Materials and Modification (part 1) **青年论坛 4：沥青材料与改性（上）**（Room2002）	**YS1:** Smart Materials and Modeling (part 1) 青年论坛 1：智能材料与建模（上）（Room2004）
	16:00-16:20	Coffee Break 茶歇				
	16:20-18:30		**YS3**: Mechanical Behavior of Materials 青年论坛 3：材料的力学行为（Room1004）	**SC1**: Asphalt and Pavement Materials Performance: 学生竞赛论坛 1：沥青材料与混合料性能 **SC3:** Slope, Geotechnical and Mining Engineering 学生竞赛论坛 3：岩土、矿业与边坡工程（上）（Room1005）	**SC2:** Sustainable Materials and Solid Waste Reuse 学生竞赛论坛 2：可持续材料与固废利用（Room2002） **SC4:** Smart Technologies and Methods in Infrastructure 学生竞赛论坛 4：智能材料与基础设施技术（Room2002）	**YS6**: Mountain Engineering Safety and Sustainable Transportation **青年论坛6：山地工程安全与可持续交通发展**（Room2004）
	18:30-19:30	Dinner Break 晚餐				
	19:30-21:30			**SC3**: Slope, Geotechnical and Mining Engineering 学生竞赛论坛 3：岩土、矿业与边坡工程（下）（Room1005） **YS1**: Smart Materials and Modeling (part 2) 青年论坛 1：智能材料与建模（下）（Room1005）	**YS10**: Cement-Based Material Performance 青年论坛**10**：水泥基材料性能（Room2002）	
July 27, Sunday 7 月 27 日星期日	08:30-09:00		**Keynote:** Prof. Qing Lyu 大会特邀报告：吕庆教授（Room1001）			
	09:00-09:30		**Keynote:** Prof. Yu Zhao 大会特邀报告：赵瑜教授（Room1001）			
	09:30-09:40	Coffee Break 茶歇				
	09:40-12:30		**S7**:Infrastructure Resilience and Geotechnical Engineering in Complex Environments 技术论坛7：复杂环境下基础设施韧性与地质工程（Room1001）	**S8**: Geohazard Mitigation and Novel Material Applications 技术论坛 8：岩土灾害防控与新材料应用（Room1004）	**S9**: Eco-Friendly Pavement Materials and Emission Reduction Technologies 技术论坛 9：环境友好型道路材料与减排技术（Room1005）	**Simu-Live Session 2**: Emerging Technologies in Transportation Infrastructure 录播 + 实时问答专场 2：交通基础设施新兴技术（Room2004）
			YS5: Functional and Smart Materials (part 2) 青年论坛5：功能与智能材料 (下)（Room1001）	**YS9:** Waste-Based Cementitious Materials **青年论坛9：固废基胶凝材料**（Room1004）	**YS4**: Asphalt Materials and Modification (part 2) 青年论坛 4：沥青材料与改性（下）（Room1005）	
	12:30-13:30	Lunch Break 午餐				
	13:30-14:00		Keynote: Prof. Aoying Zhou 大会特邀报告：周傲英教授（Room1001）			
	14:00-15:30		**YS7**: Subgrade and Soil Behavior 青年论坛 7：路基与土体工程行为（Room1001）	**YS8:** Asphalt Mixture Performance 青年论坛 8：沥青混合料性能（Room1004）	**YS11**: Tunnel and Underground Construction 青年论坛 11：隧道与地下工程 （Room1005）	**Career Development**: Advancing Careers in Transportation Infrastructure: Insights from Aca-demia and Entrepreneurship (continues) **职业发展论坛：**交通基础设施职业发展—学术界与产业界的视角 (续) (Room2004)
	15:30-15:40	Coffee Break 茶歇				
	15:40-17:40		**YS12**: Advanced Testing and Modeling of Civil Mate-rials 青年论坛 12：土木材料测试与建模新方法（Room1001）	**YS13**: Sustainable and Intelligent Pavement Materials 青年论坛 13：可持续与智能化道路材料（Room1004）	**YS14 :** Geomechanics and Asphalt Materials 青年论坛 14：岩土力学与沥青材料（Room1005）	l, (continued) （续）(Room2004)
	17:40-18:00		**Closing Ceremony / Awards**(Room1001) **闭幕式 /颁奖典礼**			
July 28, Monday 7 月 28 日星期一	08:00-20:00	Technical Tours (PingTang Sky Bridge, FAST Radio Telescope, etc.)； 技术参观：平塘天空之桥、FAST 射电望远镜等				
July 29, Tuesday 7 月 29 日星期二	All Day 全天	Departure 离会				

Workshop: AI in Transportation Infrastructure

研讨会：交通基础设施中的人工智能

July 25, 2025, Friday, 14:30~17:30	
Workshop	**Room 1004**

随着人工智能（AI）技术的快速发展，其在交通基础设施中的应用正逐步深化，涵盖设计优化、结构监测、运维管理、交通感知等多个关键环节。为促进学术界与业界的交流合作，TIM2025 大会特别组织本次专题研讨会，邀请国内外多位在 AI 与交通工程交叉领域具有重要影响力的专家，围绕前沿研究成果、工程应用实践与未来挑战展开深度探讨。

Moderators:

- **Prof. Zhen Leng,** Hong Kong Polytechnic University
- **Prof. Wenbing Shi**, Guizhou University
- **Prof. Feng Ma**, Chang' an University

Key Topics

- AI-enabled pavement condition evaluation and damage detection
- Infrastructure maintenance decision-making supported by machine learning
- Data fusion, computer vision, and intelligent sensing technologies
- AI applications in intelligent transportation systems and infrastructure asset management
- Cross-disciplinary collaboration and technology deployment challenges

Presenters & Invited Attendees

- **Prof. Meizhu Chen,** Wuhan University of Technology
- **Prof. Dingxin Cheng,** California State University, Chico
- **Prof. Baoshan Huang,** University of Tennessee
- **Prof. Xi Jiang,** Tongji University
- **Prof. Hui Li,** Tongji University
- **Prof. Jenny Liu,** Missouri University of Science and Technology
- **Prof. Guoyang Lu,** City University of Hong Kong
- **Prof. Yinghao Miao,** Southeast University
- **Prof. Ghim Ping Ong Raymond,** National University of Singapore
- **Prof. Ruwen Qin,** Stony Brook University
- **Prof. Xiaoming Wang,** Guizhou University
- **Prof. Haopeng Wang,** University of Liverpool
- **Prof. Huanan Yu,** Changsha University of Science and Technology
- **Prof. Yuqing Zhang,** Southeast University
- **Prof. Hongzhou Zhu,** Chongqing Jiaotong University
- **Prof. Xue Luo,** Zhejiang University
- **Prof. Yuhong Wang,** Hong Kong Polytechnic University
- **Prof. Yu Qian,** University of South Carolina
- **Prof. Qiwen Dong,** East China Normal University

本研讨会将以专题报告与自由讨论相结合的形式开展，旨在构建 AI 技术与交通基础设施深度融合的交流平台，激发跨界合作与工程落地的创新思路。

Meeting with Editors

主编交流会

July 26, 2025, Saturday, 13:30~15:30

Meeting with Editors	Room 2004

Moderator: **Prof. Xi Jiang,** Tongji University

为帮助学者更好地理解国际与国内高水平期刊的审稿机制、选题偏好与投稿规范，TIM2025 大会特别举办本场“主编面对面”圆桌论坛。论坛将邀请多位国际知名期刊的主编与副主编，分享他们对学术出版的深刻洞察，解答与会者在论文撰写与投稿中的常见问题。

Key Topic

- AI-enabled pavement condition evaluation and damage detection
- Infrastructure maintenance decision-making supported by machine learning
- Data fusion, computer vision, and intelligent sensing technologies
- AI applications in intelligent transportation systems and infrastructure asset management
- Cross-disciplinary collaboration and technology deployment challenges

Presenters & Invited Attendees

- **Prof. Zhen Leng,** Hong Kong Polytechnic University
  - *Founding Editor-in-Chief, Cleaner Materials*
  - *Executive Editor, Journal of Cleaner Production*
- **Prof. Baoshan** Huang, University of Tennessee
  - *Founding Editor-in-Chief, Cleaner Materials*
- **Prof. Erol Tutumluer,** UIUC
  - *Editor-in-Chief, Transportation Geotechnics*
- **Prof. Hui Li,** Tongji University
  - *Executive Editor-in-Chief, International Journal of Transportation Science and Technology*
- **Prof. Jenny Liu,** Missouri University of Science and Technology
  - *Associate Editor:*
    ASCE Journal of Materials in Civil Engineering; ASCE Journal of Transportation Engineering, Part B: Pavements, ASCE Journal of Cold Regions Engineering
- **Prof. Yuhong Wang,** Hong Kong Polytechnic University
  - *Associate Editor:*
    Construction and Building Materials; Nature-Based Solutions; International Journal of Pavement Research and Technology; Sustainable and Resilient Infrastructure
- **Prof. Ghim Ping Ong Raymond,** National University of Singapore
  - *Associate Editor:*
    Asian Transport Studies; Cleaner Materials; International Journal of Transportation Science and Technology
- **Prof. Yu Qian, University of South Carolina**
  - *Associate Editor:*
    Expert Systems with Applications; Intelligent Transportation Infrastructure; Smart and Resilient Transportation
- **Dr. Yuejie Han,** Chang’ an University
  - *Manager:*
    Journal of Traffic and Transportation Engineering (English Edition); Journal of Road Engineering
    China Journal of Highway and Transport; Journal of Chang’an University (Natural Science Edition)
- **Prof. Dongdong Ge,** Changsha University of Science and Technology
  - *Associate Editor, Journal of China & Foreign Highway*

Advancing Careers in Transportation Infrastructure: Insights from Academia and Entrepreneurship

July 27, 2025, Sunday, 14:00~17:40	
Career Development	Room 2004

Moderator: **Prof. Xue Luo,** Zhejiang University

为帮助青年学者和学生更好地了解交通基础设施领域的多元职业路径，TIM2025 特别设置本场职业发展论坛。论坛将围绕学术深造、跨国发展、企业转型等话题展开，邀请十位来自中国、美国、英国、加拿大、欧洲及香港等地的专家学者和行业领袖，分享他们在学术与职业道路上的关键节点与成长经验。

Key Topic

- The logic of choosing between studying abroad and returning home
- Career path planning for doctoral/postdoctoral students
- Feasible transition between academia and business
- Differences and Similarities in Career Development Environments Across Different Countries/Regions
- How to integrate international experience into local education and research

Presenters & Invited Attendees

- **Prof. Jiasheng Dai,** Guangxi University
- **Prof. Zhen Fu,** Chang' an University
- **Mr. Yuechun Li,** General Manager of Shanghai Nuorui Technology
- **Prof. Guoyang Lu,** City University of Hong Kong
- **Prof. Haopeng Wang,** University of Liverpool, UK
- **Prof. Shenghua Wu,** University of South Alabama
- **Mr.Zhixiang Zhang,** Chairman of Sinoroad Transportation Science & Technology Co., Ltd
- **Prof.Yuqing Zhang,** Southeast University
- **Ms.Yaning Zhang,** PhD candidate at the University of Ottawa, Canada

本论坛面向正在求学、求职、或计划转型的青年学者，旨在提供真实、实用、可参考的职业发展视角。

Keynote Presentations

Moderator：Prof. Baoshan Huang

July 26, 2025, Saturday

09:00~09:40	Room 3001

Prof. Fwa Tien Fang

National University of Singapore, Chang' an University

Title:
Concept of Pavement Skid Resistance State - Theoretical Significance and Engineering Applications

Abstract: The current practices of routine pavement skid resistance measurements serve to provide guidance for pavement friction maintenance to safeguard driving safety on highways, based on engineering judgement and past experience of road accidents. By measuring skid resistance under standard conditions, including test speed and water film thickness, the current practices do not provide adequate information required for a comprehensive driving safety assessment. The Concept of Skid Resistance State is presented to offer a mechanistic representation of the skid resistance condition of a pavement section. The Concept of Skid Resistance State is developed based on the assumption that the generation of skid resistance can be fully described by the mechanistic interaction of tire, pavement surface and water film on the pavement surface. Once the Skid Resistance State of a pavement section has bene defined, the skid resistance of the pavement under any set of vehicle and environment conditions can be calculated, thereby permitting a comprehensive driving safety analysis to be conducted.

Biography: Dr. T. F. Fwa is currently an emeritus professor in the Department of Civil & Environmental Engineering, National University of Singapore (NUS). He is also a Distinguished Professor at Chang'an University in China, serving as the Dean of the newly established School of Future Transportation. He is a Fellow of the Academy of Engineering, Singapore. Dr. Fwa's main research effort has been focusing on Pavement performance evaluation and management, and wet-weather safety-related pavement functions, specifically on pavement skid resistance, hydroplaning speed, and pavement drainage. He is the Joint Editor-in-Chief of the Journal of Road Engineering. He also serves on the editorial boards of six other leading pavement engineering journals. He has published more than 400 technical papers in leading international journals and conferences, and has been invited to lecture in more than 20 countries. Dr. Fwa is the founding and current President of the Pavement Engineering Society (Singapore), and the Asia Pavement Engineering Society (APES). He was a Past President of the (iSMARTi). He founded two international conference series, namely the International Conference on Road and Airfield Pavement Technology (ICPT), and the Asia Pacific Symposium on Transportation and the Environment (APTE).

Keynote Presentations

Moderator：Prof. Baoshan Huang

July 26, 2025, Saturday

09:40~10:20	Room 3001

Academician
Prof.
Kejian Ma

Guizhou University, China

Title:
Innovative Theories and Practices in the Construction of High-rise and Super-high-rise Industrial and Public Buildings with Large Column Grids and Long Spans

Abstract: The main contents of the report include a brief introduction to the theory of hollow sandwich panels, the application of hollow sandwich panels in multi-storey and high-rise buildings, the project of Lushan Xihai Fleet Ball Sports and Leisure Center in Jiujiang, Jiangxi, the 1:1 model test of prefabricated reinforced concrete hollow sandwich panels, as well as engineering cases and key technologies of the application of prefabricated concrete hollow sandwich panels in multi-storey long-span buildings.

Biography: Academician Kejian Ma, academician of the Chinese Academy of Engineering, is Director of the Spatial Structure Research Center at Guizhou University and Director of the Guizhou Provincial Key Laboratory of Green and Intelligent Buildings. He has previously served as Counselor to the Guizhou Provincial Government and as a member/standing-committee member of the Guizhou Provincial CPPCC. As principal investigator he has received one National Third Prize for Scientific and Technological Progress, two Provincial First Prizes, two Provincial Second Prizes, six Provincial Third Prizes, two ministerial Second Prizes, two National Invention Competition First Prizes, the Hong Kong "Ruzi Niu" Golden Globe Award, 68 national invention patents and 78 utility-model patents, and has authored six books/codes. Honors include twice receiving the Guizhou "May 1st" Medal (1994, 1996), the National "May 1st" Medal (1997), National Model Worker, the 2007 Guizhou Provincial Highest Science & Technology Award, and the Lifetime Achievement Award of the China Steel Construction Society (2013). After 2008 he proposed and successfully implemented a new spatial grid-box structural system derived from open-web sandwich-panel theory; the resulting "assembled monolithic spatial steel grid-box structure" embodies circular-economy principles and has been applied in numerous projects at his academician workstation.

Keynote Presentations

Moderator：**Prof. Baoshan Huang**

July 26, 2025, Saturday

10:20~11:00	Room 3001

Prof. Erol Tutumluer

University of Illinois Urbana-Champaign

Title:
Bender Element Field Sensor for Structural Health Monitoring of Constructed Aggregate Layers

Abstract: An innovative bender element (BE) shear wave transducer was developed at the University of Illinois as a field sensor for assessing structural health, via monitoring in-situ modulus characteristics, of constructed base/subbase layers through elastic wave velocity measurements. This keynote lecture discusses the field instrumentation process with the BE field sensor as an intelligent layer modulus characterization tool during the construction and trafficking of full-scale pavements. The BE field sensors were installed at multiple full-scale testing sites in the U.S. Five BE field sensors were installed in the SMART Runway airport pavement section at the Hill Air Force Base in Utah. The U.S. Army Corps of Engineers Engineer Research and Development Center (ERDC) heavily instrumented the SMART Runway test section to monitor its mechanistic response characteristics when subjected to various mixed aircraft loads. Three BE sensors were installed in geogrid-stabilized and control base course layers in the Construction Cycle 9 (CC9) flexible pavement test sections at the Federal Aviation Administration (FAA)'s National Airport Pavement Test Facility (NAPTF) in New Jersey. Two BE field sensors were installed in granular base layers in the Pit A of the full-scale highway pavement test sections constructed by the Federal Highway Administration (FHWA) at the Turner-Fairbank Highway Research Center (TFHRC) in Virginia. Lastly, a newly built highway pavement US 20 in Elkhart County, Indiana was instrumented using twelve BE sensors to quantify layer modulus improvements through geogrid base stabilization. This keynote lecture presents the instrumentation procedure and results of installing the BE sensors in the these multiple field sites and testing environments. BE sensor measurements have provided valuable insights into the layer modulus behavior trends from different stages of pavement layer construction, including confinement effects quantified with locked-in residual stress buildup in the aggregate layer during the construction process and the effect of geogrid stabilization

Biography: Dr. Erol Tutumluer is Abel Bliss Professor specializing in Transportation Geotechnics in the Department of Civil and Environmental Engineering (CEE) at the University of Illinois at Urbana-Champaign (UIUC). Professor Tutumluer holds the Paul F. Kent Endowed Faculty Scholar and serves as the Director of International and ZJUI Education Programs. Dr. Tutumluer has research interests and expertise in characterization of pavement and railroad track geomaterials, i.e., subgrade soils and base/ballast unbound aggregates, soil/aggregate stabilization, geosynthetics, advanced imaging techniques and applications of artificial intelligence and deep learning techniques to transportation infrastructure, structural health monitoring of transportation facilities using sensors, modeling granular foundation systems using innovative techniques, sustainable use of foundation geomaterials and construction practices for transportation infrastructure, discrete element analysis of ballast, dynamic response measurement and analyses of track systems, and mechanistic analysis and design. Dr. Tutumluer has authored and co-authored over 400 peer reviewed publications, including four best paper awards, which consist of journal articles, conference papers, edited books, invited book chapters, technical reports, and so on. Dr. Tutumluer is a Distinguished Member of ASCE and recipient of numerous prestigious awards/honors. He published two US patents on aggregate roads from his funded research studies and has formed a startup company as an entrepreneur. He has delivered over 150 invited/keynote lectures at universities and conferences, taught/organized over 36 short courses and workshop events, and three international conference chair roles.

Keynote Presentations

Moderator：Prof. Jenny Liu

July 27, 2025, Sunday

08:30~09:00	Room 1001

Prof. Qing Lyu

Chongqing Jiaotong University/ part-time professor at Zhejiang University

Title:
Probabilistic assessment and Rainfall Thresholds Determination for Rainstorm-induced Shallow Landslides

Abstract: This lecture proposes a time-dependent probabilistic method to assess the stability of soil slopes during rainstorms. Rainstorm-induced landslide cases from Zhejiang Province, China, are used to show that landslides occur when the failure probability exceeds a critical threshold. A probabilistic framework is developed to determine rainfall intensity-duration (I-D) thresholds by integrating local rainfall characteristics and slope geotechnical variability through Monte Carlo simulations. Thresholds corresponding to failure probabilities of 2.3%, 7%, and 16% are identified as Yellow, Orange and Red warnings, respectively. This approach enables early warnings up to 0.5–10 hours before slope failure, providing a quantitative tool for real-time landslide risk management.

Biography: Prof. Qing Lyu is currently a professor at Chongqing Jiaotong University and also a part-time professor at Zhejiang University. He was selected as a Changjiang Scholar Distinguished Professor by the Ministry of Education in China. His main research focuses on the fundamental theory and mitigation technologies of geological hazards, including landslides, rockfalls and debris flow.

He has been the PI or participant in more than 40 R&D programs, including the National Natural Science Foundation of China (NSFC), the National Key R&D Program, and the Zhejiang Province Key R&D Program. He has published more 130 academic papers, co-authored three books and one textbook, and holds 22 authorized invention patents and 10 software copyrights.

He has received Outstanding Young Scientist Award from International Consortium on Geo-disaster Reduction (ICGdR) in 2024, Qian Qi-hu Award from Chinese Society for Rock Mechanics and Engineering (CSRME) in 2022 and the Outstanding Paper Award from Computers and Geotechnics in 2017, and six Science and Technology Awards from Zhejiang Provincial Government.

Keynote Presentations

Moderator：Prof. Jenny Liu

July 27, 2025, Sunday

09:00~09:30	Room 1001

Prof. Yu Zhao

Dean of the College of Civil Engineering,
Professor of Guizhou University, China

Title:
Discussion on Three-dimensional Fracture Acoustic Emission Characterization and Theoretical Prediction in Rock Masses

Abstract: The Punch-Through Shear (PTS) test method was used to induce Mode-II loading and fracture in shale specimens. Acoustic emission (AE) technology was utilized to interpret and illustrate the fracture mechanisms. Classical RA-AF (Rise Time-Amplitude/Frequency) analysis demonstrated that although tensile-type AE signals persisted throughout the fracture process of PTS shale specimens, the emergence of shear-type AE signals could generally be interpreted as a precursor and warning of macroscopic fracture. Based on the correlation between AE dominant frequency ranges and damage modes, a hierarchical clustering algorithm was applied to categorize the dominant AE frequencies of PTS shale specimens into three characteristic bands: low-frequency, mid-frequency, and high-frequency, corresponding to tensile, tensile-shear, and shear cracks, respectively. By distinguishing the influence of volumetric strain energy density and distortional strain energy density on mixed-mode I/III fracture, an improved 3D-MASED (Modified 3D Mean Average Strain Energy Density) fracture criterion was proposed. This enhanced 3D fracture criterion not only accurately evaluates the mixed-mode I/III fracture toughness envelope under tensile-dominated conditions but also successfully predicts the fracture toughness envelope under shear-dominated conditions.

Biography: Prof. Yu Zhao is the dean of the college of civil engineering at Guizhou University. He was selected for the Ministry of Education's "New Century Excellent Talents Support Program". He has been honored with titles including Outstanding Scientific Contributor of Guizhou Province, "Innovation Pioneer & Scientific Role Model" of Guizhou Province, and High-Level Innovative Talent (Top 100) of Guizhou Province. His notable awards include the National Science & Technology Progress Award (Second Prize), Ministry of Education Science & Technology Progress Award (First Prize), Ministry of Natural Resources Science & Technology Progress Award (Second Prize). He has led or participated in over 40 research projects such as National Natural Science Foundation of China (NSFC) Projects. As first or corresponding author, he has published more than 100 papers in prestigious international journals.

Keynote Presentations

Moderator：Prof. Jenny Liu

July 27, 2025, Sunday

13:30~14:00	Room 1001

Prof. Aoying Zhou

East China Normal University, China

Title:
From Civil Engineering to Data Engineering: AI Boom and Beyond

Abstract: In the history of human beings, the engineering disciplines have played very important roles, which evolved from civil engineering to mechanical engineering then to electrical engineering. Before the advent of the internet, data engineering was regarded as the discipline for data management. Contemporary artificial intelligence is essentially data intelligence. Without computers, there would be no internet; without the internet, there would be no big data; and without big data, there would be no current AI. Behind the data intelligence boom is the newer and deeper understanding about data engineering that emerged almost at the same time as AI. In China, data has been defined as the fifth factor of production. Unlike traditional factors of production, it is a driving force akin to electricity, i.e., Data is Power. Therefore, the future direction for data engineering is to focus on data power platforms, functioning much like a power grid.

Biography: ZHOU Aoying, Professor at the School of Data Science and Engineering, East China Normal University. He is a China Computer Federation (CCF) Fellow and a member of the CCF Standing Committee, the Chair of the CCF Technical Committee on Databases, and the Associate Editor-in-Chief of the Chinese Journal of Computers. He is the Chairman of the Shanghai Computer Society, and the President of the Shanghai Society of Artificial Intelligence and Social Development. He was the Chair of the Department of Computer Science, Fudan University (1999-2002), the Vice President of East China Normal University (2016-2023). His research interests lie in Databases, Data Management, Blockchain, Digital Transformation, FinTech, and EduTech.

Technical Sessions
技术会议

Date：July 26, Saturday, 11:10~12:30

Simu-Live Session 1	Room 2004

Materials Research and Innovation
录播 + 实时问答专场 1：沥青研究与创新

Session Chair： Qing Lu & Zhanping You

Title	Presenters
1.Ultrathin Bonded Wearing Course (UTBWC): Materials, Application, and Greenhouse Gas (GHG) Emissions	**Zhanping You,** Michigan Technological University, USA
2.Characterization of Early Stage Concrete by Non-destructive Testing Methods	**Yan Liu,** Point Park University, USA
3.Enhancing Sustainability and Durability in Asphalt Pavements: Evaluating the Impact of Low-Carbon Sulfur Polymer Modifiers and Reclaimed Asphalt Pavement	**Shadi Saadeh,** California State University Long Beach
4.Intelligent detections of cracks on transportation infrastructures with limited dataset	**Yue Hou,** Swansea University, UK
5.An optimal rejuvenator content determination method for asphalt binder	**Di Wang,** University of Ottawa, Canada

Date：July 27, Sunday, 09:40~12:30

Simu-Live Session 2	Room 2004

Technologies in Transportation Infrastructure
录播 + 实时问答专场 2：交通基础设施新兴技术

Session Chairs： Ruwen Qin & Lu Gao

Title	Presenters
1.Infrastructure Management Practice and Education of the Future: The Emerging Opportunities and Desired Outcomes	**Samuel Labi,** Purdue University, USA
2.Calibrating Parameters in the Barcelona Basic Model, Xiong Zhang, Missouri University of Science and Technology	**Xiong Zhang,** Missouri University of Science and Technology, USA
3.Waste Materials in HMA – Costa Rican Experience	**Jose Pablo Aguiar Mayo**, University of Costa Rica, Costa Rica
4.Bridging Textual Crash Reports and Pavement Management Systems with Large Language Models	**Lu Gao**, University of Houston, USA
5.Additive construction: Material and design innovations to achieve multifunctionalities in infrastructures	**Hongyu Zhou,** University of Tennessee, Knoxville, USA

Technical Sessions

Date：July 26, Saturday, 11:10~12:30

Session 1	Room 3001

Subgrade Materials and Engineering Properties

技术会议 1：路基材料与工程特性

Session Chair： Hao Wang

Title	Presenters
1.Implementing the LWD for MoDOT Construction Acceptance of Unbound Material Layers	**Jenny Liu**, Missouri University of Science and Technology, USA
2.AI-enabled Asphalt Pavement Performance Prediction under Climate Change Uncertainty	**Hao Wang,** Rutgers University, USA
3.Triaxial Test-based Ballast Settlement Characteristics Anaylysis under Extreme Weather Conditions	**Yu Qian**, University of South Carolina, USA
4.Active Dehydration Mechanism and Engineering Application of Core-Suction Subgrade in Permafrost Regions	**Chuang Lin**, Harbin Institute of Technology, China
5.The Development and Application of Cement-Stabilized Phosphogypsum Subgrade and Pavement Materials	**Kaisheng Chen,** Guizhou University, China

Date：July 26, Saturday, 11:10~12:30

Session 2	Room 1004

Recycled Asphalt and Sustainable Cold Mix Technologies

技术会议 2：再生沥青与绿色冷再生技术

Session Chair： Rui Li

Title	Presenters
1.Sustainable and Cost-Effective Cold Mix Asphalt Using 100% Reclaimed Asphalt Pavement with Rejuvenator	**Shenghua Wu,** University of South Alabama, USA
2.Research on Cold-Mixing and Hot-Paving Process of Cement Emulsified Asphalt Mixture after Microwave Radiation	**Haoyan Guo**, Chang' an University, China
3.Interfacial adhesion between bitumen emulsion and RAP	**Rui Li**, Chongqing Jiaotong University, China
4.Multi-index Evaluation of Low-Temperature Performance for Desulfurised Rubber Powder Modified Asphalt and Mixtures	**Bo Li,** Lanzhou Jiaotong University
5.The Compatibility of Composite Rejuvenators for Aged SBS Modified Bitumen	**Chengwei Xing**, Chang' an University, China

Technical Sessions

Date：July 26, Saturday, 11:00~12:30

Session 3	Room 1005

Asphalt Aging and Durability Performance

技术会议 3：沥青老化与耐久性能分析

Session Chair： Huanan Yu

Title	Presenters
1.Evaluation of the Degree of Blending between Virgin and Aged Asphalt in Rejuvenated Asphalt Mixture Based on Multilayer Inclusion Theory	**Huanan Yu,** Changsha University of Science and Technology, China
2.Research on the Salt Erosion Mechanism of Asphalt Mixture Based on Multi-scale Interface Interaction Effects	**Yingxue Zou,** Wuhan University of Science and Technology, China
3.Rheological and Morphological Evolution and Damage Pathways in Asphalt Subjected to Solution Erosion	**Chen Li,** Inner Mongolia University, China
4.Study on High-Modulus Asphalt Binders and Mixtures for Hot-Humid Regions	**Guanglai Jin**, Sinoroad Transportation Science & Technology Co., Lt
5.Study on coarse aggregate migration and skeleton structure evolution law during asphalt mixture compaction process	**Xueru Chen** , Guoping Qian,, Xi Li, Huanan Yu , Xiangbing Gong, Changsha University of Science and Technology

Date：July 26, Saturday, 11:10~12:30

Session 4	Room 2002

Asphalt Performance Enhancement and Durability

技术会议 4：沥青性能提升与耐久性研究

Session Chair： Dongdong Ge

Title	Presenters
1.Factors Affecting the Fatigue Lives of Aged Asphalt Binders	**Fangjin Li,** Yuhong Wang, Hong Kong Polytechnic University, Hong Kong (China)
2.Study on the Performance of Asphalt and Asphalt Mixtures under Changing Ultraviolet Conditions	**Dongdong Ge,** Changsha University of Science and Technology, China
3.Evaluation of Deflection Errors in Traffic Speed Deflectometer Measurements on Inverted Asphalt Pavement Structures	**Chaoyang Wu,** Lanzhou Jiaotong University
4.Study on Surface Temperature Effect of Thermoelectric Asphalt Pavement	**Dongdong Yuan,** Chang 'an University, China
5.Syncretization Mechanism Between Emulsified Asphalt and Aged Asphalt in Cold Recycled Mixture Using Developed Method	**Xiaoguang Yao,** Anhui University of Technology, China

Technical Sessions

Date：July 26, Saturday, 13:30~15:30

Session 5	Room 1004

Pavement Materials and Structural Performance Evaluation

技术会议 5：路面新材料与结构性能评价

Session Chair： Yu Qian

Title	Presenters
1.Performance Evaluation of Double Chip Seals Plus Paving Mat on Asphalt Pavement with Fatigue Cracking	**DingXin Cheng,** California State University, Chico, USA
2.Damage Mechanisms and Performance Optimization of Cement-stabilized Construction Solid Waste Recycled Aggregate Permeable Bases	**Xiaoming Wang,** Guizhou University, China
3.Pavement Performance Model Development and Application Based on Bayesian Neural Networks	**Jingnan Zhao,** Zhiqiang Zhang, Guangxi University, China
4.Application and Research on Semi-Flexible Asphalt Pavement Technology at Channelized Intersections	**Yuhui Pi,** Chongqing Vocational Institute of Engineering, China
5.Structural Design and Release Mechanism of Self-Repairing Microcapsules with Pomegranate Like Asphalt Structure	**Tong Lu,** Chang' an University, China
6.Influence of Microwave Heating Process on the Internal Mesoscopic Structure Healing of Magnetite Asphalt Concrete	**Jianan Liu,** China University of Mining and Technology, Xuzhou, China

Date：July 26, Saturday, 13:30~15:30

Session 6	Room 2002

Sustainable Pavement Materials and Smart Construction

技术会议 6：可持续铺面材料与智能建造

Session Chair： Jiasheng Dai

Title	Presenters
1Waste Plastics on Asphalt Roads: From Waste Source Identification to Recycled Asphalt Pavement Specifications	**Ghim Ping Ong,** National University of Singapore, Singapore
2.New AI Methods for Advancing Structural Component Assessment in Automated Visual Inspection	**Ruwen Qin,** Stony Brook University, USA
3.Rheological Properties and Microscopic Mechanism of Composite Regenerated Asphalt	**Zhen Fu,** Pengkai Yang, Chang' an University, China
4.Performance Improvement Technology of Recycled Concrete Aggregate (RCA) for Asphalt Mixtures	**Jun Xie,** Wuhan University of Technology, China
5.The High-Enthalpy Composite Eutectic Phase Change Materials for Cooling Pavement	**Jiasheng Dai,** Guangxi University, China
6.Valorization of Waste Cheese Why: Development of a Bio-Admixture for Retardation in Alkali Activated Slag-based Materials	**Jiaqing Wang**, Shuang Hu, Nanjing Forestry University, China
7.Real-Time Monitoring of Strain and Modulus of Asphalt Pavement Using Built-In Strain Sensor Cluster	**Dongdong Han,** Chongqing Jiaotong University, China
8.Research on the Assessment of Urban Sewage Pipeline Network Upgrades and Strategies for Resilience Enhancement Driven by Digital and Intelligent Technologies	**Xianzhi Tang,** Fang Zhao, Chongqing Vocational Institute of Engineering, China

Technical Sessions

Date：July 27, Sunday, 09:40~12:00

Session 7	Room 1001

Infrastructure Resilience and Geotechnical Engineering in Complex Environments

技术会议 7：复杂环境下基础设施韧性与地质工程

Session Chairs： **Hanli Wu & Shuangying Zuo**

Title	Presenters
1.Technologies for Emergency Repair and Rapid Restoration of Road Infrastructure	**Hui Li,** Tongji University, China
2.Rock Slope Risk Assessment of Important Transportation Corridor in Sichuan and Tibet Areas	**Xingyuan Jiang,** Guizhou University, China
3.Discussion on the Key Regulation and Control Technologies for Pipe-Soil Frictional Resistance During Trenchless Pipe Jacking and A Typical Case Study Analysis of Pipe Jacking Practice	**Jiwei Wen,** Shijiazhuang Tiedao University, China
4.Use of Cellular Concrete for Air Convection Embankment in Cold Region	**Hanli Wu,** Harbin Institute of Technology, China
5.Evaluation of Long-Term Performance Deterioration of Subgrades under Dry-Wet Cycles with Hypergravity Testing and Multiphysics Modeling	**Ganggui Liu,** Zhejiang University, China
6.Deflection Prediction Model of Asphalt Pavement Based on Hyper-PINN Architecture	**Wensheng Wang,** Jilin University, China
7.From Macro to Micro: Particle-Scale Responses of Asphalt Mixtures under Rolling Tire Loads Via Coupled FEM-DEM Simulations	**Haitao Ge,** Chang' an University, China
8.Study on the Surface Deformation Evolution of Mining-Induced Slopes in Typical Mining Areas of Guizhou Province	**Lina Yu,** Guizhou University, China

Technical Sessions

Date：July 27, Sunday, 09:40~12:00

Session 8	Room 1004

Geohazard Mitigation and Novel Material Applications

技术会议 8：岩土灾害防控与新材料应用

Session Chairs： Xi Jiang & Dewu Liao

Title	Presenters
1.Formation Process and Prevention Measures of Landslide Debris Flow Bridge Collapse Disaster Chain Under Extreme Rainfall in Karst Mountainous Areas	**Wenbing Shi,** Guizhou University, China
2.Sand 3D Printing for Experiments in Rock Mechanics	**Ke Zhang,** Hebei University of Technology, China
3.Research and Development of New Materials for the Prevention and Control of Deterioration of Steep and High-Slope Reservoir Banks	**Tong Liu,** Guizhou University, China
4.Influrence Mechanism of Mineral Composition Ratios on the Early Anchorage Properties for Cement Anchoring Agents	**Suining Zheng,** Huaxin Chen, Chang' an University, China
5.Analysis of the Structural Characteristics and Deformation Mechanisms of Unstable Rock Masses in the Red Beds along the Renchi Expressway	**Genlan Yang,** Jin Xie, Chao Xu, Xingyuan Jiang, Xudong He, Guizhou University, China
6.Geological Characteristics and Recent Research Developments of the Laodongzhai Lead-Zinc Deposit in Southeast Guizhou Province	**Yajiang Tian,** Guizhou University, China
7.Moisture Storage-Release Mechanism in Red Clay and Formation Mechanism of the "Reverse Profile" with Upper Hard and Lower Soft Layers	**Weiguo Jiao,** Guizhou Institute of Technology, China
8.Characteristics of Deep Three-Dimensional Electrical Structure in the Yadu-Mangdong Tectonic Belt in Northwestern Guizhou	**Shuai He,** Guizhou University, China

Technical Sessions

Date：July 27, Sunday, 09:40~12:00

Session 9	Room 1005

Eco-Friendly Pavement Materials and Emission Reduction Technologies

技术会议 9：环境友好型道路材料与减排技术

Session Chair： **Shenghua Wu & Longqiang Han**

Title	Presenters
1.Fabrication of microwave-responsive self-healing microcapsules and evaluation of their effects on asphalt properties	**Feng Ma,** Chang' an University, China
2.Study on the Performance and Fume Gas Emissions of Modified Asphalt Using Pre-treated Waste Rubber Powder	**Meizhu Chen,** Wuhan university of technology
3.Study on the Formation Mechanism of Alkali Bleeding in Asphalt Pavement on Bridge Decks	**Bowei Sun,** Civil Aviation University of China, China
4.Synergistic Effect of Pollutant Purification and Carbon Fixation Performance of Photocatalytic Recycled Aggregate Pervious Concrete	**Guanyu Liu,** Hebei University, China
5.Gelation and Oil Exudation in Asphalt	**Jianmin Ma,** Emily Froat, Chanaka Nawarathna, Hai Yuan, Simon A.M. Hesp, Queen's University, Canada
6.Evolution Characteristics of Mechanical Properties and Pore Structures of Concrete Containing Magnetite During Long-Term Microwave Deicing	**Heping Qiu,** Shandong University, China
7.Quasi-Static and Dynamic Mechanical Properties of Concrete Containing Cellulose Fiber: Mechanism and Effects	**Hansong Wu,** Beijing University of Technology, China
8.Study on the Mechanism of Macro- and Micro-Physical and Mechanical Properties of Red Clay Controlled by Colloidal Oxides	**Daoyong Wu,** Guizhou University, China

Young Scholars Forum

Date：July 26, Saturday, 15:30~16:00

YS 1 (part 1)	Room 2004

Smart Materials and Modeling (part 1)

青年论坛 1：智能材料与建模（上）

Session Chairs： **Linwei Li**

Title	Presenters
1.Leaching Behavior Of Tartaric Acid as a Dealkalization Agent in Red Mud Treatment: A Comprehensive Study	**Tao Zhang,** Guizhou University.
2.Study on the Synergistic Effect Of Co-Pyrolysis Gasification Of Low-Grade Non-Cohesive Coal And Waste Biomass	**Yaopan Hu,** Kunming University of science and Technology.
3.Real Time Reaction Rate and Changes in Physical and Mechanical Properties Of Carbon Dioxide Sequestration in Basalt Mineralization	**Pan Yang**, Guizhou University.
4.Numerical Simulation Analysis of Steel-concrete Vierendeel Sandwich Plate Composite Bridge under a close-in blast loading	**Kaicong Kuang,** Guizhou University
5.Functional Regulation of Substrate-Microbial Communities in Karst Hg/Tl Mining Wastes: Toward Ecological Infrastructure Construction	**Lixia Chen,** Xingying Li, Yonggui Wu, Guizhou University

Young Scholars Forum

Date：July 26, Saturday, 20:00~21:30

YS 1 (part 2)	Room 1005

Smart Materials and Modeling (part 2)

青年论坛 1：智能材料与建模（下）

Session Chairs： Shuang Dang

Title	Presenters
1.Physics-Informed Neural Networks for Solving Elastic Deformation Problems of Circular Arches	**Minjie Shi**, Guizhou University.
2.Discrete Element Modeling of Size Effect in Limestone-concrete Composites with Varying Joint Angles under Uniaxial Compression	**Hang Liu,** Guizhou University.
3.A Novel Landslide Susceptibility Mapping Method Based on a Backpropagation Neural Network Algorithm with Optimized Non-landslide Samples and Hyperparameters	**Zhengli Duan,** Shandong Liu, Xingyuan Jiang, Guizhou University.
4.Numerical Study on Response of AZ31B Magnesium Alloy Subjected to High-Velocity Projectile Perforation	**Ao Zhou**, Guizhou University.
5.The Improvement in Early Age Strength of Magnesium Slag Blended Cement by Incorporating Silica Fume	**Juhong Yang,** Guizhou University
6.Influence of Red Mud Calcined at Different Temperatures on Shrinkage Deformation of One-part Alkali-activated Fly Ash-slag Mortar	**Qingqing Xie,** Guizhou University
7.Research On Activation Mechanisms, Preparation Methods, And Engineering Applications Of High-Performance Metal Tailings-Based Cementitious Materials	**Jie Yao,** Changsha University of Science & Technology
8.Research On The Preparation And Engineering Application Of Activated Tailings Geopolymer Cementitious Materials Based On Solid-Waste Synergy	**Xiaoming Fan,** Changsha, University of Science & Technology
9.Laboratory Evaluation On Engineering Properties Of Fluidized Solidified Soil Prepared With Multi-Source Solid Waste For Municipal Backfill Engineering	**Miao Zhang,** Chaohui Wang, Chang'an University
10.Mechanisms And Optimization Of Interfacial Properties In Alkali-Activated Slag Repair Materials Modulated By Ionic Polyacrylamides	**Kun Wu,** Chongqing Jiaotong University
11.Intelligent Identification Model for Microseismic Signals During Rock Slope Excavation: A Case Study of an Erpu Potential Collapse in Guiyang, China	**Youhao An,** Guizhou University.
12.Characteristics and Hazard Boundaries of Pinhole Gas Leaks from Vertical Pipes Buried Around Buildings Based on Numerical Simulation	**Fan Ran,** Guizhou University.

Young Scholars Forum

Date：July 26, Saturday, 13:30~16:00

YS 2	Room 1005

Advances in Pavement and Geomaterials

青年论坛 2：道路与岩土材料前沿

Session Chairs： Yuqing Zhang & Xue Luo

Title	Presenters
1.Least Squares Reverse Time Migration of Ground Penetrating Radar	**Xijiang Zhang,** Guizhou University.
2.Development of a Coaxial Waveguide-Based Geotechnical Multi layer Deformation Sensor	**Yan Rui,** Chengdu University of Technology.
3.Optimization Of Asphalt Pavement Strain Measurement Across a Wide Temperature Range	**Siwei Chen,** Chongqing Jiaotong University.
4.Evaluation of Skid Resistance of Pavement Maintenance Energy-Absorbing Seal Based on Surface Texture Characteristics	**Xiang Lan,** Chaohui Wang, Chang' an University.
5.Porous Water Retention Composite Thermal Resistance Temperature Reduction Semi-Flexible Pavement Tests Research	**Yuhang Guan,** Tianqing Ling, Chongqing Jiaotong University.
6.Water Stability And Low-Temperature Performance Of Polyolefin Modified Recycled Asphalt Mixtures	**Jun He,** Wuhan university of technology.
7.Study on the Performance of Usp-Type Warm-Mix Modified Rubber Asphalt and Mixtures	**Weipeng Shi,** Jiahui Tang, Yang Ye, Bangyu Liu, Tianqing Ling, Chongqing Jiaotong University.
8.Dynamic Bond-Driven Bio-Based Polyurethane-Modified Asphalt: Preparation, Performance Evaluation, and Self-Healing Mechanisms	**Li Shu, Xuejuan Cao,** Chongqing Jiaotong University..
9.Study on Lateral Resistance Performance of Light Wood Shear Walls with Phosphogypsum Board)	**Qunqing Wei,** Guizhou University.
10.Revealing the Effect of Pore Size Distribution Characteristics on Macroscopic Properties of Red Sandstone under Instantaneous High Temperature Through the Lens of Shannon Entropy Theory	**Ziyang Zhao,** Guizhou University.
11.Fracture Behavior and Damage Mechanisms in Red Sandstone under Loading: an Integrated Experimental and Discrete Element Method Study	**Zhi-Nan Deng,** Xing-Yuan Jiang, Di Wu, Yi Yang, Guizhou University.
12.Preparation of a High Stability-Viscosity-Elasticity Composite Modified Asphalt with Bio-Devulcanized Rubber Powder	**Jinbiao Tang,** Derun Zhang, Shangxian Xie, Ruben Paul Borg, Odette Lewis, Huazhong University of Science and Technology.
13.Reverse Design for Mixture Proportion of Asphalt Concrete in High-Temperature Regions Based on Materials Informatics	**Chenhui Peng,** Derun Zhang, Huazhong University of Science and Technology.
14.Cracking Behaviour and Mechanical Properties of Rock-filled Concrete: Influence of Contact Interfaces on the Rock Skeleton	**Biao Han,** Guizhou University.
15.Study on the workability, strength, durability and environmental performance of alkali-activated electrolytic manganese slag-fly ash-slag grouting materials	**Guangjie Yang,** Guizhou University.

Title	Presenters
16.Capillary Water Migration Characteristics of Sandstone with Different Porosities and Calculation Methods for Pore Surface Relaxation Strength	**Di He,** Guizhou University.
17.Solidifying/Stabilizing Soluble Manganese and Ammonia Nitrogen in Electrolytic Manganese Residue Via The Hydrolysis of Dicalcium Silicate in Magnesium Slag	**Wei Tang,** Guizhou University
18.Multi-Scale Pore Engineering of Dealkalized Red Mud in Cement Composites: Fractal Nmr Insights and Grey Relational Mechanisms	**Junjie Chen,** Guizhou University
19.The Effect of Microbially Induced Calcium Carbonate Precipitation (Micp) On Pores and Moisture During The Early Hydration Process of Cement Slurry	**Sheng Ren,** Guizhou University
20.Effects of Five Different Origins of Low-Temperature Pretreated Phosphogypsum Dosing On The Mechanical Properties of Alkali-Activated Slag-Fly Ash-Based Cementitious Materials	**Jiangshan Yang,** Guizhou University

Young Scholars Forum

Date：July 26, Saturday, 16:20~18:30

YS 3	Room 1004

Mechanical Behavior of Materials

青年论坛 3：材料的力学行为

Session Chairs： **Hui Li & Jing Bi**

Title	Presenters
1.Study on Pores Structure and Damage Characteristics of Red Sandstone Due to Different Heating and Cooling Methods Based on Nmr and Entropy	**Yuhang Zhao,** Guizhou University.
2.Mechanical Properties and Damage Characteristics Of Rock-Concrete under High Temperature and Water-Cooled Circulation	**Yicong Li,** Guizhou University.
3.Experimental Study on Damage Evolution and Failure Precursors of Thermal-Cold Water Cycling Treated, Granite,	**Zhenjiang Huang,** Guizhou University.
4.Aerodynamic Instability Mechanisms and Frequency-Domain Characteristics of Iced Eight-Bundled Conductors	**Bolin Zhong,** Chengdu University
5.Mechanical Responses and Stress Distribution of Rock-like Specimens Containing Spherical Defects under Uniaxial Compression	**Can Cui**, Guizhou University.
6.Study on the Mixed-Mode I/II Fracture Characteristics of C80-MSC with Different Amounts of SP Incorporation Based on AE Technology	**Hongying Zhao,** Guizhou University.
7.Investigation of High-Temperature Effects On The Strengthening and Degradation of Mechanical Property in Sandstone	**Lin Zhang,** Guizhou University.
8.Evolution Characteristics of Fracture Surface Morphology of Cracked Concrete-rock Bi-material with Fracture Mode I-II	**Xiaojiang Deng,** Guizhou University.
9.Study on the Tensile-Shear Mechanical Behavior of Sandstone Using a Simple Auxiliary Apparatus	**Longlong Mao,** Guizhou University.
10.Ballistic Performance of Thermoplastic Fiber-Reinforced Metal Laminates Subjected to Impact Loadings	**Qingwei Li,** Guizhou University.
11.Experimental Design, Mechanical Performance and Mechanism Analysis of C30 Phosphogypsum-Based Concrete	**Pengwei Zhu**, Guizhou University
12.Effect of Rainfall Conditions and the Soil–Epikarst Structure on the Rapid Loss of Nitrogen in Subsurface Flow	**Shimei Yang,** Guizhou University
13.Macro-micro Fracture Characteristics and Mechanical Response Mechanisms of Grouted Fractured Sandstone under Stepwise Incremental Loading	**Zhongshao Yao,** Guizhou University
14.Technical Exchange on Integrated Prevention, Avoidance, and Mitigation Strategies for BT15 Collapse Mass at Laodigou Coal Mine	**Xiaodong Ji,** Liupanshui Survey Institute of Guizhou Non-ferrous Metals and Nuclear Industrial Geological
15.Investigation of Aggregate Gradation on Air Voids Distribution in Porous Asphalt Concrete Using X-ray CT Scanning Images	**Wenjing Kuang,** Chongqing Jiaotong University
16.Field Monitoring Study on Structural Mechanical Behavior of Sof Rock Tunnel with Large Deformation Supported by Energy-Absoring Bolts	**Peiwen Yuan,** Chengdu University of Technology
17.Study On Rheological Properties and Chemical Composition of Asphalt Under Photo-Thermal-Oxygen Aging	**Zhen He,** Lingyun Kong, Yi Peng, Chongqing Jiaotong University, China

Young Scholars Forum

Date：July 26, Saturday, 15:30~16:00

YS 4 (part 1)	Room 2002

Asphalt Materials and Modification (part 1)

青年论坛 4：沥青材料与改性（上）

Session Chair： Jianmin Ma

Title	Presenters
1.Application of Functionalized Graphene Oxide in the Preparation of Crumb Rubber–Modified Asphalt with Excellent Storage Stability	**Li Xu,** Kaixuan Guo, Hongzhou Zhu, Chongqing Jiaotong University
2.Dynamic Crosslinking Strategy for Thermal-Response Self-Healing and Recycling of Thermosetting Polyurethane Asphalt	**Kuiling Wei,** Xuejuan Cao, Boming Tang, Chongqing Jiaotong University
3.Introducing Diels-Alder Reaction With Carbon Nanotubes for the Enhanced Repair Performance of Epoxy Resin Modified Asphalt	**Shi Fan,** Fenglei Zhang, Wenjun Huang, Lier Chen, Hongzhou Zhu, Chongqing Jiaotong University
4.Polyvinyl Alcohol (PVA) Fiber Modified Resin-Based Micro-Surfacing: Toughness and Durability	**Jianyun Ma,** Chaohui Wang, Chang'an University

Date：July 27, Sunday, 12:00~12:30

YS 4 (part 2)	Room 1005

Asphalt Materials and Modification (part 2)

青年论坛 4：沥青材料与改性（下）

Session Chair： Jianmin Ma

Title	Presenters
1.Desulfurized rubber asphalt with excellent storage stability was prepared by using high-density polyethylene as a modifier	**Feiyu Zhang,** Hongzhou Zhu, Song Yang, Chongqing Jiaotong University
2.Tannic Acid/Γ-A Minopropyltriethoxysilane/Molybdenum Disulfide Composite Prepared By Co-Deposition as an Environment-Friendly Modiffer for Crumb-Rubber-Modiffed Asphalt	**Yudan Wang,** Hongzhou Zhu, Qiqi Tan, Song Yang, Xiaosi Yang, Chongqing Jiaotong University
3.Prediction Model for Safe Vehicle Speed Based On Skid Resistance of Asphalt Pavement	**He Zhang,** Chongqing Jiaotong University
4.Multifractal Analysis of Pore Structure and Failure Behavior of Concrete with Different Aggregate Sizes	**Renhong Ding,** Guizhou University
5.The Change in Physical Properties of Asphalt and Characterization Analysis of Oxygen-Containing Functional Groups Under Coupled Photo-Thermal-Oxidative Aging	**Pan Xie,** Chongqing Jiaotong University

Young Scholars Forum

Date：July 26, Saturday, 15:30~16:00

YS 5 (part 1)	Room 1004

Functional and Smart Materials (part 1)

青年论坛 5：功能与智能材料（上）

Session Chairs： Zhen Leng & Haopeng Wang

Title	Presenters
1.The Model fracture Toughness and Acoustic Emission Characteristics of Hot Dry Rock under Temperature Effects	**Yuehao Jia**, Guizhou University.
2.Prediction Method of Blasting Vibration Velocity of High Slope Based on Bayes	**Xiangzhao Deng**, Guizhou University.
3.Study on the Performance of Fiber-reinforced Red Mud-phosphogypsum-based Composite Materials	**Yu Zhou**, Guizhou University.
4.The Spatiotemporal Transfer Feature of Traffic Flow in University Campus	**Muyuan Zhang,** Chunli Guo, Yaolu Ma, Southwest Forestry University, China
5.Investigation of Bond Behavior and Bamage Mechanism Between Plain Round Bars and Phosphogypsum-based Composite Cementitious Materials	**Shihai Wang,** Tao Zhen, Dewen Kong, Guizhou University.

Date：July 27, Sunday, 12:00~12:30

YS 5 (part 2)	Room 1001

Functional and Smart Materials (part 2)

青年论坛 5：功能与智能材料（下）

Session Chairs： Zhen Leng & Haopeng Wang

Title	Presenters
1.The Effects of Admixtures on the Durability Properties of Phosphogypsum-based Cementitious Materials	**Fanqi Bi, Dewen Kong,** Rusong Fu, Guizhou University.
2.Preparation and Performance of Shape Memory Piezoelectric Composites for Seamless Expansion Joints	**Zixuan Wang,** Yanhui Niu, Zhuo Li, Chang'an University.
3.Hybrid Materials Inspired by Mesoporous Aquatic Bryophyte Fossils With High Water-Collecting Efficiency From Dry-Wet Cycles	**Ya Yang,** Guizhou University.
4.Anti-Aging Mechanism and Performance Verification of Modified Asphalt Binder Based on Inhibition of Polymer Degradation	**Xiangquan Zhang,** South China University of Technology.
5.Wetting of Bio-Rejuvenator Nanodroplets on Bitumen: A Molecular Dynamics Investigation	**Haiqin Xu,** Wuhan University of Technology.
6.Time-varying law of rebar corrosion performance in Phosphogypsum-Based Cementitious Materials	**Yangyang He,** Guizhou university.

Young Scholars Forum

Date：July 26, Saturday, 16:20~18:30

YS 6	Room 2004

Mountain Engineering Safety and Sustainable Transportation

青年论坛 6：山地工程安全与可持续交通发展

Session Chairs： **Chuang Lin & Xingyuan Jiang**

Title	Presenters
1.Research on Fiber Bragg Grating (Fbg) Sensing Technology for Slope Internal Thrust and Instability Early Warning Methods	**Shan Zhang,** Chengdu University of Technology.
2.Application of Double-row Anti-slip Piles with Multi-connected Beams in Landslides of Weakly Expansive Clay with High Fluid Limit	**Zhenyu Wang,** Tianqing Ling, Jinping Yu, Chongqing Jiaotong University.
3.Influence of Rotational Spatial Variability in Geotechnical Parameters on the Rainfall-Induced Stability of Soil-Like Slopes	**Jijia Zhang,** Guizhou University
4.Research on Meteorological Early Warning of Landslide Disasters in the Chishui Red Bed Area Driven by Both Data and Models	**Rongqian Zhao,** Xingyuan Jiang, Shandong Liu, Yi Yang, Guizhou University.
5.Spatial Evolution of Fractures and Stability Assessment in Overlying Strata Under Coal Mining Disturbance in Guizhou Province	**Xunhe Zheng,** Guizhou University.
6.Experimental Study on the Morphological Evolution of Landslide Debris Flow-Induced Surges and Their Response to Dam Break of Landslide Dams	**Xiaoxiang Zhou,** Guizhou University.
7.Study on the Catastrophic Evolution Mechanism of Soil Landslides Triggered by Fissure Disturbance and Rainfall in Karst Areas	**Gaoqing Jiang,** Taihong He, Xingyuan Jiang, Yi Yang, Sifa Wang, Qianzheng Sun, Guizhou University.
8.Research on the Fine Structural Identification Technology of Landslide Geological Disasters Driven by Geophysical Data	**Qilin Huang,** Chengdu University of Technology/ Guizhou Institute of Geophysical and Geochemical Prospecting.
9.Coupled Effects of Fault-Related Groundwater Flow and Pore Water Pressure: Unraveling the Mechanisms of Deformation and Failure in Gentle Slopes	**Xudong He,** Guizhou University.
10.A Smart Variable Spring Support and Hanger for Pipeline Deformation Monitoring	**Qiang Peng,** Chengdu University of Technology.
11.Proper Orthogonal Decomposition (Pod) Dimensionality Reduction Combined with Machine Learning to Monitor the Vibration Characteristics of Stay Cables at Different Lengths	**Rui Chen,** Chengdu University.
12.Deep Learning-based 3D Inversion Study of Ground-Penetrating Radar Data	**Lingcen Kong,** Jiong Zhang, Zhao Hou, Zhen Yang, Jia Liu, Jiaqi Lu, Yanan Li, Shandong University.

Title	Presenters
13.Coastal Bridges with A Box-Girder Superstructure Under the Action of Solitary Waves: Study on the Optimization of Bearings, Dynamic Characteristics and Failure Mechanism	**Jie Zhang,** Chongqing Jiaotong University.
14.Physics-Informed Interpretable Neural Network for Structural Modal Identification	**Tengzhao Jiang,** Guizhou University.
15.Research on Toughening Urban Flood Disaster Based on Spatial Distribution of Surface Vegetation	**Xinyue Zhang,** Yaolu Ma, Southwest Forestry University.
16.A Comprehensive Evaluation Method for Mountainous Transportation Complex Corridors Integrating Tourism and Sustainability: a Case Study of 'Qinba No. 1 Scenic Route'	**Yujian Yang,** Chang'an University.
17.Research on the Resource Utilization and Diverse Applications of Urban Sludge in Road Construction	**Zhihao Li,** Xuejuan Cao, Boming Tang, Chongqing Jiaotong Univercity
18.Automated Grouting Anchoring Cloud Equipment	**Xin Li,** Guizhou University / Shandong Zeming Energy Technology Co., Ltd.

Young Scholars Forum

Date：July 27, Sunday, 14:00~15:30

YS 7	Room 1001

Subgrade and Soil Behavior

青年论坛 7：路基与土体工程行为

Session Chair： Yipeng Guo

Title	Presenters
1.Optimization of Foam Lightweight Soil Performance for Bridge Abutment Backfilling	**Tingran Yang**, Chongqing Jiaotong University.
2.Study on Mixed Dielectric Model of Red Clay	**Junhao Chen**, Guizhou University.
3.Research on the development law and influencing factors of surface cracks induced by coal mining in loess gully area	**Rui Zhao,** Guizhou University/ Weinan Vocational & Technical College.
4.Research on the dynamic response characteristics and treatment techniques of low embankments with red clay under the coupling effect of dynamic load and water environment	**Jinhong Li,** Changsha University of Science & Technology.
5.Investigation on the Mechanism of Pavement Collapse Induced by Municipal Pipeline Breakage	**Jiaqi Lu**, Jia Liu, Lingcen Kong, Zhen Yang, Jiong Zhang, Shandong University.
6.Experiments on Moisture Migration in Frozen Soil Using Fluorescent Tracers and Tdr Detection	**Zhen Yang,** Jiong Zhang, Hao Zeng, Xinzhuang Cui, Jiaqi Lu, Lingcen Kong, Xiaoning Zhang, Shandong University.
7.Effects of High-Temperature and Alkaline Conditions on Swelling Pressure of Gaomiaozi Sodium-Based Bentonite	**Long Fang,** Guizhou University.
8.An Extended Model Based on the General Van Genuchten Model for the “wetting” Process of GMZ Na-bentonite Subjected to Alkali-heat Treatment	**Lei He**, Guizhou University.
9.How does subcritical CO 2 affect the micro-structure of coal under saturated water conditions at different temperatures?	**Yun Ling**, Guizhou University.
10.Evaluation of the Effectiveness of Wicking Geotextile in Controlling Capillary Water Rise: an Experimental Study	**Yipeng Guo,** Dahao Zou, Jiejing Chen, Yafeng Li, Xiong Zhang, Yongjie Zhang, Lu qiang Ding, Changsha University of Science & Technology.
11.Root Distribution Characteristics and Soil Reinforcement in Miaoling Mountainous Area	**Jinzhi Yang,** Junwei Tian, Xingyuan Jiang, Guizhou University.
12.Macro and Micro Shear Failure Mechanism of Soil-rock Mixture with Different Block Strength Under High Confining Pressure	**Xinhai Yuan**, Guizhou University.
13.Influence of Alkali-Clay Interactions on the Shear Strength and Microstructure of Alkaline-Contaminated Red Clay	**Lianrui Wang,** Guizhou University.

Young Scholars Forum

Date：July 27, Sunday, 14:00~15:30

YS 8	Room 1004

Asphalt Mixture Performance

青年论坛 8：沥青混合料性能

Session Chairs： **Shanshan Jin & Yanhui Niu**

Title	Presenters
1.Study on the Performance of SBR Modified Emulsified Asphalt Cold Paving Mixtures,	**Yang Ye**, Chongqing Jiaotong University.
2.Analysis of Aging Mechanisms in High-Viscosity Modified Asphalt Based on Microscopic Indicators	**Mengxu Zhang**, Chang' an University.
3.Evaluation Framework for Bitumen-aggregate Interfacial Adhesion Incorporating Pull-off Test and Fluorescence Tracing Method	**Zhengyu Ren,** Yi Peng, Lingyun Kong, Tianhao Zhao, Chongqing Jiaotong University.
4.Study On Rheological Properties and Index of EPDM Sulfur Modified Asphalt Based on PCA	**Wenhao Wang**, Jiuguang Geng, Wenhui Zhao, Zhao Zhang, Yanhui Niu, Chang' an University.
5.Synergistic Action and Effect Mechanism of Coal Gangue Powder and Red Mud on the Properties of Concretes	**Yida Zhang,** Guizhou University.
6.Effect Evaluation and Mechanism Analysis of β-hemihydrate Phosphogypsum on Performances of Red Mud Concretes	**Huanyou Gu,** Yurui Han, Dewen Kong, Guizhou University.
7.Influence and Mechanism Analysis of Different Parent Rock Stone Powders on the Properties of Manufactured Sand high-strength Concretes	**Jianglin Xu,** Shenghui Zhou, Dewen Kong, Guizhou University.
8.Study on Dry Shrinkage and Anti-scouring Properties of Cement-stabilized Phosphogypsum Gravel Pavement Base Material	**Yan Hu,** Guizhou University.
9.Research on Hydraulic Stability Characteristics and Mechanism of Cement-Stabilized Phosphogypsum Materials	**Zhangrong Ji,** Guizhou University.
10.Investigation of The Cement Hydration Process Based On 2D Nuclear Magnetic Resonance T1-T2 Specttum and Entropy Theory	**Lin Ning**, Guizhou University.
11.Effect Investigations of Curing Temperature on Performances of Phosphogypsum-based Cementitious Materials with Different RPG:HPG Ratios	**Wenhui Ni,** Guizhou University.
12.Molecular Dynamics Study on the Effect of Ion Type and Concentration on Physical and Mechanical Properties of Red Clay Aggregates	**Mingxiang Huang**, Guizhou University.

Young Scholars Forum

Date：July 27, Sunday, 11:45~12:30

YS 9	Room 1004

Waste-Based Cementitious Materials

青年论坛 9：固废基胶凝材料

Session Chairs： **Meizhu Chen & Yuhong Wang**

Title	Presenters
1.Resource Utilization of Phosphogypsum Solid Waste: A Dual Path of Environmental Friendliness and Performance Optimization	**Huanlong Li,** Guizhou University
2.Performance Study and Effect Mechanism of Red Mud Manufactured Sand Foam Concrete Using a Single-factor Experiment	**Huiyong Ren,** Guizhou University
3.Study on the Hydration Reaction and Pore Structure of Ecologically Recycled Mortar with Corn Cob Aggregate	**Zishuo Han,** Guizhou University
4.Effects of Hybrid Fibers on Properties of Desulfurized Gypsum-based Composite Cementitious Materials	**Tongjie Wu,** Guizhou University
5.Development of Composite Magnesium Oxychloride Cement and Its Application on Solidification of Dredged Sludge	**Xiuyin Yang**, Guizhou University
6.RSM-based Multi-objective Optimization of Desulfurized Gypsum-based Composites Properties	**Tao He，** Gengyin Cui, Dewen Kong, Guizhou University

Young Scholars Forum

Date：July 26, Saturday, 19:30~21:30

YS 10	Room 2002

Cement-Based Material Performance

青年论坛 10：水泥基材料性能

Session Chairs： Cun Hui & Fang Han

Title	Presenters
1.Experimental investigation on fractal mechanism and shear failure characteristics of cement mortar at different curing ages	**Yuyan Lou,** Renhong Ding, Guizhou University
2.Investigation of damage mechanism of sawdust-magnesium oxychloride cement composites under uniaxial compressive load using AE and DIC techniques	**Shanshan Wu,** Guizhou University
3.Alkali-Activated Slag Cement Via HPMC: Structural Role of Silicate Tetrahedra Polymerization and Its Correlation with Mechanical Performance Gain	**Yilong Liu,** Chongqing Jiaotong University
4.Mechanisms and Efficacy of Self-Healing in Cementitious Composites: An In-Depth Review	**Qing Liu,** Xuejuan Cao, Boming Tang, Siyu Wu, Bailin Shan, Chongqing Jiaotong University
5.Study on Micro-pore Structure and Macro-mechanical Properties of Road Cement-based Materials Modified by Nano-SiO2	**Xiangxin Zhang,** Guizhou University
6.Performance of Red Mud Concrete Reinforced with Single and Hybrid Polyvinyl Alcohol and Basalt Fibers	**Zhen Liu,** Guizhou University
7.Study on Axial Compression Properties of C30 Phosphogypsum-based Concrete Filled Circle Steel Tubular	**Nauman Khan,** Guizhou University
8.Experimental Study on Performance of Red Mud Concrete and Establishment of Uniaxial Compression Constitutive Model	**Fuchao Xu**, Guizhou University
9.Bonding Performance and Mechanism Analysis of Interface between Rebar and Red Mud Concrete	**Zinan Fang,** Guizhou University
10.Study on the Energy-Saving Effect of Ventilation and Cooling in High-Temperature Tunnels Using Phase Change Materials Coupled with Lining Structures	**Chunrong Chen,** Chengdu University of Technology
11.Study on the Prediction of TBM Tunneling Attitude in Small-Radius Curved Sections of Coal Mine Roadways	**Zhan Cai,** Guizhou University
12.The Relationship between Rock Fragment Size Distribution and TBM Rock Breaking Efficiency in Jointed Rock Mass	**Jiawei An**, Guizhou University
13.Investigation on Adhesion Damage Behavior between High-viscosity Asphalt and Aggregates During Long-Term Aging Process	**Haoxuan Jin,** Qiang Li, Nanjing Forestry University
14.Resistance to chloride ion attack and application optimization of red mud-slag composite cementitious materials	**Xizheng Sun**, Guizhou University
15.Development of a Geologic Forecasting Optimization Model and Multidata Fusion Technology for Tunnel Construction in Guizhou	**Biyang Yan,** Guizhou University
16.Lignin-Based Flame-Retardant Asphalt Modifier with Dual Toughening and Antioxidant Functions: Preparation Method and Application in Flame-Retardant Asphalt	**Xiao Huang,** Yi Zhao, Chongqing Jiaotong University, China

Young Scholars Forum

Date：July 27, Sunday, 14:00~15:30

YS 11	Room 1005

Tunnel and Underground Construction

青年论坛 11：隧道与地下工程

Session Chair： Shiwan Chen

Title	Presenters
1.Construction and Application of Optimized Model for Mine Water Inflow Prediction Based on Neural Network and ARIMA Model	**Menghua Li,** Guizhou University.
2.Deformation and Failure Mechanism of a Mining Slope under Mining Blasting and Rainfall	**Yongdong Zhu,** Guizhou University.
3.Study on Industrial High-Value Utilization Technology, Resource Utilization and Environmental Governance of Shallow Black Shale in Guizhou	**Yuchen Guo,** Guizhou University.
4.Construction of Resource Evaluation System and Engineering Practice Innovation for Green Coal Development (Underground Gasification) Under the Dual Carbon Goals	**Ze Zhou**, Guizhou University.
5.Analysis of Spatiotemporal Heterogeneity of Water Resource Carrying Capacity from an Ecological and Water Resources Synergistic Perspective Based on Entropy Weight TOPSIS Model	**Chaoyi Li**, Guizhou University.
6.Numerical Simulation of Dynamic Compressive Mechanical Properties of Phosphogypsum Concrete	**Mingwang You,** Guizhou University.
7.Numerical Simulation Study on the Bearing Performance of Side-Convex Fabric Bag Pile Structures in Karst Areas	**Min Yuan,** Guizhou University.
8.Study on Monitoring of Temperature Change Process in Self-Compacting Rock-Filled Concrete Dams	**Guozhuan Yao**, Shuangying Zuo, Guizhou University.
9.Characteristics of CO_2 adsorption influenced by coal pore structure-temperature interaction, including its implications for geological storage	**Yunna Ding,** Guizhou University.
10.Earthquake Prediction Driven by Energy Laws: Construction of a Full-Cycle Earthquake Model Based on Byerlee's Law Correction and Multi-Scale Energy Transfer Mechanisms	**Wang Tao,** Guizhou University.
11.Bearing Capacity And Deformation Characteristics Of Block-Stone-And-Gravel-Filled Foundation In Mountainous Areas	**Ju Long**, Guizhou University.
12.Failure Mode of Pipeline Fracture Induced Ground Collapse Under Varying Spacing Conditions in Red Clay Area: Insights from Semi-Physical Modeling	**Kai Wang,** Guizhou University.

Young Scholars Forum

Date：July 27, Sunday, 15:40~17:20

YS 12	Room 1001

Advanced Testing and Modeling of Civil Materials

青年论坛 12：土木材料测试与建模新方法

Session Chairs： Dingxin Cheng & Daoyong Wu

Title	Presenters
1.Research on the Dynamic Apparent Permeability of Shale: Coupling Anisotropic Deformation Characteristics and Multiple Transport Mechanisms	**Yuting Fan**, Guizhou University
2.A Novel Fluid-Solid Coupling Discrete Element Algorithm for Hydraulic Fracturing	**Wei Zhang**, Guizhou University
3.Real-Time Nmr Investigation of Water Infiltration Mechanisms and Pore Structure Evolution in Fractured Sandstone Near-Wellbore Regions	**Shengfeng Wu**, Guizhou University
4.Mechanisms of Coalbed Methane Seepage Under Multi-field Coupling: Development of an Intelligent Experimental System, Apparent Permeability Modeling and Validation	**Yuhan Tang,** Guizhou University
5.Study on a Coal Permeability Model Considering the Influence of Multiple Factors Under Elastoplastic Deformation Conditions	**Hengyu Wang,** Guizhou University
6.Analysis of Characteristics of Overburden Rock Damage and the Mechanism of Water Damage in Karst Pipelines in Coal Seam Mining Under Multi-Field Coupling	**Wenjie Zhang,** Guizhou University
7.Study on the Failure Characteristics of Water-Proof Rock Mass in Coal Seam Roof Under Stress-Seepage Coupling and the Mechanism of Pipeline-Fracture Water Inrush	**Lulu Che**, Guizhou University
8.Artificial Aggregate as a Sustainable Substitute for Natural Aggregate in Structure Concrete Applications	**Wanli Ye**, Harbin Institute of Technology
9.Experimental Study on Self-magnetic Flux Leakage Detection of Cable Circumferential Corrosion Based on Sensor Array	**Qingxia Tao**, Chongqing Jiaotong University
10.Study on Strength Properties of Cement-Stabilized Phosphogypsum-Gravel Pavement Base Materials	**Liangchun Xu,** Guizhou University
11.Preparation And Application Performance Of Thermo-Regulated Slow-Release Anticoagulant Ice Fog Seal Coating Materials	**Yanxia Luo,** Peng Guo, Chongqing Jiaotong University.
12.Research on the Shear Failure Behavior and Interface Damage Mechanism of Concrete-rock Composite under Acid Erosion	**Piao Hao,** Guizhou University.
13.Ball Milling-medium Temperature Sequential Coupling Activated Bayer Red Mud: Multi-scale Pozzolanic Activity Evaluation and Effect Mechanism	**Zeyuan Wang,** Lingling Wang, Dewen Kong, Daiyu Zhou, Qiwan Zhang, Weiping Yang, Guizhou University.
14.Study on the Influence of Bedding and Fracture Inclination on the Mechanical Properties and Damage and Failure Laws of Layered Limestone	**Furong Zhang,** Guizhou University.

Young Scholars Forum

Date：July 27, Sunday, 15:40~17:40

YS 13	Room 1004

Sustainable and Intelligent Pavement Materials

青年论坛 13：可持续与智能化道路材料

Session Chairs： Genlan Yang & Yiwei Wang

Title	Presenters
1.Ba(OH) 2 -activated hemihydrate phosphogypsum-based slag concrete: Influence of Ba(OH) 2 content on compressive strength, water resistance, microstructure and cementitious mechanism	**Daiyu Zhou,** Guizhou University.
2.Deterioration Mechanism of Steel Fiber Concrete with Different Rock Types Under Acid Attack in Uniaxial and Triaxial Tests	**Heshan Wu,** Guizhou University.
3.Research on Mechanical Properties of Interbedded Hard-Soft Rock Masses and Acoustic Emission Evolution Characteristics During Shear Failure	**Shili Xiao**, Guizhou University.
4.Effects of Time-dependent Adsorption and Creep Deformation on Permeability Evolution of Coal	**Haodong Ren**, Guizhou University.
5.Characterization and Correlation Analysis of Mechanical Properties and Resistance of Emulsified Asphalt Cold-Recycled Mixtures	**Pengliang Qi,** Rui Li, Chongqing Jiaotong University.
6.Impact of Aggregate Morphology on the Compression Strength of Asphalt Mixtures During Different Compaction Stages	**Zixuan Xiao,** Changsha University of Science & Technology.
7.Investigation of Aggregate Gradation on Air Voids Distribution in Porous Asphalt Concrete Using X-ray CT Scanning Images	**Wenjing Kuang,** Tianqing Ling, Jingfeng Li, Xiulei Li, Chongqing Jiaotong University.
8.Study on the Performance of Epoxy Asphalt with Different Matrix Asphalt Contents	**Wenjun Huang**, Hongzhou Zhu, Fenglei Zhang, Shi Fan, Lier Chen, Chongqing Jiaotong University.
9.Research on Road Performance and Microstructural Mechanisms of Stabilizers For Open-Pit Mining Roads	**Han Zhou,** Chongqing Jiaotong University.
10.The Rejuvenation Effects of Colza Bio-Oil on Aged Sbs Modified Bitumen: a Multiscale Performance Study	**Chenghao Liang,** Hunan University.
11.Aging Behaviour and Microscopic Characteristics of Modified Asphalt Using Different Pretreated Crumb Rubber	**Jianwei Zhang,** Meizhu Chen, Wuhan university of technology.
12.Research Status of Organic Material Emission Reduction Agents and Detection Methods for Vocs in Road Asphalt	**Tengwang Ge,** Qian Chen, Chang' an University.
13.Prediction Model for Safe Vehicle Speed Based on Skid Resistance of Asphalt Pavement	**He Zhang,** Peng Guo, Chongqing Jiaotong University.
14.Fabrication and Performance Evaluation of High-Performance Sbs-Modified Asphalt Through Secondary Modification with Aminated Graphene Oxide	**Kaixuan Guo,** Li Xu, Zhu Hongzhou, Chongqing Jiaotong University.
15.Advancing Asphalt Aging Research Through Quantum Chemistry: Mechanistic Frontiers	**Yueyang Chen,** Peng Guo, Chongqing Jiaotong University.
16.Preparation and Performance Evaluation of Polyurea Formaldehyde-Bio-Oil Microcapsules for Self-Healing Asphalt	**Lichuan Zheng,** Hongzhou Zhu, Song Yang, Chongqing Jiaotong University.

Young Scholars Forum

Date：July 27, Sunday, 15:40~17:40

YS 14	Room 1005

Geomechanics and Asphalt Materials

青年论坛 14：岩土力学与沥青材料

Session Chair： **Dongdong Han**

Title	Presenters
1.Displacement Prediction of Tunnel-Type Anchorages Using Nonlinear Fractional-Order Creep Model	**Yukun Li,** Guizhou University.
2.Research on Differential Settlement Control of Soft Soil Subgrade in Flac3D Reconstruction and Expansion Based on Differential Constitutive Model	**Ping Zhang,** Chongqing Jiaotong University.
3.Elasto-Plastic Analysis for the Tunnels in Cold Regions Considering the Comprehensive Effects of the Supporting Strength and Axial in Situ Stress	**Zedong Yang,** Guizhou University.
4.Research and Engineering Application on Key Technologies for Integrating Ultra-Long Horizontal Directional Drilling and Grouting in Deep-Buried Tunnel Fault Zones	**Yunlei Tian,** Guizhou University.
5.Stability Analysis On the Positioning of Steel Caisson Foundations During Submerging Stage Under Complex Marine Conditions	**Xiaolan Liu,** Chongqing Jiaotong University.
6.Experimental and Mechanistic Investigation on Time-Delayed Initiation Behavior of Hydraulic Fractures in Shale under Constant-Pressure Injection	**Cong Huang,** Guizhou University.
7.Design of Mixing Ratio and Pore Structure Evolution Mechanism of Red Mud-based Filler Layer for Tunnel Invert	**Pingyang Wu,** Guizhou University.
8.Deformation and Mechanical Characteristics of Pile Foundation Buttresses for Bridges under Metro Tunnels	**Changcan Yang,** Guizhou University.
9.Crushing Mechanism of Mudstone-Coal Complex in Coal Mine Tunnel under the Action of Milling Cutter of TBM	**Qianlong Wang,** Guizhou University.
10.Influence of Upward Cavities on the Stability of Deeply Buried Mega-section Tunnels and Its Safety Distance	**Zhenyong Zhou,** Guizhou University.
11.Experimental Study on the Coupled Bearing Model of Tunnel Invert-Road Surface-Filling Layer with New Red Mud-Based Filler	**Xiangyu Bao,** Guizhou University.
12.Experimental Study on Mechanism of Floor Karst Aquifer Failure and Water Inrush About Coal Seam Mining in Southwest China	**Yu Yang,** Guizhou University.
13.An Exploratory Study of Recycled Plastics for Asphalt: Selection, Processing, and Standardization	**Lina Yang,** Liting Yu, Rui Li, Yizhi Du, Jianzhong Pei, Xinjiang University.
14.Fabrication of an Environmentally Friendly Modifier Based on Dah-Mt-Mos 2 Via Codeposition for the Preparation of Composite Tb Rubberized Asphalt	**Xinyue Ma**, Rui Li, Chongqing Jiaotong University.
15.Study on Preparation and Performance of Functionalized Graphene Oxide Modified Emulsified Asphalt	**Jiangnan Fan,** Chongqing Jiaotong University.
16.Study On the Behavior and Mechanism of Emulsified Asphalt Modified by Graphene Oxide	**Yujie Chang,** Chongqing Jiaotong University.

Graduate Student Research Pitch Competition

研究生科研快讲竞赛

Date：July 26, Saturday, 16:20~18:00

SC1	Room 1005

Asphalt and Pavement Materials Performance

学生竞赛论坛 1：沥青材料与混合料性能

Session Chair： Zhe Li

Title	Presenters
1.Optimization of Uhmpc Composite Material Mix Proportion and Study on Road Performance	**Jin Wang,** Chongqing Jiaotong University.
2.Mix Design and Dynamic Mechanical Properties Comparison of Polyurethane and Asphalt Mixtures	**Yimin Liu,** Chang' an University.
3.Enhanced Self-Healing Performance of Asphalt Mixtures Modified with Carbonyl Iron/Graphite Composites	**Yongzuo Du,** Southeast University.
4.Interface Enhancement of Emulsion Bitumen–Aggregate System via Hydrophobic and Oleophilic Aggregate Modification	**Tiancheng Liu,** Southeast University.
5.Fatigue Performance Investigation and Life Prediction of Castor Oil Modified Polyurethane Mixtures	**Jisheng Li,** Beijing University of Civil Engineering and Architecture.
6.Adaptability and Self-Healing Performance of Microcapsules for Asphalt	**Tianqiang, Jiang,** Chongqing Jiaotong University.
7.Impact of Environmental Conditions on the Bonding Performance of Asphalt Overlays in High-altitude Areas	**Fengjiang Li,** Chongqing Jiaotong University.
8.Aging Behavior and Self-Healing Properties of Asphalt Binders in High-Altitude Environments	**Jiajun Pei,** Chongqing Jiaotong University.
9.Effects of Different Warm Mix Additives on the Performance of Porous Asphalt Mixtures in Cold Regions	**Shaoxiang Gao,** Chang' an University.
10.Property Regulation and Mechanism Analysis of Aging Asphalt by Release Microcapsules	**Xu Xu,** Chang' an University.
11.Study on the Vocs Emission Reduction Capacity of Asphalt by Thermally Modified Attapulgite	**Hao Lai,** Chang' an University.
12.Rheological Properties of Warm Mix High Viscosity Asphalt Mastic	**Xingyuan Ma,** Chang' an University.
13.Impact of Temperature-Controlled Salt Storage Fillers on the Rheological Properties of Asphalt Mastics	**Yingjie Hou,** Chang' an University.
14.Preparation and Characterization of Epoxy Vitrimer Asphalt Based on Transesterification Dynamic Covalent Bond System	**Zhe Zhao,** Chang' an University.

Title	Presenters
15.The Application of Nano-Silicon Carbide Phase Change Microcapsules in Asphalt: Heat Transfer Capacity Enhancement and Temperature Range Reduction	**Xinyu Sun,** Chang' an University.
16.Investigation of Low-Temperature Fracture Characteristics of Asphalt Concrete under the Coupled Erosion of Sea Salt Dry-Wet Cycles	**Zedong Zhao,** Chang' an University.
17.Characterization of Performance Evolution in Blended Virgin-Aging Binders Composite	**Ke Shi,** Chang' an University.
18.Research on Water-Based Epoxy Resin Emulsion-Modified Steel Slag and Its Road Performance	**Yixiong Zhong,** Changsha University of Science and Technology.
19.Rhythmic Pavement Design and Acoustic Optimization Based on Tire-Road Coupling Simulation	**Di Wang,** Chongqing Jiaotong University.
20.A Study on the Characteristics of Rhythmic Tire-Road Noise Based on Harmonic Feature Extraction	**Hao Chen,** Chongqing Jiaotong University.
21.Design and Characterization of Temperature-Responsive Salt Storage Fillers Enabled by Phase Change Materials	**Pengkai Yang,** Chang' an University.
22.Molecular Dynamics Simulation on Asphalt Limestone Interfaces Considering Unconstraiont and Indivisual Colloid Components	**Yujie Tang,** Chang' an University.

Graduate Student Research Pitch Competition

Date：July 26, Saturday, 16:20~17:35

SC2	Room 2002

Sustainable Materials and Solid Waste Reuse

研究生科研快讲竞赛 2：可持续材料与固废利用

Session Chair： Hanli Wu

Title	Presenters
1.Preparation and Performance Evaluation of High-Enthalpy Encapsulated Ternary Eutectic Phase Change Materials	**Xinye Jiang,** Chang' an University
2.The Influence Law of Glass Sand on the Strength of Concrete	**Liuhuan Li,** Beijing University of Civil Engineering and Architecture
3.Water Absorption-Desorption Characteristics of Solid Waste-Derived Porous Coarse Aggregates for Internal Curing and Their Impact on Early-Age Mechanical Properties of Concrete	**Yuan Wang,** Jiajie Zheng, Pengfei Song, Qianqian Liu, Xiang Hu, Xuhao Wang, Chang' an University
4.Green Synthesis and Performance Optimisation of Foamed Water Carrier for Warm Mix Asphalt Using Recycled Porcelain Waste	**Jianliang Zhai,** Chang' an University
5.A New Method for Predicting the Hydration Heat of CSA Cement-Based Composites: Conductivity-Based LSTM Prediction	**Tingquan Shao,** Chang' an University
6.Study on the Hydrophobic Functionalization Mechanism and Durability of Cement-Based Composites Modified by Lauric Acid Self-Assembly	**Jiahui Wang,** Chang' an University
7.A No Purifying Photocatalytic Self-Cleaning G-C3N4/Sio2/Pdms Coating	**Siyu Wu,** Chongqing Jiaotong University
8.Based on Machine Learning for Prediction of Fatigue Life and Performance of Warm Mix Recycled Asphalt	**Guiyu Zhang,** Inner Mongol University of Technology
9.Research on the Adhesion Between Warm Mix Recycled Asphalt and Aggregates under Salt Freeze-Thaw Cycles	**Xinyu Song,** Inner Mongol University of Technology
10.The Influence of Terrain Undulation and Elevation on the Movement and Depositional Characteristics of Landslide Debris Flows	**Hui Bi,** Guizhou University
11.Strength Characteristics and Failure Mechanism of Rock-Like Specimen with Cracks under Biaxial Cyclic Compression	**Tao Wu,** Chengdu University of Technology
12.Multi-Scale Study of Cracking Behavior of Thin-Layer Overlays of Exhaust Self-Cleaning Asphalt Mixtures	**Xiang Liu,** Inner Mongol University of Technology
13.Non-uniform cooling mechanism of concrete after exposure to high temperatures revealed by laboratory tests and microstructural inspection	**Zehang Su,** Guizhou University
14.Warm-Mix Rejuvenation Effects of Waste Polyethylene Wax and Rejuvenator Blends on Aged Asphalt Binder	**Ruizhe Huang,** Chang' an University
15.Design and Performance Optimization of a Novel Wear-Resistant Reflective Cooling Coating for Asphalt Pavements	**Moxuan Xia,** Chang' an University

Graduate Student Research Pitch Competition

Date：July 26, Saturday, 18:00~18:30

SC3 (part 1)	Room 1005

Slope, Geotechnical and Mining Engineering (part 1)

学生竞赛论坛 3：岩土、矿业与边坡工程（上）

Session Chair： Rui Li

Title	Presenters
1.Research on Interfacial Adhesion Performance and Structural Compactness of Basalt Fiber Shotcrete	**Pengfei Song,** Chang' an University
2.Discriminating the Water Source of Mine Water Breakout Based on Principal Component Analysis-Sparrow Search Algorithm-Bp Neural Network	**Yidan Du**, Guizhou University
3.Study on Hydrothermal Simulation of Cracked Permafrost Embankments under Rainfall Infiltration in Qinghai Region	**Yaning Zhang**, University of Ottawa
4.Study on the Shear Properties of Slope Base Materials Modified by Phosphogypsum	**Zhihua Wang,** Beijing University of Civil Engineering and Architecture
5.Study on Deformation and Failure Characteristics of Sandstone with Unequal Length Cross Cracks under Uniaxial Compression of Freeze-Thaw Cycle	**Hongqiang Li,** Chengdu University of Technology
6.Study on Macro-Meso Damage Mechanism of Fractured Rock Mass under Repeated Freeze-Thaw Action	**Zhihang Zeng,** Chengdu University of Technology

Date：July 26, Saturday, 19:30~20:00

SC3 (part 2)	Room 1005

Slope, Geotechnical and Mining Engineering (part 2)

学生竞赛论坛 3：岩土、矿业与边坡工程（下）

Session Chair： Yinghao Miao

Title	Presenters
1.Study on Creep Mechanical Properties and Constitutive Model of Phyllite under Different Bedding Dip Angles	**Xin He**, Chengdu University of Technology
2.Study on the impact of grouting reinforcement on the mechanical behavior of non-penetrating fracture sandstone	**Shibo Huang,** Chengdu University of Technology
3.Sbas-Insar Based Regional Landslide Identification in Karst Terrain: A Case Study of Sinan County, Guizhou Province, China	**Guiyin He,** Guizhou University
4.Monitoring and Evolution Analysis of Mining-Induced Slope Deformation in Mountainous Areas Based on Insar Technology	**Qianqian Ning,** Guizhou University
5.Test Evaluation of Slope Deformation and Fissure Network with Different Surface Shapes under the Action of underground Mining	**Kaipeng Liu**, Guizhou University
6.Study on the Bearing Capacity of Micropile Group Structures for Reinforcing Rock Slopes	**Wenzhou Dong**, Guizhou University

Graduate Student Research Pitch Competition

Date：July 26, Saturday, 17:35~18:30

SC4	Room 2002

Smart Technologies and Methods in Infrastructure

学生竞赛论坛 4：智能材料与基础设施技术

Session Chair： Yinghao Miao

Title	Presenters
1.Design and Performance of Fiber Supercapacitor with Alkali Metal Cations Embedded Birnessite for Smart Transportation	**Shiqi Peng**, Chongqing Jiaotong University
2.Smart Pothole Management System Using Mobile App, Video Analytics, and Machine Learning	**Devin Cheng**, California State University, Chico
3.A Correction Method for Road Surface Texture Point Clouds Based on Rotation Matrices	**Wei Chen**, Kunming University of Science and Technology
4.Research on Movement Detection of Pavement Anti-Skid Performance Based on Smart Robotic Vehicle	**Benrui Liu**, Southeast University
5.Effects of Water Saturation on Pore Structure and Fluid Infiltration in Hydraulic Fracturing: An Experimental Study Using Real-Time Nmr	**Yan Li,** Guizhou University
6.Numerical Simulation of the Crack Propagation Effect on the Hysteretic Behavior of CHS-X Joints	**Wenjin Chen**, Guizhou University
7.Effect of Long-Term and Short-Term Aging on the Microwave Self-Healing Performance of Steel Slag Asphalt Mixtures	**Zhenqing He**, Chang' an University
8.InSAR-derived surface deformation characteristics and mining subsidence parameters in mountain coal mines	**Ya Wang,** Guizhou University
9.Study on the Caving Law of Overlying Strata and Prediction of Deformation and Failure in Mining-Induced Slopes	**Jinhong Zhang**, Guizhou University
10.Experimental and Numerical Simulation Study on Rockfall Impact Fragmentation	**Haodong An**, Guizhou University
11.Numerical Simulation of Temperature Field Evolution in Eutectic Phase Change Temperature-Regulating Asphalt Pavements for Urban Heat Island Mitigation	**Dingjie Xu**, Guangxi University
12.Mechanisms of Interface Electrostatic Potential Induced Asphalt-Aggregate Adhesion	**Songxiang Zhu**, Chongqing Jiaotong University
13.Research on Thermal Conduction Behavior and Urban Heat Island Effect of Steel Slag-Modified Asphalt Mixtures (S-SMA) Incorporating Physical Properties of Steel Slag Aggregates	**Ruochen Lei**, Changsha University of Science and Technology
14.Reconstruction Method of Initial Magnetic Strength Signal of Steel Strand Based on Physical Information Constraints	**Houxuan Li,** Chongqing Jiaotong University
15.Stability Analysis and Support Scheme Exploration of Tailings Pond Slope Based on GeoStudio	**Qishan Yang**, Guizhou University
16.Dynamic Analysis of Quasi-Liquid Layer Structure Evolution at Asphalt-Ice Interface and Investigation of Freezing Adhesion Characteristics	**Yunhao Jiao**, Chang,an University
17.Development and Verification of Rutting Prediction Model Based on Variable Frequency Load Test	**Hongxi Hu,** Peng Hu, Shandong Jiaotong University, China

Technical Tours

技术参观

Date：July 28, Monday *（08:00~20:00）* *Route：Hotel →Sky Bridge→ FAST→ Luodian → Hotel*

Departure Time	Departure Point
08:00 AM	**Novotel Guiyang Panjiang** *(Meet in the Hotel Lobby)*

上车时间：08:00；上车地址：盘江诺富特酒店大厅集合

Pingtang "Sky Bridge" *is located on the Caodu River Grand Canyon. The bridge is 2,135 meters long and 30.2 meters wide. It is a two-way four-lane bridge. The height of three bridge towers are all over 300 meters. The tallest middle tower is 332 meters high, equivalent to the height of about 110 floors. It is the world's tallest reinforced concrete bridge tower. Its super-high bridge tower, complex structure, and magnificent landscape represent one of the highest achievements of contemporary bridge engineering and are a living textbook for understanding the planning, design, construction, and management of super-large transportation infrastructure.*

平塘特大桥（天空之桥）位于槽渡河大峡谷上，大桥长 2135 米，宽 30.2 米，为双向四车道，三座桥塔都超过 300 米，最高的中塔高达 332 米，相当于约 110 层楼的高度，是世界第一高钢筋混凝土桥塔。其超高桥塔、复杂结构、壮美景观代表了当代桥梁工程的最高成就之一，是理解超大型交通基础设施规划、设计、建造与管理的活教材。

Engineering wonders at close range: Experience the magnificence of the "Sky Bridge" in person and appreciate its extraordinary design and construction technology that overcomes complex geological conditions.

Observation deck overlooks the panoramic view: Standing on a world-class viewing platform, overlooking the bridge like a giant dragon leaping on the top of the sea of clouds, and feeling the majestic power of human engineering.

Expert perspective interpretation: Have the opportunity to listen to front-line engineers or experts on-site explain the bridge design concept, innovative material application, intelligent construction technology and operation and maintenance challenges, and gain insight into the pinnacle of modern bridge engineering.

工程奇观零距离：亲身感受“天空之桥”的雄伟壮丽，领略其克服复杂地质条件的非凡设计与施工技术。

观景台俯瞰全景：站在世界级观景平台，俯瞰大桥如巨龙般腾跃于云海山巅，感受人类工程的磅礴力量。

专家视角解读：有机会聆听一线工程师或专家现场讲解大桥设计理念、创新材料应用、智能建造技术及运维挑战，洞悉现代桥梁工程的巅峰之作。

FAST "Five-hundred-meter Aperture Spherical radio Telescope"

It is the world's largest and most sensitive single-aperture radio telescope and a major national scientific and technological infrastructure. Its diameter is 500 meters and the total reflective surface area is 250,000 square meters. FAST is not only the pride of Chinese science and technology, but also the extremely precise engineering, complex system integration, big data processing and intelligent operation and maintenance concepts used in its site selection, construction and maintenance are extremely inspiring for the intelligent and sustainable development of various types of infrastructure!

FAST“中国天眼”是全球最大、最灵敏的单口径射电望远镜，也是国家重大科技基础设施。其直径达 500 米，反射面总面积 25 万平方米。FAST 不仅是中国科技的骄傲，其选址、建造、维护中运用到的极端精密工程、复杂系统集成、大数据处理和智能运维理念，对各类基础设施的智能化、可持续发展极具启发意义！

Experience the great power equipment: Visit this world-renowned "big pot" to feel its huge scale and understand its construction accuracy to the millimeter level (top "infrastructure" technology).

大国重器亲体验：亲临这口举世瞩目的“大锅”，感受其巨大规模，理解其精密到毫米级的建造精度。

Zero contact with the frontier of science: Learn how FAST captures weak signals from the universe and how technology expands the boundaries of human cognition.

科学前沿零接触：了解 FAST 如何通过捕捉宇宙微弱信号，感受科技如何拓展人类认知边界。

Exclusive in-depth visit: Have the opportunity to listen to researchers share FAST's innovative solutions in site selection, construction, and operation and maintenance (such as karst landform utilization and active reflector technology). Its precision manufacturing, data processing and operation and maintenance concepts have profound implications for large and complex infrastructure.

独家深度探访：有机会聆听科研人员分享 FAST 在选址、建设、运维中的创新解决方案（如喀斯特地貌利用、主动反射面技术），其精密制造、数据处理与运维理念对大型复杂基础设施具有深刻启示。

Luodian“Daxiaojing Bridge”

BRIDGE integrates the essence of typical karst landforms, with magnificent natural bridges, caves, underground rivers and deep green pools. It is known as the "Oriental Cave Museum" and the "Emerald on the Earth's Belt".

罗甸“大小井”融合了典型的喀斯特地貌精华，拥有壮丽的天生桥、溶洞、地下河和碧绿深潭，被誉为“东方洞穴博物馆”和“地球腰带上的绿宝石”。

In-depth experience of geological wonders: Visit natural bridges, cenotes, caves, etc., and feel the uncanny craftsmanship shaped by water and limestone for billions of years.

地质奇观深度体验：探访天生桥、天坑、溶洞等，感受亿万年来水流与石灰岩塑造的鬼斧神工。

Inspiration from natural "bridge and tunnel engineering": Observing the structural form of natural bridges, the "tunnel" system of underground rivers and the complex karst geological environment, it provides the most original and vivid natural reference for the site selection, design (such as bionics application), geological risk prevention and control and ecological protection strategies of artificial bridge and tunnel engineering.

自然“桥隧工程”启示：观察天生桥的结构形态、地下河的“隧道”系统以及复杂岩溶地质环境，为人工桥隧工程的选址、设计（如仿生学应用）、地质风险防控及生态保护策略提供最原始、最生动的自然参照。

Thinking about ecology and sustainable transportation: In the picturesque mountains and rivers, think about how infrastructure construction can better respect nature, integrate into the environment, and achieve harmonious coexistence of ecology.

生态与可持续交通思考：在如画的山水田园中，思考基础设施建设如何更好地 尊重自然、融入环境、实现生态和谐共生。

Lodging, Transportation & Catering

住宿，交通和餐饮

Conference Venue

Novotel Guiyang Panjiang

贵阳盘江诺富特饭店

Add. *No. 95, West Lincheng Road, Guanshanhu District, Guiyang*
地址：贵阳观山湖区林城西路 95 号

Contact: *+86 15761630798（Mr. Zhou）*
联系电话：+86 18608566376（Miss Zhang）

The Novotel Guiyang Panjiang *provides a great place for travelers to relax after a busy day. The Novotel Guiyang Panjiang is an ideal choice for travelers who want to take in the sights and sounds of Guiyang.*

Traveling to the hotel is easy with Guiyang North Railway Station located approximately 9km away and Guiyang Longdongbao International Airport roughly 30km away. The closest major public transportation, West Lincheng Road Metro Station, is only 300m away.

The nearby area boasts an abundance of attractions including Tangmuyueke Kafei Museum, Guiyanghuiyi Center.

When guests have some time on their hands they can make use of the onsite facilities. For guests' convenience, airport pickup can be arranged. For those driving themselves, parking is provided on site.

贵阳盘江诺富特饭店

是一个忙碌一天后放松身心的理想场所。对于想要饱览贵阳风光和都市喧嚣的旅客来说，贵阳盘江诺富特酒店是理想之选。

酒店交通便利：

- ✧ 距离贵阳北站约 9 公里；
- ✧ 距离贵阳龙洞堡国际机场约 30 公里；
- ✧ 最近的林城西路地铁站 D 口距离酒店仅 300 米；
- ✧ 附近景点众多，包括博物馆、贵阳会议中心等；

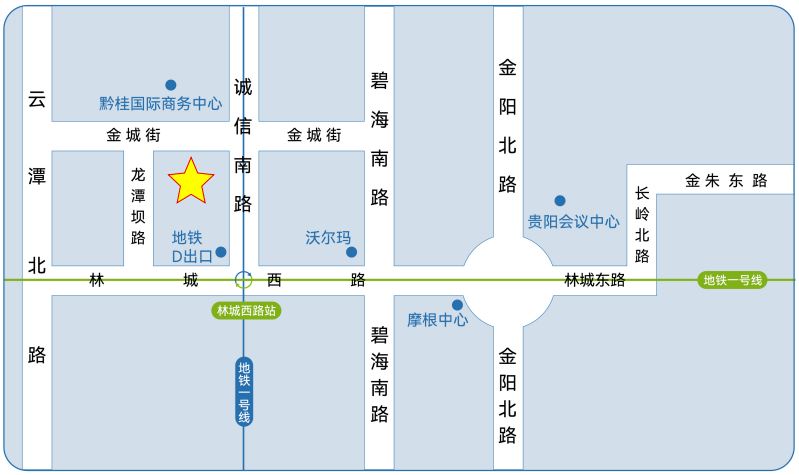
如果您有空闲时间，可以使用酒店内的设施。为了方便客人，酒店可安排机场接机服务。对于自驾客人，酒店内设有停车位。

Transportation

Distance from Key Guiyang Stations to *the Novotel Guiyang Panjiang*:
贵阳主要车站与贵阳盘江诺富特饭店的距离：

- **Guiyang Longdongbao International Airport** *(30 km from the venue)*
  贵阳龙洞堡国际机场（距离会场 30 公里）
- **Guiyangbei Railway Station** *(9km from the venue)*
  贵阳北高铁站（距离会场 9 公里）
- **Jinyang Passenger Transport Station** *(9 km from the venue)*
  金阳客运站（距离会场 9 公里）
- **Guiyang Railway Station** *(18 km from the venue)*
  贵阳火车站（距离会场 18 公里）
- **Guiyangdong Railway Station** *(16 km from the venue)*
  贵阳东高铁站（距离会场 16 公里）
- **West Lincheng Road [Exit D]** *(300 m from the venue)*
  林城西路地铁站 [D 出口]（距离会场 300 米）

（Download the subway map 地铁图：https://www.gyurt.com/materialpub/gdyy/images/ditiexianglutu.jpg ）



Catering

July 26, 2025 Saturday	***LUNCH*** Time: **12:30-13:30 PM** Venue: Restaurants on the **2nd Floor & 3rd Floor** Building **B**, ***Novotel Guiyang Panjiang*** ***DINNER*** Time: **18:30-19:30 PM** Venue: Restaurant on the **2nd Floor** Building **B**, ***Novotel Guiyang Panjiang***
July 27, 2025 Sunday	***LUNCH*** Time: **12:30-13:30 PM** Venue: Restaurant on the **2nd Floor** Building **B**, ***Novotel Guiyang Panjiang***

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IACIP International Association of Chinese Infrastructure Professionals（IACIP）

GUIZHOU UNIVERSITY

The 8th International Conference on Transportation Infrastructure and Materials

Live Photo Streaming
（图片直播）

Registration
（参会注册）

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