

 热烈欢迎参加"第四届国际桥梁养护与管理技术(美国特辑)研讨会" 的专家、展商和代表们,祝您在会议期间心情愉快、万事如意!
 Warm welcome is extended to experts, exhibitors and representatives from home and abroad attending "The 4th International Bridge Management & Maintenance Technology Congress" and may you have a good time during the conference!

 为确保您在会议期间一切顺利,请您仔细阅读会议指南,实时掌握相关 安排。

To ensure a smooth experience, please read the Conference Guide carefully so as to master relevant arrangements in time.



## Need-To-Know

一、会议地点设在一楼金色厅,进入会场时请佩戴"代表证",全程请佩戴并保管好, 会议期间请将手机等无线通讯设备关闭或设置为静音、振动状态。

1. The conference will be held in Golden Hall (1st floor), please wear and well keep your badge, and turn off or set your wireless communication devices (mobile phones) in vibration or mute state.

 二、会议费发票: 16-17 日 代表凭收据到报到处换取正式发票,请您认真核对发票 抬头、金额等信息,如有疑问请及时与会务组财务联系: 王云 13522554357
 2.Conference fee invoice: please claim official invoice with receipt from the registration desk on 16th-17th, and make sure you check the invoice title, amount and other information carefully. Any questions, please contact the financial officer of Organizing Committee Wang Yun, 13522554357 in time.

#### 三、用餐安排

3. Dining arrangements

	时间 Time	地点 Location	
早餐 Breakfast	07:00-09:00	东楼西餐厅(二层) 2nd Floor Cafeteria, East Building	
午餐 Lunch	12:00-13:30	西楼和为贵餐厅和东楼西餐厅(二层) 2nd Floor Dining Room, West Building 2nd Floor Cafeteria, East Building	
晚餐 Dinner	17:50-19:00	西楼和为贵餐厅和东楼西餐厅(二层) 2nd Floor Dining Room, West Building 2nd Floor Cafeteria, East Building	

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• 四、课件下载:会议结束后7日内,会务组将上传专家同意分享的课件、通讯录及部分照片到公共邮箱,有需要的代表请会后自行下载,请登陆www.rioh.cn,在"邮箱登陆"里输入用户名: kjxz 密码: 123456即可(下载后请不要随意删除,已便其他代表下载使用)。

4.Courseware download: the organizing committee will upload the courseware, contacts, and some photos experts agreed to share to the public mailbox seven days after the conference, and you can log in the website www.rioh.cn, input the user name kjxz and code 123456 to download them (Please do not delete any data so as to facilitate other representatives' use, and data are available within one month).

 五、如有其它任何问题和要求,请及时与会务组的人员联系,我们会在最短的时间内 和您联系并解决。

5. If you have any other questions and requirements, please do not hesitate to contact the organizing committee staff, we will contact you and solve them in a short time.

#### ● 六、会务组联系方式:

6. Contacts of Organizing Committee

总负责人:	张	涟	13521318363
国内会议联系人:	许	倩	18500030345
	张	NN	13810404030
	王清龙		18612980064
陈先		も珍	13366853881
国际会议联系人:	雪	梅	15010655013

General Leader: Zhang Lian 13521318363 Domestic contacts: Xu Qian 18500030345 Zhang Li 13810404030 Wang Qinglong 18612980064 Chen Xianzhen 13366853881 International contact: Xue Mei 15010655013



# **CONFERENCE AGENDA**

2015年11月16日(上午) 16<sup>th</sup>Nov. 2015 (A.M.)

● 9:00-9:30

开幕式

**Opening Ceremony** 

**9**:30-10:10

演讲题目:桥梁无损检测技术现状与发展

Topic: The State of the Art and Development Trend of Bridge Nondestructive Testing Technology

演讲人: 张劲泉 交通运输部公路科学研究院院长

Speaker: Zhang Jinquan, President of the Research Institute of Highway, MOT

10:10-10:50

演讲题目:美国桥梁无损检测技术

Topic: Bridge Nondestructive Testing Technology in the U.S.

演讲人: Mohsen Shahawy 美国 SDR EngineeringConsultants 公司董事长、 首席执行官

Speaker: Mohsen Shahawy, President/CEO of SDR Engineering Consultants, Inc.

10:50-11:25

演讲题目:桥梁无损检测及评估技术

Topic: Bridge Nondestructive Testing and Assessment Technology

演讲人: 何杰 中交路桥技术有限公司高级工程师

Speaker: He Jie, Senior engineer of CCCC Road & Bridge Consultants Co., Ltd.

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#### 11:25-12:00

演讲题目:不中断交通条件下斜拉索更换成套技术研究

Topic: Study on a Complete Set of Technology for Replacing Cables for Cable-stayed Bridges without Traffic Interruption

演讲人: 王蔚 武汉二航路桥特种工程有限责任公司副总经理

Speaker: Wang Wei, Deputy General Manager of Wuhan Second Harbour Road & Bridge Special Engineering Co., Ltd.

12:00-14:00 午休

11:50-14:00 LUNCH BREAK

### 2015年11月16日(下午) 16<sup>th</sup>Nov. 2015 (P.M.)

● 14:00-14:50

演讲题目: 应用先进的超声波技术检测水泥混凝土构件缺陷

Topic: Advanced Ultrasonic Techniques to Characterize Damage in Concrete Structural Components

演讲人: Laurence J. Jacobs 美国乔治亚理工大学工程学院副院长、教授 Speaker: Laurence Jacobs, Associate Dean/Professor of the College of Engineering,

Georgia Institute of Technology, Atlanta, Georgia, USA

● 14:50-15:30

演讲题目:钢桁梁悬索桥检测及荷载试验

Topic: Steel Truss Suspension Bridge Inspection and Load Testing

演讲人: 许宏元 中交瑞通路桥养护科技有限公司董事长

Speaker: Xu Hongyuan, Chairman of the CCCC Xi'an Ruitong Highway & Bridge Science & Technology Co.,Ltd

• 15:30-16:10

#### 演讲题目: 混凝土无破损应力检测技术的新发展

Topic: New Development of Non-destructive Methods for Concrete Stress Measurement 演讲人: Jiang Ruinian 美国新墨西哥州立大学工程技术和测量系教授、室主任 Speaker: Jiang Ruinian, Director/Professor of the Department of Engineering and Technology & Surveying Engineering, New Mexico State University

16:10-16:50

演讲题目:高性能桩基保护系统水下结构修补解决方案-APE

Topic: Advanced Polymer Encapsulation

演讲人: John M Halsall 巴斯夫化学建材亚太区区域业务经理

Speaker: John M Halsall, Business Manager of Asia Pacific Regional, BASF

**•** 16:50–17:40

#### 演讲题目: 混凝土与钢结构的纳米微碳管智能感应

Topic: Novel Self-Sensing Carbon Nanotube-Based Composites for Holistic Rehabilitation of Highway Bridges

演讲人: Thomas Schumacher 美国波特兰州立大学土木与环境工程学院助理教授、 博士

Speaker: Thomas Schumacher, Assistant Professor/PhD. of Civil & Environmental Engineering, Portland State University, Portland, OR, USA



### 2015年11月17日(上午) 17<sup>th</sup>Nov. 2015 (A.M.)

• 09:00-09:40

演讲题目: 雷达探测和波动检测技术在服役桥梁桩基础无损检测中的应用

Topic: Application of Radar and Wave Detection Technology in Bridge Pile Foundation Nondestructive Testing

演讲人: 马晔 交通运输部公路科学研究院桥梁中心副主任

Speaker: Ma Ye, Deputy Director of Bridge Technology Research Center, RIOH, MOT • 09:40-10:10

演讲题目: 钢筋锈蚀检测与防腐技术应用

Topic: Application of Reinforced Concrete Corrosion and Prevention Technology 演讲人:廖海学 上海法赫桥梁隧道养护工程技术有限公司技术顾问、美国加拿大等 注册专业工程师、NACE 国际阴极保护专家

Speaker: liao Haixue, Technical Consultant of FAHE Bridges & Tunnels Maintenance & Repairment Technology Co., Ltd., PE of U.S. & Canada, NACE CP Expert

● 10:10-10:40

演讲题目:桥梁承载力快速评定 ---- 美国 BDI 方法介绍

Topic: Quick Evaluation of the Carrying Capacity of a Bridge – Introduction to BDI's Methods

演讲人: Jesse Grimson 美国桥梁诊断公司 (BDI) 副总裁

Speaker: Jesse Grimson, Vice President of Bridge Diagnostics, Inc.

● 10:40-12:00

演讲题目:桥梁养护工程实例分享与解析

Topic: Bridge Maintenance Engineering Case Analysis

演讲人:优秀工程师团队武汉二航路桥特种工程有限责任公司

Speaker: Engineer Team of Wuhan Second Harbour Road & Bridge Special Engineering Co., Ltd.

# 专家简介

## **Expert Profile**

张劲泉,现任交通运输部公路科学研究院院长,桥梁安全技术国家工程实验室主任,国家道路及桥梁质量监督检验中心主任,旧桥检测与加固技术交通行业重点实验室主任,交通运输部专家委员会委员。

主要从事桥梁检测评定与维修加固、桥梁结构监测与安全评估、桥梁 耐久性等方面的研究工作。重要科研成果有:悬索桥上部构造施工监 控技术、悬索桥钢箱梁架设技术、大跨悬索桥竣工验收试验方、桥梁 健康监测与安全评价技术、桥梁承载能力检测评定方法、公路桥梁维 修加固成套技术等。主持了国家科技支撑计划"多塔连跨悬索结构及 工程示范"、交通部科技项目"桥梁耐久性关键技术研究"、"公路 旧桥检测评定与加固技术研究及推广应用"等十余项重大项目的研究 工作。研究成果获国家科技进步二等奖2项,交通部科技进步特等奖 2项、省部级科技进步奖-等奖多项。主要著作有:《桥梁检测与加 固手册》、《公路旧桥承载能力评定方法及工程实例》、《混凝土旧 桥材质状况即耐久性检测评定指南及工程实例》、《公路旧桥加固成 套技术及工程实例》、《公路旧桥检算分析指南及工程实例》、《公 路桥梁加固工程施工监理》,主持编制了《公路桥梁承载能力检测评 定规程》(JTG/T J21-2011)。





Jinquan Zhang currently serves as President of the Research Institute of Highway of the Ministry of Transport, Director of the National Engineering Laboratory for Bridge Structural Safety, Director of the National Quality Supervision and Inspection Center for Roads and Bridges, Director of the Key Laboratory of Bridge Detection & Reinforcement Technology of the Ministry of Transport, and member of the Expert Committee of the Ministry of Transport.

Zhang is mainly engaged in research work related to bridge inspection assessment, bridge repair and reinforcement, bridge structure monitoring and safety assessment as well as bridge durability. Major research results of Zhang include: technologies for monitoring superstructure construction of suspension bridges, technologies for installing steel box girder onto suspension bridges, methods for final acceptance test of large-span suspension bridges, technologies for bridge health monitoring and safety evaluation, methods for checking and evaluating carrying capacity of bridges, packaged technologies for maintenance and reinforcement of highway bridges. Zhang has been in charge of research of over ten major projects, including a project backed by National Key Technology R&D Program, namely "multi-tower continuousspan structure and engineering demonstration", and two technology projects of the Ministry of Transport, namely the "research on key technology of bridge durability" and "research and application of highway old bridge detection assessment and reinforcement technologies". Among total research results of Zhang, one result won the National Science and Technology Progress Award (second prize), two results won the Science and Technology Progress Award granted by Ministry of Transport (grand prize), while a number of other results won provincial and ministerial science or technology awards (first prize). Major monographs include: "Bridge Inspection and Reinforcement Handbook", "Evaluation Method for Carrying Capacity of Old Highway Bridges and Case Study", Guidance on Evaluation of Material Availability or Durability Detection of Old Concrete Bridges and Case Study", "Packaged Technologies for Old Highway Bridge Reinforcement and Case Study", "Guidance on Checking Analysis of Old Highway Bridges and Case Study" and "Highway Bridge Construction Supervision". Besides, Zhang acted as a chief participant in preparation of the "Specification for Inspection and Evaluation of Load-bearing Capacity of Highway Bridge" (JTG/T J21-2011).

2 Mohsen Shahawy, 毕业于加拿大女王大学, 获土木工程专业博士学位。现任美国 SDR Engineering Consultants 公司董事长、首席执行官, 拥有超过 35 年的桥梁工程设计、评估、康复和负载测试方面的研究经验。他曾在在佛罗里达州交通运输局任职 15 年,并担任桥梁研究中心负责人,主要负责桥梁状态评估、桥梁负载测试和无损检测、桥梁加固等。同时, 作为主要作者参与过多部美国联邦和州的桥梁设计和检测规范的编写, 其中包括使用最广泛的 PCI Bridge Design Manual。1986 年,他率先使用无损检测技术进行桥梁评估,并创立了第一个检测中心。1990 年,他最早开始研究碳素纤维加固和维修技术于 1991 年首次在美国得到应用。至今,他已经用该创新技术设计和维修超过 150 座桥梁,这些成就也让 Shahawy 博士成为了领域内的世界级专家。

Dr. Shahawy has over 35 years experience in bridge engineering design, assessment, rehabilitation and load testing. He has published over 180 papers in the areas of prestressed / reinforced concrete performance, bridge performance, load testing and load rating of bridges, dynamic behavior of bridges, and bridge rehabilitation. In his fifteen years with the Florida Department of Transportation, he was responsible for the bridge condition assessment, bridge load testing and non-destructive evaluation, bridge rehabilitation, developing design guidelines and implementation of LRFD. He is a co-author of the Prestressed Concrete Institute (PCI) Bridge Design Manual. In 1986 he pioneered the use of nondestructive test methods for bridge evaluation and created the first test center of its kind, owned and operated by a state DOT. In 1990 he pioneered research on the use of Carbon Fiber Polymer (CFRP) composites in civil engineering applications; in 1991 this research was applied in the CFRP strengthening and repairs of the first bridge in the United States. He has since designed and repaired over 150 bridges using these innovative methods and he is considered a world leader in this field.





3 何杰,工程力学专业硕士研究生学历、高级工程师,现任中交路桥技术有限公司桥宇公司副总经理、技术负责人。近十年来一直从事桥梁工程的检测评估、施工监控、维修养护工作。主持参与了交通运输部重点桥梁监测项目、国庆 60 周年阅兵长安街通道监测评估、印度尼西亚苏拉马都大桥施工监控及试验检测、青海省 G214 线地震灾后桥梁检测评估及加固保通工程、昆明东绕城高速桥梁应急检测维修处治等项目。曾获中国交通建设集团"品牌团队"荣誉。

Jie He, a Senior Engineer majoring in Engineering Mechanics and holding a master's degree, serves as the Deputy Manager and concurrently Technical Director of Beijing CCCC Qiaoyu Science and Technology Co., Ltd. Over the past decade, He has been engaged in inspection evaluation, construction monitoring, repair and maintenance of bridge engineering projects. He has been in charge of / participated in the following projects: key bridge monitoring project launched by the Ministry of Transport, monitoring and evaluation of the Chang'an Avenue tunnel for China's 60th Anniversary parade, construction monitoring and test detection for Indonesia's Suramadu Bridge, post-earthquake detection, evaluation, and reinforcement of bridges and related smooth traffic project for the G214 national highway within Qinghai province, emergency bridge testing, maintenance and treatment for the east section of the Kunming Beltway. He was once awarded the honor of "Brand Team" by China Communications Construction Company.

王蔚,教授级高级工程师,武汉二航路桥特种工程有限责任公司 党委书记、副总经理,"桥梁结构安全国家工程实验室"专家委员会委员。

从 1993 开始, 一直从事混凝土结构加固和桥梁养护相关技术工作, 有 丰富工程实践经验。并参与编写交通部《公路桥梁加固施工技术规范》 (JTG/T J23-2008), 主持"采用超高压水射流技术的混凝土水力 破碎设备研制"、"不中断交通条件下斜拉索更换成套技术研究"、"混 凝土箱梁桥面 CFRP-环氧砂浆组合加固技术研究及应用示范"、"混 凝土小箱梁腹板加厚与张拉预应力组合加固技术研究"、"全国重点 文物保护单位兰州黄河铁桥维修加固工程关键技术研究"等多项科研 课题研究, 获得多项省部级科学技术进步奖, 并拥有多项发明专利。

Wei Wang, and a professor-level Senior Engineer, holds the post of Secretary of the Party Committee and concurrently Deputy General Manager of CCCC Road & Bridge Special Engineering Co., Ltd.. Wang is also a member of the Expert Committee of "National Engineering Laboratory for Bridge Structural Safety".

Wang has been engaged in technical work related to concrete structure reinforcement and bridge maintenance since 1993, with extensive experiences in engineering practices. Wang participated in preparation of the Technical Specifications for Strengthening Construction of Highway Bridges (JTG/T J23-2008) released by the Ministry of Transport. In addition, Wang has been in charge of a number of scientific researches, including "development of hydraulic concrete crushing equipment using ultra-high pressure water jet technology", "research of packaged technologies for stay cables replacement without interrupting traffic conditions", etc. Wang has won multiple provincial and ministerial level science and technology progress awards, owing a number of invention patents.





5 Laurence J. Jacobs,美国乔治亚理工大学工程学院副院长、 土木工程与环境学院教授。研究领域集中在结构材料无损评估、 监测、寿命预测的定量发展。他目前的主要研究为应用先进的测量技 术和信号处理检测材料的定量表征。这包括应用非线性超声测量金属 材料的疲劳损伤、蠕变、应力腐蚀、热脆化和辐射损伤,以及应用线 性和非线性超声技术量化微观结构和混凝土渐进微观裂纹等技术。 先后撰写和著发表了240多篇论文,出版物被引用超过3300余次。作 为美国机械工程师学会的研究员,他现任《国际无损检测和评价》编 辑委员会委员,曾任美国土木工程师学会主办的《工程力学期刊》副 主编。

Professor Jacobs'research focuses on the development of quantitative methodologies for the nondestructive evaluation, monitoring and life prediction of structural materials. His current research is focusing on the application of advanced measurement techniques and signal processing for the quantitative characterization of material state. This includes the application of nonlinear ultrasound for the characterization of fatigue, creep, stress corrosion, thermal embrittlement and radiation damage in metals. His work in cement-based materials includes the application of linear and nonlinear ultrasonic techniques to quantify microstructure and progressive micro-cracking in concrete.

Dr. Jacobs has authored/co-authored over 240 papers in refereed journals and conference proceedings. His publications have been cited more than 3300 times with an h-index of 32 (Google Scholar). He is a Fellow of the ASME, past Associate Editor of ASCE's Journal of Engineering Mechanics and currently on the editorial board of NDT&E International. Professor Jacobs' research has been funded by DOE, NSF, ONR, AFOSR, DARPA, NASA, US DOT, Georgia DOT, Exxon-Mobil, EPRI and GE. He has been the PI or co-PI on \$8.2M worth of contracts since 1990.



6 许宏元,毕业于重庆交通学院桥梁隧道专业。教授级高级工程师, 现任中交第一公路勘察设计研究院院长助理,西安瑞通路桥科技 有限公司董事长。许宏元从事公路桥梁勘察设计、桥梁检测评估、加 固工程技术研发等工作近三十年。其主持设计的南京长江第二大桥北 汉桥设计项目曾获得交通部优秀设计一等奖,建设部第十届优秀工程 设计银质奖。参与桥梁设计手册《斜拉桥》的五章的编写,《公路桥 梁养护规范》的讨论和制定,主编了交通运输部《公路桥梁加固设计 规范》、《公路桥梁加固施工技术规范》《公路桥涵养护规范》等。

Hongyuan Xu graduated from Chongging Jiaotong University and majored in Bridges and Tunnel Engineering. As a professor-level Senior Engineer, Xu currently works as President Assistant of CCCC First Highway Consultants Co., Ltd., and Chairman of the Board of Xi'An Rui Tong Highway & Bridge Science & Technology Co., Ltd. Xu devoted himself to highway bridge survey and design, bridge inspection assessment, and R&D of reinforcement engineering technology for nearly three decades. The North Bridge of The Second Nanjing Yangtze River Bridge mainly designed by He won the Outstanding Design Award (first prize) granted by Ministry of Transport, and the 10th Excellent Engineering Design Award (silver medal) granted by Ministry of Housing and Urban-Rural Development. Xu composed five chapters of the bridge design manual "Cable-Stayed Bridge", participated in discussion and preparation of the "Code for Maintenance of Highway Bridges", and worked as Chief Editor in preparation of the "Specifications for Strengthening Design of Highway Bridges", the "Technical Specifications for Strengthening Construction of Highway Bridges", the Code for Maintenance of Highway Bridges and Culvers, which were released by the Ministry of Transport.

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7 蒋瑞年教授 1984 年毕业于湖南大学土木系,获道路和桥梁工程 学士学位。毕业后分配到交通部科学研究院从事科研工作,参 加多项交通部及国家重点研究项目,并担任国际道路信息系统中国部 负责人。2005 年获得新墨西哥州立大学土木工程博士学位,留校担 任教学工作。主要从事研究包括桥梁检测和评估、无破损检测、近景 摄影测量、结构承载能力评估、智能交通工程、以及施工技术和管理 等。现任新墨西哥州立大学工程技术和测量系教授及中国项目部主任。 2012 年至今兼任交通运输部公路科学研究院国家桥梁检测和加固实验 室客座研究员。

Dr. Ruinian Jiang graduated in 1984 from the Department of Civil Engineering, Hunan University, and received his bachelor degree in road and bridge engineering. After graduation he joined China Academy of Transportation Sciences (CATS), Ministry of Transport, and took part in many research projects at both the ministry and national levels. He also served as the head of the China Division of the International Road Research Documentation. Jiang received his PhD degree in structural engineering in 2005 from New Mexico State University (NMSU). After graduation he became a faculty member in the Department of Engineering Technology and Surveying Engineering (ETSE), NMSU. His research interest includes bridge inspection and evaluation, structural non-destructive testing, closerange photogrammetry, load carrying capacity evaluation, intelligent transportation systems, and construction management. Since 2012 he has been an affiliate research fellow of the National Laboratory of Bridge Inspection and Strengthening, the Research Institute of Highway, Ministry of Transport of China.



**8** John M Halsall 30年工程行业、化学建材行业工作经验。在服务巴斯夫公司 15年的时间里,曾任北美、中东及亚太等多个地区的业务及技术负责人。在建筑物的修补加固、桥梁的维修养护等方面积累了丰富的工作经验。

30 years work experience in Engineering & Construction Chemicals area. As a expert in structure repairing & protection area, John in charge of many bridge repair projects in different countries, and has been served as Business and Technical Director in multiple regions, such as North America, the Middle East and Asia Pacific, while working in BASF.





9 Thomas Schumacher,美国波特兰州立大学土木与环境工程学院助理教授。2012年毕业于俄勒冈州立大学,获土木工程博士学位。主要从事研究包括无损检测传感新方法、民用基础设施的结构健康监测:量化声发射监测、纳米微碳管智能感应、数字视频监控、混凝土结构耐久性、混凝土结构的可持续性、概率度等。2010年获得瑞士国家科学基金会提供的优秀研究员助学金,2014年获得《基础设施系统杂志》的杰出评论家称号,2012年在特拉华大学工程学院任教时,获得杰出教学奖。从2005年起,Thomas Schumacher 博士就成为美国混凝土学会、美国土木工程协会、美国无损检测学会的成员,并且在2012年加入了国际材料与结构研究实验联合会。

Dr. Thomas Schumacher is currently an assistant professor of Civil and Environmental Engineering in Portland State University. He received his PhD degree in Civil Engineering in 2012 from Oregon State University. His research interest includes Novel sensing methodologies for non-destructive testing (NDT) and structural health monitoring (SHM) of civil infrastructure: Quantitative acoustic emission monitoring, carbon nanotube-based sensing composites, digital video-based monitoring; Behavior and durability of concrete structures; Sustainable structures; Probabilistic approaches. Dr. Thomas Schumacher received Fellowship for Prospective Researchers; Swiss National Science Foundation (SNSF) in 2010, and Outstanding Reviewer: Journal of Infrastructure Systems, ASCE in 2014. Respectively, he received an award of Excellence in Teaching Award in 2012, while he was teaching in the College of Engineering at the University of Delaware. Since 2005 he has been a member of American Concrete Institute (ACI), American Society of Civil Engineers (ASCE), and American Society for Nondestructive Testing (ASNT). And has been joined International Union of Laboratories and Experts in Construction Materials (RILEM) from 2012.



**10** 马晔,研究员,博士,交通运输部公路科学研究院桥梁技 术研究中心副主任。1983 年毕业于湖南大学土木系公路工 程专业;1989 年赴日本研修桥梁工程设计、施工和管理专业一年。从 事桥梁桩基础相关科研、试验、桥梁桥梁检测及加固设计、施工30余年。 主持多项省部级科研项目,获中国公路学会科技进步奖、交通部科技 成果奖等奖励多项;获实用新型专利9项,出版专著2本,主审1本, 参加编著7本,在国内外学术期刊发表论文数十余篇。主持的科研项 目主要有:《超长钻孔灌注桩桩基承载性能的研究》(获中国公路学 会科技成果二等奖)、《公路桥梁钻孔桩承载力可靠度研究》(获部 科技成果三等奖)、《铜陵大桥钻孔灌注桩桩壁承载力研究》(获市 科技成果二等奖)、《基于雷达探测和波动检测技术的在役桥梁桩基 础无损检测方法研究》(获国际领先水平)等等。

Ye Ma, a researcher with a doctor's degree, acts as Deputy Director of the Bridge Technology Research Center, Ministry of Transport. In 1983, Ma graduated from the Department of Civil Engineering of Hunan University, majoring in Highway Engineering; in 1989, Ma went to Japan for one-year research and study, majoring in Bridge Engineering Design, Construction and Management. Ma has devoted himself to bridge pile foundation related research and test, bridge inspection, reinforcement design and construction for over 30 years. Ma has presided over a number of provincial and ministerial level research projects, winning the Science and Technology Progress Award granted by China Highway & Transportation Society and the Technology Achievement Award granted by Ministry of Transport. In addition, Ma got 9 patents for practical and new technologies, published 2 monographs, acted as presiding teacher for 1 monograph, participated in compiling of 7 monographs and published over ten papers, etc.





廖海学,现为上海法赫桥梁隧道养护工程技术有限公司技术顾问,美国加拿大等注册专业工程师,国际防腐蚀协会 (NACE International)认证的阴极保护专家,美国结构工程师协 会认证的继续教育项目《评估、修复、保护和加强现有的混凝土结构》 专家,具有丰富的钢筋混凝土及预应力筋的腐蚀、评估、防腐和保护 的经验。同时也是美国后张预应力协会(PTI)会员和美国节段拼装 桥梁协会(ASBI)会员。

Haixue Liao works as Technical Advisor of Shanghai Fahe Bridges &Tunnels Maintenance and Repairment Co., Ltd. Liao is also a professional engineer registered in USA and Canada, a cathodic protection expert recognized by NACE International, and an expert of a continuing program recognized by The American Society of Civil Engineers, namely "Assessing, Repairing, Protecting and Strengthening Existing Concrete Structures. Liao has a wealth of experience in corrosion assessment, anti-corrosion and protection of reinforced concretes and prestressing tendons. Additionally, Liao is a member of Post Tensioning Institute (PTI) and American Segmental Bridge Institute.



**12** Jesse L. Grimson,美国桥梁诊断公司(BDI)副总 裁。2002年5月取得加拿大Saskatchewan大学土木工 程专业学士学位,毕业后成为BDI的项目经理和新产品研发部主任。 Grimson 先生参与了数个数据采集系统的设计和许多不同线路的结构 传感器的测试,包括加速度计,倾斜仪,应变传感器。此外,他还是 BDI 现场测试团队的一份子。他的研发背景使他特别适合于短期测试 计划和长期监测系统的实际设计和部署工作。Grimson 先生在 BDI 不 同程度的参与了大约250个测试项目,包括路易斯安那州科技大学-90 号公路(#2桥梁)、杜兰大学-白河口、美国陆军工程兵部队-Ft. Shafter 和红河陆军基地项目等。

Mr. Jesse L. Grimson, Vice President of Bridge Diagnostics, Inc. (BDI), graduated from Saskatchewan University, Canada, with a bachelor's degree in civil engineering in May 2002. Since graduation, Mr. Grimson has become one of BDI's lead project managers and is the director of new product development at BDI. Mr. Grimson has been a part of several data acquisition system designs plus many different lines of structural testing sensors including tiltmeters, accelerometers, and strain transducers. In addition, he is an integral part of BDI's field testing team. His R&D background makes him particularly suited for the practical design and deployment of both short term testing programs and long term monitoring systems. Mr. Grimson has been involved in approximately 250 testing projects to some level during his time with BDI, including Louisiana Tech University, Hwy 90 (Bridge #2), Tulane University, White Bayou, Zachary, LA(#03-4ST), US Army Corps of Engineers, Ft. Shafter & Red River Army Bases(W912EE-04-D-0006) etc.





13 吴俊明,武汉二航路桥特种工程有限责任公司副总工程师,高级工程师,多年从事公路桥梁维修加固与拆除及检测养护技术的研究和实践工作。开展了桥梁预防性养护技术和维修加固技术等多项科技研发,推进了我国桥梁养护技术进步。近年来先后取得"防漏的梳齿型伸缩缝结构"、"桥梁施工辅助便捷移动吊篮"、"桥梁顶升加高专用支座垫块"、"用于桥梁梁底粘贴碳纤维板的装置"、"斜拉索挂索专用索夹"等10余项国家专利,先后参与了福建泉厦高速沉洲晋江特大桥(主桥)加固工程、河南三门峡黄河公路大桥加固工程、江苏沪宁高速锡澄运河大桥拆除工程等大型桥梁的维修加固,直接负责完成了湖北汉宜高速沥青加铺桥涵加固工程、江西昌樟高速药湖高架桥下构维修工程、广州东南西环高速K42连续刚构桥加固工程、湖北京珠高速公路五年期桥梁养护工程。

Junming Wu, Deputy Chief Engineer of CCPC Road & Bridge Special Engineering Co., Ltd., Senior Engineer, has long been engaged in research and practice of highway bridge repair, reinforcement, demolition, inspection and maintenance technologies. Wu has participated in R&D of multiple technologies, such as the preventive bridge maintenance technology and the bridge repair and reinforcement technology, which promotes the development of China's bridge maintenance technology. In recent years, Wu successively obtained over 10 national patents on leak-proof comb-shaped joints structure, auxiliary convenient mobile basket for bridge construction, special seat pad for further lift-up of the bridge, device for pasting carbon fiber at the bottom of bridge beam, and special cable clip used for stay cable and sling.

Wu successively participated in the reinforcement of the Chenzhou Jinjiang Bridge (main bridge), which is part of the Quanzhou-Xiamen Expressway, the reinforcement of the Henan Sanmenxia Yellow River Highway Bridge, the demolition of the Xicheng Canal Bridge, which is a part of the Shanghai–Nanjing Expressway, and the repair and reinforcement of other large bridges, etc.

14 朱慈祥,高级工程师,重庆交通大学"桥梁与隧道工程" 专业研究生毕业,现任武汉二航路桥特种工程有限责任公司技术中心常务副经理,主要从事桥梁加固、改造与拆除工作,负责相关设计、咨询、施工及监控项目 20 余项;近5年获得各级科学技术进步奖励 12 项(省部级一等奖1项,三等奖2项)、工法6项(省部级工法4项);参编专著及规范2部(副主编1项);授权专利 30 余项; 发表论文 20 余篇;在国内外学术会议上交流创新技术成果7次。目前正主持湖北省地方标准"桥梁拆除技术规范"编制。

Cixiang Zhu, Senior Engineer, graduated from Chongging Jiaotong University with a master's degree, majoring in Bridge and Tunnel Engineering. Zhu currently serves as Executive Deputy General Manager of the Technology Center of CCCC Road & Bridge Special Engineering Co., Ltd, being mainly in charge of bridge reinforcement, renovation and demolition. Zhu has been responsible for design, consulting, construction and monitoring of over 20 projects. In the last five years, Zhu obtained 12 science and technology progress awards at all levels (1 first-class award and 2 third-class awards, provincial and ministerial level), and 6 engineering method certificates (4 provincial and ministerial level certificates). Besides, Zhu participated in preparation of 2 monographs/specifications (working as Associate Editor for one of them), obtained over 30 patents, published more than 20 papers and exchanged innovative technological achievements at domestic and international academic conferences for 7 times.





15 周华威, 重庆交通大学"桥梁与隧道工程"专业研究生毕业,现任职于武汉二航路桥特种工程有限责任公司技术中心。 主要从事旧桥检测、设计与施工等技术工作,负责完成桥梁检测1项、施工监控3项,参与桥梁拆除设计3项、桥梁维修加固施工4项、铁路与高速公路新建施工各1项。
重点参与了福州橘园洲大桥、G50沪渝高速高界段太湖大桥及浙江省省道S222线漩门港特大桥三个桥梁桩基加固工程,提出采用静力水准仪对抬桩加固施工过程进行精确监测的方法及适应于任意地质条件的抬桩加固的施工方法。

Huawei Zhou, graduating from Chongqing Jiaotong University with a master's degree and majoring in Bridge and Tunnel Engineering, currently works in the technical center of CCCC Road & Bridge Special Engineering Co., Ltd., where he mainly involves in technical work related to inspection, design and construction of old bridges. Zhou was responsible for accomplishment of 1 bridge inspection project and 3 construction monitoring projects. In addition, Zhou participated in 3 bridge demolition design projects, 4 bridge repair and reinforcement projects, 1 railway new construction project and 1 highway new construction project.

Zhou mainly involved in bridge pile foundation engineering for three bridges, including the Fuzhou Juyuanzhou Bridge, the Taihu Lake Bridge located in the Gaojie Section of the G50 Shanghai-Chongqing Expressway, and the Xuanmen Harbour Bridge of the Zhejiang provincial highway S222. In the process, Zhou proposed to use hydrostatic water level gauge to accurately monitor the pile-lifting and reinforcement construction process and put forward a pile-lifting and reinforcement construction method that is adapted to any geological conditions.



**16** 刘昂,长沙理工大学"土木工程"专业本科毕业,主要从 事桥梁加固、改造与拆除工作,现任武汉二航路桥特种工 程有限责任公司技术中心技术主管及中交二航局福州江心公园悬索桥 提质改造工程项目总工。

主持福州江心公园悬索桥提质改造工程,参与厦漳西溪大桥下部结构 加固及防撞措施施工工程、河北高速公路石安改扩建 JG1 工程、长春 绕城高速公路富锋特大桥引桥加固工程、长平高速改建工程主梁顶升 项目以及湖北京珠高速公路 2009–2013 年养护工程第十合同段。

Ang Liu, majoring in Civil Engineering and graduating from Changsha University of Science & Technology with a bachelor's degree, mainly worked in the area of bridge reinforcement, renovation and demolition. Liu currently acts as Technical Center Director of CCCC Road & Bridge Special Engineering Co., Ltd., and concurrently Chief Engineer of a project undertaken by The Second Harbor Engineering Company and concerning upgrade and reconstruction of the suspension bridge crossing Fuzhou River Center Park.

Liu was in charge of upgrade and reconstruction of the suspension bridge crossing Fuzhou River Center Park, participated in several projects, such as substructure reinforcement and anti-collision construction of the Xiamen-Zhangzhou Expressway Xixi Bridge, reconstruction and expansion of the JGI Segment, main beam lift-up engineering for reconstruction of the Changchun-Siping Expressway, and maintenance engineering of the tenth Segment, Hubei Section of the Beijing–Hong Kong–Macau Expressway (former Jingzhu Expressway) between 2009 and 2013.