



工程建设与设计

主办单位: 国家机械工业局工程建设中心 中国机械工业勘察设计协会 中国中元国际工程有限公司 CN 11-3914/TU 2016 年第 11 月 总第 347 期



封面人物
北京东方园林生态股份有限公司
高级规划师兼项目经理 于小琴

ISSN 1007-9467
9 771007 946103 11 >

卷首

05 节能减排,我们在路上

动态资讯

06 “住房城乡建设部修改《勘察设计注册工程师管理规定》等11个部门规章”等信息14则

封面工程

08 构筑和谐生态之城

信息化

12 BIM技术进入互联互通全新时代

论坛

14 试论工民建工程施工中节能技术的应用

16 房屋建筑工程中基础地基设计问题探析

建筑与结构设计

- 19 某小区超高层住宅结构设计(朱运川)
22 腐蚀钢筋混凝土构件承载力模型评述(关华深,林刚)
25 考虑剪切变形的波形钢腹板组合梁的挠度计算(左志鹏)
28 静安大厦核心筒超前施工剪力墙局部稳定性分析(李怀翠,苏昱晟,伍小平)
31 中空箱型钢混凝土梁的抗扭性能研究(吴见丰,郝娟)
34 院落精神的现代诠释——西安华侨城壹零捌坊(牟中辉)

基础工程设计

- 36 陡坡段桩柱式桥梁的桩基受力分析与施工研究(张克智)
39 紧邻既有地铁站大型深基坑开挖影响分析(王斌)
43 矿山尾矿坝渗流及稳定性分析(胡逸捷,张丽娜,余祥)
46 处理后的填方地基作基础持力层的实践(向志群)
48 相似材料性能调节方法综述(严泽臣,李宏,潘轶)

公用工程设计

- 50 浅析煤棚安全防护系统的应用(熊伟,李恒)
53 如何做好消防施工全过程的质量控制(周荣德,贺海东)
56 油浸式电力变压器的故障分析与预防对策探究(郭中华)15
59 国外水电项目计算机监控系统及微机保护系统的特点和建议(张鹏,陈鹏,李啸)

市政·交通·水利工程设计

- 63 高速公路常规结构桥梁设计分析(杨振祥,张忠文)
66 桥梁工程质量管理与控制的强化策略研究(张立影)
69 桥梁满堂支架浇筑工艺的支架安全分析(黄瑞民)
72 连续折线形斜梁桥的受力计算分析(黄筱淇,李达宏)
75 在桥梁工程加固中植筋技术与张贴钢板法的应用研究(杨水欣)
78 公路桥梁施工中混凝土裂缝的防治研究(罗扎强)
80 乌议高速公路沥青路面施工中离析现象的成因及防治措施(刘洪泉)
83 谈提高公路工程施工及养护质量的方法(袁浪平)
85 减隔震技术在桥梁结构设计中的应用研究(曹俊昌,吴健)
88 基于模糊层次分析的沥青路面养护决策研究(安保军,蔡奇珍,钟治欧)
92 山区高速公路溶洞发育区的桥梁桩基设计(邹霖,邓宏斌)
94 长大下坡路段安全评价方法研究(王春正)
98 谈采用侧面摩擦系数评价公路平曲线设计的安全性(郭红涛)
101 大理深公路隧道富水区瞬变电磁超前探测应用技术研究(缪强)
105 公路桥梁的盖梁纵向张拉体外预应力加固技术探讨(刘坤)
107 南京某保障房公交首末站设计方案的比选(刘娟,陈雄)
109 探讨农田水利工程的施工难点及施工技术(李金珍)

环境工程设计

- 112 铀矿冶有限制开放使用设施用于建造房屋的辐射环境影响评价(李利,彭小勇,王春普,詹乐音)
114 浅析松辽盆地南部庆和一太平川地区姚下段古河道展布与铀成矿关系(佟术敏,宁君,杨文达,任伟龙,翟亮亮)

智能与信息化

- 118 我国建筑工业化应用现状与发展建议(孙泽世)

工程施工技术

- 123 混凝土预制楼梯安装施工关键技术研究与应用(王斌,张明,孙宏智,罗盈洲)
126 谈地铁附属结构明挖基坑井点降水技术措施(高灵通)
129 填方路基及桥梁加宽拼接技术探讨(吴飞,张清)
132 四机垂直吊篮加速钢结构屋面面板封闭技术分析(王璠玮)
135 泥水盾构刀具磨损机理分析(冯淑芳,洪甘霖)
138 山区桥梁建设施工问题及措施分析(唐利雄,郭小平)
140 含有高掺量RAP料的高速公路沥青混合料的性能评价(刘慧军)
144 小半径螺旋式隧道测量技术(贾世斌,吴迪,刘丹)
146 路桥施工中桩基加固技术探究(邹明辉,甘轼)
149 铁路路基施工现场检测与实验(孟军)
151 公路桥梁深水桩基础施工技术分析(高坤)
154 智能预应力张拉检测仪器的应用与推广(梁建军)
156 铁路工程施工路基沉降的控制技术(李亭)
159 十字型钢柱一级焊缝施工质量控制(雷进发)
161 桥梁施工技术及裂缝成因研究(孙芬芬,丁勇文)
164 基于双机抬吊旋转法的大型设备吊装研究与应用(马立国)
167 公路沥青路面施工中振荡压实技术的应用分析(刘鸿祥)
169 基于Matlab的盾构施工数据分析平台(陈刚)

工程项目管理

- 174 BIM技术在总图设计中的应用(魏炜,郝琦,单春林)
177 P6软件在铁路工程进度与费用管理中的应用(徐超)
180 市政工程总承包项目主要阶段风险防控措施(王兴骥,韩菲)
184 公路设计阶段存在的问题以及对策探讨(刘海)
187 公路工程在监理阶段的施工阶段的质量控制对策(郭迪金)
189 桥梁施工质量管理与控制策略探究(涂丽)
122 投稿须知





FOREWORD

05 Energy Conservation and Emissions Reduction is Always Go on

INFORMATION

06 "MOHURD Amend 《The Regulations of Survey and Design Registered Engineer》 and Other 11 Kinds of Regulations" Etc. 14

COVER PERSON

08 Build the Harmonious and Ecological City

INFORMATIONIZATION

12 The BIM Technology Has Entered a New Connective Period

FORUM

14 Try to Talk about the Application of Energy-Saving Technology in Civil Engineering Construction

16 On the foundation design of building construction

Architectural and Structural Design

- 19 A District High-rise Residential Structure Design (ZHU Yun-chuan)
- 22 The Reviews on Load Capacity of Corrode Reinforcement Concrete Component (GUAN Hua-shen, LIN Gang)
- 25 Calculation of Deflection for Composite Beams with Corrugated Steel Webs Considering Shear Deformation (ZUO Zhi-peng)
- 28 Part Stability Analysis of Shear Wall When the Core Tube Built in Advance of Jing'An Tower (LI Huai-cui, SU Yu-sheng, WU Xiao-ping)
- 31 Research on Torsional Behavior of Hollow Box Steel Reinforced Concrete Beams (WU Jian-feng, HAO Juan)
- 34 Modern Annotation of Courtyard Spirit ——Xi'an OCT 108 Li-fang (MU Zhong-hui)

Engineering Design of the Ground

- 36 Stress Analysis and Construction of Pile Foundation at Steep Slope Section of Bridge (ZHANG Ke-zhi)
- 39 Analysis of Large Deep Foundation Pit Excavation Adjacent to Existing Metro Station (WANG Bin)
- 43 Seepage and Stability Analysis of Tailing Dam in Mine (HU Yi-jie, ZHANG Li-na, YU Xiang)
- 46 The Practice that Fill Ground is Chosen for Bearing Layer of Foundation After Foundation Treatment (XIANG Zhi-qun)
- 48 Similarity Material Performance Adjustment Method Review (YAN Ze-chen, LI Hong, PAN Yi)

Public Utilities Design

- 50 Application of Coal Shed Safety Protection System (XIONG Wei, LI Heng)
- 53 How to Control the Quality of the Whole Process of Fire Protection Construction (ZHOU Rong-de, HE Hai-dong)
- 56 Exploration of Fault Analysis and Prevention Countermeasures of Oil Immersed Power Transformer (GUO Zhong-hua)
- 59 Characteristics and Suggestion of SACDA and Relay Protection System for the Overseas Hydropower Stations (ZHANG Peng, CHEN Peng, LI Xiaocun)

Municipal · Traffic · Water Resources · Engineering Design

- 63 Design and Analysis of Highway Conventional Structure Bridge (YANG Zhen-xiang, ZHANG Zhong-wen)
- 66 The Strengthening of the Bridge Engineering Quality Management and Control Strategy Research (ZHANG Li-ying)
- 69 Safety Analysis of Bridge Falsework with Full Framing Casting Construction (HUANG Rui-min)
- 72 The Analysis of Mechanical Calculation for Continuous Zigzag Skew Bridge (HUANG Xiao-qi, LI Da-hong)
- 75 Planting Reinforce Bar Technique and Post Plate Method Application Research in the Bridge Engineering Reinforcement (YANG Yong-xin)
- 78 Research on Prevention and Cure of Concrete Crack in Highway Bridge Construction (LUO Zha-qiang)
- 80 Causes and Prevention Measures of Segregation of Asphalt Pavement Construction in Expressway (LIU Hong-quan)
- 83 Discussion on How to Improve the Quality of Highway Engineering Construction and Maintenance (YUAN Lang-ping)
- 85 Study on the Application of Seismic Isolation Technology in the Design of Bridge Structure (CAO Jun-chang, WU Jian)
- 88 Fuzzy Hierarchy Analysis on Decision Making of Asphalt Pavement Based on Entropy Weight (AN Bao-jun, CAI Qi-zhen, ZHONG Zhi-ou)
- 92 Design of Bridge Pile Foundation in Karst Area of Mountainous Expressway (ZOU Lin, DENG Hong-bin)
- 94 Study on Safety Evaluation Method of Long and Steep Slope (WANG Chun-zheng)
- 98 Using Side Friction Coefficient to Evaluate the Safety of Highway Horizontal Curve Design (GUO Hong-tao)
- 101 Research on the Application Technology of Transient Electromagnetic Advanced Detection in the Water Rich Area of the Highway Tunnel (MIU Qiang)
- 105 The Highway Bridge Reinforcement Technology of External Prestressed Longitudinal Beam (LIU Kun)
- 107 Comparison and Selection of Design Schemes of a Bus Terminal Station in Nanjing Affordable Housing (LIU Juan, CHEN Xiong)
- 109 Discussion Irrigation and Water Conservation Project Construction Difficulty and Construction Technology (LI Jin-zhen)

Environment Engineering Design

- 112 Radiation Environmental Impact Assessment of Restricted-use Decommissioned Uranium Mining and Metallurgy Facilities for House-building (LI Li, PENG Xiao-yong, WANG Chun-pu, ZHAN Yue-yin)
- 114 Analysis on the Relationship Between the Distribution of the Ancient River Channel and the Uranium Mineralization of Lower Part of Yao Fan in the Qinghe-Taipingchuan Area in the South of Songliao Basin (TONG Shu-min, NING Jun, YANG Wen-da, Ren Wei-long, ZHAI Liangliang)

Intelligence and Information Technology

- 118 Current Application and Future Development Suggestion of Building Industrialization in China (SUN Ze-shi)

Construction Technology

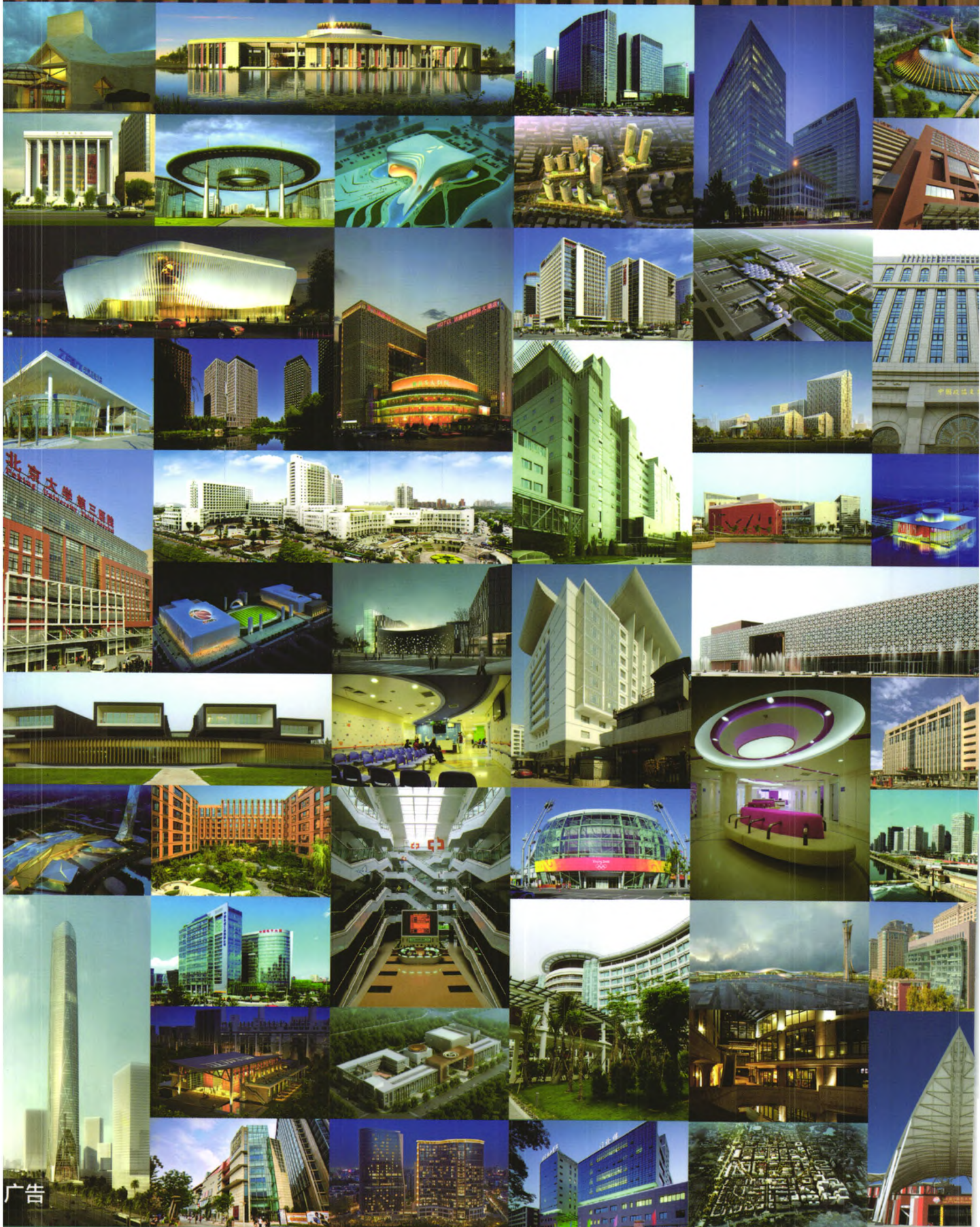
- 123 The Key Technology of Construction of Precast Concrete Stairs (WANG Bin, ZHANG Ming, SUN Hong-zhi, LUO Ying-zhou)
- 126 A Discussion on the Technical Measures for the Well Point deWatering of Underground Excavation in the Underground Structure of Metro (GAO Ling-tong)
- 129 Discussion on Subgrade and Bridge Widening Splicing Technology (WU Fei, ZHANG Qing)
- 132 Within the Four Machine Vertical Hanging Basket Speed Steel Structure Roofing Board Closed Technical Analysis (WANG Li-wei)
- 135 Cutter Wearing Mechanism of Slurry Shield Machine (FENG Shu-fang, HONG Gan-lin)
- 138 Mountain Building Bridges Construction Problems and Measures Analysis (TANG Li-xiong, GUO Xiao-ping)
- 140 Performance Evaluation of Highway Asphalt Mixtures with High Recycled Asphalt Pavement Content (LIU Hui-jun)
- 144 The Measurement Technology of Small Radius Spiral Tunnel (JIA Shi-bin, WU Di, LIU Dan)
- 146 Research on Pile Foundation Reinforcement Technology in Luqiao Construction (ZOU Ming-hui, GAN Shi)
- 149 Field Testing and Experiment of Railway Subgrade Construction (MENG Jun)
- 151 Highway Bridges Deepwater Pile Foundation Construction Technical Analysis (GAO Kun)
- 154 Application and Popularization of Intelligent Prestressing Tension Detecting Instrument (LIANG Jian-jun)
- 156 Control Technology of Subgrade Settlement in Railway Engineering (LI Ting)
- 159 The Construction Quality Control of the First Grade Welded Joint of the Cross Section Steel Column (LEI Jin-fa)
- 161 Bridge Construction Technology and Fracture Research (SUN Fen-fen, DING Yong-wen)
- 164 Research and Application of Large Equipment Hoisting Based on Double Machine Lifting and Rotating Method (MA Li-guo)
- 167 Analysis on the Application of Vibrating Compaction Technology in the Construction of Highway Asphalt Pavement (LIU Hong-xiang)
- 169 The Analysis Platform for Shield Construction Data Based on Matlab (CHEN Gang)

Project Management

- 174 Application of BIM Technology in the Design of General Layout (WEI Wei, HAO Qi, SHAN Chun-lin)
- 177 P6 Software Applications in Railway Project Schedule and Cost Management (XU Chao)
- 180 The Prevention and Control Measures of EPC for Overall Project-Contracting During the Main Stages (WANG Xing-jian, HAN Fei)
- 184 Problems and Countermeasures of Highway Design Stage (LIU Hai)
- 187 Quality Control Measures of Highway Engineering Supervision in Construction Stage (GUO Di-jin)
- 189 Explore the Bridge Construction Quality Management and Control Strategy (TU Li)



中国中元国际工程有限公司
CHINA IPPR INTERNATIONAL ENGINEERING CO., LTD.



广告

地址：北京市西三环北路5号 邮编：100089 电话：(010) 68458355 传真：(010) 68732688 网址：<http://www.ippr.com.cn> 邮箱：office@ippr.com