第五届地质（岩土）工程光电传感监测国际论坛（5th OSMG-2014）

2014年10月12-14日
中国 南京

第一号通知

主　　题： 地质灾害监测与预警
主办单位： 南京大学
承办单位： 南京大学光电传感工程监测中心
南京大学（苏州）高新技术研究院
协办单位：

中国国家自然科学基金委员会
国际工程地质与环境协会中国国家组
国际智能结构健康监测学会
国际环境岩土工程学会
香港理工大学
德国fibrisTerre有限公司
苏州南智传感科技限公司
中国电科41所

关于会议

随着我国各类基础工程建设的迅猛发展和干旱、暴雨等极端气候和地震活动的频繁发生，滑坡、泥石流、地裂缝、地面沉降、地面塌陷等地质灾害越来越严重，并造成了巨大的生命财产损失。为防止和减轻各类地质灾害带来的危害，提高地质灾害监测的技术水平是必然的途径。近年来，各类光电传感监测技术，如布里渊光时（频）域技术（BOTDR/A、BOFDR/A、OTDR、COTDR）、拉曼光时域技术（ROTDR）、光纤光栅技术（FBG）、光干涉技术、光纤荧光技术、电时（频）域技术（TDR、FDR）、MEMS等，在地质灾害监测与预警中不断得到应用，并显示出独特的优势，目前已成为国内外工程监测领域的研发热点。

本次论坛是继2005、2007、2010和2012年由南京大学组织召开的四届地质（岩土）工程光电传感监测国际论坛后召开的第五届论坛。应广大学术界同行和工程技术人员的要求，本次论坛将围绕“地质灾害监测与预警”这一主题，展开相关议题的讨论和交流。会议期间将邀请国内外知名学者和专家就本领域中的最新研究成果、热点、难点课题作专题报告，并开设相关技术培训班，为产品供应商提供新技术、新产品的信息发布和交流场所，为国内外企事业单位提供技术支持和合作机会，以提高光电传感监测技术在地质与岩土工程中的应用水平。

主要议题

- 光电传感监测技术的最新进展
- 新型光电传感解调技术
- 光电传感网络的数据采集与无线传输技术
- 光电传感监测中的温度补偿与异常识别技术
- 工程地质多场信息分布式监测技术
- 光纤传感器现场布设和数据传输解决方案
- 基于光电传感技术的地质灾害监测与预警系统
- 地质灾害特种光电传感元件的研发
- 地质灾害光电传感网络的集成技术
- 地质灾害中岩土体大变形的监测技术
- 崩塌、滑坡、泥石流、地面沉降、地裂缝灾害监测与预警
- 轨道交通、水电设施、特高压输电工程建设中的地基变形监测
- 古建筑保护中的分布式监测
- 矿山安全和深部岩土体分布式监测

会议语言

英文和中文

论文征集

作者应在2014年5月31日前提交一份约300字的英文或中文摘要，并于2014年7月31日前提交英文或中文的论文全文。论文集非正式出版，可接受已发表的论文，部分未发表过的优秀论文将推荐到相关的SCI、EI期刊发表。

重要日期

论文摘要提交 …… 2014 年　5月　31 日
会议提前注册 …… 2014 年　7月　31 日
产品参展注册 …… 2014 年　7月　31 日
论文全文提交 …… 2014 年　7月　31 日
会议现场注册 …… 2014 年 10月　12 日 全天和13日上午
会 议 时 间 …… 2014 年 10月　13-14日

学术委员会

主 席 W.R. Habel 博士（国际智能结构健康监测学会 主席）

组织委员会

主 席　施斌 教授 （南京大学，中国）

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光纤传感技术培训班

本次会议将于2014年10月12日举办光纤传感技术培训班，培训班内容包括布里渊光频域分析技术(BOFDA)、布里渊光时域反射/分析技术(BOTDA/R)、光纤布拉格光栅技术(FBG)、拉曼光时域反射技术(ROTDR)的基本原理和操作方法。报名方式详见会议网站。

会议场址

本次会议的举办地江苏省南京市是中国国家区域中心城市（华东），中国四大古都之一，有“六朝古都”、“十朝都会”之称，是中华文明的重要发祥地。会场位于南京市仙林大学城南京大学仙林校区，详细路线及地图请见会议网站。

注意事项

- 由于会议期间正值南京旅游旺季，宾馆预定十分紧张，请参会者务必提前预定。
- 会议将设光电传感监测技术与产品展览区，欢迎相关公司企业和科研单位参展。参展相关信息见网站。

5th International Forum on Opto-electronic Sensor-based Monitoring in Geo-engineering(5th OSMG-2014)

OSME

Oct 12-14, 2014
Nanjing, China

First Announcement

Theme:
Monitoring and Early Warning of Geological Disasters

SPONSOR:
Nanjing University

ORGANIZERS:
CEMOES, Nanjing University
Nanjing University High-Tech Institute at Suzhou

CO-ORGANIZERS:

National Natural Science Foundation of China

China National Group, International Association for Engineering Geology and the Environment

IInternational Society for Structural Health Monitoring of Intelligent Infrastructure

International Society for Environmental Geotechnology

The Hong Kong Polytechnic University

fibrisTerre GmbH

Suzhou Nanzee Sensing Co. Ltd

41st Institute of China Electronics Technology Group Corporation

ABOUT FORUM

With the rapid development in the construction of civil infrastructures and the frequent occurrence of severe weather conditions and earthquakes in China, there have been more and more geological disasters, including landslides, debris flows, land collapse, ground subsidence and fissures, which have caused tremendous losses in the lives and properties. To prevent and mitigate various potential disasters, the improvement of the level of engineering monitoring technology is of great importance. In recent years, the opto-electronic sensor-based monitoring technologies, such as the distributed fiber optic sensing technologies, such as Brillouin optical frequency/time domain technologies (BOTDR/A, BOFDR/A, OTDR, COTDR), Raman optical time domain technologies (ROTDR), fiber Bragg grating technologies (FBG), optical interferometry technologies, optical fiber fluorescence technologies, electric Frequency/Time Domain technologies (TDR,FDR), and Micro-Electro-Mechanism System (MEMS) technologies, have played an increasingly important role in monitoring and early warning of geological disasters. Due to their apparent advantages, the development and application of these technologies have become a research focus all over the world.

As the fifth forum following the 1st, 2nd, 3rd, and 4th International Forums on Opto-electronic Sensor-based Monitoring in Geo-engineering held by Nanjing University, China, in 2005, 2007, 2010, and 2012, respectively, this forum will focus on the subject of "Monitoring and Early Warning of Geological Disasters", on which related topics will be discussed and communicated. During the forum, some well-known foreign and domestic scholars and experts will be invited to give keynote lectures on up-to-date research findings, hotspots and difficult subjects in the geo-engineering monitoring field. An information release and communication platform for new technologies and products of relevant suppliers will be provided, as well.

MAIN TOPICS

- Recent development of opto-electronic sensor-based monitoring technologies
- Innovative demodulation technologies for opto-electronic sensing network
- Data acquisition and wireless transmission technologies of opto-electronic sensing network
- Temperature compensation and abnormality recognition of opto-electronic sensing network
- Distributed monitoring technologies of multi-field information engineering geology
- Solutions of field installation and data transmission of fiber optic sensors
- Monitoring and early warning systems of geological disasters based on opto-electronic sensing network
- Development of special opto-electronic sensors for monitoring geological disasters
- Integration of opto-electronic sensing network in monitoring geological disasters
- Monitoring technologies of geo-materials with large deformation
- Monitoring and early warning of rockfalls, landslides, debris flows, ground subsidence and fissures
- Monitoring of ground deformation induced by the construction of urban rail transits, hydraulic structures, ultra-high-voltage transmission structures, etc.
- Distributed monitoring in protection of historic buildings
- Distributed monitoring in mining and deep underground engineering

OFFICIAL LANGUAGE

English and Chinese

CALL FOR PAPERS

The authors should submit an abstract of about 300 words (in English or Chinese) to the organizers before May 31, 2014. The full-length papers in MS-Word or Pdf format should be submitted before July 31, 2014. All accepted papers will be collected in an unofficially published proceeding. Selected papers will be considered for publication in several peer-reviewed journals.

IMPORTANT DATES

Abstract due:..... May 31, 2014
Early-bird registration: ..... July 31, 2014
Products exhibition registration: ..... July 31, 2014
Full-length paper submission: ..... July 31, 2014
On-site registration dates: ..... Oct 12 & 13 am, 2014
Forum dates: ..... Oct 13-14, 2014

ACADEMIC & TECHNICAL COMMITTEE

Chair: Dr. W.R. Habel (Chair of International Society for Structural Health Monitoring of Intelligent Infrastructure)

ORGANIZING COMMITTEE

Chair: Prof. B. Shi (Nanjing University, China)

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SHORT COURSE

A short course on fiber optic sensing technologies will be held on Oct 12, 2014. The main topic will be the sensing principles and operation methods of BOFDA, BOTDA/R, ROTDR, and FBG. The instructors will speak in Chinese during the short course.

FORUM VENUE

The forum will be held in Nanjing, which is recognized as one of the Four Great Ancient Capitals of China and has a prominent place in Chinese history and culture. The forum venue is Nanjing University (Xianlin Campus),, 163 Xianlin Avenue, Nanjing, China. Please check the forum website for the venue location and detailed traffic information.

NOTES

- During the forum, Nanjing is in its tourist season. Thus the hotels and the transportation tickets are recommended to be pre-reserved.
- The forum will set an exhibition pavilion of monitoring tech nologies and products for relevant companies and researc h units. The registration information will be provided on the forum website.