深地科学论坛 (第八讲):

深部地下工程学科创新引智基地学术报告会 高端外国专家引进计划启动仪式 (深部岩土非常规重力特性模拟研究)

时间: 2020年12月23日14: 30-17: 30

地点: 深地国重 411 会议室&腾讯会议直播(ID号: 5462819230)

报告人	单位	报告题目
Prof. Andrew Chan 陈衍昌教授	澳大利亚塔斯马尼 亚大学	Numerical analysis of fracture and breakage of brittle material using combined continua and discontinua method
Prof. Yingxin Zhou 周迎新院士	新加坡工程院	Rock cavern development and rock engineering practice in Singapore
Prof. Chunfai Leung 梁春辉教授	新加坡国立大学	Geotechnical centrifuge modeling and its potential applications to deep underground studies
Prof. Jianguo Wang 王建国教授	中国矿业大学	非常规能源资源开采的多场耦合理论

欢迎全校教师及同学参加!

深部岩土力学与地下工程国家重点实验室

力学与土木工程学院

2020, 12, 18

报告人简介:



Prof. Chan joined the University of Tasmania, Australia, in March 2015 and he is currently Professor and Head, School of Engineering. He received his BSc(Eng) and MPhil from university of Hong Kong then he completed his PhD study at the University of Wales, Swansea. He has spent time working as a Postdoctoral Research Assistant at Cambridge University, and has lectured in the Department of Civil Engineering at the University of Glasgow. Prof. Chan was then appointed Reader and Professor in Computational Engineering at University of Birmingham. When moved to Australia, he took up a professorial and deputy dean

position at University of Ballarat (later renamed Federation University Australia) before moving to Tasmania. He has a wide research interest. He is one of the world leading experts in the use of the finite element method of static and dynamic fully coupled soil and pore-fluid interaction and the author of two comprehensive Finite Element packages for deformable porous media and pore fluid interaction. His recent interest, besides the use of SBFEM and DEM for the modelling of particle breakage, includes simulating the breakage of glass under hard body impact using the combined finite-discrete element method and Modelling dynamic saturated soil and pore fluid interaction such as fluidisation using combined discrete element method and Lattice Boltzmann method. He is subject editor for the Journal of Applied Mathematical Modelling and on the editorial board of Computers and Structures. He was a member of the ARC College of Experts from 2017 to 2019.



Dr Zhou is a Fellow of the Academy of Engineering of Singapore. He has been involved in several major rock engineering projects in Singapore and providing technical advice to government agencies on rock engineering and underground space. Dr Zhou is Fellow of the International Society for Rock Mechanics and Engineering (ISRM), and sits on the Editorial Board for the International Journal of Tunnelling & Underground Space Technology. He is Director (Asia) and Board Member of the Associated research Centres for the Urban Underground Space and member of the Advisory Board for the ITA Committee on Underground Space. Dr Zhou received the

Defence Technology Prize 2018 Engineering (Individual) Award for his contributions in rock engineering in space creation and defence in Singapore. He was Assoc (Adj) Professor with Nanyang Technological University and Vice President for Asia of the ISRM.



Prof C F Leung is a professor in Department of Civil and Environmental Engineering, National University of Singapore. He obtained his BEng degree in civil engineering and PhD degree in geotechnical engineering from the University of Liverpool, UK. His research interests include centrifuge modelling technique of onshore, marine and offshore geotechnical problems. Prof Leung was the Chairman of Technical Committee of International Society of Soil Mechanics and Geotechnical Engineering on centrifuge

modeling from 2012 to 2015. He has published many articles in journals and serves on the editorial boards of several geotechnical and offshore engineering journals. Since June 2020, Prof Leung is the President of International Press-in Association with its headquarter based in Tokyo, Japan. He is also very active in the geotechnical industry serving as geotechnical consultants for over 100 projects in Singapore and overseas.



王建国博士是中国矿业大学特聘教授、博士生导师,江 苏省双创团队(外国院士类)核心成员。曾从事径向基 无单元法、岩土工程和防护工程的研究。现在主要从事 非常规油气资源开采(主要研究煤层气和页岩气)数值 模拟、二氧化碳地下存储、地热开采和废弃地下空间综 合利用等领域的科学研究;主持和参加包括国家重点研 发计划项目、国家自然科学基金项目、澳洲和新加坡国 家科学基金项目等 10 余项;任 10 余个国际期刊论文评 审专家和两个国际学术期刊的学术编辑。第一个将多尺

度均质化法应用于非线性岩土力学及孔隙介质渗透力学; 创建基于径向基的点插值无单元法理论及算法, 并成功应用于固体力学, 海床液化和软组织生物力学问题; 提出时间和空间多尺度的裂隙岩体渗流理论, 并正在开发无水压裂技术和地层微热力致裂体积处理新技术。至今发表SCI 收录论文 130 余篇。