

环境科学与工程学院

SCHOOL OF ENVIRONMENTAL SCIENCE & ENGINEERING

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School Overview

为顺应国家环境保护重大战略需求,2015年5月南方科技大学成立了环境科学与工程学院(以下简称"学院")。国际地下水环境领域知名专家郑春苗教授担任创院院长。学院旨在水资源与水环境、土壤污染与修复、大气污染及其防治、工业生态、全球环境变化等领域开展前沿学术研究和高端人才培养。同时,学院致力于研发水处理、海水淡化、节能减排和环境遥感等与社会需求密切相关的先进技术。

The School of Environmental Science and Engineering was founded in May 2015, in response to the strategic development needs of environmental protection in China. The Founding Dean, Prof. Chunmiao Zheng, is a world-renowned expert in groundwater research. The School has focused on conducting cutting-edge research and cultivating talents in water resources and water quality, soil science and remediation, air pollution control, industrial ecology, global environmental change, and related areas. In addition, the School is developing advanced technologies for water treatment, desalination, energy saving and emission reduction, and environmental remote sensing, in order to meet the urgent needs of the society.

指导委员会 >>>>> Advisory Board



Steven Gorelick 院士 美国斯坦福大学 环境地球系统 Stanford University Environmental Earth System Science



中国科学院生态环境研究中心 生态学 Research Center for Eco-Environmental Sciences, CAS

Ecology

傅伯杰 院士



美国加州理工学院 环境工程 California Institute of Technology Environmental Engineering

Michael Hoffmann 院士



Bridget R. Scanlon 院士 美国得克萨斯大学奥斯汀分校 全球变化、水资源管理

University of Texas at Austin Global Change and Water Management



王光谦 院士 清华大学/青海大学 水力学

Tsinghua University / Qinghai University Hydraulics and Water Resource



Mary P. Anderson 院士 美国威斯康星(麦迪逊)大学 水文地质

University of Wisconsin-Madison Hydrogeology

>>>> 学院发展的中长期目标 Development Objectives

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Development Objectives

- 我国环境科学与工程领域拔尖创新人才的培养基地;
- 环境领域世界级的科学研究中心;
- 先进环保技术研发与产业化的国家级平台。
- A leading school for training and cultivating future talents and the next generation of leaders in the field of environmental science and engineering;
- A world-class environmental science research center;
- A national platform for development and industrialization of advanced environmental technologies.

师资 >>>>> Faculty

学院拥有国内一流的师资队伍,现有全职教师 65 人,讲席教授 7 名、教授 6 名、副教授 10 人、助理教授 30 人(含专职研究助理教授 24 人)。其中美国国家工程院院士 1 人、英国皇家工程院院士 1 人、美国地球物理学会会士 1 名、国家特聘专家 5 人、国家杰出青年科学基金获得者 3 人、国务院特殊津贴专家 2 人、万人计划中青年科技创新领军人才 1 人、国家优秀青年科学基金获得者 3 人、教育部特聘青年学者 1 人、国家特聘青年专家 4 人。

The School has attracted an outstanding faculty in environmental science and engineering. The School currently has 65 full-time faculty members, including 7 Chair Professors, 6 Professors, 10 Associate Professors, and 30 Assistant Professors (including 24 full-time Research Assistant Professors). The faculty have received numerous honors and distinctions. Among the faculty members, one is a Member of the U.S. National Academy of Engineering, one is a Fellow of the U.K Royal Academy of Engineering, and one is a Fellow of the American Geophysical Union. In addition, there are 5 National Chair Professors, 3 National Natural Science Foundation of China (NSFC) Outstanding Scientists, 2 Recipient of State Council Expert Special Allowance, 1 Leading Innovative Talent of Science and Technology, 3 NSFC Outstanding Young Scientists, 1 Recipient of the Ministry of Education Junior Faculty Award, and 4 National Young Experts. All faculty members have prior experiences studying and/or working abroad.



>>> 师资 Faculty

创院院长 Founding Dean



郑春苗 ZHENG Chunmiao

讲席教授 美国威斯康星 (麦迪逊)大学博士、国家特聘专家、美国地球物理联合会会士 (AGU Fellow)和美国地质学会会士 (GSA Fellow)。曾任北京大学讲席教授及水科学研究中心主任、美国阿拉巴马大学 Lindahl 终身讲席教授、国际水文科学协会 (IAHS)国际地下水委员会主席。研究领域包括地下水污染机理与修复技术、流域尺度生态-水文过程、全球变化与新型污染物对水资源可持续利用的影响等。开发了地下水污染模拟标准软件 MT3D/MT3DMS,在 100 多个国家得到广泛使用。发表了论文 250 多篇及专著 5 部,谷歌学术被引用总数超过一万次。获得的荣誉包括: 1998年美国地下水协会 John Hem 杰出贡献奖、2009年美国地质学会 Birdsall-Dreiss杰出讲席奖、2013年美国地质学会 O. E. Meinzer Award(国际水文地质界最高荣誉)、2013年美国地下水协会 M. King Hubbert Award(该协会最高科学奖)、2014年美国威斯康星(麦迪逊)大学地学系杰出校友奖。

Chair Professor. Ph.D., University of Wisconsin-Madison, National Chair Professor, Fellow of the American Geophysical Union (AGU) and the Geological Society of America (GSA). Prior to his current appointment, he was Chair Professor and Director of the Institute of Water Sciences at Peking University, and the George Lindahl III Endowed Professor at the University of Alabama. His research interests include groundwater contaminant transport and remediation, basin-scale eco-hydrologic processes, and impacts of global change and emerging contaminants on water sustainability. He is the developer of the MT3D/MT3DMS series of contaminant transport codes used in over 100 countries, and author or co-author of over 250 SCI papers and 5 books with over 10,000 citations on Google Scholar. He was awarded the Birdsall-Dreiss Distinguished Lectureship (2009) and the O. E. Meinzer Award (2013) by the Geological Society of America, and the John Hem Award (1998) and the M. King Hubbert Award (2013) by the National Ground Water Association (USA). He was also recipient of the Distinguished Alumni Award (2014) from the Department of Geoscience, University of Wisconsin-Madison.

院士 Academician

讲席教授 美国亚利桑那大学博士、美国国家工程院院士,现任南方科技大学(代理)副校长兼教务长。国家杰出青年科学基金获得者、美国地质学会会士(GSA Fellow)、国际石油工程师协会SPE最高荣誉会员。历任北京大学研究生院常务副院长、工学院院长、海洋研究院院长、美国南加州大学Marshall讲席正教授(终身制)、俄克拉荷马大学石油和地质工程系米勒讲席正教授(终身制)、北京大学能源与资源工程系首任系主任、美国著名拉萨拉莫斯(Los Alamos)国家实验室高级研究员。为地下水文学、非常规油气开采(煤层气、页岩气)、二氧化碳地质埋藏方面的国际著名学者,其随机理论建模、数值计算、历史拟合和机器学习方面的研究成果已被国际同行广泛采用。发表学术论文220多篇(其中SCI论文180多篇)。先后担任权威性杂志《水资源研究》、《国际石油工程师杂志》等八种国际学术杂志副主编。



张东晓 ZHANG Dongxiao

Chair Professor. Ph.D., University of Arizona. He is a Member of the U.S. National Academy of Engineering, an Honorary Member of the Society of Petroleum Engineers, and a Fellow of the Geological Society of America. He had held positions as a Senior Scientist at the Los Alamos National Laboratory, the Miller Chair Professor at the Department of Petroleum and Geological Engineering at the University of Oklahoma, Chair Professor at the University of Southern California, Executive Dean of Graduate School and Dean of College of Engineering at Peking University. Professor Zhang is an internationally renowned expert in unconventional oil and gas production, groundwater hydrology, and geological carbon sequestration, whose research achievements in stochastic modeling, numerical simulation, inverse modeling and machine learning have been widely adopted by the international community. He has authored 2 books and published over 180 peer-reviewed SCI papers.



倪晋仁 NI Jinren

长期访问杰出教授 清华大学博士、中科院院士。研究兴趣包括水沙两相流理论、环境模拟、河流动力地貌的拓展研究和污水处理技术等。主持完成包括国家自然科学基金重大项目、国家重点基础研究 973 课题、国家自然科学基金 NSFC-JST 重大国际合作项目等 30 余项科技项目。发表论文 200 余篇,出版专著 5 部,获得授权国家发明专利 30 余项。曾获国际泥沙研究中心钱宁泥沙科学奖 (1992)、北京市优秀教师 (2006)、国家科技进步奖二等奖 (2010)、国家技术发明二等奖 (2013) 等。

Visiting Chair Professor. Ph.D., Tsinghua University. Academician of CAS. Professor Ni focuses on the fundamentals of solid-liquid two-phase flow, environmental modeling, river sustainability, and wastewater treatment. Professor Ni has led more than 30 national or international research projects,

including the Key Program of Natural Science Foundation in China, National Key Basic Research Program (973), the international cooperation research program of National Natural Science Foundation and JST, etc. He has published over 200 peer-reviewed international journal papers, 5 professional books, and he has received about 30 invention patents.

讲席教授 英国伯明翰大学博士、英国皇家工程院院士。曾就职于英国谢菲尔德大学土木与建筑工程系,与 Steve Banwart 教授一起在谢菲尔德大学创建了地下水保护与修复研究组,该组现在已有约50名研究人员。 David Lerner 院士最近的研究兴趣包括城市地下水、污染物的自然衰减、地下水建模和裂隙岩体水文地质学等。



David Lerne

Chair Professor. Ph.D., University of Birmingham, UK. Fellow of the Royal Academy of Engineering, UK. He came to academic life in 1984 via a water authority and international consultants and has since worked in both Geology and Civil Engineering departments. With Steve Banwart, he founded the Groundwater Protection and Restoration Group (GPRG) at the University of Sheffield, UK, which, with its daughter groups, now has about 50 researchers working at a range of scales from cells to catchments. Recent research interests have included urban groundwater, natural attenuation of pollutants, modelling, and fractured rock hydrogeology.

教研系列 Tenured or Tenure-Track Faculty



张幼宽 ZHANG Youkuan

讲席教授 美国亚利桑那大学水文学博士、国家特聘专家、美国地质学会会士(GSA Fellow)。已主持30余项美国和中国政府资助的科研项目发表论文100多篇,内容涉及非均质介质中地下水污染物弥散理论、河流径流和基流以及地下水水位变化的尺度效应、土地利用和地表覆盖对流域水循环的影响、土壤与地下水污染修复、基岩裂隙水分布及富集规律与合理开发利用等。

Chair Professor. Ph.D., University of Arizona. National Chair Professor, GSA Fellow. He has published more than 100 papers and carried out more than 30 research projects founded by the U.S. and China governments. He was principal investigator for the Chinese National Key Project, "Water Pollution Control in the Huai River Basin". He served as Associate Editor for several important international journals in water research, including Stochastic Environmental Research, Groundwater, and Vadose Zone Journal.

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杨新 YANG Xin

讲席教授 香港科技大学博士、教育部特聘专家、国务院特殊津贴专家,曾任复旦大学特聘教授。主要研究领域包括:大气气溶胶物理化学特性及环境气候效应、城市区域空气质量、新型环境检测技术研发等。重点研究大气中重要一次颗粒物来源、城市大气环境二次气溶胶组分形成机制、利用高时间分辨物理化学性质测量对大气颗粒物的环境效应进行精确表征。发表学术论文 140 余篇。

Chair Professor. Ph.D., Hong Kong University of Science & Technology, Distinguished Professor by Ministry of Education of China, State Council Expert for Special Allowance. Prior to his current appointment, he was Chair Professor at Fudan University. Dr. Yang's research interests include physical and chemical properties of atmospheric aerosol and their impacts on human health and global climate; urban air quality; instrument development for environmental analysis. He is author or co-author of over 140 peer-reviewed journal papers.

讲席教授 美国约翰霍普金斯大学博士、国家特聘专家,曾任美国能源部西北太平洋国家实验室首席科学家。长期从事污染物在地下水和土壤中的迁移、转化和降解研究,擅长运用理论、实验和模拟相结合的方法研究污染物在环境中的迁移转化规律和设计开发水处理和污染修复技术。现任国际 SCI 期刊地球和空间化学 (ACS Earth and Space Chemistry) 副主编。发表 SCI 论文 160 多篇,2004 年获得美国能源部基础能源科学研究杰出贡献奖,2011 入选美国地质学会会士 (GSA Fellow)。

Chair Professor. Ph.D., Johns Hopkins University, National Chair Professor, Fellow of the Geological Society of America (GSA). He was a chief scientist at Pacific Northwest National Laboratory of US DoE before joining SUSTech. His research area is in the biogeochemistry in water and soil environments, focusing on the transformation, degradation and transport of contaminants in groundwater. His current research interests include the biogeochemistry of C, N, and contaminants in groundwater and surface water exchange zones and the development of biotechnologies for wastewater treatment. He is the PI or Co-PI for over 20 projects, and he has authored and co-authored over 160 peer-reviewed articles with a total citation of over 4800 and H-index of 41.



刘崇炫 LIU Chongxuan



郑焰 ZHENG Yan

讲席教授 美国哥伦比亚大学博士、国家特聘专家、美国地质学会会士。曾任北京大学讲席教授、纽约市立大学终身教授、美国哥伦比亚大学高级研究员、联合国儿童基金会驻孟加拉国水及环境卫生项目专员。致力于环境中化学物质的生物地球化学过程及其对人类健康与生态系统的影响研究,共发表 SCI 论文 100 多篇,现任中国国际地球科学促进会主席及国际水文地质学会地下水人工回补与可持续发展工作组长。

Chair Professor. Ph.D., Columbia University. National Chair Professor, Fellow of the Geological Society of America. Professor Zheng was Chair Professor at Peking University, tenured Full Professor at City University of New York, and an adjunct senior research scientist at Columbia University. She was also a water and sanitation specialist with UNICEF Bangladesh. She has published more than 100 peer-reviewed journal articles. She currently serves as the President for the International Professionals for Advancement of Chinese Earth Sciences, and she is the Chair of Managed Aquifer for Sustainable Development Working Group of the International Hydrogeologist Association.



刘俊国 LIU Junguo

讲席教授 瑞士苏黎世联邦理工学院博士、国家杰出青年科学基金获得者、国家特支计划科技创新领军人才、科技部中青年科技创新领军人才,国务院特殊津贴专家。长期从事水资源和生态修复方面的科研和教学工作,在水资源时空演变、水质性缺水评价和河流生态修复等方面取得了系统性创新成果。出版中英文著作5部,发表论文180余篇,国际SCI期刊发表论文130余篇。创建了中国首个聚焦生态修复的省部级一级学会一北京生态修复学会,并担任理事长。

Chair Professor. Ph.D., Swiss Federal Institute of Technology in Zurich (ETH Zurich). His main research interests include hydrology and water resources, global environmental change, and ecological restoration. He is a Vice Chair of the Chinese National Commission for the International Association of Hydrological Sciences (CNC-IAHS), a target leader of the Decade Program 2013-2022 (Panta Rhei) of IAHS, and the Chair of the working group on Water Scarcity Assessment of the Panta Rhei program. Prof. Liu is author of about 180 publications (>130 SCI papers).

特聘教授 英国帝国理工大学环境污染和水文学专业博士、国家科技部中长期战略规划特聘专家、国务院特殊津贴专家、环境保护部环境损害鉴定评估专家委员会委员、中国环境科学学会土壤与地下水专业委员会委员、新加坡李光耀水奖评委等。2017 年荣获国家科技进步奖二等奖,2019 年获环境保护科学技术奖二等奖(已公示),2016 年荣获IBM 全球杰出学者奖,2012 年获教育部科技进步一等奖,2011 年获得人保部高层次留学人才回国资助人才(全国十人)。主要研究成果发表在 Nature、Science 等国际顶尖学术期刊,拥有二十余项专利成果。



胡清 HU Qing

Professor. Ph.D., Imperial College London, UK. State Council Expert for Special Allowance. She has more than 30 years research and working experiences in ecological and environmental protection areas. Her research papers were published in the top international academic journals such as Nature and Science. She received the China top-tier Awards of National Science and Technology Progress Award (2017); the Prize of Environmental Protection Science and Technology Award of Ministry of Ecology and Environment (2019), IBM Faculty Award (2016), the First Prize of Science and Technology Progress Award of Ministry of Education (2012). In 2011, she won the Prize of Scientific Research Foundation for the High-Level Returned Overseas Chinese Scholars of MOHRSS.



李海龙 LI Hailong

教授 香港大学水文地质学博士、湖北省楚天学者、国家杰出青年科学基金获得者。主要从事海底地下水排泄和海岸带地下多组分(如盐分、营养盐、示踪剂等)多相流(如水气两相流)及其生态环境效应方面的研究。发表论文 180 余篇,其中在 Nature Geoscience、GRL、JGR、WRR等水文水资源、水环境领域主流期刊发表 SCI 论文 90 多篇,发明专利 3 项。主持包括基金委重点项目、科技部 973 项目一级课题等 12 项科研项目。任 Water Science and Engineering、《盐湖研究》编委,曾任 Hydrogeology Journal、《中国科学:地球科学》、《生物数学学报》编委等。

Professor. Ph.D., University of Hong Kong. Professor Li received funding as a Chutian scholar of Hubei Province and from the National Outstanding Youth Science Fund. His research interests focus on submarine groundwater discharge and subsurface multi-component (such as nutrients, tracer and salt), multi-phase flows (such as air and groundwater) and their ecological effects. He has published more than 180 research articles, including more than 90 SCI articles in leading international journals such as Nature Geoscience, GRL, JGR and WRR in the field of hydrology, water resources and the environment. He has obtained funding for over 12 research projects including the NSFC Key Program and the 973 Program. Professor Li served as Associate Editors for Hydrogeology Journal, Science China Earth Science, Water Science and Engineering, and Journal of Salt Lake Research.



郑一 ZHENG Yi

教授 美国加州大学圣巴巴拉分校博士、国家优秀青年科学基金获得者、环境科学与工程学院副院长。主要从事水文模拟、水资源管理、环境大数据分析等方面研究,是国际水文水资源领域权威期刊 Water Resources Research 及 SCI 期刊 Journal of Hydrologic Engineering-ASCE的副主编,兼任国家环境保护流域地表水 - 地下水污染综合防治重点实验室副主任、中国自然资源学会青年工作委员会的副主任、深圳市环境物联网技术与应用工程实验室主任等职。发表SCI 论文 55 篇,主要发表于 Water Resources Research、Geophysical Research Letters、Journal of Hydrology、Advances in Water Resources、Environmental Modelling & Software、Water Research 等专业领域顶尖学术期刊。获中国自然资源学会"优秀科技奖"。

Professor. Ph.D., University of California, Santa Barbara. Recipient of NSFC Excellent Young Scholars Award. He is currently an Associate Dean of the School of Environmental Science and Engineering at SUSTech. His main research areas include hydrological modeling, water resources management and environmental big data analysis. He serves as an associate editor of two SCI journals, Water Resources Research (top journal in this field) and Journal of Hydrologic Engineering-ASCE. He is an Associate Director of State Environmental Protection Key Laboratory of Integrated Surface Water-Groundwater Pollution Control, a Vice Chair of the Young Scientists Committee in China Society of Natural Resources, and the director of Shenzhen Municipal Engineering Lab of Environmental IoT Technologies. He has published 55 SCI papers, mostly in top journals such as Water Resources Research, Geophysical Research Letters, Journal of Hydrology, Advances in Water Resources, Environmental Modelling & Software, and Water Research. He received Outstanding Science and Technology Award from China Society of Natural Resources.

教授 瑞典皇家工学院博士、国家优秀青年基金获得者。现任深圳市城市固体废弃物资源化技术与管理重点实验室主任、广东省土壤与地下水修复重点实验室副主任,在固废高效清洁利用领域取得一定成绩。近五年主持包括自然科学基金委优秀青年基金、国家重点研发计划等 10余项国家、省部级科研项目。近五年在 Appl. Cat. B: Environ.、Appl. Energy、ACS Sustain. Chem. & Eng.、Waste. Manag.、J. Hazard. Mater. 等国际知名期刊发表 SCI 文章 80 余篇;申请国家发明专利 20 余项,有多项专利实现技术转让。担任 Journal of Cleaner Production 副主编、《中国科学:技术科学》青年编委等。担任中国硅酸盐学会固废分会副理事长等职务。获得广东省环境协会二等奖、中国循环经济协会技术一等奖、北京市科技进步二等奖等。



张作泰 ZHANG Zuotai

Professor. Ph.D., Royal Institute of Technology, Sweden. He is the Director of Key Laboratory of Municipal Solid Waste Recycling and Management of Shenzhen City. Dr. Zhang's research interests include the efficient and clean utilization of solid waste and conducted thorough researches on the integrated utilization of waste heat/resource of metallurgical slag, the recycling valuable elements of metallurgical slag, the transformation and utilization of energy solid waste, and the transformation and migration mechanism of harmful elements based on the such key scientific issues in the process of the efficient cleaning utilization of solid waste. He has published more than 80 SCI papers in leading journals, including Appl. Cat. B: Environ., Appl Energy., ACS Sustain. Chem. & Eng., Waste. Manag., J. Hazard. Mater., and applied 30 patents. Dr. Zhang also serves as Associate Editor of Journal of Cleaner Production, Vice-Chair of Solid Waste Subcommittee of Chinese Ceramic Society of China.



傅宗玫 FU Tzung-May

教授 美国哈佛大学地球与行星科学博士。曾任北京大学物理学院大气与海洋科学系长聘副教授、研究员,及香港理工大学土木与结构工程系助理教授。主要研究领域包括空气污染、全球及区域大气化学、化学 - 气候相互作用等。重点研究大气有机气体与有机气溶胶、对流层臭氧、气候与空气质量相互作用、云 - 气溶胶相互作用、大气组分遥感及反演、污染物长程传输、海 - 气交换等。发表学术论文 40 余篇。曾获国家自然科学基金委优秀青年基金、中国气象学会涂长望青年气象科技奖二等奖、教育部特聘青年学者、教育部高校自然科学奖二等奖等。

Professor. Ph.D., Harvard University. Prior to her current appointment, Fu was Associate Professor and "Bairen" Professor in the Department of Atmospheric and Oceanic Sciences, Peking University, and Assistant Professor in the Department of Civil and Structural Engineering, Hong Kong Polytechnic University. Her research interests are in air pollution, global and regional atmospheric chemistry, and

chemistry-climate interactions. Research topics include organic gases and organic aerosols, tropospheric ozone, climate-air quality interactions, cloud-aerosol interactions, remote sensing and inverse modeling of atmospheric constituents, pollutant long-range transport, and air-sea exchange of organics. Fu has authored or co-authored more than 40 SCI peer reviewed papers. She has won the National Natural Science Foundation of China Outstanding Young Scientist Fellowship, the Tu Chang Wang Award in Meteorological Science and Technology, Distinguished Junior Faculty of the Ministry of Education, and the Second Prize of Natural Science Award of Ministry of Education.



Luke Gibson

副教授 新加坡国立大学博士、国家特聘青年专家。加入南方科技大学之前曾任香港大学研究助理教授。他的研究方向包括森林破碎化、清洁能源、野生动物非法贸易以及动物迁徙等。研究区域以中国为中心,拓展至东南亚及东亚。他曾在 Science 和 Nature 等世界顶级刊物发表多篇学术论文。曾获香港大学王庚武奖及世界未来基金会环境与可持续研究博士生奖。

Associate Professor. Ph.D., National University of Singapore. Prior to his current appointment, he was Research Assistant Professor at the University of Hong Kong. His research expertise encompasses fragmentation, green energy, wildlife trade, and animal migration, centered in China but extending across Southeast and East Asia. His research has been published in Science and Nature. Among other awards, he received the Wang Gung Wu Medal & Prize and the World Future Foundation PhD Prize in Environmental and Sustainability Research.

副教授 香港大学博士、国家特聘青年专家、深圳市海外高层次人才。研究领域包括饱和-非饱和流、水气二相流、溶质运移地下水对气候变化的响应。在 Geohpysical Research Letters、Journal of Geophysical Research、Water Resources Research 等水文水资源领域权威期刊上发表 SCI 论文 20 余篇。长期担任水资源领域多个学术期刊的审稿人,包括 Water Resources Research、Earth and Planetary Science Letters、Geophysical Research Letters、Groundwater、Vadose Zone Journal 等。现任国际水资源领域重要期刊 Hydrogeology Journal 副主编。2014 年获得 AXA 研究基金博士后奖学金。



匡星星 KUANG Xingxing

Associate Professor. Ph.D., The University of Hong Kong. His research areas are saturated-unsaturated flow, subsurface air-water two-phase flow, solute transport in porous media, and response of ground-water to climate change. He has published more than 20 SCI journal papers including 3 in Water Resources Research. He serves as a reviewer for several journals, including Water Resources Research, Earth and Planetary Science Letters, Geophysical Research Letters, Groundwater, and Vadose Zone Journal. Currently, he is an Associate Editor of Hydrogeology Journal. In 2014, he was awarded the AXA Research Fund Post-Doctoral Fellowships.



史海匀 SHI Haiyun

副教授 清华大学博士、国家特聘青年专家。曾在香港大学从事博士后、高级研究助理工作,荣获 2014 年度香江学者奖。主要研究方向为数字流域、水信息学、气候变化、极端水文事件(洪水和干旱)、可持续发展等。主持或参与国家科技支撑计划、国家自然科学基金等重要科研项目 10 余项。以第一作者或通讯作者在水文水资源和环境领域知名国际期刊上发表学术论文 20 余篇,另有英文专著章节 3 部。长期受邀作为 Water Resources Research、Journal of Hydrology、Geophysical Research Letters 等 30 余种知名国际期刊的审稿人,曾作为两种国际期刊的客座编辑,并担任 AOGS (Asia Oceania Geosciences Society) 年会水文科学两个分会场的第一召集人。

Associate Professor. Ph.D., Tsinghua University. He worked previously as a Postdoctoral Fellow/Senior Research Assistant at The University of Hong Kong and won the Hong Kong Scholars Award in 2014. His research interests include digital watershed, hydro-informatics, climate change, hydrological extremes (floods and droughts), and sustainable development. Shi has been the PI/Co-PI of more than 10 research projects. He has published 3 book chapters and over 20 journal papers as the first author or corresponding author in the field of hydrology and water resources. He has been invited as the reviewer of over 30 international journals, including Water Resources Research, Journal of Hydrology, and Geophysical Research Letters, as well as served as the Guest Editor of two international journals. He has served as the main convener of two sessions of Hydrological Sciences in AOGS (Asia Oceania Geosciences Society) annual meeting.



曾振中 ZENG Zhenzhong

副教授 北京大学博士。曾任美国普林斯顿大学博士后研究员,获邀担任 IPCC 第六次评估报告的同行评审专家,同时担任 Nature Sustainability 等 24 种 SCI 学术期刊的同行评审员。研究领域包括生态水文、陆气相互作用、全球环境变化和地球系统模拟等,致力于了解地球系统的动力机制,实现人类社会的可持续发展。当前研究侧重于热带地区的农业扩张、环境影响及其解决方案。累计发表 SCI 论文 50 篇,其中第一或通讯作者论文 14 篇,发表于 Science、Nature Climate Change、Nature Geoscience 等期刊,被引用 2886 次。部分研究成果成为IPCC 报告的支撑材料,并多次被科技媒体报道。

Associate Professor. Ph.D., Peking University. Postdoctoral Research Associate at Princeton University. A peer reviewer of Nature Sustainability and other 24 SCI academic journals, as well as the IPCC sixth report invited peer review expert. His research interests include ecological hydrology, land-atmosphere interaction, global environmental change and earth system simulation, etc. He aims at understanding

the dynamic mechanism of the earth system to achieve a sustainable development of human society. His current research focuses on agricultural expansion, impacts and solutions in the tropical regions. He published a total of 50 SCI papers, among which 14 papers he is the first or the corresponding author, in journals such as Science, Nature Climate Change, Nature Geoscience, etc. The papers were cited 2886 times. Some of the research results have been used as supporting materials for the IPCC report and have been reported by the international scientific media many times.

副教授 美国布朗大学博士、国家特聘青年专家。先后在布朗大学工程学院 Robert Hurt 教授和加州大学伯克利分校 Baoxia Mi 教授课题组从事博士后研究工作。近年来在 Chemical Society Reviews、PNAS、ACS Nano、Advanced Materials、Nano Letters、Environmental Science and Technology、Nanoscale等杂志发表论文 20 余篇,总引用次数 1200 余次。并担Water Research、Environmental Science: Nano、Environmental Science and Technology等十余个杂志的独立审稿人。

Associate Professor. Ph.D., Brown University, USA. His research interests include environmental transformation and implications of nanomaterials, the applications of nanomaterials in the environmental fields, and membrane-based technologies for sustainable water supply. Dr. Wang has published 23 peer-reviewed papers on various journals, including Chemical Society Reviews, PNAS, ACS Nano, Advanced Materials, Nano Letters, Nanoscale, and Environmental Science and Technology. He serves as a reviewer for several journals, including Carbon, Water Research, Environmental Science: Nano, Journal of Hazardous Materials, and Environmental Science and Technology.



王钟颍 WANG Zhongying



唐圆圆 TANG Yuanyuan

助理教授 香港大学博士。研究方向:重金属迁移转化及稳定化、固废资源化、微塑料环境行为等。主持及主要参与科研课题 16 项,包括国家自然科学基金、科技部国家重点研发计划等,在Environ. Sci. Technol.、Water Res.、Waste Manage.等环境领域权威期刊发表论文 57 篇,参编论著 2 部。发起并组织"第一届粤港两地环境材料学术交流会",担任 Environ. Geochem. Hlth. 期刊客座编辑,应邀在国际知名学术会议上担任专家委员会成员、分会主席等,并作特邀专题报告。申请国家专利 14 项并有 2 项实现技术转让。担任 Environ. Sci. Technol. 等十几个权威期刊审稿人。美国化学学会(ACS)会员、国际废物工作组(IWWG)会员。获"深圳市海外高层次人才"、"世界土壤日青年学者论坛口头报告三等奖"、"香港工程师学会优秀论文奖"等。

Assistant Professor. Ph.D., The University of Hong Kong. Dr. Tang's research interests include the transformation and stabilization mechanisms of heavy metals, "waste-to-resource" options for solid wastes, and the environmental fate of microplastics. She has obtained funding for over 16 research projects, including NSFC, The National Key Research and Development Program of China, etc. Dr. Tang has published 57 SCI journal articles, including Environ. Sci. & Tech., Water Res., etc. She has published 2 book chapters, and also applied 14 patents. Dr. Tang organized "Guangdong-HK Environmental Materials Workshop in 2015", and has been invited as keynote speaker and session chair by several international conference committees. She also got numerous awards including "Overseas High-Caliber Personnel, Shenzhen" and "The HKIE Outstanding Paper Award for Young Engineers/Researchers".



冯炼 FENG Lian

助理教授 武汉大学博士、美国南佛罗里达大学博士后。主要从事水环境遥感的理论、方法及应用研究。曾获得中国环境科学协会"青年科学家奖"获得者(2019)、广东省"珠江青年"学者(2018)、湖北省优秀博士论文等荣誉。主持国家自然科学基金项目 3 项,作为核心人员参与国家自然科学基金重大项目、重点项目、中科先导专项等多个科研项目。总计发表 SCI 论文 60 余篇,其中一半以上刊登在遥感、环境、地学等领域的 TOP 期刊。Google Scholar 总引用次数1900余次,H-index为24,单篇最高被引>280次,SCI 总他引>800次。论文多次入选ESI高被引论文,顶级期刊封面论文等。研究成果被中央办公厅、生态环境部、中国资源卫星应用中心等国内相关部门成功应用,研究工作被中央电视台、美国航空航天管理局 NASA、国际海洋水色协调工作组(IOCCG)等关注报道。

Assistant Professor. Ph.D., Wuhan University. He was a postdoctoral researcher of the University of South Florida during 2015-2017. His research interests include remote sensing of inland and coastal water environments, and how these environments are influenced by climate variability and human activities. He is the recipient of the "Young Scientist Award" from the China Association for Environmental Sciences and the "Young Pearl River Scientist Award" from Guangdong Province. He also severed as consultant for the U.S. National Oceanic and Atmospheric Administration, and the Geospatial Analysis Center for America University-Sharjah. He has been the PI/Co-PI of >10 funded projects, and he has published 60 peer-reviewed papers, more than half of which were appeared in TOP journals, such as Remote Sensing of Environment, Journal of Geophysical Research, and Environmental Science & Technology. His publications have been cited more than 1900 times according to Google Scholar (H-index:24), with the highest one of >280 times (ESI indexed highly cited paper). His research has been highlighted by a number of domestic and international media and agencies, such as the CCTV, NASA, NOAA, IOCCG, etc.

助理教授 美国克莱姆森大学博士、多伦多大学环境核磁中心博士后。多年来从事环境地球化学方面研究,致力于开发并利用前沿的天然有机质与污染物分析方法,关注于全球变化与人为干扰对土壤与水体环境质量的影响机理。曾参与美国、加拿大、中国等国家级研究项目十余项,在全球变暖影响下的北极暖化、森林火灾频发、海平面上升等研究领域取得了系列成果。在Nature Communications、Environmental Science & Technology、Water Research、New Phytologist等环境生态类 SCI 期刊上发表论文 36 篇。担任 Journal of Environmental Quality 副编辑、Chinese Chemical Letters 青年编委、美国自然科学基金评审人和 20 多个国际期刊审稿人。



王俊坚 WANG Junjian

Assistant Professor. Ph.D., Clemson University. Prior to his current appointment, he was a postdoc at the Environmental NMR Centre at the University of Toronto. His research focuses on soil and water quality in response to global environmental change. He is dedicated to develop and apply the cutting-edge and molecular-level analyses of natural organic matter and pollutants to study the critical impacts of global

change and anthropogenic disturbance on water and soil quality. He has actively participated in research projects funded by national agencies of United States, Canada, and China. He published 36 papers on top-tier SCI journals including Nature Communications, New Phytologist, Environmental Science & Technology, and Water Research, as well as 1 ACS book chapter. He is serving as an associate editor of Journal of Environmental Quality and on the editorial board of the Chinese Chemical Letters, and he has also served as a panelist for NSF proposals and as journal reviewer for more than 20 SCI journals.



夏雨 XIA Yu

助理教授 香港大学博士。研究方向集中于利用新一代测序技术与生物信息学大数据分析相结合的手段研究环境微生物群落组成和协同作用关系对生物处理技术运行效率、致病菌的环境分布以及抗生素抗性基因在环境中的迁移转化,环境物质循环的驱动机理和生态效应的影响。已在The ISME Journal, Environmental Microbiology, Biotechnology for Biofuels, Environmental Science & Technology 等重要期刊发表 SCI 论文 20 余篇。曾任美国微生物协会香港地区青年大使以及香港大学研究生协会常务秘书长。

Assistant Professor. Ph.D., University of Hong Kong. Her research focuses on utilizing new generation sequencing technology coupled with advanced bioinformatic big data mining to investigate the community structure and functionality of various microbiomes. The research areas she is currently working on mainly include: biological waste water/waste sludge treatment; environmental dissemination

of antibiotic resistance genes (ARGs), and the microbial effect in nature material cycles. Dr. XIA has published more than 20 high quality research papers in prestigious scientific journals in environmental microbiology and ecology fields like The ISME Journal, Environmental Microbiology, Biotechnology for Biofuels, Environmental Science & Technology, etc. Additionally, she has served as the Young Ambassador of Hong Kong region for American Society for Microbiology (ASM), and the General Secretary for the Postgraduate Student Association of the University of Hong Kong.



陈洪 CHEN Hong

助理教授 瑞典斯德哥尔摩大学博士。近年来在 Nature Materials、Science Advances、PNAS、Nature Communications、Matter、Journal of American Chemical Society、Angewandte Chemie International Edition、Advanced Materials等杂志发表论文 70 余篇,谷歌学术总引用次数 2500 余次,H-index 28。主持广东省杰出青年基金、国家自然科学基金面上项目、深圳市海外高层次引进人才项目、瑞典瓦伦堡基金会 Maxlab IV 同步辐射专项博士后基金等。并担任 Advanced Materials、Angewandte Chemie International Edition 等二十余个杂志的独立审稿人和 Chinese Chemical Letters 杂志第三届青年编委和环境化学方向论文预审专家。

Assistant Professor. Ph.D., Stockholm University. He finished his postdoctoral training at KTH-Royal Institute of Technology, Stanford Synchrotron Radiation Light source at Stanford University, and University of California Berkeley. He has co-authored >70 peer reviewed papers on prestigious journals

including Nature Materials, Science Advances, PNAS, Nature Communications, Matter, Journal of American Chemical Society, Angewandte Chemie International Edition, Advanced Materials, etc. These publications received more than 2500 citations and an H-index of 28 according to Google Scholar. He was the receipt of the Distinguish Young Scholar of Guangdong Province and the Knut and Alice Wallenberg postdoctoral scholarship. He serves on the junior editorial committee for Chinese Chemical Letters (2019-2022).

助理教授 哈佛大学博士及博士后、哈佛-史密松天体物理中心研究学者。其研究方向为大气化学,研究兴趣包括痕量气体遥感、数据同化、空气质量、大气-地面-海洋交互作用。共发表论文 20 余篇,谷歌学术引用 1000 余次,H-index 15。曾获奖励包括 NASA 及美国内政部 William T. Pecora 团队奖、NASA 团队成就奖、哈佛大学杰出教学认证等。

Assistant Professor. Ph.D. and Postdoc, Harvard University. Lei worked as a Research Scholar at Harvard-Smithsonian Center for Astrophysics before joining SUSTech. His research area is atmospheric chemistry. His research interests include remote sensing of trace gases, data assimilation, air quality, and atmosphere-land-ocean interactions. Lei has published more than 20 journal papers, with the total citation of > 1000 and the h-index of 15. Lei was awarded William T. Pecora Team Award (NASA and DOI), NASA Group Achievement Award, and Harvard University Certificate of Distinction in Teaching.



朱雷 ZHU Lei



叶斌 YE Bin

访问助理教授 哈尔滨工业大学博士、清华大学和美国劳伦斯伯克利国家实验室博士后。主要从事环境管理和能源经济等方面的研究工作,擅长将环境科学与经济管理科学方法相结合,研究全球区域和城市尺度的气候、能源和经济发展问题。主持国家自然科学基金、中国博士后基金国际交流和面上项目、广东省自然科学基金以及深圳市多项竞争性科研项目。目前已经发表各类学术论文 60 余篇,其中 40 余篇被 SCI 或 SSCI 检索,24 篇为第一或者通讯作者。以第一作者或通讯作者身份在能源与环境领域顶级期刊 Renewable and Sustainable Energy Review 发表论文 2 篇,在 Applied Energy 发表论文 3 篇; 2 篇论文入选 ESI 高被引论文。2018 年 5 月开始担任JCR 1 区期刊 Environmental Geochemistry and Health 客座主编。

Visiting Assistant Professor. Ph.D., Harbin Institute of Technology. Prior to his current appointment, he was a postdoctoral fellow in Tsinghua university and Lawrence-Berkeley National Laboratory. His research interests include environmental management and energy economics, with emphasis on integrating environmental science with economics methods into climate, energy, and economic development related issues at global, regional, and city-dimensions. He has presided over the National Natural Science Foundation of China, China Postdoctoral Foundation on International Exchange and Regular Project, Guangdong Natural Science Foundation and a number of competitive research projects in Shenzhen. He has published more than 60 academic papers, among which more than 40 papers are indexed by SCI/SSCI journals (24 papers are first/corresponding author SSCI/SCI). As the first or corresponding author, he published 2 papers in Renewable and Sustainable Energy Review and 3 papers in Applied Energy, and he has 2 ESI highly cited papers. He also served as a guest editor for Environmental Geochemistry and Health since May 2018.

教学系列Teaching Faculty



史江红 SHI Jianghong

教学教授 东京农工大学博士。从事雌激素、POPs 物质、塑化剂等内分泌干扰物、解热镇痛药等物质的痕量分析技术、环境浓度分布特征、迁移转化过程、生物降解过程、环境负荷估算、生态风险评估、控制技术研究。先后主持水专项子课题、国家自然科学基金等科研项目 20 余项。在环境领域主流期刊 Water Research, Environmental Pollution, Chemosphere 等发表杂志论文 47 篇,获得中国和日本国家发明专利授权 12 项。

Teaching Professor. Ph.D., Tokyo University of Agriculture and Technology. Dr. Shi's research has been focused on Endocrine Disrupting Chemicals inclusive of estrogens, POPs, and plasticizers, and included consecutive study on their trace analysis technology, concentration distribution in environmental matrix, migration and transformation processes, biological degradation, environmental load evaluation, ecological risk assessment, and control technology.

高级讲师 滑铁卢大学博士,城市规划和环境设计方向,美国规划师协会成员。有丰富的城市规划项目经验和教学经验,曾任职于加拿大卡市规划部,曾任教于北京大学工学院。

Senior Lecture. Ph.D., University of Waterloo. Member of APA. She has rich experience in both project implementing and teaching in urban planning and environmental design areas as she worked for the City Calgary, Canada and taught at the Peking University, China.



王扬 WANG Yang



南方科技大学校园内的现场实验 Field experiments on the campus of Southern University of Science and Technology

研究系列 Research Faculty



易树平 YI Shuping

研究副教授 西班牙 Universidad de A Coruna 博士,深圳市土壤及地下水污染防治重点实验室常务副主任。主要从事放射性废物的安全处置、核素迁移机理及模拟、水土污染调查及修复、地下水循环及环境影响评价领域的研究。

Research Associate Professor. Ph.D., Universidad de A Coruna, Spain. Dr. Yi serves as the executive deputy director of Shenzhen Key Laboratory of Soil and Groundwater Pollution Control, his research interests include the safe disposal of radiative wastes, radionuclides transport mechanisms and modelling, investigation and remediation for groundwater and soil contamination, groundwater resources, the impact assessment of groundwater environment.



梁修雨 LIANG Xiuyu

研究副教授 南京大学博士。主要从事地下水资源与环境方向的研究工作,具体包括流域尺度浅层地下水流及溶质的时间尺度性、饱和 - 非饱和水流耦合模拟、以及地表 - 地下水交互作用。

Research Associate Professor. Ph.D., Nanjing University. His research interests include the temporal scaling of subsurface flow and solute transport in watersheds, the coupling unsaturated-saturated flow, the interaction between the surface-groundwater flow, and the residence time distribution of groundwater flow.



郭伟 GUO Wei

研究副教授 北京师范大学博士。主要从事流域水环境中持久性有机污染物和重金属污染物迁移转化行为、有毒污染物生物炭调控技术、及基于 DGT 技术和荧光素酶表达基因技术 (CALUX) 的内分泌干扰物激素效应筛选方法研究。

Research Associate Professor. Ph.D., Beijing Normal University. His research is mainly focused on the migration and transformation behavior of persistent organic pollutants and heavy metal pollutants in the water environment, the biochar control technology for toxic pollutants, and the screening method of endocrine disruptor hormone effect based on DGT technology and luciferase expression gene technology (CALUX).



田展 TIAN Zhan

研究副教授 中科院地理科学与资源研究所理学博士。主要从事气候变化对中国农业生态系统和城市洪涝影响、适应和决策研究。

Research Associate Professor. Ph.D., The Institute of Geographical Sciences and Natural Resources, Chinese Academy of Sciences. His current research interests focus on assessing the adaptation and mitigation measure and techniques of climate change on China's agriculture ecosystem and city flooding.



宋兰 SONG Lan

研究副教授 荷兰莱顿大学博士(玛丽居里学者),曾任爱思唯尔荷兰总部出版人,全权负责环境科学与工程方向十多个 JCR 1 区 SCI 期刊。主要从事生态文明和城市可持续发展、新型污染物的环境风险评估和管理等方面的研究。

Research Associate Professor. Ph.D., Leiden University. She was Publisher at the Elsevier headquarters in the Netherlands and managed more than ten SCI journals in environmental science and technology. Her research interests focus on ecological civilization and sustainable urban development, environmental risk assessment and management of emerging pollutants.



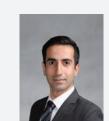
李炜怡 LI Weiyi



姜继平 JIANG Jiping



廖鹏 LIAO Peng



Masoud Irannezhad

研究助理教授 华中科技大学博士、北京大学博士后。主要研究方向包括地表水 - 地下水耦合模拟、三维水动力数值计算、流域水资源综合管理、GIS/RS 与水环境科学的交叉应用等。

Research Assistant Professor. Ph.D., Huazhong University of Science and Technology. He worked as a postdoctoral research fellow in the Institute of Water Sciences at Peking University. His research interests include surface water-groundwater modeling, numerical simulation of hydrodynamics and water quality, environmental information science and scientific visualization, and GIS/RS applications in hydrology and water resources.

研究助理教授 美国辛辛那提大学博士,曾在新加坡南洋理工大学南洋水处理研究所(NEWRI)的新加坡膜技术中心(SMTC)工作。主要研究方向为膜分离技术,并在研发以膜分离技术为基础的高效水处理技术方向积累了丰富的经验。

Research Assistant Professor. Ph.D., University of Cincinnati. He worked as a research fellow at the Singapore Membrane Technology Centre, Nanyang Technological University, Singapore. His research focuses on membrane process simulation and optimization, membrane module/spacer design, novel membrane fabrication.

研究助理教授 哈尔滨工业大学博士、新南威尔士大学公派联合培养。研究领域包括科学与工程两个路径:面向城市水环境监管的水信息学,包括先进模型、算法、监测、软硬件开发与系统集成;水环境非线性系统分析与数据密集型知识发现。

Research Assistant Professor. Ph.D., Harbin Institute of Technology. He studied overseas at University of New South Wales, Australia. His research interests include nonlinear system analysis on water environment and data centric knowledge innovation, hydro-informatics for urban water environmental management with advanced environmental models algorithms, software and hardware development, and DSS integration.

研究助理教授 中国地质大学(武汉)博士/圣路易斯华盛顿大学联合培养。主要研究方向为环境胶体地球化学、污染水体和场地的电化学修复技术和原理。

Research Assistant Professor. Ph.D., China University of Geosciences (Wuhan), and postdoctoral researcher at Southern University of Science and Technology. Dr. Peng's research focuses on redox reactions that affect the fate and transport of colloids and associated contaminants and constituents in natural and engineered aquatic systems. He is particularly interested in reactions occurring at anoxic-oxic interfaces.

研究助理教授 芬兰奥卢大学博士。主要研究方向包括大气 - 气候 - 水资源的相互作用、寒区气候水文学、极端水文事件、水资源短缺及其环境影响等。

Research Assistant Professor. Ph.D., University of Oulu, Finland. His research interests include atmosphere-climate-water resources interactions, cold climate hydrology, hydroclimatic extreme events, as well as water resources scarcity and its environmental impacts.

>>> 研究系列 Research Faculty



WANG Xuejing

研究助理教授 中国地质大学(北京)博士、南方科大学校长卓越博士后。研究领域包括海岸 带地下水环境、海底地下水排泄等。

Research Assistant Professor. Ph.D., China University of Geosciences (Beijing). He was a postdoctoral researcher of SUSTech during the period 2016-2018, and received the SUSTech Presidential Postdoctoral Fellowship in 2016. His major research interests include submarine groundwater discharge (SGD) and the environment of coastal groundwater flow and the associated chemical transport.



裘文慧 QIU Wenhui

研究助理教授 上海大学博士。博士期间获得国家留学基金委支持,在加州大学洛杉矶分校的 David Geffen 医学院进行博士联合培养。主要从事环境雌激素、抗抑郁药在水体中的分布水平 及其对鱼类免疫毒性的研究、抗生素的生态风险评价及其水生毒理学。

Research Assistant Professor. Ph.D., Shanghai University. She studied at the University of California, Los Angeles (UCLA) during 2014 to 2015. Her research focuses on toxicity of environmental disrupting chemicals and antidepressants in fish.



HAN Feng

研究助理教授 北京大学博士。主要从事对流域尺度下生态过程、水文过程和水质过程的数值 模拟,包括开发新的模型或模块、发展高效的数据融合方法(贝叶斯分析、数据同化、优化算法 等)和对国内外典型流域的应用研究(黑河流域、深河流域、Newport Bay流域等)。

Research Assistant Professor. Ph.D., Peking University. His research mainly focuses on the numerical simulations of ecological, hydrological and water quality processes at the watershed-scale, including developing new watershed models or modules, designing new model-data fusion methods (such as Bayesian analysis, data assimilation, and optimization algorithms) and applications in domestic and foreign basins (such as the Heihe river basin, Luan river basin, and Newport Bay watershed).



WANG Feng

研究助理教授 日本京都大学博士。主要从事固体废弃物处理处置与资源化方向的研究工作, 具体包括焚烧飞灰的稳定化处理与资源化、生物质废物清洁能源化技术、高浓度有机废水厌氧 消化技术。

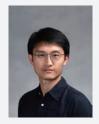
Research Assistant Professor. Ph.D., Kyoto University. His research interests include the stabilization and utilization of municipal solid incineration fly ash, technology of conversion of biomass waste to energy, anaerobic digestion of organic waste water.



YAN Feng

研究助理教授 清华大学博士。研究方向为固体废物资源化及 CO2 捕集利用,具体包括工业固 体废物高值资源化技术、生物质废物能源化利用技术、以及 CO2 捕集和利用技术研究。

Research Assistant Professor. Ph.D., Tsinghua University. He focuses on the the high-value utilization of solid-waste and the CO2 capture & utilization, including recycling and reuse of industrial solid waste, Biomass waste to energy, and CO2 capture & utilization technologies.



修复中的作用和意义。

陈勋文 CHEN Xunwen

Research Assistant Professor. Ph.D., Hong Kong University of Science and Technology. His research

研究助理教授 香港科技大学博士。研究兴趣为植物 - 微生物互作的营养及生理在土壤和生态

interests are in plant-microbe interactions, which have profound influences on plant nutrition and physiology and are key to soil remediation and ecological restoration.



毕兆顺 BI Zhaoshun

研究助理教授 英国利物浦大学博士。主要研究兴趣包括新型高灵敏电化学传感器的研发、海 洋环境中重金属的形态分析研究、重金属的地球化学循环及生物可利用性研究。

Research Assistant Professor. Ph.D., University of Liverpool, UK. He focuses on electrochemical sensor development and application in heavy metals analysis in the environment. His main interests include the development of innovative electrochemical sensor of high sensitivity, metal speciation analysis in the marine environment, and metals biogeochemistry cycling and bioavailability towards to its speciation.



原晓非 YUAN Xiaofei

研究助理教授 日本东京大学博士。主要从事交叉学科技术在环境领域的研发与应用,具体包 括基于微流控芯片的单细胞分析以及芯片的设计与制备、基于微流控芯片和纳米材料的生物传 感器的研发、环境水体中新型污染物和致病菌的检测等。

Research Assistant Professor. Ph.D., University of Tokyo. Her scientific interests are research and applications of interdisciplinary techniques in environmental area, which include single-cell analysis based on microfluidics, development of biosensors based on microfluidics and/or functional microparticles, and detection of aquatic environmental contaminants and microbe.



研究助理教授 美国西弗吉尼亚大学博士。研究领域包括微生物示踪技术的研发与应用、对虾 DNA 疫苗研发、环境微生物以及宏基因组学等等。

Research Assistant Professor. Ph.D., West Virginia University. His main research includes developing and applying microbial source tracking markers targeting human and animal fecal pollutions, developing DNA vaccine for shrimp aqua-culturing, environmental microbiology and metagenomics etc.



研究助理教授 新西兰梅西大学博士,毕业后曾在澳大利亚昆士兰大学和迪肯大学担任博士后 以及副研究员。研究兴趣包括动物生态学、保护生物学、湿地生态学以及环境管理。

Research Assistant Professor. Ph.D., Massey University in New Zealand. He worked as a postdoctoral research fellow at the University of Queensland and an associate research fellow at the Deakin University prior taking up his current position. He is an applied ecologist with expertise in animal ecology, conservation biology, wetland ecology, and environmental management.





孟凡玲 MENG Fanling

研究助理教授 美国达特茅斯学院博士。博士和博士后期间主要从事高熵合金的设计、微观结构的表征以及力学性能的测试,课题涉及大量的原位透射电镜的表征工作。入职南方科技大学之后,主要从事危险固废中重金属的稳定化处置及稳定化机理的研究。

Research Assistant Professor. Ph.D., Dartmouth College. Previously, she interpreted the deformation mechanisms and size-effect in materials through in-situ mechanical tests in electron microscope. Her current research is mainly focused on heavy metal stabilization in solid waste through thermal methods and the mechanisms of immobilization through state-of-the-art techniques.



龙鑫 LONG Xin

研究助理教授 中国科学院大学博士。主要从事人为活动对空气质量的影响、地表生态系统 -大气化学相互作用、臭氧 - 植被相互影响等方面的研究。

Research Assistant Professor. Ph.D., University of Chinese Academy of Sciences. He is interested in numerical simulation in land use/change & atmospheric chemistry coupling, ozone & vegetation coupling, and the effects of anthropogenic activities on haze pollution.



齐伟 QI Wei

研究助理教授 大连理工大学与英国埃克塞特大学联合培养博士。主要从事不同尺度极端水文事件变化、影响与适应研究,应用数学概率统计理论及具有物理机制的陆面生态水文过程模型,结合实测、模拟和遥感大数据研究分析极端水文事件风险的变化机理及其与社会系统的关系。

Research Assistant Professor. Ph.D., Dalian University of Technology and University of Exeter. Dr. Qi's research focuses on global and regional extreme hydro-climatic events, their socioeconomic impacts and human adaptation, based on novel mathematical approaches, physically-based global biosphere land surface hydrological models, remote sensing, reanalysis and modelled datasets.



索红日 SUO Hongri

研究助理教授 吉林大学博士。毕业后在英国牛津大学化学学院从事博士后研究工作,目前的研究方向为环境功能型材料的设计与合成,例如水污染控制与修复的材料研究。

Research Assistant Professor. Ph.D., JiLin University. She worked as a Postdoctoral Research Associate at the Chemistry department in University of Oxford. Her current research areas focus on the design and synthesis of environmental functional materials, including catalysis material for waste water / waste sludge treatment and organic pollution degradation.



郭芷琳 GUO Zhilin

研究助理教授 美国亚利桑那大学博士。与中国水利水电科学院、国家气候中心合作开发模型,用于模拟华北平原、加州中央谷底平原的水盐平衡和盐碱化的过程以及气候变化对地下水水质水量的影响。

Research Assistant Professor. Ph.D., University of Arizona. She studies the factors causing non-Fickian transport behaviors and develops methods to simulate these behaviors. She is also interested in impacts of climate change on regional scale groundwater quantity and quality.





人才培养的目标

Educational goal

培养具有创新思维、国际化视野和多学科交叉背景的环境研究与管理人才

To cultivate environmental research and management talents with innovative spirit, global vision, and multidisciplinary academic training.

本科教学

Undergraduate Programs

学院目前拥有教育部正式批准的两个本科专业: "环境科学与工程专业"和"水文与水资源工程专业",其中环境科学与工程本科专业为广东省优势重点学科。本科专业教育注重坚实的专业知识基础,同时强调工程科学的创新。两个本科专业的教育各具特色: 环境科学与工程专业突出资源-环境-社会经济的系统耦合,并关注新兴环保产业、环保产品和环保服务; 水文与水资源专业教育强调地表水资源与地下水资源的一体化研究与管理,致力于介绍从分子到全球尺度的水科学。截止 2019 年 6 月,学院已有两届本科毕业生近 90人;现有在读生本科生 100 余人。

The School currently has two undergraduate majors approved by the Ministry of Education: the Environmental Science and Engineering Major, which is an Advanced Key Discipline in Guangdong Province, and the Hydrology and Water Resources Engineering Major. Undergraduate education focuses on laying a solid foundation of professional knowledge while emphasizing innovation in engineering science. Both undergraduate majors have their specialties: the Environmental Science and Engineering Major specializes in resource-environment-socioeconomic system coupling and targets emerging environmental industries, environmental products and environmental services. The Hydrology and Water Resources Major emphasizes integrated research and management of surface water and groundwater resources and encompasses the sciences of water from molecular to global scale. The School has graduated 90 students from the Classes of 2014 and 2015; the current undergraduate body includes more than 100 students.





- 侧重工程科学的创新 Emphasizes innovation in engineering science
- 突出资源-环境-社会经济的系统耦合的创新 Highlights coupling between resources, environment, and the socioeconomic system
- 关注新型环保产业,环保产品和环保服务
 Targets emerging environmental industries, environmental protection products and services
- 从分子到全球尺度的水科学 Water science from molecular to global scale
- 强调水资源的保护与合理利用,而非水利工程开发 Emphasizes the protection and smart utilization of water resource, instead of hydraulic engineering
- 强调地表水资源与地下水资源的一体化研究与管理 Emphasizes the integrated research and management of surface water and groundwater resources

实践实习活动

Practicum Experiences

环境学院强调学生创新能力的培养。通过组织包括暑期实习、国际夏令营等形式多样、内容丰富的实践实习活动,使环境科学与工程以及水文与水资源工程两个专业的学生都能深入环保企业和野外现场,了解如何将理论知识应用到实际问题中。

Our School emphasizes the cultivation of strong innovation capability in our students. A key effort is to organize rich practicum experiences for them. Students majoring in either the Environmental Science and Engineering or the Hydrology and Water Resources Engineering have opportunities to attend various summer camps to obtain first-hand experiences at environmental firms or field research sites.



本科生在广州参加暑期认识实习

 ${\bf Undergraduates\,in\,Guangzhou\,for\,the\,Summer\,Practicum\,in\,Environmental\,Engineering}$







本科生在深圳参观污水处理厂 Undergraduates visiting the Shenzhen Wastewater Treatment Plant



本科生在美国参加暑期实践活动 Undergraduates participating in the summer practicum in the U.S.



本科生在雅鲁藏布江采样 Undergraduates collecting samples in the Yarlung Tsangpo River

研究生教学

Graduate Programs

2018年5月,南方科技大学正式成为博士学位授予单位和硕士学位授予单位,并从2019年开始独立招收博士研究生和硕士研究生(学硕、专硕)。环境学院依托力学(学硕/博士)、物理学(学硕/博士)、生物学(学硕/博士)、化学(学硕)、材料与化工(专硕)等五个学科进行招生。同时,南科大继续与香港大学、香港科技大学、新加坡国立大学、澳大利亚昆士兰大学、丹麦哥本哈根大学等多所境外知名高校进行博士生联合培养,学生可获合作院校的学位。学院自2016年起招收联合培养研究生,截止目前已招收研究生182名,共有两届毕业生20人。截止2019年6月,学生共发表各类论文35篇(其中SCI论文29篇)、申请专利14项。前两届毕业生升学就业率100%,除部分继续攻读博士学位外,其余大多数就业于广东省建筑设计研究院、深圳水务规划设计院有限公司、中国上海建筑设计研究院有限公司等单位。

Southern University of Science and Technology has been officially authorized to grant doctoral and master degrees since 2018. The University has started to independently enroll doctoral students and master students since 2019. The School of Environment currently enrolls graduate students in five disciplines: Mechanics, Physics, Biology, Chemistry, as well as Material Science and Chemical Engineering. In addition, SUSTech continues to develop joint postgraduate programs with prestigious universities overseas. These include the University of Hong Kong, Hong Kong University of Science and Technology, National University of Singapore, University of Queensland, University of Copenhagen, and many others. Students will receive their graduate degrees from our partner institutions. Since 2016, the School has enrolled 182 graduate students; 20 graduate students have now obtained their degrees. As of June 2019, our graduate students have published 35 papers (including 29 SCI papers) and have filed for 14 patent applications. The employment rate of our graduate students over the past two years is 100%.

研究生实践及活动

Graduate Activities



博士生华珊珊获CSES年会优秀论文一等奖 PhD student Hua Shanshan won the first prize of CSES annual conference excellent paper



研究生课程实践



博士生王艺赴牛津大学交流学习 PhD student Wang Yi in Oxford University



研究生参加学校文艺演出 Graduate students participate in art performances



学院重点关注的研究领域包括:水文学与水资源、环境生物地球化学、水污染与水处理、土壤与地下水修复、固体废物处 理与利用、大气化学、大气污染控制、生态系统评估、环境遥感以及全球环境变化等。我们欢迎这些领域的海内外优秀研 究人才加入,共创一个世界级多学科交叉创新的环境研究平台,为解决中国和全球的环境问题做出贡献。

The School's major research directions include hydrology and water resources, environmental biogeochemistry, water pollution and treatment, soil and groundwater remediation, solid waste disposal and utilization, atmospheric chemistry and pollution control, ecological system assessment, environmental remote sensing, and global environmental change. We welcome talented researchers in these fields from all over the world to join us, with the goal of building a world-class multi-disciplinary environmental research center that will lead the solution of environmental problems in China and in the World.

科研平台

Research Platforms

本重点实验室是环境学院近期获批建设的国家环保实验平台,也是南科大第一个部级重点实验室。重点实验室面向我国 环境保护的重大科技需求,充分发挥依托单位的地域和人才优势,在基础理论、应用技术与管理政策等层面,开展以流域 地表水-地下水污染综合治理为核心理念的前沿及应用性研究工作,为我国流域水环境保护和水污染防治提供有力的科 技支撑和创新人才培养基地。

This is the first ministry-level Key Laboratory at SUSTech, which serves as a national research platform for integrated surface water-groundwater pollution control. The Key Laboratory aims to address the major needs in environmental protection in China, draws from the talents in the School of Environment, and conducts cutting-edge research in the comprehensive control of surface water and groundwater pollution.







三重四极杆液相色谱-质谱联用仪



同位素比质谱仪





三重四极杆气相色谱-质谱联用仪



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电感耦合等离子体质谱色谱联用仪

东省土壤与地下水污染防控及修复重点实验室和工程技术研究中心

此实验室及工程技术研究中心依托"深圳市土壤与地下水污染防治重点实验室"和"深圳市城市固体废物资源化技术与管 理重点实验室",以保障和改善土壤与地下水环境为目标,开展土壤与地下水污染防控与修复的前瞻性、战略性基础理论 和应用技术研究。

As one of the first two province-level key laboratories at SUSTech, this research center provides an interdisciplinary and platform for the first two province-level key laboratories at SUSTech, this research center provides an interdisciplinary and platform for the first two province-level key laboratories at SUSTech, this research center provides an interdisciplinary and platform for the first two province-level key laboratories at SUSTech, this research center provides an interdisciplinary and platform for the first two province-level key laboratories at SUSTech, this research center provides an interdisciplinary and platform for the first two province-level key laboratories at SUSTech, this research center provides an interdisciplinary and platform for the first two province-level key laboratories at SUSTech, this research center provides at SUSTECH, thboth fundamental and applied research in soil and groundwater contamination and remediation, with emphasis on technological development and talent cultivation to meet the urgent needs in Guangdong and Southern China.

深圳市重点实验室和工程中心 Key Laboratories and Engineering Centers supported by the Shenzhen Municipal Government

这些实验室是由深圳市政府资助的与深圳市环保需求密切相关的优先研究机构,包括:深圳市土壤与地下水污染防治重 点实验室,深圳市城市固体废弃物资源化技术与管理重点实验室,深圳市环境物联网技术与应用工程中心。

These Key Laboratories and Engineering Centers are funded by the Shenzhen Municipal Government to conduct research and develop novel engineering solutions in strategic areas to address the local needs of environmental protection. Currently, the School has three such laboratories and engineering centers in soil and groundwater, solid waste management, and environmental internet

南科大环境科学与技术研究中心

STech Center for Environmental Science and Technology Research (CESTER)

该中心是集教学、科研、服务等功能于一体的国际一流公共教学和技术研发平台。中心配置价值近亿元的实验仪器和设 备。中心由四个实验室构成:环境色质谱和成像实验室、多尺度流动和溶质运移实验室、环境分子生物和微生物实验室、 多尺度生态环境观测实验室。

The CESTER is a premier platform for education, research, and technological development in environmental science and engineering. The Center is equipped with instruments worth approximately 100 million RMB. The Center consists of four laboratories: the Environmental GC-MS and Imaging Laboratory, the Multi-scale Flow and Solute Transport Laboratory, the Environmental Molecular Biology and Microbiology Laboratory, and the Multi-scale Ecological-Environmental Observation Laboratory.



特色研究方向

Featured Research Clusters

01 / 水安全与全球变化 Water Security and Global Change

该方向的目标是为中国和世界其他地区提供水与环境问题的科学认识和解决方案,提高人类以及生态系统的水与环境安全。结合数学模型、遥感、野外观察和原位试验、室内分析和机理实验等多种方法,研究全球、区域、国家、流域、城市等不同尺度的全球变化和水安全问题,科学评价全球变化的演变规律和驱动机理,阐明自然一经济复合系统下水资源时空分布格局和演变规律,揭示强人类活动下水与社会经济相互作用关系,为应对气候变化和保障水安全提供理论方法关键技术和政策建议。

This research cluster aims to provide scientific insights and solutions to water and environmental problems for the Planet with a focus on China in order to improve water and environmental security of both human and the ecosystems. We investigate global change and water security issues on different spatial scales from global, regional, national to river basin and municipal by integrating mathematical models, remote sensing, field measurement and monitoring, and experiments. This team reveal the spatial pattern and historical evolution of water resources in coupled human-natural systems and demonstrate water-society relations in the context of intensification of human activities. We will provide theoretical methods, key techniques and policy recommendations to combat climate change and guarantee water security in a changing environment.

02 / 环境污染与健康风险 Environmental Pollution and Health Risk

探索环境污染形成和演变的新机理、健康风险新认知、及污染管控措施;识别城环境污染与健康风险镇化过程中,环境污染及生活方式变化共同作用下现代疾病风险及寻找有效预防干预措施。目前研究重点为再生水利用健康风险管控,研究本科生肥胖症风险,为SUSTech GEM (Gene-Environment-Microbiome) Initiative 基因-环境-微生物群落研究计划做前期准备工作,研发环境传感器应用于现场水砷分析。

This research cluster aims to illuminate the sources and biogeochemical transformation of contaminants in the environment; develop effective pollution prevention and control technologies for the protection of ecosystem and human health; investigate the reduction of environmental and life style risks associated with rising non-communicable disease burdens brought by rapid urbanization.

03 / 绿色智慧城市 Green Intelligent City

该研究方向致力于:城市环境监测网络的优化设计,基于大数据分析的城市环境、能源、水资源模拟与预测,以及基于云计算和物联网的城市环境、能源、水资源优化管理和智能调控。

This research cluster aims to develop optimized urban environmental monitoring networks; to conduct simulation and prediction of the urban environment, energy and water resources based on big data analysis; to innovate in management optimization and intelligent control of the urban environment, energy and water resources based on Cloud Computing and Internet of Things.

04 / 河流关键带科学 Riverine Hyporheic Zone Science

河流关键带是流域系统物质通量变化的关键地带。河流关键带科学研究河流关键带中物质组分通量的分布特征,控制物质组分通量的水文生物地球化学动力学过程,以及物质通量对碳氮和营养元素的循环和污染物迁移转化的影响。为建立流域系统的物质迁移转化理论和保护流域环境提供科学依据和基础数据。

Riverine hyporheic zones are regions where material flux varies significantly in a river system. The science of riverine hyporheic zone investigates the distribution of material flux, fundamental hydro-biogeochemical processes that control the flux, and the influence of the flux on carbon, nitrogen, and nutrient cycling, as well as contaminant reactive transport in river systems. It will provide fundamental knowledge and data for establishing material transport theory in river systems, and for protecting and managing watershed ecosystems.

科研成果

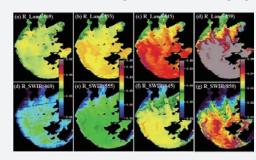
Scientific Research

学院 2015 年成立以来共发表 SCI 文章 600 余篇,包括大量发表在 Science、Nature 及其子刊、PNAS 等期刊的高水平论文。学院共申请及获取授权专利 60 余项。承担包括国家自然科学基金、国家重点研发计划、国家科技支撑计划在内的各类科研项目 200 余项,获批经费总额超过 3 亿元。

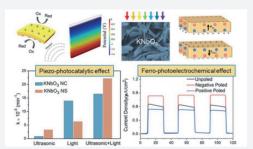
Since 2015, the School has published over 600 SCI papers, including papers published in Science, Nature and its affiliated journals, and PNAS. More than 10 software copyrights were obtained, and more than 60 patents were authorized. The School has been awarded more than 200 research projects, including major projects funded by the NSFC, the 973 program, the 863 program, and other national, provincial, and municipal funding agencies. The total granted funding since 2015 has exceeded 300 million RMB.



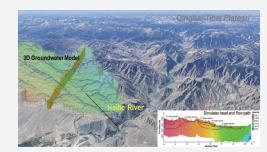
2019年11月发表于Nature Climate Change,曾振中 Published in Nature Climate Change in November 2019, Zhenzhong Zeng



2018年5月发表于Water Resources Research(封面文章), 冯炼 Published in Water Resources Research (cover paper) in May 2018, Lian Feng



2019年10月发表于Nano Energy, 张作泰 Published in Nano Energy in October 2019, Zuotai Zhang



2017年8月发表于Geophysical Research Letters,郑春苗 Published in Geophysical Research Letters in August 2017, Chunmiao Zheng

南山环境讲场

Nanshan Distinguished Lecture Series on the Environment

学院定期举办高水平杰出系列讲座"南山环境讲坛",邀请海内外知名学者进行学术讲座。自启动以来,已邀请海内外相关领域的知名学者进行学术讲座百余次。讲座嘉宾包括中国工程院院士王浩,中国科学院院士陶澍、傅伯杰、汪集旸、陈德亮,美国工程院院士 Christine Shoemaker、David Maidment、Michael Hoffmann、Bridget Scanlon,英国皇家工程院院士 David Lerner,加拿大科学院院士 Jeffery McDonnell 等。

The School organizes the Nanshan Distinguished Lecture Series on the Environment, which brings in renowned international and Chinese scholars to give lectures on cutting-edge research. To date, the lecture series has featured over 100 presentations by many well-known scholars, including Professor Hao Wang (Academician of the Chinese Academy of Engineering), Professors Shu Tao, Bojie Fu, Jiyang Wang, and Deliang Chen (Academicians of the Chinese Academy of Sciences), Professors Christine Shoemaker, David Maidment, Michael Hoffmann, and Bridget Scanlon (Members of the National Academy of Engineering, US), Professor David Lerner (Fellow of Royal Academy of Engineering, UK), and Professor Jeffery McDonnell (Member of the National Academy of Engineering, Canada).

产学研 >>>>>

Technology Innovation and Application

南方科技大学工程技术创新中心(北京)

SUSTech Engineering Innovation Center (Beijing)

南方科技大学工程技术创新中心(北京),依托于南方科技大学环境科学与工程学院,紧密结合我国环保产业发展现状及行业特点,定位于消除科研成果与产业应用之间的鸿沟,以为社会带来效益、给教师创造机会、为学生带来就业、给企业创造利润为发展宗旨;通过与学术界和工业界的联合,将科研成果有效社会化、产业化、公开化,将创新打造为国际化的环境保护领域创新平台。

创新中心的主要工作包括:研发关键环保技术,推动关键环保技术的工程化开发和系统集成,推进其示范推 广和产业化;参与我国环保行业政策、标准规范、技术导则的制定,为国家环境管理,监督与决策提供技术支 持和服务;为广大学生、专业人才和公司技术骨干提供专业培训,建设国际化产学研用交流与合作平台。

The Engineering Innovation Center (Beijing) of SUSTech is supported by the School of Environmental Science and Engineering of SUSTech. Closely aligned with the development of the environmental protection industry in China, the Innovation Center focuses on bridging the gap between scientific research and industrial applications. Moreover, it creates not only societal benefits and opportunities to the faculty, but also employment for graduates and profits to enterprises. The Innovation Center is a bridge between academia and industry, and will convert the research results to cost-effective, publicly accepted and commercialized products or services. The Innovation Center will be an international scope involving scientists and engineers from other countries.

The mission of the Innovation Center includes: development of key environmental technologies, promotion of key environmental technologies into engineering applications and integration, and demonstration and commercialization. The Innovation Center will also participate in developing Chinese environmental protection policies, standards and technical guidelines, providing technical support and services to central and local authorities in the fields of environmental management, monitoring and decision-making.

深圳市南科环保科技有限公司

SUSTech Environmental Ltd.

2016年,在深圳市科技创新委员会与南方科技大学的支持下,深圳市南科环保科技有限公司依托南科大环境学院的深圳市高层次人才团队项目——"流域水环境污染综合治理"而成立。公司充分利用南科大环境学院的技术和人才优势,努力打造一流的技术研发和产业化平台。公司在流域环境规划和综合治理、土壤和地下水污染防治、底泥及固废处置和资源化利用、基于物联网和互联网的环境综合监测管理的"智慧平台"搭建等领域,具有宽阔的国际视野和先进的技术水平。

SUSTech Environmental Ltd. is a spinoff of the School's Research Group "Comprehensive Solutions to Watershed Environmental Restoration" funded by the Shenzhen High Level Talent Team. This company was established in 2016 with support from the Scientific Innovation Commission of Shenzhen City and the Southern University of Science and Technology. SUSTech Environmental Ltd. aims to leverage the expertise of the School's faculty to build up a leading R&D and technology transfer base. The company currently focuses on watershed planning and management, soil and groundwater pollution control, contaminated sediment and solid waste recycling, and web-based environmental monitoring and sustainable technologies.

校园风光

SUSTech Scenery









BY
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