1st BJUT-UCD RESEARCH SYMPOSIUM

March 8-12, 2021

UNIVERSITY COLLEGE DUBLIN

BEIJING UNIVERSITY OF TECHNOLOGY

Welcome Message from Co-Chairmen of the Symposium

BJUT and UCD are long term collaborators who share a common vision – to collaborate in teaching and research. The most significant collaboration to date is the establishment and operation of our joint college, Beijing-Dublin International College (BDIC). BDIC was established in 2012 on the main BJUT campus conveniently situated close to the embassy and business districts in Beijing.

Starting with a single undergraduate programme, an initial cohort of 24 students was admitted to BDIC in 2012. In the intervening years the student numbers have increased steadily to a student cohort of approximately 1300, and the number of undergraduate programme offerings has increased to four; i) The Internet of Things, ii) Financial Economics, iii) Software Engineering, and iv) Electronic and Information Engineering.

Nine years since its establishment, BDIC now represents a mature partnership between UCD and BJUT. The joint international college is situated in a purpose-built facility that reflects the history and heritage of both BJUT and UCD, Beijing and Dublin, and the People's Republic of China and Ireland. To date over 600 students have graduated from BDIC with dual degrees.

Cooperation thus far has focused largely on undergraduate education. Both universities are research intensive and share a common goal to engage in high quality collaborative research that will impact current and future global challenges. With growing numbers of staff travelling between Beijing and Dublin the objective of this first BJUT-UCD Research Symposium is to introduce faculty members across a broad range of disciplines to extend our collaboration into research and innovation by leveraging common interests and international funding mechanisms.

We hope that occasion of this first symposium provides you opportunities to enhance your research network and that it will be remembered as the first in a long series of further successful symposia.

Assoc Prof Paul Fanning
International Dean China
University College Dublin

Prof Fu GUO
Vice President
Beijing University of Technology

Organising Committee

University College Dublin

Assoc. Prof Paul Fanning
Provost, Beijing Dublin International College
UCD International Dean – China
UCD Global
University College Dublin
paul.fanning@ucd.ie

Assoc. Prof Ailish O'Halloran
Deputy Provost, Beijing Dublin International College
University College Dublin
ailish.ohalloran@ucd.ie

Beijing University of Technology

Prof Fu GUO
Vice President
Beijing University of Technology
guofu@bjut.edu.cn

Prof Zhaomiao LIU
Director, International Office
Beijing University of Technology
lzm@bjut.edu.cn

Prof Jiancheng WENG (Jason)
Deputy Director, International Office
Beijing University of Technology
youthweng@bjut.edu.cn

Mr. Bo ZHANG (Bob)
Assistant to Director
International Office
Beijing University of Technology
zhangbob@bjut.edu.cn

Ms. Ning WANG (Jane)
Program Manager
International Office
Beijing University of Technology
ningwang@bjut.edu.cn

Organising Committee (Parallel Sessions)

Beijing University of Technology

Prof Yanyan CHEN
Vice Dean (International), Faculty of Architecture, Civil and Transportation Engineering
Beijing University of Technology
cdyan@bjut.edu.cn

Prof Qing ZHU
Vice Dean (International), Faculty of Information Technology
Beijing University of Technology
ccgszq@bjut.edu.cn

Prof Yufeng WU
Vice Dean (International), Faculty of Materials and Manufacturing
Beijing University of Technology
fograinwind@126.com

Assoc. Prof Huizheng LIU
Vice Dean (International), College of Economics and Management
Beijing University of Technology
liuhuizheng@bjut.edu.cn

Prof Shuicai WU
Vice Dean (International), Faculty of Environment and Life
Beijing University of Technology
wushuicai@bjut.edu.cn

Prof Tianrui ZHAI
Dean, Faculty of Science
Beijing University of Technology
trzhai@bjut.edu.cn

Contents

Opening Ceremony: Presidents' Welcome and Funding Opportunities

Monday, March 08, 2021 Beijing Time (16:00-17:35)

Join Zoom Meeting https://ucd-ie.zoom.us/j/68908029437?pwd=QzNzSnR3T0FCOGV1ZzJ2UkJHZDBOdz09

Meeting ID: 689 0802 9437 Passcode: 861561

Moderators:	***Prof Fu GUO**, Vice-President, Beijing University of Technology* ***Assoc. Prof Paul Fanning**, International Dean China, University College Dublin*
08:00-08:30 16:00-16:30	*Presidents Welcome: **Prof Zuoren NIE**, President, Beijing University of Technology* ***Prof Andrew Deeks**, President, University College Dublin*
08:30-08:50 16:30-16:50	Overview and Funding Opportunities for International Research ***Prof Xiaodong HAN**, Executive Deputy Director of Institute for Science and Technology Development, Beijing University of Technology*
08:50-09:10 16:50-17:10	Ireland – China International Cooperation, Horizon Europe Funding Opportunities ***Aine Moore**, UCD Research, University College Dublin*
09:10-09:15 17:10-17:15	Introduction to Research Professional - a comprehensive database of worldwide research funding opportunities ***Dr.Colleen Thomas**, UCD Research, University College Dublin*
09:15-09:35 17:15-17:35	International Joint Talent Cultivation of Graduate Students in BJUT ***Prof Yubo JIAO**, Vice-Dean of Graduate School, Beijing University of Technology*

Parallel Session 1: Civil Engineering, Transportation & Architecture

Civil Engineering, Transportation & Architecture (I)

Tuesday, March 09, 2021 Beijing Time (16:00-18:40)

Join Zoom Meeting https://ucd-ie.zoom.us/j/61112001413?pwd=dHdpemFyaGR6TXFnQlNaSVF4MVF4UT09

Meeting ID: 611 1200 1413 Passcode: 247031

Moderators: ***Prof Yanyan CHEN***, *Beijing University of Technology* ***Prof Eugene O'Brien***, *University College Dublin*

08:00 - 08:20 16:00 - 16:20	An Overview of BJUT Department of Urban Construction Research + Own Research "Potential and Challenges of Smart Upgrade of Urban Transportation in the Age of Intelligent" ***Prof Yanyan CHEN,*** *Beijing University of Technology*
08:20 - 08:40 16:20 - 16:40	An Overview of UCD School of Civil Engineering Research + Own Research "Vehicle/Bridge Dynamics and Bridge Health Monitoring" ***Prof Eugene O'Brien***, *University College Dublin* ***Assist. Prof Abdollah Malekjarfarian***, *University College Dublin*
08:40 - 09:00 16:40 - 17:00	An Advanced Earthquake Resilient Bridge System: from Research to Practice ***Assoc. Prof Junfeng JIA***, *Beijing University of Technology*
09:00 - 09:10 17:00 - 17:10	Applications of Computational Fluid Dynamics for the Build Environment ***Assist. Prof Jennifer Keenahan***, *University College Dublin*
09:10 - 09:20 17:10 - 17:20	Coffee Break

09:20 - 09:30 17:20 - 17:30	Metamodel-based reliability analysis ***Assist. Prof Rui Teixeira**, University College Dublin*
09:30 - 09:50 17:30 - 17:50	Fracture Characterization of Reinforced Concrete Beam Based on Static, Dynamic, and Acoustic Properties ***Prof Yubo JIAO**, Beijing University of Technology*
09:50 - 10:10 17:50 - 18:10	Extreme loading conditions in civil engineering infrastructure ***Assist. Prof Daniel McCrum**, University College Dublin*
10:10 - 10:20 18:10 - 18:20	Concrete Innovations to reduce the Carbon Cost of Constructing our Cities ***Assist. Prof. Oliver Kinnane**, University College Dublin*
10:20 - 10:40 18:20 - 18:40	Q&A

Civil Engineering, Transportation & Architecture (II)

Thursday, March 11, 2021 Beijing Time (16:00-19:20)

Join Zoom Meeting https://ucd-ie.zoom.us/j/63004496047?pwd=UjBGMDdzN1hoN3lFRlBsV3VwQktHdz09

Meeting ID: 630 0449 6047 Passcode: 126881

Moderators: ***Assoc. Prof Yue LIU**, Beijing University of Technology* ***Assoc. Prof Mike Long**, University College Dublin*

08:00 - 08:20 16:00 - 16:20	Carbon Fiber Reinforced Polymer (CFRP) Cables for Bridge and Spatial Structures: Advantages and Feasibility ***Assoc. Prof Yue LIU**, Beijing University of Technology*
08:20 - 08:30 16:20 - 16:30	Modelling Travel & Traffic Behaviour, Network Performance and Energy Use ***Assist. Prof Páraic Carroll**, University College Dublin*
08:30 - 08:50 16:30 - 16:50	Applications of Intelligent Transport Systems on emergency management ***Dr. Wenlong SHANG**, Lecturer, Beijing University of Technology*
08:50 - 09:00 16:50 - 17:00	Transport Resilience ***Assist. Prof Beatriz Martinez Pastor**, University College Dublin*
09:00 - 09:30 17:00 - 17:30	Human-induced Vibration Control of Cross-Laminated Timber Floor System ***Dr.Haoyu HUANG,** Beijing University of Technology*
09:30 - 09:40 17:30 - 17:40	Coffee Break
09:40 - 10:00 17:40 - 18:00	Vortex-Induced Vibration Control of Long-Span Bridges by Using Tuned Mass Damper Inerter (TMDI)

Civil Engineering, Transportation & Architecture (II)

Thursday, March 11, 2021 Beijing Time (16:00-19:20)

Join Zoom Meeting https://ucd-ie.zoom.us/j/63004496047?pwd=UjBGMDdzN1hoN3lFRlBsV3VwQktHdz09

Meeting ID: 630 0449 6047 Passcode: 126881

Moderators: ***Assoc. Prof Yue LIU**, Beijing University of Technology* ***Assoc. Prof Mike Long**, University College Dublin*

08:00 - 08:20 16:00 - 16:20	Carbon Fiber Reinforced Polymer (CFRP) Cables for Bridge and Spatial Structures: Advantages and Feasibility ***Assoc. Prof Yue LIU**, Beijing University of Technology*
08:20 - 08:30 16:20 - 16:30	Modelling Travel & Traffic Behaviour, Network Performance and Energy Use ***Assist. Prof Páraic Carroll**, University College Dublin*
08:30 - 08:50 16:30 - 16:50	Applications of Intelligent Transport Systems on emergency management ***Dr. Wenlong SHANG**, Lecturer, Beijing University of Technology*
08:50 - 09:00 16:50 - 17:00	Transport Resilience ***Assist. Prof Beatriz Martinez Pastor**, University College Dublin*
09:00 - 09:30 17:00 - 17:30	Human-induced Vibration Control of Cross-Laminated Timber Floor System ***Dr.Haoyu HUANG,** Beijing University of Technology*
09:30 - 09:40 17:30 - 17:40	Coffee Break
09:40 - 10:00 17:40 - 18:00	Vortex-Induced Vibration Control of Long-Span Bridges by Using Tuned Mass Damper Inerter (TMDI)

	***Assoc. Prof Kun XU**, Beijing University of Technology*
10:00 - 10:10 18:00 - 18:10	Flexible Pavement Materials ***Assoc. Prof Amanda Gibney**, University College Dublin*
10:10 - 10:30 18:10 - 18:30	Modulus simulation of asphalt binder models using Molecular Dynamics (MD) method ***Prof Hui YAO**, Beijing University of Technology*
10:30 - 10:40 18:30 - 18:40	Advanced Monitoring for Multiphysics Processes in Geomaterials ***Assist. Prof Budi Zhao**, University College Dublin*
10:40 - 10:50 18:40 - 18:50	On Constitutive Integration of Non-Associative Plasticity with Non-Smooth Yield Surfaces ***Prof Hong ZHENG**, Beijing University of Technology*
10:50 - 11:00 18:50 - 19:00	Shock Environment Assessment and Mitigation of Underground Structures ***Prof Hongyuan ZHOU**, Beijing University of Technology*
11:00 - 11:20 19:00 - 19:20	Q&A

Civil Engineering, Transportation & Architecture (III)

Friday, March 12, 2021 Beijing Time (16:00-16:40)

Join Zoom Meeting https://ucd-ie.zoom.us/j/67466857570?pwd=MkhvcHFzbnE4ZVZxSnlTT1lSdlJpQT09

Meeting ID: 674 6685 7570 Passcode: 521953

Moderator: ***Assoc. Paul Fanning**, University College Dublin*

08:00 - 08:40	Beijing Key Laboratory of Engineering Structures
16:00 - 16:40	***Dr. Lihui WANG**, Beijing University of Technology*

Parallel Session 2: Computer Science & Information Technology

Computer Science & Information Technology (I)

Tuesday, March 09, 2021 Beijing Time (16:00-18:20)

Join Zoom Meeting https://ucd-ie.zoom.us/j/66261499696?pwd=VXJUR0Z2ME9xaUJORlI0R05sSy9pUT09

Meeting ID: 662 6149 9696 Passcode: 151389

Moderators: ***Dr. Tong LI**, Lecturer, Beijing University of Technology* ***Prof Eleni Mangina,** University College Dublin*

08:00 - 08:30 16:00 - 16:30	Welcome Remark and Introduction to Research Institutes and Scientific Research of Faculty of Information Technology ***Dr.Tong LI**, Lecturer, Beijing University of Technology*
08:30 - 08:50 16:30 - 16:50	Consensus Mechanism for Blockchain-based Applications ***Prof Jingsha HE**, Beijing University of Technology*
08:50 - 09:10 16:50 - 17:10	Virtual Reality and Augmented Reality Use in Science Visualization, Education and Training ***Assist. Prof Abey Campbell**, University College Dublin*
09:10 - 09:20 17:10 - 17:20	Coffee break
09:20 - 09:40 17:20 -17:40	Energy-optimized Partial Computation Offloading in Mobile Edge Computing ***Prof Jing BI**, Software Engineering, Beijing University of Technology*
09:40 - 10:00 17:40 - 18:00	Smart Transport - A Computer Science Perspective ***Assist. Prof Shen Wang**, University College Dublin*
10:00 - 10:20 18:00 - 18:20	Q&A

Computer Science & Information Technology (II)

Wednesday, March 10, 2021 Beijing Time (16:00-18:10)

Join Zoom Meeting https://ucd-ie.zoom.us/j/65354531583?pwd=TGFpVHhvdzZGekdnTTdBc2lxbGRzQT09

Meeting ID: 653 5453 1583 Passcode: 400997

Moderators: ***Dr. Yuwen CHEN***, *Lecturer, Beijing University of Technology* ***Assist. Prof David Lillis***, *University College Dublin*

08:00 - 08:20 16:00 - 16:20	Research on Multimodal Fusion Deep Learning Method for Intelligent Biomedical Image Analysis and Understanding ***Prof Xibin JIA***, *Beijing University of Technology*
08:20 - 08:40 16:20 - 16:40	Implementing AI Ethics ***Assist. Prof Vivek Nallur***, *University College Dublin*
08:40 - 09:00 16:40 - 17:00	An Elliptic Curve based Scalable Data Aggregation Scheme for Smart Grid ***Dr. Yuwen CHEN***, *Lecturer, Beijing University of Technology*
09:00 - 09:10 17:00 - 17:10	Coffee Break
09:10 - 09:30 17:10 - 17:30	Transformative Applications of Natural Language Processing ***Assist. Prof David Lillis***, *University College Dublin*
09:30 - 09:50 17:30 - 17:50	Choices and Crisis in a new area of Mining for Sustainable Development ***Dr Abdul-Wadood Moomen***, *University College Dublin*
09:50 - 10:10 17:50 - 18:10	Q&A

Computer Science & Information Technology (III)

Thursday, March 11, 2021 Beijing Time (16:00-18:10)

Join Zoom Meeting https://ucd-ie.zoom.us/j/64254318766?pwd=NVgrNnpoeDBLRXdlOGo4ck9Qdnl6QT09

Meeting ID: 642 5431 8766 Passcode: 416896

Moderators: ***Xing SU,*** *Lecturer, Beijing University of Technology* ***Assist. Prof Abey Campbell*** *University College Dublin*

08:00 - 08:20 16:00 - 16:20	Automated Fault Interpretation Using Deep Learning ***Assist. Prof Ruihai Dong****, University College Dublin*
08:20 - 08:40 16:20 - 16:40	Missing Data Recovery in Large-scale, Sparse Datacenter Traces ***Assoc. Prof Yi LIANG****, Beijing University of Technology*
08:40 - 08:50 16:40 - 16:50	Coffee Break
08:50 - 09:10 16:50 - 17:10	Prevention and Detection Techniques of Cyber Security Attacks ***Assist. Prof Anca Delia Jarcut****, University College Dublin*
09:10 - 09:30 17:10 - 17:30	Modeling Code Readability: Challenges and Insights ***Dr. Qing MI****, Lecturer, Beijing University of Technology*
09:30 - 09:50 17:30 - 17:50	Data Analytics for Smart Cities ***Prof Eleni Mangina****, University College Dublin*
09:50 - 10:10 17:50 - 18:10	Q&A

Computer Science & Information Technology (IV)

Friday, March 12, 2021 Beijing Time (16:00-17:30)

Join Zoom Meeting https://ucd-ie.zoom.us/j/68429384635?pwd=c3BDUjRnc3ZBbnVSWmpNNkF2UGpZQT09

Meeting ID: 684 2938 4635 Passcode: 873710

Moderators: ***Dr Shuopeng LI**, Lecturer, Beijing University of Technology* ***Assist. Prof Ruihai Dong**, University College Dublin*

08:00 - 08:30 16:00 - 16:30	UCD Insight Centre for Data Analytics ***Prof Brian Caulfield**, Director Insight SFI Research Centre for Data Analytics*
08:30 - 08:50 16:30 - 16:50	Data Mining and Security Laboratory ***Dr. Yuwen CHEN**, Lecturer, Beijing University of Technology*
08:50 - 09:30 16:50 - 17:30	Research Demonstration 1. Keyword extraction by entropy difference between the intrinsic and extrinsic mode (Prof. Zhen YANG's Lab) 2. GEOgraphic Spatial-Temporal big-data Real-time Interactive Analysis (Prof. Zhiming DING's Lab) 3. Walking into Ancient Paintings with Virtual Candles (Assoc. Prof. Wei MA's Lab) ***Dr Shuopeng LI**, Lecturer, Beijing University of Technology*

Parallel Session 3: Advanced Manufacturing & Materials Science

Advanced Manufacturing & Materials Science (I)

Tuesday, March 09, 2021 Beijing Time (16:00-18:30)

Join Zoom Meeting https://ucd-ie.zoom.us/j/68119580509?pwd=STdTTzhaYk1DeUtVYTB4ejgvSm1rdz09

Meeting ID: 681 1958 0509 Passcode: 203104

Moderators: ***Prof Haijun YU**, Beijing University of Technology* ***Assist. Prof Nan ZHANG**, University College Dublin*

08:00 - 08:10 16:00 - 16:10	Welcome Remark and Introduction of Faculty of Materials and Manufacturing ***Prof Shujun CHEN**, Dean of Faculty of Materials and Manufacturing, Beijing University of Technology*
08:10 - 08:30 16:10 - 16:30	Precision Fabrication of Polymeric Micro/nano Structures ***Assist. Prof Nan ZHANG**, University College Dublin*
08:30 - 08:50 16:30 - 16:50	Stability of Nanocrystalline Metals and Alloys ***Prof Xiaoyan SONG**, Beijing University of Technology*
08:50 - 09:10 16:50 - 17:10	Photocatalytic activity of low dimensional nanocomposite materials ***Prof Jinshu WANG**, Beijing University of Technology*
09:10 - 09:20 17:10 - 17:20	Coffee Break

09:20 - 09:40 17:20 - 17:40	Development Progress of Magnesium Alloys with High Performance in BJUT ***Prof Wenbo DU**, Beijing University of Technology*
09:40 - 10:00 17:40 - 18:00	High Temperature In-situ Characterisation of 3D-Printed Ti-6Al-4V alloy ***Assist. Prof Mert Celikin**, University College Dublin*
10:00 - 10:20 18:00 - 18:20	Advanced Materials for Energy Storage Devices ***Prof Haijun YU**, Beijing University of Technology*
10:20 - 10:30 18:20 - 18:30	Q&A

Advanced Manufacturing & Materials Science (II)

Wednesday, March 10, 2021 Beijing Time (16:00-18:10)

Join Zoom Meeting https://ucd-ie.zoom.us/j/62850471341?pwd=Snl2TVRGdzA3T1FYU1V1RDJKUHpGUT09

Meeting ID: 628 5047 1341 Passcode: 292836

Moderators: ***Prof Xiaodong YANG***, *Beijing University of Technology* ***Assist. Prof Nan ZHANG***, *University College Dublin*

08:00 - 08:20 16:00 - 16:20	Elastic Wave Manipulation of Gyroscopic Metastructures ***Prof Xiaodong YANG***, *Beijing University of Technology*
08:20 - 08:40 16:20 - 16:40	Real-time Monitoring Strategies of Dynamical Systems ***Assoc. Prof Vikram Pakrashi***, *University College Dublin* ***Dr. Basuraj Bhowmik***, *University College Dublin*
08:40 - 09:00 16:40 - 17:00	Nondestructive Micro-magnetic Evaluation of Mechanical Properties and Residual Stress in Ferromagnetic Materials ***Prof Xiucheng LIU***, *Beijing University of Technology*
09:00 - 09:10 17:00 - 17:10	Coffee Break
09:10 - 09:30 17:10 - 17:30	Measurement and simulation of welding plasma arc ***Prof Fan JIANG***, *Beijing University of Technology*
09:30 -09:50 17:30 - 17:50	Mechanics Study on Reliability of Electronics Packaging Components ***Assoc. Prof Pei CHEN***, *Beijing University of Technology*
09:50 - 10:10 17:50 – 18:10	Q&A

Advanced Manufacturing & Materials Science (III)

Thursday, March 11, 2021 Beijing Time (16:00-18:10)

Join Zoom Meeting https://ucd-ie.zoom.us/j/65339769440?pwd=SE9zUjYzN3dFRmp3ME4wdHd1cmpQdz09

Meeting ID: 653 3976 9440 Passcode: 125632

Moderators: **Assoc. Prof *Yan PANG***, *Beijing University of Technology* ***Dr. Basuraj Bhowmik***, *University College Dublin*

08:00 - 08:20 16:00 - 16:20	High Efficiency Si Heterojunction Solar Cells ***Prof Yongzhe ZHANG***, *Beijing University of Technology*
08:20 - 08:40 16:20 - 16:40	"In-Process monitoring during the additive manufacture of TiAl6V4 alloy parts" ***Prof Denis Dowling***, *University College Dublin*
08:40 - 09:00 16:40 - 17:00	Advanced Surface Coating Technology and the Additive Manufacturing for Metallic Materials ***Assis. Prof Xingye GUO***, *Beijing University of Technology*
09:00 - 09:10 17:00 - 17:10	Coffee Break
09:10 - 09:30 17:10 - 17:30	Breakup Dynamics of Droplets at an Asymmetric Bifurcation with Two Branches ***Dr. Xiang WANG***, *Postdoc Fellow, Beijing University of Technology*
09:30 - 09:50 17:30 - 17:50	Droplets/bubbles Generation in Microchannels under Modified Conditions ***Assoc. Prof Yan PANG***, *Beijing University of Technology*
09:50 - 10:10 17:50 - 18:10	Q&A

Advanced Manufacturing & Materials Science (IV)

Friday, March 12, 2021 Beijing Time (16:00-17:30)

Join Zoom Meeting https://ucd-ie.zoom.us/j/66470900658?pwd=V3lzdnNBSGJJV1QwOU5Lclp0MXZLUT09

Meeting ID: 664 7090 0658 Passcode: 634965

Moderators: ***Prof Haijun YU**, Beijing University of Technology* ***Assist. Prof Nan ZHANG**, University College Dublin*

08:00 - 08:15 16:00 - 16:15	Key Laboratory of Advanced Functional Materials, Education Ministry of China ***Prof. Xiaoyan SONG**, Beijing University of Technology*
08:15 - 08:30 16:15 - 16:30	Multiscale Fluid Dynamics Laboratory, Beijing University of Technology ***Assoc. Prof Yan PANG**, Beijing University of Technology*
08:30 - 08:50 16:30 - 16:50	I-Form, the SFI Research Centre for Advanced Manufacturing ***Prof Denis Dowling**, University College Dublin*
08:50 - 09:00 16:50 - 17:00	Coffee Break
09:00 - 09:15 17:00 - 17:15	Lab of Advanced Battery Materials and Devices, Beijing University of Technology ***Prof. Haijun YU**, Beijing University of Technology*
09:15 - 09:30 17:15 - 17:30	Beijing Key Laboratory of Nonlinear Vibrations and Strength of Mechanical Structures ***Prof. Xiaodong YANG,** Beijing University of Technology*

Parallel Session 4 : Economics & Social Sciences

Economics & Social Sciences (I)

Tuesday, March 09, 2021 Beijing Time (16:00-18:30)
Join Zoom Meeting https://ucd-ie.zoom.us/j/65645236090?pwd=MlBkMmJkVEJsd2QzTlR4UjJLbFp6Zz09
Meeting ID: 656 4523 6090 Passcode: 932082
Moderators: ***Assoc. Prof Huizheng LIU***, *Beijing University of Technology* ***Prof Ronald Davies***, *University College Dublin*

08:00 - 08:20 16:00 - 16:20	Brief Introduction of BJUT College of Economics and Management ***Assoc. Prof Huizheng LIU***, *Beijing University of Technology*
08:20 - 08:40 16:20 - 16:40	Total Factor Energy Efficiency and 2030 Emission Reduction Targets of EU Paper Industry ***Prof Shuangjie LI***, *Beijing University of Technology*
08:40 - 09:00 16:40 - 17:00	Patent Boxes and the Success Rate of Applications ***Prof Ronald Davies***, *University College Dublin*
09:00 - 09:10 17:00 - 17:10	Coffee Break
09:10 - 09:30 17:10 - 17:30	Energy R&D Investment and Carbon Abatement Policy ***Assist. Prof Di YIN***, *Beijing University of Technology*
09:30 - 09:50 17:30 - 17:50	The social planning problem with costly information processing: Towards understanding production decisions in centralized economies ***Assist. Prof Dominik Naeher***, *University College Dublin*
09:50 - 10:10 17:50 - 18:10	Corporate Competitive Strategy, Director Professional Background and Dual Innovation ***Assist. Prof Zhenyu WANG***, *Beijing University of Technology*
10:10 - 10:30 18:10 - 18:30	Q&A

Economics & Social Sciences (II)

Wednesday, March 10, 2021 Beijing Time (16:00-18:30)

Join Zoom Meeting https://ucd-ie.zoom.us/j/63169691217?pwd=SmV1cERwanEyZGU1cHlsQ0s0dTJNdz09

Meeting ID: 631 6969 1217 Passcode: 243415

Moderators: ***Assoc. Prof Huizheng LIU**, Professor, Beijing University of Technology* ***Assist. Prof Zuzanna Studnicka**, University College Dublin*

08:00 - 08:20 16:00 - 16:20	Supply Chain Finance Driven by Blockchain ***Prof Jian LI**, Beijing University of Technology*
08:20 - 08:40 16:20 - 16:40	Education and Credit ***Assist. Prof Yota Deli**, University College Dublin*
08:40 - 09:00 16:40 - 17:00	Spatial Characteristics of Changes in CO2 Emissions and PM2.5 Concentrations in China ***Prof Yanmei LI**, Beijing University of Technology*
09:00 - 09:10 17:00 - 17:10	Coffee Break
09:10 - 09:30 17:10 - 17:30	Signalling Identity ***Assist. Prof Vessela Daskalova**, University College Dublin*
09:30 - 09:50 17:30 - 17:50	A Topic Models based Framework for Detecting and Forecasting Emerging Technologies ***Prof Shuo XU**, Beijing University of Technology*
09:50 - 10:10 17:50 - 18:10	Gravity and trade in video on demand services ***Assist. Prof Zuzanna Studnicka**, University College Dublin*
10:10 - 10:30 18:10 - 18:30	Q&A

Economics & Social Sciences (III)

Thursday, March 11, 2021 Beijing Time (16:00-18:30)

Join Zoom Meeting https://ucd-ie.zoom.us/j/66315945324?pwd=d2ZLKytrcnFleE56R2tDWnZGOHR0UT09

Meeting ID: 663 1594 5324 Passcode: 960531

Moderators: ***Assist. Prof Xiqian WANG***, *Beijing University of Technology* ***Assoc. Prof Frank Walsh,*** *University College Dublin*

08:00 - 08:20 16:00 - 16:20	Returns to Value-Added for Research Economists ***Assist. Prof Kevin Devereux***, *University College Dublin*
08:20 - 08:40 16:20 - 16:40	A Study on Deceptive Online Reviews: Motivation and Identification ***Prof Wen ZHANG***, *Beijing University of Technology*
08:40 - 09:00 16:40 - 17:00	Cognitive Dissonance and Political Ideology ***Assist. Prof Ivan Pastine***, *University College Dublin*
09:00 - 09:10 17:00 - 17:10	Coffee Break
09:10 - 09:30 17:10 - 17:30	Teacher Pension Enhancements and Staffing in an Urban School District ***Assist. Prof Xiqian WANG***, *Beijing University of Technology*
09:30 - 09:50 17:30 - 17:50	Productivity, Non-Compliance and the Minimum Wage in Developing Countries ***Assoc. Prof Frank Walsh***, *University College Dublin*
09:50 - 10:10 17:50 - 18:10	Physical Infrastructure, Energy Consumption, Economic Growth and Environmental Pollution in Pakistan: an Asymmetry Analysis ***Dr. Jafri Muhammad Haider***, *Beijing University of Technology*
10:10 - 10:30 18:10 - 18:30	Q&A

Parallel Session 5: Bioengineering

Bioengineering (I)

Tuesday, March 09, 2021 Beijing Time (16:00-18:30)

Join Zoom Meeting https://ucd-ie.zoom.us/j/62560919854?pwd=RjJlY1V0N2dBcUE3MFM5U1ZOV3M5dz09

Meeting ID: 625 6091 9854 Passcode: 983010

Moderators: ***Prof Dongmei HAO,*** *Beijing University of Technology* ***Assist. Prof Dimitrios Argyropoulos****, University College Dublin*

08:00 - 08:15 16:00 - 16:15	Biosystems Engineering in the Digital Era ***Assist. Prof Dimitrios Argyropoulos****, University College Dublin*
08:15 - 08:30 16:15 - 16:30	Microalgae: A Natural Nutraceuticals Source ***Dr. Bingbing GUO****, Lecturer, Beijing University of Technology*
08:30 - 08:45 16:30 - 16:45	Microalgae: The Next Frontier in Waste Remediation and Bio-Based Products ***Assist. Prof Ronald Halim****, University College Dublin*
08:45 - 09:00 16:45 - 17:00	Deep Learning Based Neuroimage Analysis for Brian Aging ***Assoc. Prof Lan LIN****, Beijing University of Technology*
09:00 - 09:10 17:00 - 17:10	Coffee Break
09:10 - 09:25 17:10 - 17:25	Pharmaceuticals and Energy ***Assist. Prof Philip Donnellan****, University College Dublin*

09:25 - 09:40 17:25 - 17:40	Maternal Health Monitoring Technology ***Prof Dongmei HAO**, Beijing University of Technology*
09:40 - 09:55 17:40 - 17:55	Medical Device Design at UCD ***Assoc. Prof Eoin O'Cearbhaill*, University College Dublin**
09:55 - 10:10 17:55 - 18:10	Intelligent Wearable Devices in Healthcare ***Dr. Shen SUN**, Lecturer, Beijing University of Technology*
10:10 - 10:30 18:10 - 18:30	Q&A

Parallel Session 6：Opto-electrical & Micro-electronic Engineering

Opto-electrical & Micro-electronic Engineering (I)

Tuesday March 09, 2021 Beijing Time (16:00-18:00)

Join Zoom Meeting https://ucd-ie.zoom.us/j/66289429245?pwd=Mk1Tc3VQbnJUOFFEcjFqUzd2REwvUT09

Meeting ID: 662 8942 9245 Passcode: 359191

Moderators: ***Prof Xinping ZHANG***, *Beijing University of Technology* ***Prof Peter Kennedy,*** *University College Dublin*

08:00 - 08:10 16:00 - 16:10	Welcome Remark & Brief Introduction of Optics in BJUT ***Prof Xinping ZHANG***, *Beijing University of Technology*
08:10 - 08:30 16:10 - 16:30	Ultrafast Nanophotonics ***Prof Xinping ZHANG***, *Beijing University of Technology*
08:30 - 08:50 16:30 - 16:50	Organic Microcavity Lasers ***Prof Tianrui ZHAI***, *Beijing University of Technology*
08:50 - 09:00 16:50 - 17:00	Coffee Break
09:00 - 09:20 17:00 - 17:20	Optical Signal Processing ***Assist. Prof John Healy***, *University College Dublin*
09:20 - 09:40 17:20 - 17:40	Cut your Coat According to the Cloth: A Telecommunication Networks Perspective ***Assist. Prof Avishek Nag***, *University College Dublin*
09:40 - 10:00 17:40 - 18:00	Q&A

Opto-electrical & Micro-electronic Engineering (II)

Wednesday, March 10, 2021 Beijing Time (16:00-18:00)

Join Zoom Meeting https://ucd-ie.zoom.us/j/64839451784?pwd=RURXYzQvQ0IrUUZvMkYvUFRaVzNzdz09

Meeting ID: 648 3945 1784 Passcode: 787175

Moderators: ***Prof Dayong WANG***, *Beijing University of Technology* ***Assist. Prof John Healy***, *University College Dublin*

08:00 - 08:20 16:00 - 16:20	Continuous-wave Terahertz Phase Imaging ***Assoc. Prof Lu RONG***, Beijing University of Technology
08:20 - 08:40 16:20 - 16:40	The Latest Research Progress of the Ultrashort Pulsed Fiber Laser and Application ***Prof Pingxue LI***, *Beijing University of Technology*
08:40 - 08:50 16:40 - 16:50	Coffee Break
08:50 - 09:10 16:50 - 17:10	A High-Precision Time Skew Estimation and Correction Technique for Time-Interleaved ADCs ***Assist. Prof Barry Cardiff***, *University College Dublin*
09:10 - 09:30 17:10 - 17:30	Hybrid LiFi and WiFi Networks: Towards Future Indoor Wireless Communications ***Assist. Prof Xiping WU***, *University College Dublin*
09:30 - 09:50 17:30 - 17:50	Trust in Shared Data: IoT Quality Assurance from Creation to Consumption ***Assist. Prof Declan Delaney***, *University College Dublin*
09:50 - 10:10 17:50 - 18:10	Q&A

Opto-electrical & Micro-electronic Engineering (III)

Thursday , March 11, 2021 Beijing Time (16:00-18:30)

Join Zoom Meeting https://ucd-ie.zoom.us/j/63978740691?pwd=N0VBbURaZm1hclY2dmoyL2xrbm9JQT09

Meeting ID: 639 7874 0691 Passcode: 941543

Moderator: ***Prof Wensi WANG,*** *Beijing University of Technology* ***Prof John Sheridan****, University College Dublin*

08:00 - 08:20 16:00 - 16:20	Welcome Remark and Introduction of Electrical and Electronic Engineering Research in BJUT ***Prof Shiwei FENG,*** *Beijing University of Technology*
08:20 - 08:40 16:20 - 16:40	Microelectronics Research in UCD ***Prof Peter Kennedy****, University College Dublin*
08:40 - 09:00 16:40 - 17:00	Thermal Reliability in Power Devices and ICs: Temperature Testing Techniques and Some Specific Solutions ***Prof Shiwei FENG,*** *Beijing University of Technology*
09:00 - 09:10 17:00 - 17:10	Coffee break
09:10 - 09:30 17:10 - 17:30	Optics and Photonics Research in BJUT ***Prof Chen XU****, Beijing University of Technology*
09:30 - 09:50 17:30 - 17:50	Optical Engineering Research an Overview ***Prof John Sheridan****, University College Dublin*
09:50 - 10:10 17:50 - 18:10	*Micro-power Integrated Circuits Design for Medical Applications* ***Prof Wensi WANG****, Beijing University of Technology*
10:10 - 10:30 18:10 - 18:30	Q&A

Opto-electrical & Micro-electronic Engineering (IV)

Friday, March 12, 2021 Beijing Time (16:00-17:00)

Join Zoom Meeting https://ucd-ie.zoom.us/j/6546392689?pwd=M0Q0UStNLzI5MWorbGl4cnVDSmRvQT09

Meeting ID: 654 639 2689 Passcode: 565858

Moderator: ***Assist. Prof Avishek Nag***, *University College Dublin*

08:00 - 08:30	Optics and Photonics Research Lab, Beijing University of Technology
16:00 - 16:30	***Assist. Prof Jinxin GUO***, *Beijing University of Technology*
08:30 - 09:00	Micro-Electronics Research Lab, Beijing University of Technology
16:30 - 17:00	***Prof Wensi WANG***, *Beijing University of Technology*

Biographies

UCD Biographies

Please find more details in hyperlinks associated with Speakers in the schedule of presentations

Eugene O'Brien

Ph.D.

Professor
School of Civil Engineering
University College Dublin
Phone: 01 716 3224
E-mail: eugene.obrien@ucd.ie

Dr. Eugene O'Brien 1985-1989: Worked with firms of Consulting Engineers including Mott McDonald EPO and Roughan ODonovan/G. Maunsell & Partners. Designed various bridge and viaduct structures. 1989-1990: Director of Tower Software, a small software firm developing and distributing Civil Engineering software. 1990-1998: Lecturer, Trinity College Dublin.1998-2004: Professor & Head of Civil Engineering, University College Dublin. 2004-date: Professor, School of Civil Engineering, University College Dublin. 2008-2018: Director, Roughan O'Donovan Innovative Solutions (Consulting Engineers). 2006-Sep 2007: Director of UCD Urban Institute, University College Dublin.

Abdollah

Malekjafarian

Ph.D.

Lecturer/Assistant Professor
School of Civil Engineering
University College Dublin
Phone: 01 716 3207
E-mail: abdollah.malekjafarian@ucd.ie

Dr. Abdollah Malekjafarian is an Assistant Professor in the school of Civil Engineering at UCD. He is leading "Structural Dynamics & Assessment Laboratory (SDA-Lab)" in UCD. The main areas of research interest are Structural Dynamics and Random Vibrations for Civil Infrastructure including "Transport Infrastructure" and "Offshore Wind Turbines". He is also collaborating with CeADAR research centre on the application of data analytics and AI to built environment.

Abdollah won "KB Broberg" medal for "Best UCD PhD Thesis in Mechanics- 2016". He also won Royal Irish Academy Charlemount award in 2018 for his collaboration with University of Alberta. For more details, please visit the website of SDA-Lab: https://sdal.ucd.ie/

Jennifer Keenahan

Ph.D.

Lecturer/Assistant Professor
School of Civil Engineering
University College Dublin
Phone: 01 716 3226
E-mail: jennifer.keenahan@ucd.ie

Dr. Jennifer Keenahan is an Assistant Professor in Civil Engineering, UCD. Interested in the use of Computational Fluid Dynamics for the Built Environment, particularly wind analysis. Head of Teaching and Learning, completed Professional Diploma in Higher Education, Programme Director for Dual Columbia-UCD ME in Civil Engineering. Teaching focuses on building working relationships between engineers and architects. Consultant with Arup, Chartered Engineer with Engineers Ireland.

Rui Teixeira

Ph.D.

Lecturer/Assistant Professor
School of Civil Engineering
University College Dublin
Phone: 0899744421
E-mail: rui.teixeira@ucd.ie

Dr. Rui Teixeira gets PhD degree in Trinity College Dublin. His research interest is Structural and System Reliability, Uncertainty Quantification, Computational Methods in Engineering, Renewable Energy and Probability Theory.

Daniel McCrum

Ph.D.

Lecturer/Assistant Professor
School of Civil Engineering
University College Dublin
Phone: x3214
E-mail: daniel.mccrum@ucd.ie

Dr. Daniel McCrum graduated in 2005 from Trinity College Dublin with a first class honours degree in Civil Engineering. He then moved to Scotland and completed an MSc in Structural Engineering and Mechanics from the University of Glasgow in 2006. His MSc scholarship was awarded by the Scottish Awards Agency Scholarship. He worked as a consulting structural engineer for a couple of years in Dublin prior to undertaking his PhD in Trinity College Dublin in 2008 under an Irish Research Council Scholarship. The topic of his PhD was hybrid testing of steel plan irregular structures. Upon completion of his PhD, he worked as a data analyst for a year in Accenture Analytics Innovation Centre. He then joined Queen's University Belfast as a lecturer in 2012. HE joined UCD as an Assistant Professor in Structural Engineering in September 2017. He is a chartered structural engineer with the Institution of Structural Engineers (2016) and a chartered engineer with Engineers Ireland (2012).

Oliver Kinnane

Ph.D.

Lecturer/Assistant Professor
School of Architecture, Planning and Environmental Policy
University College Dublin
Phone: 01 716 2748
E-mail: oliver.kinnane@ucd.ie

Dr. Oliver Kinnane is programme director of the MSc in Architecture, Urbanism and Climate Action at UCD School of Architecture, Planning and Environmental Policy, where he is Head of Teaching and Learning. He is module coordinator of Architecture and Climate Change (ARCT41210) and Architectural Technology modules ARCT20100 and ARCT30090, and input sustainable design content across the architecture curriculum.

He researches and teaches a wide range of topics related to architecture, engineering and climate change. His interests range from the fundamentals of building science to the design and development of building products and the impact of the built environment on climate change.

Páraic Carroll

Ph.D.

Lecturer/Assistant Professor
School of Civil Engineering
University College Dublin
Phone: +353 (0)17163215
E-mail: paraic.carroll@ucd.ie

Dr. Páraic Carroll is an Assistant Professor in the School of Civil Engineering, where his teaching and research focus is Transportation Engineering. Dr. Carroll joined the School of Civil Engineering in 2019, prior to which, he worked as a Transport Modeller in the Transport Planning and Capital Investment Division of the National Transport Authority (NTA). During this time, he advised government departments on the appraisal and assessment of national transport strategies and policies including public transport and active mode schemes. Dr. Carroll is has provided guidance to the Climate Change Advisory Council on transitioning to low carbon and sustainable mobility in Ireland. His research expertise lies in the modelling of travel behaviour, multi-modal transport networks and systems, with a keen interest in modelling potential solutions and pathways for decarbonisation and electrification of transport and mobility. Other research interests include discrete choice modelling, transport and behavioural economics, transport accessibility and social inclusion assessment, as well as climate change adaptation and mitigation, and disaster risk management.

Beatriz Martinez-Pastor

Ph.D.

Lecturer/Assistant Professor
School of Civil Engineering
University College Dublin
Phone: 0899528639
E-mail: beatriz.martinez-pastor@ucd.ie

Dr. Beatriz Martinez-Pastor gets PhD degree in Trinity College Dublin. The focus of her research has been related to transport networks and the concept of resilience. Resilience can be analysed in many areas; however, in the last years, it has acquired significant relevance in the area of transport networks. Transport resilience can be defined as the ability of systems to absorb and recover from a perturbation, and it is noted, that even nowadays, quantitative models for evaluating the impact of the hazards and the recovery of the systems are scarce. One of the goals of her research is to develop algorithms and mathematical models that help to quantify and understand the behaviour of the networks when affected by these damaging events. More specifically, the impacts affecting transport networks. Her research is also closely related to the areas of probability analysis, and data analytics. When developing new mathematical models, a deep analysis of the new parameters is required, and probabilistic analyses are the ones allowing these improvements. Innovative approaches in this area allow to statistically reduce the number of points required for the analysis. These approaches are essential when large time-consuming models are used; since the time required for the analysis can be significantly reduced without losing efficiency.

Amanda Gibney

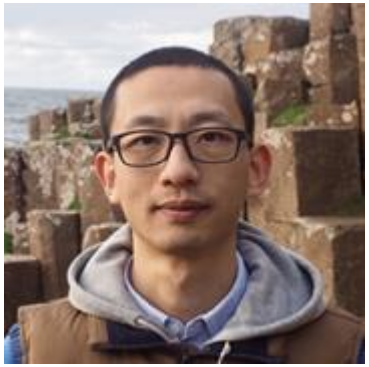
Ph.D.

Associate Professor
Head of School of Civil Engineering
University College Dublin
Phone: 716 3217
E-mail: amanda.gibney@ucd.ie

Dr. Amanda Gibney qualified with a 1st Class honours BE from UCD in 1985. She was initially employed as a structural design engineer in London by Ove Arup & Partners and subsequently by Skidmore Owings and Merrill. She undertook a p/t MSc at City University in London, graduating in 1990. Amanda returned to Ireland in 1991 and worked with Techrete in Howth, thereafter with Muir Associates. Amanda returned to academia in 1995, and is an Associate Professor in the School of Civil Engineering. Amanda completed her PhD at UCD in 2002, on asphaltic materials. Her main research interests are in the area of bituminous materials and teaching and learning. Amanda was appointed as a UCD Fellow in Teaching and Academic Development in 2007. She served as the Vice Principal for T&L for the College of Engineering, Mathematics and Physical Sciences, and subsequently as Vice Principal for T&L for the College of Engineering & Architecture. She was awarded a National Teaching Excellence Award in 2009.

Budi ZHAO

Ph.D.



Lecturer/Assistant Professor
School of Civil Engineering
University College Dublin
Phone: 353899752958
E-mail: budi.zhao@ucd.ie

Dr. Zhao joined the School of Civil Engineering at University College Dublin as a Lecturer/Assistant Professor in August 2020. He worked as a Research Associate in Imperial College London for one year, following two years at King Abdullah University of Science and Technology. He completed his PhD studies in City University of Hong Kong in 2017. His main research interest is the hydro-chemo-mechanically coupled processes in soil and rock. His research uses X-ray micro-tomography (μCT), microfluidics as well as numerical techniques including discrete element method (DEM) and coupled CFD-DEM. Budi has been applying these techniques to investigate crushable sands, desiccation crack formation, and fines migration and clogging.

Eleni Mangina

Ph.D.

Professor
School of Computer Science
University College Dublin
Phone: 01 716 2858
E-mail: eleni.mangina@ucd.ie

Eleni Mangina carried out her PhD work at the University of Strathclyde (UK), Department of Electronic and Electrical Engineering, working on Agent-based applications for intelligent data interpretation under the supervision of Prof. Jim McDonald. The research area focused on software analysis, design and development of multi agent systems, which utilise different Artificial Intelligence (AI) techniques (Knowledge based systems, Artificial Neural Networks, Case Based Reasoning systems and Model based Reasoning systems). Eleni Mangina holds an M.Sc. in Artificial Intelligence from the Department of Artificial Intelligence at University of Edinburgh in the UK and an MSc in Agricultural Science from Agricultural University of Athens in Greece. In 2002 she joined School of Computer Science, at University College Dublin, Ireland. Eleni Mangina is guided by her own definition of the art of persistence, that involves both courage and compassion with research integrity and authenticity. Her lab operates at the intersection between applied Artificial Intelligence (VR/AR; Data Analytics; UAVs; Information Systems) and a portfolio development within interdisciplinary applications (i.e. Engineering [Energy Sector] and Educational Systems with XR). Eleni Mangina is currently project coordinator of two (2) H2020 projects (ARETE & AHA), one (1) Erasmus+ (FANTASIA) and partner within two other EU projects (BASE, RoboPisces). She is currently a funded investigator as part of SFI Energy Systems Integration Partnership Programme (ESIPP), an academic collaborator with VistaMilk SFI Research Centre (Milk by Design) and academic supervisor for two (2) SFI Centres for Research Training (CRT) (Machine Learning – ML-Labs; Digitally-Enhanced Reality – D-REAL). Her lab also develops novel software tools for UAV communications. She has authored more than 190 peer-reviewed articles in national and international peer reviewed workshops and conferences and international journals, including in IEEE and ACM. Eleni Mangina also contributes as a committee member for reviews to many international conferences and journals. She is currently the Deputy Vice Principal (International) within the UCD College of Science and the Chair of Athena SWAN Bronze Award application for the School of Computer Science.

Abey Campbell

Ph.D.

BDIC Lecturer/Assistant Professor
School of Computer Science
University College Dublin
Phone: 01 716 2933
E-mail: abey.campbell@ucd.ie

Dr. Abey Campbell is Deputy Porgramme Director for Computer Science since 2017. His interest is Augmented Reality, Multi-Agent Systems, Virtual Reality, Mixed Reality.

Shen WANG

Ph.D.

Lecturer/Assistant Professor
School of Computer Science
University College Dublin
Phone: 01 716 2479
E-mail: shen.wang@ucd.ie

Dr. Shen Wang is a Lecturer/Assistant Professor in the School of Computer Science, University College Dublin since 2018. He teaches modules and supervises final year projects for undergraduates at Beijing-Dublin International College in the spring semester. He is also an academic collaborator with the CeADAR Centre (http://ceadar.ie) and Performance Engineering Laboratory (http://pel.ucd.ie). Prior to that, Shen received the Ph.D. degree in 2016 from the School of Electronic Engineering, Dublin City University, Ireland, for his work on reducing urban road traffic using vehicular communications and artificial intelligence. Since 2016, Shen worked as the lead researcher for CeADAR on the AURORA EU H2020 project (big streaming data framework calculating flight efficiency) and the EXPERTS demonstrator project (explanable graph data analyser). He also worked with the team of Intelligent Transportation at IBM Ireland in 2013, and Natural Resources Solutions group at IBM Research Brazil in 2015.

Vivek Nallur

Ph.D.

BDIC Lecturer/Assistant Professor
School of Computer Science
University College Dublin
Phone: 01 716 2475
E-mail: vivek.nallur@ucd.ie

Dr. Vivek Nallur has recently started work on Machine Ethics. He is interested in how to implement and verify ethics in autonomous machines. Questions such as what kinds of ethics would autonomous machines agree to among themselves, how to ensure that individually ethical machines don't combine to produce un-ethical behaviour, are interesting to pose and answer computationally. This is, by nature, an inter-disciplinary thread and I am quite interested in collaborating with folks in the field of philosophy/law/politics etc.

He is on the Organizing Committee for AAAI 2021 Spring Symposium Series on Implementing AI Ethics [22-24 March 2021] .He is also a voting member, and serves on the IEEE P7008 Standards committee for Ethically Driven Nudging for Robotic, Intelligent and Autonomous Systems. He is very interested in complex self-adaptive systems, engineering emergent feedback loops, predicting and controlling emergence in humano-tech systems (where technical systems interact heavily with human desires/abilities), engineering robust systems from non-robust parts.

David Lillis

Ph.D.

Lecturer/Assistant Professor
School of Computer Science
University College Dublin
Phone: 353 1 716 2926
E-mail: david.lillis@ucd.ie

Dr. David Lillis is Principal Investigator in the CeADAR Technology Centre (Ireland's Centre for Applied AI), which is funded by Enterprise Ireland and IDA Ireland. He is also the Principal Investigator of the Transpire (Trained AI Platform for Regulation) project; a collaboration with Corlytics and Version 1 that is funded by the Department of Enterprise, Trade and Employment under the Disruptive Technologies Innovation Fund. He is a SFI Funded Investigator on the Crop Optimisation through Sensing, Understanding and Visualisation (CONSUS) project. He is also affiliated with the UCD Forensics and Security Research Group. His principal research interests are in the areas of natural language processing, information retrieval, digital forensics, data analytics, and multi agent systems.

Abdul-Wadood

Moomen

Ph.D.

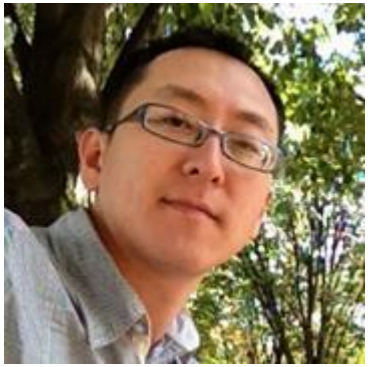
Postdoc Research Fellow LVL II
School of Computer Science
University College Dublin
E-mail: abdul-wadood.moomen@ucd.ie

Dr. Abdul-Wadood Moomen is PhD, Spatial Sciences, Western Australian School of Mines (WASM), Curtin University of Technology (2012 – 2016). Research focused on Applications of Geospatial Technology on Mining Land Use and Conflicts in the global south Bachelor's (Hons.), Geography and Resource Development, University of Ghana (2007 – 2011)

Current research project focuses on Applications of Geospatial Technologies on Sustainable Mining (Sustainable Mineral Resource Extraction) in the global south.

Ruihai Dong

Ph.D.



BDIC Lecturer/Assistant Professor
School of Computer Science
University College Dublin
Phone: 01 716 2631
E-mail: ruihai.dong@ucd.ie

Dr. Ruihai Dong is an Assistant Professor with the School of Computer Science in University College Dublin. His research interests lie broadly in Machine Learning and Deep Learning, and their applications in recommender systems and finance. Ruihai has published in top peer-reviewed journals and conferences such as WWW, RECSYS, IUI, and IJCAI and in 2018 Ruihai was awarded the Outstanding Research Award 2018 by the UCD School of Computer Science for a series of significant publications that year. Ruihai has a track record of collaboration with industry and has worked with companies including Eagle Alpha, SkillPages, and Samsung as well as individually winning funding from Enterprise Ireland for commercialization studying of his research.

Anca Delia Jurcut

Ph.D.

BDIC Lecturer/Assistant Professor
School of Computer Science
University College Dublin
Phone: 01 716 2479
E-mail: anca.jurcut@ucd.ie

Dr. Anca Jurcut is an Assistant Professor in the UCD School of Computer Science since 2015. She received a BSc in Computer Science and Mathematics from West University of Timisoara, Romania in 2007 and a PhD in Security Engineering from University of Limerick (UL) in 2013 funded by the Irish Research Council for Science Engineering and Technology (IRCSET). She worked as a postdoctoral researcher at UL as a member of the Data Communication Security Laboratory and as a Software Engineer in IBM in Dublin in the area of data security and formal verification. She has recently acted as an evaluator of H2020 proposals for the Cryptography and Cybersecurity call. Dr. Jurcut research interests include Security Protocols Design and Analysis, Mathematical Modelling, Automated Techniques for Formal Verification, Cryptography, Computer Algorithms, Security for Internet of Things and Blockchain Security. Much of her work has focused on formal verification techniques for security protocols using deductive reasoning methods (modal logics and theorem proving); automation of logics for formal verification; the development of new logic-based techniques and tools for formal verification; the design and analysis of security protocols; formalisation and modelling of design requirements for security protocols.

Brain Caulfield
Ph.D

Full Professor of Physiotheraphy
Public Health Physiotherapy and Sport Science
University College Dublin
Phone: 01 716 6502
E-mail: b.caulfield@ucd.ie

Dr. Brain Caulfield is currently the Director of the SFI Insight Centre for Data Analytics at UCD. His research is focused on the application of digital supports and data driven technologies for better understanding and enhancement of human behaviour and performance in health and sport. Outside of work he is a running enthusiast in constant seek of new PBs.

Nan ZHANG
Ph.D

z

Lecturer/Assistant Professor
Mechanical and Materials Engineering
University College Dublin
Phone: 01 716 1989
E-mail: nan.zhang@ucd.ie

Dr. Nan Zhang is a Lecturer/Assistant Professor in Manufacturing and Design in the School of Mechanical and Materials Engineering at University College Dublin (UCD) in Ireland. His research areas include precision fabrication of plastic microfluidic and their applications towards nanomedicine and molecular diagnostics, functional surfaces and polymeric miniatured medical devices, Atomic and close-to-atomic scale manufacturing. His vision is to focus on biomedical applications but relies on developing advanced manufacturing technologies from micro scale to nano and atomic scale to critical challenges for emerging medical product development.

Mert Celikin
Ph.D

Lecturer/Assistant Professor
Mechanical and Materials Engineering
University College Dublin
Phone: 01 716 1835
E-Mail: mert.celikin@ucd.ie

Dr. Mert Celikin is Assistant Professor in the School of Mechanical and Materials Engineering at UCD. He received his PhD in Materials Engineering at McGill University in 2012, where he studied high temperature deformation behaviour of magnesium alloys for automotive powertrain applications. He has worked as a postdoctoral fellow at McGill Metals Processing Centre and more recently, at Institut National de la Recherche Scientifique - Centre Énergie Matériaux Télécommunications (INRS-EMT). His research at INRS-EMT was on advanced self-healing composites and optical fiber-based devices for aerospace / space applications with international / industrial collaboration (European Space Agency (ESA), Netherlands and MPB Technologies Inc., Canada). He has also conducted research on lead-free solder alloy design for electronic applications with sponsoring industrial partner (AIM Metals & Alloys Inc.). His research focuses on understanding and controlling the nucleation and growth phenomena in lightweight alloys used for aerospace / automotive / biomedical applications. His expertise is in advanced alloy design / processing and nanostructural characterization.

Vikram Pakrashi
Ph.D

Associate Professor
Mechanical and Materials Engineering
University College Dublin
Phone: 01 716 1833
E-mail: vikram.pakrashi@ucd.ie

Dr. Vikram Pakrashi (BEng, PhD, CEng. MIEI, MASCE) is Associate Professor in Mechanical Engineering and Director of Dynamical Systems and Risk Laboratory (DSRL) in UCD. Vikram is a Chartered Engineer and has served both industry and academia working on numerical and experimental applications of dynamics and risk/probabilistic analysis on traditional (roads, bridges) and bourgeoning (wind/wave energy devices and platforms) sectors of built infrastructure. Several of his projects are partly funded by the industrial sector. His recent research activities involve structural health monitoring, analysis of dynamic systems, vibration control, experimental methods in dynamics, damage detection algorithms and the use of new technologies for such applications. Vikram has supervised and mentored several doctoral and postdoctoral researchers and has received multiple awards for his research and leadership activities. He currently works with a dynamic and motivated team in DSRL close to industrial needs. Vikram is open for collaborations and participation in relevant funding calls.

Basuraj Bhowmik
Ph.D

Post Doc Research Fellow Lvl I
Mechanical and Materials Engineering
University College Dublin
E-mail: basuraj.bhowmik@ucd.ie

Dr. Bhowmik received his PhD on the topic of real-time condition monitoring of built infrastructure systems. The problem was motivated by the paucity of literature in this field. His recent work in the topic addressed this gap through theoretical developments, numerical simulations and experimentation. Overall, his work established and advanced the field of real-time detection through a comprehensive treatment of first order perturbation systems. Dr. Bhowmik currently works as a Postdoctoral Associate in the School of Mechanical and Materials Engineering. He is involved in an SEAI funded project, 'WindPearl', with the primary responsibility of early and accurate prediction of downtime in wind turbines. Dr. Bhowmik was previously employed as a senior mechanical developer at Siemens, AG Ltd., India where he was responsible for determining the fatigue life of turbine blades and vanes using probabilistic approaches.

Denis Dowling
Ph.D

Professor
School of Mechanical and Materials Engineering
University College Dublin
Phone: 01 716 2970
E-mail: denis.dowling@ucd.ie

Denis Dowling is the director of the 20+ million Euro I-Form Advanced Manufacturing Research Centre, which was established in November 2017. Its research focus is on materials processing (particularly additive manufacturing), as well as the integration of digital technologies into the manufacturing environment. He also leads UCD's participation in the European Institute of Innovation and Technology (EIT) in manufacturing. His own research incorporates the related areas of additive manufacturing and surface engineering. The latter includes the use of plasma treatments to tailor surface properties. He has published extensively in the areas of plasma processing (particularly using atmospheric treatments) and more recently on the processing of polymers, composites and metals by additive manufacturing. His teaching includes modules on Manufacturing and Nanomaterials. 17 PhD and 5 MSc research students have completed their studies under my supervision. He was previously deputy director of the SFI Precision Cluster, which was focused on plasma processing (2009 – 2014). He was the recipient of the UCD Innovation Award (2012) and the gold medal of the Institute of Materials Finishing (2013). Prior to taking up an academic position in UCD in 2008, he worked with Enterprise Ireland for over 25 years. He led several EU funded research projects, he also assisted indigenous companies to develop their own R&D programmes.

Ronald Davies
Ph.D

Professor
Head of School of Economics
University College Dublin
Phone: 01 716 8132
E-mail: ronald.davies@ucd.ie

You can find links to some of my research at: https://econpapers.repec.org/RAS/pda64.htms
The current CV: https://sites.google.com/site/ronbdavies/
BA: Miami University (Ohio)
MA: Miami University (Ohio)
PhD: Penn State University PA

Dominik Naeher
Ph.D

Lecturer/Assistant Professor
School of Economics
University College Dublin
E-mail: dominik.naeher@ucd.ie

Dominik Naeher joined UCD School of Economics in August 2018. Previously, he worked as a research and teaching associate at Goethe University Frankfurt, and as a consultant at the World Bank and Asian Development Bank. He obtained my PhD in economics from the Graduate School of Economics, Finance, and Management at Goethe University Frankfurt in June 2018. His primary research interests are in development economics and international economics.

Yota Deli
Ph.D

Lecturer/Assistant Professor
School of Economics
University College Dublin
Phone: 01 716 8307
E-mail: yota.deli@ucd.ie

Lecturer of Corporate Finance and Banking: University of Glasgow, Scotland1 Jan 2017 - 1 Aug 2018
Post-doctoral Fellow in Economics: Economic and Social Research Institute, Ireland31 Aug 2015 - 1 Jan 2017
Her research interests are in Macroeconomics and Banking, Fiscal Policy and Taxation, Property and Economic Inequality. Please find links to some of her research at: https://people.ucd.ie/yota.deli/publications

Vessela Daskalova
Ph.D

Assistant Professor
School of Economics
University College Dublin
E-mail:vessela.daskalova@tse-fr.eu

Vessela Daskalova is an economist working on discrimination, social identity, bounded rationality, individual and collective decision making. She is an Assistant Professor of Economics at University College Dublin and Fellow at the Geary Institute for Public Policy.She completed her PhD at Queen Mary University of London and then spent some time at the University of Cambridge, the Institute for Advanced Study in Toulouse, and Toulouse School of Economics.

Zuzanna Studnicka
Ph.D

Lecturer/Assistant Professor
School of Economics
University College Dublin
Phone: 01 716 8434
E-mail: zuzanna.studnicka@ucd.ie

Zuzanna Studnicka is an Assistant Professor at UCD since August 2017. Her work focuses on international trade and FDI. Prior to that she worked as a postdoctoral researcher at the Economic and Social Research Institute in Dublin. She has a PhD from KU Leuven (Belgium).

Kevin Devereux
Ph.D

Lecturer/Assistant Professor
School of Economics
University College Dublin
E-mail: kevin.devereux@ucd.ie

Kevin Devereux is an Assistant Professor at the School of Economics at University College Dublin. His research interests are Labour, Family, and Health Economics, with an emphasis on empirical application. His current research agenda focuses on identifying the contribution of individual workers to team output, with applications to professional tennis and scholarly economic research. He finds variation between workers' value-added to teams and their productivity at solitary production tasks, inferring a role for teamwork that is distinct from general productivity. Another strand of his research involves transitory spending dynamics and their implications for inference from and the design of RCTs, in health and other areas. Finally, He is leading a study on labour market concentration in Ireland for the Low Pay Commission along with two colleagues at UCD. Find his research at: https://kevindevereux.com/

Ivan Pastine
Ph.D

Lecturer/Assistant Professor
School of Economics
University College Dublin
Phone: 01 716 8395
E-mail: ivan.pastine@ucd.ie

Ivan Pastine earned his Ph.D. in Economics from Georgetown University in Washington DC. Prior to joining the School of Economics in UCD, he worked at the Division of International Finance at the Board of Governors of the Federal Reserve System in USA and at Bilkent University in Turkey. He also lectured at the University of British Columbia in Canada as a Visiting Associate Professor. Ivan served as a Research Affiliate in International Macroeconomics in CEPR, a London-based think tank. He contributes as a programme committee member to numerous conferences of professional associations such as the European Economic Association, and the Association of Southern European Economic Theorists. He served as a Local Organization Committee Member for the European Meeting of the Econometric Society Annual Conference and for the European Economic Association Meeting. Dr. Pastine has wide research interests contributing in the fields of game theory, public economics, industrial organization, economics of education and international economics. His recent research focuses on public policy and political elections. He publishes in leading international journals such as the Journal of Public Economics, International Economic Review, Public Choice, Economics Letters, Economics of Education Review and International Journal of Industrial Organization. His work on theoretic explanations of financial crises have been published in international journals such as Journal of International Economics and Economic Theory and are used as required reading in the Ph.D. programs at Harvard and the LSE. Ivan has been a handyman, a Boatswains Mate in the US Navy before staring his career in economics.

Frank Walsh
Ph.D

Associate Professor
School of Economics
University College Dublin
Phone: 01 716 8697
E-mail: frank.walsh@ucd.ie

Frank Walsh is a labour economist and have been a lecturer in the School of Economics at U.C.D. since 1995. Prior to this I completed my Ph.D at the University of Iowa under the supervision of John Kennan. I work primarily on imperfectly competitive models of the labour market, labour market policy and labour markets in developing countries.

Dimitrios Argyropoulos
Ph.D

Lecturer/Assistant Professor
Biosystems and Food Engineering
University College Dublin
Phone: 0896050322
E-mail:dimitrios.argyropoulos@ucd.ie

Dr. Dimitrios Argyropoulos is an Assistant Professor in the UCD School of Biosystems and Food Engineering. He was born in Athens (Greece), completed his BSc studies in Biosystems Engineering (Agricultural Machinery & Irrigation) and moved to Stuttgart (Germany) for an MSc in Environmental Protection & Agricultural Food Production with a fellowship from the Greek State Scholarships Foundation (IKY). After obtaining his MSc, he joined the group of Agricultural Engineering in the Tropics and Subtropics at the University of Hohenheim, a leading group working on renewable energy supply systems and post-harvest technology. He holds a PhD in Agricultural Engineering from the University of Hohenheim, being a member of the Association of German Engineers (Max Eyth Society for Agricultural Engineering).

Ronald Halim
Ph.D

Lecturer/Assistant Professor
Biosystems and Food Engineering
University College Dublin
Phone: +353 89 605 4447
E-mail: ronald.halim@ucd.ie

Ronald Halim is an assistant professor in the School of Biosystems and Food Engineering at University College Dublin. He has multidisciplinary research interests in the sustainable production of food, fuel and biochemicals from microalgal and macroalgal biomass. After completing his PhD in microalgal cell rupture and lipid recovery from Monash University in 2014, he continued his research into scalable microalgal bioprocess engineering, developing a biorefinery system that included an autolytic-inducing step to fractionate the biomass into a range of protein, food products and biofuel precursors during his postdoctoral appointments. The passion he has for his research has taken him to various institutions around the world, including The University of Melbourne, Karlsruhe Institute of Technology and Carnegie Institution for Science (Stanford University). He has previously been successful in attracting funding from internationally competitive schemes to support his research undertakings, such as the John Stocker Postdoctoral Fellowship and the Humboldt Postdoctoral Fellowship. His group at UCD is currently building its capacity to carry out state-of-the-art research in microalgae and macroalgae biorefinery systems. He is keen to continue expanding his international and multidisciplinary collaboration network.

Philip Donnellan
Ph.D

Lecturer/Assistant Professor
Chemical and Bioprocess Engineering
University College Dublin
Phone: 01 716 1862
E-mail: philip.donnellan@ucd.ie

Please find links to some of her research at: https://people.ucd.ie/philip.donnellan/publications
BE: University College Cork
PhD: University College Cork

Eoin O'Cearbhaill
Ph.D

Associate Professor
Mechanical and materials Engineering
University College Dublin
Phone: 01 716 1715
E-mail: eoin.ocearbhaill@ucd.ie

Dr. Eoin O'Cearbhaill, BE, PhD, is an Associate Professor in Biomedical Engineering at the UCD School of Mechanical & Materials Engineering. Prior to joining UCD, Dr. O'Cearbhaill was a Postdoctoral Fellow at Harvard Medical School (Harvard-MIT Health Sciences & Technology Division; Dept. of Medicine, Brigham & Women's Hospital), where his research focused on the conception and development of medical devices and the delivery of next generation therapeutics, in the laboratory of Prof. Jeffrey Karp. Based on his development of a mechanical clutch needle, designed to prevent through-puncture injuries, Dr O'Cearbhaill was awarded 1st prize at the MIT Sloan BioInnovations 2012 conference. He was also part of the team that received the Institution of Chemical Engineers' Innovative Product of the Year Award 2013 for their work on developing a bio-inspired microneedle adhesive. Dr O'Cearbhaill obtained his BE (Biomedical) and PhD from NUI Galway. His doctorate focused on applying mechanical stimulation to MSCs for vascular tissue engineering applications. Subsequently, he worked for Veryan Medical, before joining Creganna-Tactx, where he worked in both manufacturing and design service roles, helping to establish their Specialty Needles Division in Marlborough, MA. Dr O'Cearbhaill's interests include: 3D Printing of Medical Devices; Medical Device Innovation, Design and Commercialisation, including minimally invasive devices and delivery systems

John Healy
Ph.D

Lecturer/Assistant Professor
Electrical and Electronic Engineering
University College Dublin
Phone: 01 716 1854
E-mail: john.healy@ucd.ie

John J. Healy was born in Co. Dublin, Ireland in 1983. He was awarded the B.E. and Ph.D. degrees in Electronic Engineering from University College Dublin in 2005 and 2010. He has worked as a postdoctoral fellow in Physics in UNAM, Mexico, and in Computer Science and Electronic Engineering in Maynooth University. In 2012, he was awarded the NUI Postdoctoral Fellowship in the Sciences. He has been a Lecturer in Electrical, Electronic and Communications Engineering in UCD since 2015. He is a member of the IEEE, the OSA and the SPIE.

Avishek Nag
Ph.D

Lecturer/Assistant Professor
Electrical and Electronic Engineering
University College Dublin
Phone: 01 716 1854
E-mail: avishek.nag@ucd.ie

Dr Avishek Nag is currently an Assistant Professor in the School of Electrical and Electronic Engineering at University College Dublin in Ireland. Dr Nag received the BE (Honours) degree from Jadavpur University, Kolkata, India, in 2005, the MTech degree from the Indian Institute of Technology, Kharagpur, India, in 2007, and the PhD degree from University of California, Davis in 2012. He worked as a research associate at the CONNECT centre for future networks and communication in Trinity College Dublin, before joining University College Dublin. Dr Nag is the recipient of the Best Paper Award at the 2nd IEEE Advanced Networks and Telecommunication Symposium in 2008 and has published over 35 publications including journals, conference proceedings, and book chapters with over 950 citations. His research interests include, but are not limited to Cross-layer optimisation in Wired and Wireless Networks, Network Reliability, Mathematics of Networks (Optimisation, Graph Theory), Network Virtualisation, Software-Defined Networks, Machine Learning, Data Analytics, Blockchain, and the Internet of Things. Dr Nag is a senior member of the Institute of electronics and electrical engineers (IEEE) and also the outreach lead for Ireland for the IEEE UK and Ireland Blockchain Group.

Barry Cardiff
Ph.D

Lecturer/Assistant Professor
Electrical and Electronic Engineering
University College Dublin
Phone: 35317161915
E-mail: barry.cardiff@ucd.ie

Barry Cardiff graduated with a B.Eng from the Electronic Engineering department in UCD in 1992 and an M.Eng.Sc (by research) thereafter. In 2011 obtained a PhD, as a mature student in the field of Digital Signal Processing (DSP) for wireless and optical communications. Worked for as a design Engineer for Nokia Mobile Phone (UK) Ltd from 1993 to 2001 working on some of world's more advanced and innovative products culminating in the role of Chief Engineer and as a contributor to the 3GPP standardization process. Moved to Ireland in 2001 to work as a Systems Architect in Silicon & Software Systems (S3 group) working mainly on embedded hardware / software development projects with applications ranging from wireless communications to hearing aids. Continued to work for S3 group for several years after a break between 2007-2011 to obtain a PhD from UCD under Prof. Tony Fagan with a thesis entitled "Detection Techniques in Vector Systems in Communications". In September 2013 joined the academic staff in UCD to complement the teaching staff both in Dublin and in a joint collaboration in Beijing (BDIC). Research interests are in the area of DSP applications mainly in communication systems both in the theoretical analysis and practical advancement of such systems. The area of power / complexity reduction techniques in circuit design, i.e. DSP algorithms for digitally assisted analog circuits, is also of current interest.

Xiping WU
Ph.D

Lecturer/Assistant Professor
Electrical and Electronic Engineering
University College Dublin
Phone: 01 716 1928
E-mail: xiping.wu@ucd.ie

Xiping Wu received the Ph.D. degree from The University of Edinburgh in 2015. From June 2015 to February 2019, he held a Post-Doctoral Fellowship with the LiFi R&D Centre, The University of Edinburgh. From February 2019 to November 2020, he was a Research Fellow at University of Oxford. He is currently an Assistant Professor at the School of Electrical and Electronic Engineering, University College Dublin.

Declan Delaney
Ph.D

Lecturer/Assistant Professor
Electrical and Electronic Engineering
University College Dublin
Phone: 01 716 1934
E-mail: declan.delaney@uc

Declan is an Assistant Professor at the School of Electrical and Electronic Engineering, UCD. Declan received his Ph.D. in network analysis and design for IoT at the School of Computer Science, UCD in 2015. Declan is an SFI Funded Investigator on the project CONSUS (www.consus.com), an SFI-industry funded collaboration focused on precision agriculture, and a Principal Investigator for the Smart BOG project (www.smartbog.com). d.ie

Peter Kennedy
Ph.D

Full Professor, Head of School
Electrical and Electronic Engineering
University College Dublin
Phone: 01 716 1903
E-mail: peter.kennedy@ucd.ie

Please find links to some of her research at: https://people.ucd.ie/peter.kennedy/teaching

Deng: National University of Ireland
MSc: University of California Berkeley CA
PhD: University of California Berkeley CA

John Sheridan
Ph.D

Professor
Vice-Principal for Research & Innovation
College of Engineering & Architecture
School of Electrical and Electronic Engineering
University College Dublin
Phone: 01 716 1927
E-mail: john.sheridan@ucd.ie

John T. Sheridan was born in Castlebar, Co. Mayo, Ireland, where he attended St Patrick's National School and St Gerald's College. He received his Bachelors degree (H1) in Electronic Engineering, from University College Galway (NUIG) in 1985, and his Masters degree in the Science of Electrical Engineering, (MScEE), from Georgia Tech, in 1986. While at GT he worked as a Research Assistant of Prof. William T. Rhodes.

BJUT Biographies

Yanyan CHEN

Ph.D.

陈艳艳

Professor
Faculty of Architecture, Civil and Transportation Engineering
Beijing University of Technology
Phone: +86-10-67391680
E-mail: cdyan@bjut.edu.cn

Yanyan Chen (1970-), Professor, Ph.D. Supervisor. She is currently the Dean of College of Metropolitan Transportation at Beijing University of Technology, vice president of Urban Transportation Branch of China Highway and Transportation Society, executive director of Traffic Engineering and Information Branch of China Highway and Transportation Society. Her research interests include transportation big data, intelligent connected vehicles, urban transportation planning and management, and has achieved a series of innovative outcomes. She has published more than 100 articles in peer-reviewed journals, 10 academic monographs and authorized 16 national invention patents. She has also undertaken nearly 100 scientific research projects, including multiple national key Research and Development programs. She is also the recipient of more than 20 provincial and ministerial-level scientific research awards.

Junfeng JIA

Ph.D.

贾俊峰

Associate Professor
Faculty of Architecture, Civil and Transportation Engineering
Beijing University of Technology
Phone: +86-10-67392103
Fax: +86-10-67392103
E-mail: jiajunfeng@bjut.edu.cn

Dr. Junfeng Jia He received his Bachelor's, Master's and Ph.D. degrees in civil engineering from Harbin Institute of Technology in China in July 2004, June 2006 and June 2011, respectively. He has been with the Faculty of Architecture, Civil and Transportation Engineering of Beijing University of Technology (BJUT) in Beijing, China since August 2011. Professor Jia is on the young editorial board for the CHINA JOURNAL OF HIGHWAY AND TRANSPORT, and he is one of the member of several secondary professional associations. Professor Jia has published over 50 papers in scholarly journals and major international conferences, received more than 30 Chinese patents and software copyrights. Prof. Jia has been the principal investigator of more than 20 research projects, including grants from National Natural Science Foundation of China, Beijing Natural Science Foundation, Ministry of Science and Technology and Beijing Municipal Science & Technology Commission. Prof. Jia's research interests include advanced earthquake-resistant devices and structures, and precast bridge elements and structures.

Yubo JIAO

Ph.D.

焦峪波

Professor
Faculty of Architecture, Civil And Transportation Engineering
Beijing University of Technology
Phone: +86-16619966178
E-mail: jiaoyb@bjut.edu.cn

Dr. Yubo Jiao received his B.S. degree in 2007, M.S. degree in 2009 and Ph.D. degree in 2012 in Highway and Railway Engineering from Jilin University, China. He was assistant professor and associate professor of Jilin University from 2012 to 2018. Now he is a professor and Ph.D supervisor of Beijing University of Technology. As principal investigator, Dr. Jiao has hosted more than fifteen projects including National Natural Science Foundation of China, etc. He has published more than 70 papers. His research interests include the assessment and monitoring of transportation infrastructure, fracture characterization of structural materials, etc.

Dr. Jiao is a members of earlier career researchers committee of International Society for Structural Health Monitoring of Intelligent Infrastructure, member of standing committee on new technology promotion of China Communications and Transportation association. He serves as Guest Editor to organize a special issues on *Non-destructive Testing for Performance Evaluation of Civil Materials and Structures* in Advances in Materials Science and Engineering.

Hong ZHENG

Ph.D.

郑宏

Professor
Faculty of Architecture, Civil and Transportation Engineering
Beijing University of Technology

Prof. Hong Zheng received his PHD of engineering mechanics from Graduate School of Chinese Academy of Sciences in 2000, supervised by professors XR Ge and CF Lee; MD of solid mechanics in 1988 and BD of mechanical engineering in 1985 from Northeast University, China. Professor Zheng worked for Institute of Rock and Soil Mechanics, Chinese Academy of Sciences during 1988 to 2018. Now he is teaching at College of Architecture and Civil Engineering, Beijing University of Technology.

The academic interests of professor Zheng are mainly in numerical methods in geotechnical engineering and slope engineering. His consultancy activities include many far-reaching projects, such as Three Gorges Project. His research results are adopted in many commercial software products. He is the first or corresponding author of more than SCI indexed 70 international journal papers, with SCI citations of more than 3200.

Hongyuan ZHOU

Ph.D.

周宏元

Professor
Faculty of Architecture, Civil and Transportation Engineering
Beijing University of Technology
Phone: +86-15910649589
E-mail: hzhou@bjut.edu.cn

Dr. Hongyuan Zhou a Professor at the Faculty of Architecture, Civil and Transportation Engineering, Beijing University of Technology. He received B.E and M.E. from Xi'an Jiaotong University, respectively, and Ph.D. from Nanyang Technological University, Singapore. His research focuses on the response and protection of structures subjected to man-made hazards (blast, impact, collision, shock, etc), structural dynamics, and lightweight structures.

Dr. Zhou has published around 40 SCI-indexed papers in international journals. He serves as a guest editor of International Journal of Impact Engineering, and editorial board member of Shock and Vibration, among other academic services such as the deputy director of youth committee of the committee on earthquake resiliency and disaster mitigation of infrastructures, Seismological Society of China.

Yue LIU

Ph.D.

刘越

Associate Professor
Faculty of Architecture, Civil and Transportation Engineering
Phone: 86-10-67391862
E-mail: yliu@bjut.edu.cn

Dr. Yue Liu, associate professor and master supervisor. Beijing Specially Recruited Expert, selected as Beijing High-level Talents and Beijing Chaoyang District High-level Talents, and selected as the "Young Hundred Talents" of Beijing University of Technology. Graduated from Shanghai Tongji University with a bachelor's degree in civil engineering majoring in bridges. After that, he went to Southwest Jiaotong University majoring in bridge engineering, under the tutelage of Professor Qiao Li. Two years later, he graduated ahead of schedule and studied at the Technical University of Berlin in Germany for a PhD under the tutelage of Professor Schlaich. His research direction is fiber composite (FRP) cables and cable structures. After graduating from the Ph.D., he continued to stay in the university as a researcher in the Civil Engineering Department of the Technical University of Berlin, and at the same time engaged in bridge structure design at the Schleich Engineering Design Consulting Company (sbp GmbH). He has published more than 20 academic papers, one English monograph, one German-Chinese translation, two international patents, six domestic patents, one software copyright, and more than ten design structures. Served as a member of the Seventh Working Committee of the International Association for Bridges and Structural Engineering (IABSE), a member of the Bridge Branch of the China Highway Society, and served as Composite Structures, Construction and Building Materials, Structural Engineering International (IABSE), Bautechnik, China Journal of Highway and Transport Engineering, etc. Journal reviewer. Instructed students to win the first prize of the Beijing University Student Structural Design Competition, the special prize and first prize of the National College Student "Mao Yisheng Public Welfare Bridge" Design Competition, and the second prize of the World University Student Bridge Design Competition.

Wenlong SHANG

Ph.D. DIC

尚文龙

Lecturer
Faculty of Architecture, Civil and Transportation Engineering
Phone: +86-13520937813
E-mail: shangwl_imperial@bjut.edu.cn

Dr. Wen-Long Shang is currently a Lecturer in the College of Metropolitan Transportation, Beijing University of Technology. He received the Ph.D. degree from the Centre for Transport Studies, Department of Civil and Environmental Engineering, Imperial College London. He has already published more than 20 academic articles in peer-reviewed journals and conferences, such as Applied Energy, Transpormetrica A: transport science and Complexity. He has received several academic awards, such as Imperial College Trust funding, MIT A+B Best Poster Award and Chinese Government Scholarship. He serves as guest editors and members of editorial board for several international academic journals. He is the reviewer of more than 16 journals and conferences.

His research interests include intelligent Transport System, emergency management of transport systems, energy conservation and emission reduction of transport systems, traffic big data, smart city, large scale optimization and so on.

Haoyu HUANG

Ph.D.

黄浩宇

Lecturer
Faculty of Architecture, Civil and Transportation Engineering
Beijing University of Technology
Phone: +8615911070930
E-mail: huanghaoyu@bjut.edu.cn

Dr. Haoyu Huang received his PhD in civil engineering in 2017 from University of Bath, UK, and he received his BEng in civil engineering in 2013 from Beijing University of Technology, China, He is at present a lecturer in civil engineering at Beijing University of Technology. His research interests include structural vibration control, timber structure, tuned mass damper and smart materials. He has published twenty peer-reviewed papers in international journals such as Engineering Structures, Structural Control and Health Monitoring etc. as well as international conferences. Dr Huang currently leads projects funded by National Natural Science Foundation of China, Beijing Municipal Education Commission and Basic Research Foundation of Beijing University of Technology.

Kun XU

Ph.D.

许坤

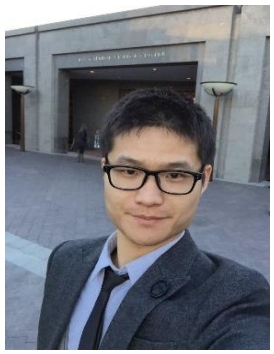
Associate Professor
Faculty of Architecture, Civil and Transportation Engineering
Beijing University of Technology
E-mail: xukun@bjut.edu.cn

Dr. Kun Xu received his Bachelor degree of Civil Engineering from Hunan University in 2010 and his Ph.D in Bridge Engineering from Tongji University, China in 2016. After that he joined Beijing University of Technology. His research focuses on the wind-resistance of long-span bridges and vibration control of civil structures. He has published over 30 papers in peer reviewed journals. He serves as secretary in the Bridge and Tunnel Specialized Committee of Beijing Highway Society. He has been awarded by the "Outstanding Paper Award" in the 2nd International Conference on Industrial Aerodynamics (ICIA2017), "Best Paper Award" in the East Asia Young Engineers Forum of the International Association for Bridge and Structural Engineering (IABSE), "Outstanding Advisor" in the First Beijing Bridge Design Competition, et al.

Hui YAO

Ph.D.

姚辉



Professor
Faculty of Architecture, Civil and Transportation Engineering
Beijing University of Technology
E-mail: huiyao@bjut.edu.cn

Dr. Hui Yao currently is serving in a professor position at the College of Metropolitan Transportation, Beijing University of Technology in China. Dr. Yao received his Ph.D. degree from Central South University, China, and Michigan Technological University, the United States. His research interests include Materials for Civil Engineering, Smart Maintenance, Engineering Mechanics, Molecular Dynamics (MD), and Discrete Element Method (DEM). He has published and submitted more than 60 papers in the field of transportation engineering. Based on google scholar, the citation reaches more than 1000 times. One of the publications is in the Top 25 Hottest Articles in Elsevier and one is also the Essential Science Indicators (ESI) highly cited paper. Moreover, he is serving as an associate editor for the journal of frontiers in materials, and also the editorial member for ten international journals.

Jingsha HE

Ph.D.

何泾沙

Professor
Faculty of Information Technology
Beijing University of Technology
Phone: +86-10-67396061
Fax: +86-10-67396242
E-mail: jhe@bjut.edu.cn

Jingsha He received his Bachelor's degree in computer science from Xi'an Jiaotong University in China in July 1982 and his Master's and Ph.D. degrees in computer engineering from the University of Maryland at College Park in U.S. in December 1984 and December 1990, respectively. Prof. He has been with the Faculty of Information Technology of Beijing University of Technology (BJUT) in Beijing, China since August 2003, starting therein as a distinguished professor of the Beijing municipality during the first three years. Prior to joining BJUT in August 2003, Prof. He had worked for several multi-national companies in the U.S., including IBM Corp. (as a senior computer scientist), MCI Communications Corp. (as a senior engineer) and Fujitsu Laboratories of America, Inc. (as a senior member of research staff), and published more than 10 papers and received 12 U.S. patents. Since joining BJUT in August 2003, Prof. He has published over 300 papers in scholarly journals and major international conferences, received 90 Chinese patents and 53 software copyrights and authored or co-authored 9 books in software engineering and information security. Prof. He has been the principal investigator of more than 40 research projects, including grants from National Natural Science Foundation of China, Beijing Natural Science Foundation, Ministry of Science and Technology and Beijing Municipal Science & Technology Commission. Prof. He's research interests include information security, wireless networks, blockchain technology and digital forensics.

Tong LI

李童

Lecturer
Faculty of Information Technology
Beijing University of Technology
E-mail : litong@bjut.edu.cn

Tong Li holds a lecturer position in the Faculty of Information Technology at the Beijing University of Technology, China. He received his Ph.D. degree in Computer Science from the University of Trento in 2016. He has been an author or co-author of more than 70 papers in peer-reviewed journals, conferences, or workshops in the areas of requirements engineering, security engineering, and conceptual modeling. He is currently focusing on analyzing security requirements for social engineering attacks and hosts a number of research projects, including a National Natural Science Foundation of China, a subtask of a National Key Research and Development Program of China, and a Beijing Education Science Planning Funding. He is an expert of ISO/IEC JTC 1/ SC 27/ WG 4 and works as a co-editor of ISO/IEC 24392.

Xibin JIA

贾熹滨

Professor
Faculty of Information Technology
Beijing University of Technology
E-mail: jiaxibin@bjut.edu.cn

Xibin Jia is Member of CCF, IEEE, CGIS. She is a member of the Chinese Society of Image and Graphics-Big Visual Data Committee (CSIG-BVD) and the Chinese Society of Image and Graphics- Machine Vision (CSIG-MV). She is an Associate Editor of KSII transactions on internet and information system (TIIS).Her research focuses on Intelligent Information Cognition and Computing, Affection Computing, Biomedical Image Analysis and Understanding, and Multimodal Fusion. Xibin Jia has published nearly 40 papers in refereed journals and conference proceedings. She has applied about 10 patents and multiple software copyrights. The main publish papers including: Xibin Jia a Professor of the Information faculty at the Beijing University of Technology. She received her B.S. in Wireless technology from Chongqing University, and her M.S. in Measuring and Testing Technology and Instrument from North University of China, and her Ph.D. in Computer Application Technology from Beijing University of Technology. She was a one-year visiting scholar at University of California Riverside U.S. and a half-year visiting scholar at Flinders University Australia respectively. She has undertaken the Projects supported by the Grants including the National Natural Science Foundation of China, the Beijing Natural Science Foundation et.al.

Xing SU

苏醒

Lecturer
Faculty of Information Technology
Beijing University of Technology
E-mail : xingsu@bjut.edu.cn

Xing Su, lecturer and master supervisor of College of Computer Science and Technology, Faculty of Information Technology, Beijing University of Technology, China. He received his B.Sc in the School of Software Engineering from Beijing University of Technology in 2007. He received his M.Sc and PhD in computer science from University of Wollongong, Australia in 2012 and 2015, respectively. His research interests include distributed artificial intelligence, multi-agent systems, disaster management, wireless sensor network and service-oriented computing. He has published more than 15 SCI/EI papers.

Jing BI

毕敬

Associate Professor
Faculty of Information Technology
Beijing University of Technology
E-mail : bijing@bjut.edu.cn

Jing Bi received her B.S., and Ph.D. degrees in Computer Science from Northeastern University, Shenyang, China. She was a Post-doc researcher at Department of Automation, Tsinghua University, Beijing, China. She was a research scientist at the Beijing Research Institute of Electronic Engineering Technology, Beijing, China. She was a research assistant and participated in research on cloud computing at the IBM Research, Beijing, China. She was a Visiting Research Scholar with the Department of Electrical and Computer Engineering, New Jersey Institute of Technology, Newark, NJ, USA. She is currently an Associate Professor with the Faculty of Information Technology, School of Software Engineering, Beijing University of Technology, Beijing, China. She has over 80 publications including journal and conference papers. Her research interests are in cloud and edge collaborative computing, multi-scale data analytics, machine learning and performance optimization. Dr. Bi was the recipient of the IBM Fellowship Award, and the recipient of the Best Paper Award-Finalist in the 16th IEEE International Conference on Q&A, Sensing and Control. She is now an Associate Editor of IEEE ACCESS. She is a senior member of the IEEE.

Qing MI

米庆

Lecturer
Faculty of Information Technology
Beijing University of Technology
E-mail: miqing@bjut.edu.cn

Qing Mi is a lecturer in the Faculty of Information Technology, Beijing University of Technology, China. She received her M.Sc. in Computer Science and Technology from the Beijing Institute of Technology in 2012 and her Ph.D. in Software Engineering from the City University of Hong Kong in 2018. Her research interests include code readability assessment, data mining and analytics, deep learning and empirical experiments. She has published 20 papers in refereed journals and conference proceedings.

Yi LIANG

梁毅

Associate Professor
Faculty of Information Technology
Beijing University of Technology
E-mail: yliang@bjut.edu.cn

Dr. Liang Yi is an Associate Professor of Faculty of Information Technology at Beijing University of Technology. She has been engaged in teaching for more than 15 years and taught courses of Principle of Computer Organizations, Computer Architecture and Parallel Computing. Dr. Liang focuses on research of performance modelling and optimization of Big Data systems and Artificial Intelligent systems and has published over 40 papers in refereed journals and conference proceedings, such as IEEE Transaction on Parallel and Distributed Systems and Big Data'19. She chairs projects from National Science Foundation of China, National Science Foundation of Beijing and Beijing Municipal Education Commission. She serves as a Technical Reviewer for refereed journals such as IEEE Transaction on Parallel and Distributed Systems, IEEE Transactions on Big Data and International Journal of Supercomputing. Dr. Liang is a member of ACM and IEEE Computer Society.

Yuwen CHEN

陈渝文

Lecturer
Faculty of Information Technology
Beijing University of Technology
E-mail: yuwen.chen@bjut.edu.cn

Yuwen Chen is a lecturer of the College of Computer Science at the Beijing University of Technology. He received his B.S. of computer science, in Guizhou Normal University, and M.S. degree Zhengzhou University, and his Ph.D. in system engineer and service for information society from the Technical University of Madrid. His research focuses on security and privacy problems in Internet of Things scenarios, collaboratively learning, secure neural network inference, etc. He has published several papers in IEEE sensors journals, IEEE systems journals, etc.

Shuopeng LI

李硕朋

Lecturer
Faculty of Information Technology
Beijing University of Technology
E-mail: lishuopeng@bjut.edu.cn

Shuopeng LI is a lecturer in the Faculty of Information Technology, Beijing University of Technology, China. He received his B.Sc in the School of Telecommunication Engineering from Xidian University in 2012. He received his M.Sc in computer science from University of Saint-Etienne, France in 2014. He received his Ph.D in computer science from University of Paris 13, France in 2018. His main research interests are network resource allocation, network resilience, edge computing and deep learning.

Shiwei FENG

冯士维

Professor
Faculty of Information Technology
Beijing University of Technology
E-mail: shwfeng@bjut.edu.cn

Prof. Shiwei Feng is a full professor in the College of Microelectronics. He is leading “The institute of Microelectronic devices” in BJUT. The main areas of research interest are novel semiconductor devices, reliability of semiconductor devices. He is the recipient of the “National Talents Engineering” from the Ministry of Human Resources and Social Security of the People’s Republic of China. He received the government special allowance from China government. He is one of “Famous teachers in Beijing” project. He received the prize of the Provincial and Ministerial Progress for 5 times, and published more than 140 research papers and 30 patents.

Main achievements: in 1994, he was selected as the Beijing Science and Technology New Star Program, in 1995, he was selected as the Beijing Outstanding Young Teacher, and in 1995, he was selected as the Beijing Trans-Century Talent Program. In 2013, he was selected as a national candidate of "Millions of Talents Project" and enjoys the special government allowance of the State Council. He is also a review expert of international cooperation projects of the Ministry of Science and Technology, reviewer of IEEE Electron Device Letter and IEEE Transaction on Electron Device at home and abroad, academic committee member of the Key Laboratory of Microwave Milmillimeter Wave Devices for General Assembly, etc. He has won four second and third prizes of provincial and ministerial level progress awards.

Wensi WANG

王文思

Professor
Faculty of Information Technology
Beijing University of Technology
E-mail: wensi.wang@bjut.edu.cn

Prof. Wensi Wang graduated from Beijing University of Technology in 2005 with a bachelor's degree. He graduated from the Tyndall National Institute in Ireland with a PhD in microelectronics in 2012. He served as a postdoctoral fellow and assistant researcher at Tyndall National Institute in Ireland from 2012 to 2015. He has been teaching at Beijing University of Technology since September 2015.

Main research areas: Field 1. Medical implantable device power management and other analog IC design; Field 2. Application of A.I. edge computing technology in various applications

Field 1 Analog integrated circuit design: Mainly focuses on the power supply of medical implantable devices (such as cardiac pacemakers and DBS). The research content includes but not limited to milliwatt-level high-efficiency DC-DC converter, Wireless energy transmission IC and antenna, energy harvesting technology and its modeling technology, highly integrated power supply design on Active Interposer, artificial intelligence algorithm assisted power IC design automation etc., (master students are required to have good analog integrated circuit design basics. Undergraduates majoring in electronics and microelectronics are welcome to apply.)

Field 2 Algorithm research of edge intelligence technology: mainly use advanced AI chips to conduct research around sensor and multimedia data analysis, and the research content is application oriented for practical problems in the industry. Such as the use of edge computing technology to carry out attribution analysis of environmental big data; classification analysis of aquatic plants such as algae; acoustic fault diagnosis of gear machines; fire evacuation analysis of large buildings, etc. (master students are required to have good programming ability and algorithm analysis ability. Undergraduates majoring in computer science or software are welcome to apply).

Chen XU

徐晨

Professor
Faculty of Information Technology
Beijing University of Technology
E-mail: xuchen58@bjut.edu.cn

Prof. Chen XU

Current Professional Societies:

Committee of photoelectric technology, Chinese Optical Society

Research Areas:

Semiconductor Optoelectronic Devices with Nanostructures

Graphene grown by CVD and its application in devices

Honors:

Beijing Science and Technology Award, First prize

Shujun CHEN

Ph.D.

陈树君

Professor
Dean of Faculty of Materials and Manufacturing
Beijing University of Technology
Phone: +86-13910689237
Fax: +86-6739-1617
E-mail: sjchen@bjut.edu.cn

Dr. Shujun Chen is a Professor of the College of Mechanical Engineering and Applied Electronics Technology, Beijing University of Technology. He received his B.S., M.S. and Ph.D in School of Materials Science & Engineering, Harbin Institute of Technology. His research focuses on plasma arc welding process analysis and equipment, machine assisted manual torch operation system design and response modeling & speed control, in-situ fusion manufacturing system of aluminum alloy assisted by multi robots, and other welding process control & process optimization (resistance spot welding, friction stir welding, laser welding, CMT, etc.). He has published over 122 papers in refereed journals, and been granted over 42 patents.

Dr. Chen has won the Second Award of the National Scientific and Technological Progress in 2015, he also be awarded the A. F. Davis Silver Medal Award for 2 times in 2014 & 2017. Dr. Chen is the Chair Professor of Cheung Kong Scholars Program, and selected into the National Talent Project. Dr. Chen is a Vice Chair of the National Welding Machine Standardization Technical Committee, member of the Education and Training Committee of China Welding Association, Director of Youth Working Committee of Welding Society of China Mechanical Engineering Society, and Managing Director in Welding Association.

Xiaoyan SONG

Ph.D.

宋晓艳

Professor
Faculty of Materials and Manufacturing
Beijing University of Technology
Phone: 861067392311
Fax: 861067392311
E-mail: xysong@bjut.edu.cn

Dr. Xiaoyan Song is group leader of Nanomaterials and Computational Materials Science at Faculty of Materials and Manufacturing, Beijing University of Technology, and the deputy director of the Key Laboratory of Advanced Functional Materials, Education Ministry of China. She is National Distinguished Professor and winner of China National Science Fund for Distinguished Young Scholars. She received her Ph. D degree from University of Science and Technology Beijing in 1999, and worked as Humboldt Fellow at Darmstadt University of Technology, Germany in 2000-2003. She was awarded the “Provincial Science and Technology Progress Award First Prize” once and the “Municipal Natural Science and Technology Award Second Prize” for three times. She has published over 300 papers in peer reviewed journals including Sci. Adv., Adv. Mater., Adv. Sci., ACS Nano, and Acta Mater., and has over 60 patents authorized. Some of her patents have been industrialized and led to more than 10 kinds of high-grade engineering products. She has been engaged as the Associate Editor of Int. J. Refract. Met. Hard Mater. since 2013, and served as committee members of several international and domestic academic societies such as PTC, CSS and CMRS. Based on computational materials science, her group aims at design, preparation, and investigation of microstructures and properties of nanomaterials, including rare-earth materials, hard metals and cermets.

Jinshu WANG

Ph.D.

王金淑

Professor
Faculty of Materials and Manufacturing
Beijing University of Technology
Phone: 861067391101
Fax: 861067391101
E-mail: wangjsh@bjut.edu.cn

Dr. Jinshu Wang Professor of Department of Materials Science & Engineering, Beijing University of Technology. She received her Ph. D degree majoring in Materials Science from Beijing University of Technology. From 2002 to 2004, she has been worked in Tohoku University, Japan, as a post-doctor. She was awarded the Distinguished Professor of Chang Jiang Scholars Program by the Ministry of Education, China in 2015. She received National Science Fund for Distinguished Young Scholars in 2012, and China Youth Science and Technology Award authorized by the China Association for Science and Technology in 2011. Prof. Wang is the author of over 200 peer reviewed journal (Adv. Funct. Mater., Appl. Catal. B: Environ., J. Mater. Chem. A ect.) papers and 2 books. Her research interests encompass electron emission materials, photocatalysts for hydrogen production and pollution control.

Wenbo DU

Ph.D.

杜文博

Professor
Faculty of Materials and Manufacturing
Beijing University of Technology
Phone: 13910134190
E-mail: duwb@bjut.edu.cn

Dr. Wenbo Du is a professor of College of Materials Science and Engineering, Beijing University of Technology. He received his B.S. and M.S. from Department of Material Science and Engineering of Zhejiang University in 1986 and 1991, respectively, and got his Ph.D degree from Materials Science and Engineering of Tokyo University in 2000. As a distinguish professor, He was employed in BJUT in 2004, and elected as a high-level returnee in 2005. He is now the leader of light metals innovative-group of BJUT, and his researching interest includes processing, microstructure control and performance of magnesium alloys. Up to now, he has presided over the national projects such as 973, 11th/12th Five-year Plan and National Key Research and Development Program etc., and published more than 130 papers and granted more than 30 domestic invention patents.

He is now the commenting expert of national research projects, the vice president of magnesium alloys branch of Chinese materials research society and the director of academic committee of Beijing graphene and applied engineering technology center. He is also the editorial board of international journal of magnesium alloy and a peer reviewer of international journals such as JCA, MSE, JSMT, AMS etc.

Haijun YU

Ph.D.

尉海军

Professor
Faculty of Materials and Manufacturing
Beijing University of Technology
Phone: 86-10-67392837
E-mail: hj-yu@bjut.edu.cn

Dr. Haijun Yu is currently a full professor at Materials Science and Engineering College, Beijing University of Technology (BJUT) since 2015. He obtained his B.E in 2003, and received his Ph.D in 2007 from Northeastern University, China. During the period (2007-2010) at General Research Institute for Non-ferrous Metals, he was working as a senior engineer on the Ni-MH power battery and application. After that, in 2010-2015, he did research works on advanced battery materials at National Institute of Advanced Industrial Science and Technology (AIST) in Japan.

His research interests involve the advanced materials for energy storage systems, especially lithium/sodium/potassium-ions batteries, solid state batteries and aluminum-ions batteries. In 2019, based on his research results on local structure investigation of electrode materials in the past 10 years, the concept of “crystalline domain battery materials” has been proposed for the first time and published in the famous ACS journal of Acc. Chem. Res. Until now, Dr. Yu has published over 100 papers in peer-reviewed journals including Angew. Chem. Int. Ed. (3), J. Am. Chem. Soc. (1), Energy & Environ. Sci. (4), Adv. Mater.(3), Adv. Funct. Mater.(5), Acc. Chem. Res.(1), Nano Lett.(1), ACS nano(1), Nano Energy (4), Energy Storage Mater.(4), J. Mater. Chem. A(4) etc. and filed 40 patents in the field of new energy materials. Dr. Yu was also awarded as “National Science Fund for Outstanding Young Scholars” (2016), “Beijing Science Fund for Distinguished Young Scientists (2019) and “Beijing's Youth Award” (2016).

Yongzhe ZHANG

Ph.D.

张永哲

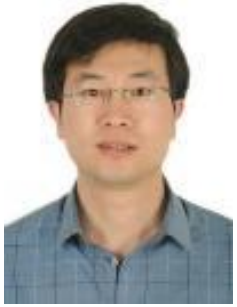
Professor
Faculty of Materials and Manufacturing
Beijing University of Technology
Phone: 86-10-6739 1716
E-mail: yzzhang@bjut.edu.cn

Dr. Yongzhe Zhang is currently a full professor in Beijing University of Technology (BJUT). He obtained the National Science Fund for Excellent Young Scholars in 2019, “Program for Overseas Talents Aggregation” award and “Beijing Nova program” award in 2014, and he is also the “specially-invited expert” of Beijing. He received his Ph.D. degree in 2009 from Lanzhou University majored in Condensed Matter Physics. Then he moved to Yonsei University in South Korea as a postdoc and Nanyang Technological University in Singapore as a research scientist from 2010 to 2013. His present research interests are optoelectronic materials and devices such as photodetector and solar cells. Until now, he has published more than 90 peer-review research papers on Nature Communications, ACS Nano, Advanced Functional Materials, Small, Journal of Power Source et al.

Xingye (Alex) GUO

Ph.D.

郭星晔



Assistant Professor
Faculty of Materials and Manufacturing
Beijing University of Technology
Phone: 86-010-67392168
E-mail: xyguo@bjut.edu.cn

Dr. Xingye (Alex) Guo is an Assistant Professor at College of Materials Science and Engineering (MSE) at Beijing University of Technology (BJUT) since January 2018. He received his PhD degree in School of Mechanical Engineering from Purdue University in Dec. 2016. His research of interests are mainly focused on (1) thermal/environmental barrier coatings, (2) additive manufacturing technology for metal-based materials, and (3) multi-scale computational materials science. Specifically, Dr Guo has research experiences in multiple topics, including stability and failure analysis of lanthanum zirconate ($La_2Zr_2O_7$) and 8YSZ gradient thermal barrier coatings(TBCs), multi-scale modelling and theoretical calculations of thermal and mechanical properties of TBCs, the rare-earth element doping design of $Yb_2Si_2O_7$ environmental barrier coatings (EBCs), the interfacial bonding properties of laser selective melting (SLM) Aluminum/copper-diamond composites, the SLM fabrication of the tantalum alloys for biomedical applications, the structural simulation study of SLM fabricated 3D printing products, etc. Dr Guo received several funds from multiple sources, including the National Natural Science Foundation (NSFC), the Beijing Municipal Education Commission and BJUT. He also participated in multiple projects which were led by other professors, including the National Key Research and Development Project, and the project in Beijing's Chaoyang Science and Technology Commission. Dr Guo published more than 20 journal papers based on the above research topics.

Xiaodong YANG

Ph.D.

杨晓东

Professor
Faculty of Materials and Manufacturing
Beijing University of Technology
Phone: 86-010-67391504
E-mail: jxdyang@163.com

Prof. Xiao-Dong Yang received his PhD degree in Mechanics from Shanghai University, China, in 2004, and was a visiting scholar of Wilfred Laurier University in 2005-2006. Now he works at Beijing University of Technology. His research interests are nonlinear vibrations of axially moving material, vibrations of pipes conveying fluid, panel flutter of aircraft structures, flow induced nonlinear vibrations, time-varying parameter systems, and the perturbation techniques for nonlinear dynamics. More than 100 papers have been published in SCI journals, such as AIAA Journal, ASME Journals, Journal of Sound and Vibration, et al. He was granted the National Science Fund for Excellent Young Scholars and named as the Beijing Distinguished Professor for his research job.

Xiucheng LIU

Ph.D.

刘秀成

Professor
Faculty of Materials and Manufacturing
Beijing University of Technology
Phone: 8613811085097
E-mail: xiuchliu@bjut.edu.cn

Dr. Xiucheng Liu is currently a Professor in College of Mechanical Engineering and Applied Electronics Technology, Beijing University of Technology. He received his B.S.Eng in Mechanical Engineering from Beihang University, China in June 2007, and received his PhD in Mechanical Engineering from Beijing University of Technology, China in June 2013. Dr. LIU worked as a Research Associate in SEEM department of City University of Hong Kong during the period of September 2009~August 2010, and September 2013~January 2014. His research topic is about nondestructive testing and evaluation. The research Interests include micro-magnetic measurement techniques, Structural health monitoring, etc.

Fan JIANG

Ph.D.

蒋凡

Professor
Faculty of Materials and Manufacturing
Beijing University of Technology
Phone: 8613720087645
E-mail: jiangfan@bjut.edu.cn

Dr. Fan Jiang received his Bachelor's degree in Welding technology and engineering from Harbin Institute of Technology in 2008, then participated in successive postgraduate and doctoral program and received PhD in Mechanical Engineering from Beijing University of Technology. Prof. Jiang has been with the Faculty of Materials and Manufacturing of Beijing University of Technology (BJUT) in Beijing, China since August 2014. Since 2016, he has been invited to become a joint researcher of JIJREC International Cooperative Research Program from Osaka University in Japan, and has been invited to become a visit professor of University of Alberta in Canada since 2019. His major research interests include novel arc welding process, welding arc physics, welding process control and metal additive manufacturing. Recently he has won 3 prizes of Science and Technology Progress from government and China Machinery Industry Federation, been responsible of National Natural Sciences Foundation of China and other ministerial-level programs, has published 40 papers in scholarly journals and major international conferences, received 30 Chinese patents, has been the principal investigator of more than 10 research projects, including grants from National Natural Science Foundation of China, Beijing Natural Science Foundation, Ministry of Science and Technology and Beijing Municipal Science & Technology Commission.

Pei CHEN

Ph.D.

陈沛

Associate Professor
Faculty of Materials and Manufacturing
Beijing University of Technology
Phone: 8613021251566
E-mail: peichen@bjut.edu.cn

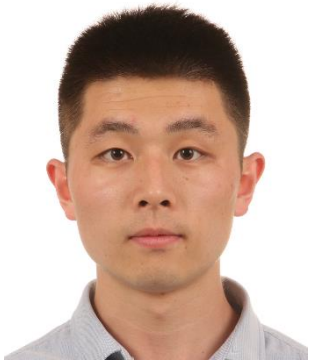
Dr. Pei Chen is appointed as an associate professor in Institute of Electronics Packaging Technology and Reliability, College of Mechanical Engineering & Applied Electronics Technology in Beijing University of Technology (BJUT). Currently, his main research interests include thermal-mechanical reliability of high-density electronics packaging or 3D packaging structure, precision manufacture of semiconductor materials, mechanical properties, interfacial strength and residual stress of electronics packaging materials. He worked on multiple National Science Foundation of China projects and National Science and Technology Research projects on electronics packaging technology. He has published more than 20 journal papers with a total citation of more than 900 times. He is also the sub-committee member and organizer of the session “Thermal and Mechanical Simulation and Characterization” in 2018 and 2019 IEEE International Conference of Electronics Packaging and Technology.

Before joining BJUT, he worked as a senior research engineer at both Akron office and Beijing Research Center of Linglong Tyre from 2013 to 2014. Before that, he was the co-founder of the start-up company named Akron Ascend Innovation LLC at 2012. He finished graduate training at University of Akron under the supervision of Dr. Shing-Chung Wong. He worked with Delphi Packard on durability study of polymer-matrix based composites for Master thesis, and his PhD dissertation is focused on synthetize, characterize and optimize of electrospun nanofibrous polymer materials with the support of NSF.

Xiang WANG

Ph.D.

王翔



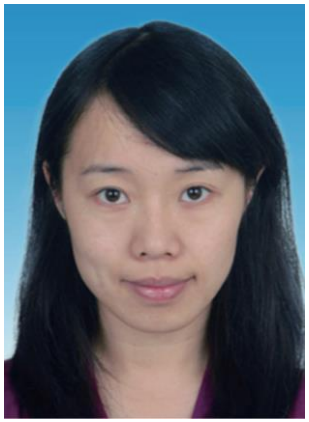
Assistant Research Fellow
Faculty of Materials and Manufacturing
Beijing University of Technology
Phone: 861067391503
E-mail: wangxiang@bjut.edu.cn

Dr. Xiang Wang is a postdoctoral research associate at Beijing University of Technology, where he received his PhD degree in Mechanics in 2019. His PhD thesis was selected as one of the best theses of Beijing University of Technology in 2019. His research interest is microscale multiphase flow. He has participated in the application and study of three National Natural Science Foundation of China and co-authored 9 sci journal papers.

Yan PANG

Ph.D.

逄燕



Associate Professor
Faculty of Materials and Manufacturing
Beijing University of Technology
Phone: 861067391503
E-mail: pangyan@bjut.edu.cn

Dr. Yan Pang received her PhD degree in Fluid Mechanics from Beijing University of Technology, China, in 2016. She has been selected in "Rixin Talent" Program of Beijing University of Technology. Her research interests are multi-phase dynamics with a complex interface, multi-phase flow in microfluidic chips, and manufacture of materials based on microdroplets. She worked on multiple National Natural Science Foundation projects, equipment pre-research fund, the Beijing Natural Science Foundation Project, and the Ministry of Education's University Doctoral Fund. Dr. Pang has published more than 20 journal papers and applied for more than 20 invention patents, 14 of which have been authorized.

Xinping ZHANG

Ph.D.

张新平

Professor
Faculty of Science
Beijing University of Technology
Phone: +86-10-67391476
E-mail: zhangxinping@bjut.edu.cn

Prof. Xinping Zhang did his PhD with Professor Dr. Wolfgang Ruehle at the Department of Physics, University of Marburg in Germany from 2000 to 2002. He worked as an assistant of Professor Dr. Harald Giessen at the Institute of Applied Physics, University of Bonn in Germany from 2003 to 2004. Then, he moved to the Optoelectronics Group at Cavendish Laboratory, University of Cambridge and worked as a research associate under the supervision of Professor Sir Richard Friend from 2004 to 2006. Since 05 Dec. 2006, he has been a professor at Faculty of Science, Beijing University of Technology (BJUT). His research topics include: Ultrafast laser technology and applications; Organic optoelectronics; Nanophotonics and applications. He is currently a professor of Physics and Optical Engineering and leading the Institute of Information Photonics Technology at BJUT. He authored about 200 publications, which include those published in some top international journals like Science Advances, Advanced Materials, Advanced Science, and Nano Letters, in the research fields of Ultrafast- and Nano-Optics and Optical Materials.

Tianrui ZHAI

Ph.D.

翟天瑞

Professor/Dean
Faculty of Science,
Beijing University of Technology
Phone: 010-67392184
E-mail: trzhai@bjut.edu.cn

Prof. Tianrui Zhai received his PhD in physics in 2010 from Beijing Normal University, China. He is at present a professor and the Dean of the Faculty of Science, Beijing University of Technology. His research interests include organic semiconductor microcavity lasers and plasmonics. He has published three research monographs and more than ninety peer-reviewed papers. All papers have been cited by more than 800 scientific publications. He obtained the “Yutai Rao Fundamental Optics Award” and the “Henry Fok Young Teachers Award”. He was included in the plans of Beijing Nova Program, Beijing excellent young researcher, and Beijing high level innovation experts.

Dayong WANG

Ph.D.

王大勇

Professor
Faculty of Science
Beijing University of Technology
Phone: 010-67391741
E-mail: wdyong@bjut.edu.cn

Prof. Dayong Wang is a Professor of Faculty of Science at Beijing University of Technology. He received his B.S. from Huazhong University of Science and Technology, China, and Ph.D. from Xi'an Institute of Optics and Fine Mechanics, Chinese Academy of Sciences. From 1994 to 1996, he did his postdoctoral work in Xidian University, China. In 1996, he joined the Department of Applied Physics, Beijing University of Technology. From 1998 to 2000, he worked at the Weizmann Institute of Science, Israel, as a visiting scientist. Since 2000, he has been a professor in the College of Applied Sciences, BJUT. From 2006 to 2007, he worked as a visiting scholar in the Institute of Applied Optics at University of Stuttgart, Germany. In 2016, he worked in University of California, Los Angeles as a senior visiting scientisit. His research interests include optical information processing, optical storage, holography, terahertz imaging and microwave photonics. He has published over 100 papers in refereed journals. He is a member of the COS, SPIE and OSA.

Lu RONG

Ph.D.

戎路

Associate Professor
Faculty of Science
Beijing University of Technology
Phone: 010-67391741
E-mail: ronglu@bjut.edu.cn

Asso. Prof. Lu Rong is the dean of department of optical information at Beijing University of Technology. He received his B.S. and Ph.D. from Beihang University, China. From 2012 to 2014, he did his postdoctoral work in BJUT. His research interests include optical information processing, digital holography and terahertz imaging. He has published 59 papers in refereed journals with 970 citations. He is a member of COS, SPIE and OSA.

Pingxue LI

Ph.D.

李平雪

Professor
Institute of Laser Engineering
Phone: 010-67392388
Beijing University of Technology
E-mail: pxli@bjut.edu.cn

Professor Pingxue Li obtained a PhD degree from the Institute of Physics, Chinese Academy of Sciences (CAS) in 2004. From 2004 to now, she worked in the institute of laser engineering, Beijing University of Technology (BJUT). She has authored over 80 technical publications in journals such as: Photonics Technology Letters, Optics Communications, laser Physics Letters, Applied Physics B etc., and produced over 30 patents. Senior Member of the Chinese Electron Committee, Commissioner of the Chinese quantum electronics Committee. In 2007, she received the award of the “Beijing NOVA Program”. In 2012 and 2013, she won “the Youth Innovation Talents Program of Beijing Municipal Commission of Education” and “Jinghua Talents of BJUT”, respectively. In 2018, she won “Beijing Billions of Talents Innovation Talents Program” and “Youth Beijing Scholar 2018”.

Jinxin (Jin) GUO

Ph.D.

郭金鑫

Associate Professor
Faculty of Science
Beijing University of Technology
E-mail: jinxin.guo@bjut.edu.cn

Dr. Jinxin Guo is an Associate Professor of the College of Applied Sciences in Beijing University of Technology. He received his B.E. in Optoelectronic Engineering from National University of Defense and Technology, and his M.E. in Electrical Engineering from Stevens Institute of Technology, and his Ph.D in Optical Engineering from University College Dublin (supervisor Prof. John T. Sheridan). His research focuses on the mechanism in holographic photopolymers and their applications. He has published over 40 papers in peer reviewed journals, book chapters, and conference proceedings. His doctoral programme was funded by the Irish Research Council for Science, Engineering and Technology. He received the title of JSPS Fellow that was granted by Japan Society for the Promotion of Science Postdoctoral Fellowships in 2013. He awarded Beijing Overseas Talents Program for young researchers in 2016.

Dongmei HAO

Ph.D.

郝冬梅

Professor
Faculty of Environment and Life
Phone: 86-13520385851
E-mail: haodongmei@bjut.edu.cn

Dr. Dongmei Hao is a Professor of Biomedical Engineering at the Faculty of Environment and Life, Beijing University of Technology. She is also the dean of Beijing International Science and Technology Cooperation Base for Intelligent Physiological Measurement and Clinical Transformation. She received her B.S. and M.S. in Biomedical Engineering from Tianjin University and Peking Union Medical College, and Ph.D. in Pattern Recognition and Artificial Intelligence from Beijing University of Technology. Her research focuses on Physiological Measurement and Signal Analysis, Medical Instrument Development, and Medical Pattern Recognition. She has been leading projects funded by Bill & Melinda Gates Foundation, National Key R&D Program of China, National Natural Science Foundation of China, and Beijing Natural Science Foundation, etc., with 70+ scientific papers on peer-reviewed prestigious journals and 10+ patents in the field of biomedical engineering. She has close links with leading hospitals and high-tech companies in China and has successfully commercialized the Monitoring Systems for Hypertensive Disorders of Pregnancy, which has been sold very well in China.

Dr. Hao is a committee member of the Chinese Society of Biomedical Engineering, China Instrument and Control Society, and China Association of Medical Equipment. Students supervised by her have received 60+ outstanding awards, including the Science and Technology Innovation award, Excellent Graduation Thesis, and National Scholarship for Graduates, etc.

Bingbing GUO

Ph.D.

郭兵兵

Lecturer
College of Life Science and Bioengineering
Phone: +86-18811728330
E-mail: guobingbing@bjut.edu.cn

Dr. Bingbing Guo is a lecture of the College of Life Science and Bioengineering. She received her B.S. in Food Science and Engineering from Jilin University, and her Ph.D. in the Institute for Food and Bioresource Engineering from Peking University. She also studied as a joint Ph.D. student in the Department of Agrotechnology and Food Science in Wageningen University in the Netherlands. Her research focuses on Microalgae as food resource, functional foods, nutrition and health.

Dr. Guo has published papers in the journal of “Molecular Nutrition & Food Research” (Cover paper), “Journal of Agricultural and Food Chemistry” (Q1), “Food & Function” (Q1), “Scientific Reports” (Q2) and “Bioresource Technology” (Q1). She served as reviewer for “Journal of Agricultural and Food Chemistry”, “Food & Function” and “Journal of Functional Foods”. She currently hosted projects funded by Postdoctoral Science Foundation of China and Beijing University of Technology.

Lan LIN

Ph.D.

林岚

Associate Professor
Department of Biomedical Engineering
College of Life Science and Bioengineering
Phone: 13810336234
E-mail: lanlin@bjut.edu.cn

Dr.Lan Lin is an Associate Professor of the Department of Biomedical Engineering at the College of Life Science and Bioengineering. He received his B.S. in Computer Science from Wuhan University and M.S. in Biomedical Engineering from Huazhong University of Science and Technology, and Ph.D. in Bioengineering from the Arizona State University. His research focuses on neuroimage analysis of brain aging and machine learning system. He has published over 40 papers in refereed journals or as book chapters, and nearly 20 papers in conference proceedings.

Dr. Lin serves on the editorial board of Smart Healthcare. He has obtained funding for and directed several interdisciplinary research projects, sponsored by China National Natural Science Foundation and Beijing Natural Science Foundation.

Shen SUN

Ph.D.

孙珅

Lecturer
College of Life Sciences and Bioengineering
Department of Biomedical Engineering
Biomedical Information Processing Lab
Phone: +8613070179816
E-mail: sunshen@bjut.edu.cn

Dr. Shen Sun is a lecturer of the Department of Biomedical Engineering at College of Life Sciences and Bioengineering. He received his B.Eng degrees in Electronic and Information Engineering from Beihang University, China, in 2008 and MSc and PhD degrees in Electronic Engineering from the University of Nottingham in 2009 and 2013 respectively. His research focuses on optical electronics applied to biomedical systems and development of medical devices and healthcare instruments.

Dr. Sun is a member of Chinese Institute of Electronics (CIE) and the 13th Sciences and Technology Beijing Committee of China Democratic League. He is a reviewer of Chinese Medical Equipment Journal and awarded as Youth Mentor of Student International Development in BJUT.

Huizheng LIU

Ph.D.

刘会政

Associate Professor
Deputy Dean of College of Economics and Management
Beijing University of Technology
E-mail: liuhuizheng@bjut.edu.cn
Homepage: https://www.bjut.edu.cn/jgxyen/info/1103/1136.htm

Huizheng Liu is deputy dean of College of Economics and Management at Beijing University of Technology. He holds a Ph.D. in Economics from the University of International Business and Economics (UIBE), he was the visiting scholar in NJIT, U.S. (2013-2014). His research interests include Global Value Chain, International Trade and Environment, Trade and Finance. He has published about 20 academic journal and conference papers in recent 5 years, including Journal of Research in International Business and Finance, Environmental Science and Pollution Research, and Journal of International Trade. He was awarded the Famous Teacher Award of Beijing University of Technology (2017) and the Excellent Young Lecturer of Beijing University of Technology (2015). He was selected as the Excellent Talents of the Organizational Department of Beijing Municipal Committee, the International Development Plan of the New Talents and Young Tutors of Beijing university of Technology.

Shuangjie LI

Ph.D.

李双杰

Professor
School of Economics and Management
Beijing University of Technology
Phone: +86-13910657085
Fax: +86-10-67391993
E-mail: lishuangjie@bjut.edu.cn

Dr. Li received his Bachelor's and Master's degrees in mathematics from Hebei University in China from 1980 to 1987 and Ph.D. degree in economics from Chinese Academy of Social Sciences in July 2002. Prof. Li has been with the School of Economics and Management of Beijing University of Technology (BJUT) in Beijing, China since July 2002. In 2004 and 2005, Prof. Li won the Second prize of Beijing Philosophy and Social Science and the Second prize of Beijing Science and Technology Progress respectively. From 2018 to 2019, Prof. Li went to UCD Ireland for a one-year visiting full profesor. As the principal investigator, Prof. Li is currently in charge of more than 8 research projects, including grants from Ministry of Science and Technology, Beijing Center of Science, Social Science Foundation of Beijing, Chaoyang District Government and Tongzhou District Government. Since joining BJUT, Prof. Li has written two monographs and a translation, and published over 40 papers in scholarly journals and major international conferences, including the Journal of Quantitative & Technical Economics, China Economic Quarterly, World Economy Studies, Journal of Industrial Technological Economics and Energies. Prof. Li's research interests include econometric model, finance and firm performance, and efficiency analysis.

Di YIN
Ph.D.

尹迪

Lecturer
Department of Applied Economics
College of Economics and Management
Beijing University of Technology
E-mail: diyin@bjut.edu.cn | https://www.bjut.edu.cn/jgxyen/

Dr. Di Yin is a lecturer at the Department of Applied Economics, the School of Economics and Management, Beijing University of Technology (BJUT) in China. She received her Ph.D. in economics from the School of Humanities and Social Sciences, Nanyang Technological University in Singapore. She received her Bachelor's degree from the School of Economics, Nankai University in China. She worked as a research fellow in operations management at the Nanyang Business School, Nanyang Technological University in Singapore before she joined BJUT.

Her research interests are energy economics and humanitarian operations. She published her paper in top academic journals such as the Energy Journal. She presented her research at international conferences such as the International Association of Energy Economics (IAEE), and the Production Operations and Management Society – Hong Kong Chapter (POMS-HK). Dr. Yin teaches advanced microeconomics (a module in the information economics) for Ph.D. students in the fall semester of the academic year 2019/20 and 2020/21.

Zhenyu WANG

Ph.D.

王振宇

Lecturer
College of Economics and Management
Beijing University of Technology
Phone: +86-17091000129
E-mail: wzy2019@bjut.edu.cn

Dr. Zhenyu Wang is broadly interested in Corporate Governance, Corporate Finance, Business Group Governance, Organization Theory and Organization Strategy. My research generally involves the strategic role of board of directors in corporate governance. I have published several articles in this field and participated in several research projects at the provincial and ministerial level.

Jian LI

Ph.D.

李健

Professor
College of Economics and Management
Beijing University of Technology
Phone: +86-18514023940
E-mail: lijiansem@bjut.edu.cn

Dr. Jian Li received his Bachelor's degree in Mathematics Education from Qufu Normal University in China in July 1998, his Master's degrees in Computational Mathematics from Wuhan University in China in July 2001, and his Ph.D. degree in Management Science and Engineering from China Academy of Sciences in China in July 2007, respectively. Prof. Li has been with the College of Economics and Management of Beijing University of Technology (BJUT) in Beijing, China since August 2017. Prior to joining BJUT in August 2003, Prof. Li had worked in College of Economics and Management of Beijing University of Chemical Technology (BUCT) in China. Prof. Li has published over 70 papers in scholarly journals and authored or co-authored 3 books in supply chain management. Prof. Li has been the principal investigator of 5 research projects, including grants from National Natural Science Foundation of China, Ministry of Education. Prof. Li's research interests include blockchain technology and application, financial technology, logistics and supply chain management, emergency management.

Yanmei LI

Ph.D.

李艳梅

Professor
School of Economics and Management
Beijing University of Technology
Phone: +86-18910885676
E-mail: liyanmei@bjut.edu.cn

Dr. Yanmei received her Bachelor's degree in geography science from Inner Mongolia Normal University in China in July 2001. She received her Master's degree in economics from China West Normal University in July 2004 and her Ph.D. degrees in economics from Beijing Jiaotong University in China in July 2007. Prof. Li has been with the Faculty of Beijing University of Technology (BJUT) in Beijing, China since July 2007. Prof. Li has published over 60 papers in scholarly journals and major international conferences, and authored or co-authored 5 books in Resources and environmental economics. Prof. Li has been the principal investigator of more than 10 research projects, including grants from National Natural Science Foundation of China, Beijing Natural Science Foundation, Humanities and Social Sciences Fund of Ministry of Education. Prof. Li's research interests include energy consumption, carbon emissions, green development and circular economy.

Shuo XU

Ph.D.

徐硕

Professor
College of Economics & Management
Beijing University of Technology
E-mail: xushuo@bjut.edu.cn
Homepage: http://54xushuo.net/wiki/

Dr. Shuo Xu is Professor in the Management Science and Engineering of College of Economics and Management at Beijing University of Technology. He received Ph.D. degree from Agricultural University of China in 2008. His research interests include scientific fronts detection, technology foresight, knowledge management, data mining and big data. He has published over 50 academic journal and conference papers in recent 5 years, including Journal of the Association for Information Science and Technology, Scientometrics, Journal of Informetrics, Technology Forecasting and Social Change, Journal of Information Science, and Journal of Biomedical Informatics. Professor Xu worked on several research projects, such as National Natural Science Foundation of China, Key Technologies R&D Program of Chinese 12th Five-Year Plan (2011-2015), Social Science Foundation of Beijing Municipality and so on.

Wen ZHANG

Ph.D.

张文

Professor
Faculty of Management Science and Engineering
Beijing University of Technology
Phone: +86-10-67391115
Fax: +86-10-67391115
E-mail: zhangwen@bjut.edu.cn

Prof. Dr. Wen Zhang received his Bachelor's degree in engineering from Chongqing University in China in July 2002, and his Master degree in management science and engineering from Academy of Mathematics and Systems Sciences, Chinese Academy of Sciences in July 2006, and Ph.D degree in knowledge science from Japan Advanced Institute of Science and Technology in April 2009. Prof. Zhang has been with the Faculty of Management Science and Engineering y of Beijing University of Technology (BJUT) in Beijing, China since August 2018. He has published over 50 papers in scholarly journals and major international conferences, received 3 Chinese patents and 10 software copyrights. Prof. Zhang has been the principal investigator of more than 10 research projects, including grants from National Natural Science Foundation of China, Beijing Natural Science Foundation, Ministry of Science and Technology and Beijing Municipal Science & Technology Commission. Prof. Zhang's research interests include big data analytics, data mining, recommendation systems, E-commerce and open source software.

Xiqian WANG

Ph.D.

王希茜

Assistant Professor
School of Economics and Management
Beijing University of Technology
E-mail: wangxiqian@bjut.edu.cn

Dr. Xiqian Wang received her Bachelor's degree in International Economy and Trade from Sichuan University in China in July 2009, Master's degrees in Economics from Peking University in China in July 2012, and Ph.D. degree in Economics from University of Missouri-Columbia in the United States in May 2019. She joined BJUT in July 2019. Dr. Wang's research interests include Labor Economics, Applied Econometrics, and Public Policy. Her current research focuses on whether pension enhancement helps to retain late-career teachers, the effect of teacher pensions on teaching quality, and whether teacher mobility contributes to the difference in teacher quality between high-poverty and low-poverty Schools. A related research paper, *Teacher Pension Plan Incentives, Retirement Decisions, and Workforce Quality*, will be published at *Journal of Human Resources.*

Muhammad Afaq Haider

Ph.D.

海德尔

Lecturer
Faculty of Economics and Management
Beijing University of Technology
Phone: +86-13051818702
E-mail: afaqhaider@bjut.edu.cn

Dr. Muhammad Afaq received his Bachelor's degree in Commerce from Punjab University, Pakistan, Master's degrees in Finance from the National University of Modern Languages Islamabad Pakistan and MS degree with majors in Finance from SZABIST University, Pakistan. Finally, he received his PhD degree with majors in Finance from Shanghai University, China in July 2017. He has been with the Faculty of Economics and Management of Beijing University of Technology (BJUT) in Beijing, China since August 2017. He had worked at COMSATS University and various other universities back in his country Pakistan. He is also a talented researcher and published more than 10 papers in different international Journals including SCI and Scopus Indexed Journals. He attended number of conferences at national and international level, he participated in a conference at Harvard University, USA in 2017. He has been the reviewer for couple of international journals. His research interests include Foreign direct investment, Foreign Portfolio investment, Energy consumption.

Introduction of BJUT Faculties

The Faculty of Architecture, Civil and Transportation Engineering (FACTE), Beijing University of Technology

The Faculty of Architecture, Civil and Transportation Engineering (FACTE), by integrating the three then Colleges (College of Architecture and Civil Engineering, College of Metropolitan Transportation, College of Architecture and Urban Planning), was established in August 2017 in the context of improving the first-class discipline group of Beijing University of Technology and meeting the needs of the construction of modern urban agglomerations and a world-class harmonious and livable capital city.

The FACTE offers three first-level doctoral programs in civil engineering, transportation engineering, and urban and rural planning; and two first-level master programs in Hydraulic Engineering and architecture. The discipline of civil engineering was established in 1960, transportation engineering 1979, and urban and rural planning 2002. Among them, the discipline of civil engineering entered the top 5% in the recent Discipline Evaluation by the Chinese Ministry of Education. In 2017, the discipline group of modern urban construction and environmental engineering with civil engineering and transportation engineering as its core disciplines was officially listed in the “Double First-Class” initiative disciplines development program in China.
The FACTE currently has 311 full-time teaching staff of which 85 are professors. Among them, there are 2 full-time employed academicians of the Chinese Academy of Engineering, 2 foreign and overseas engineering academicians, 6 national high-end talents such as the National Outstanding Youth Fund winners/ Distinguished Professors titled by the Ministry of Education, 12 national distinguished young scholars, 2 National Leading Talents recognized by the Ministry of Science and Technology, 3 national candidates for the New Century Ten Million Talent Project, 2 Beijing Scholars, and etc. In the aspect of research team, the FACTE has 1 Innovative Research team supported by National Natural Science Foundation of China, 2 Innovative Teams recognized by Ministry of Education in China, and 10 Innovative Academic Teams recognized by Beijing Government.

The FACTE includes 3 colleges, 6 departments, 14 research institutes, 3 labs and experimental centers. In addition, there are 2 national teaching bases, 1 national key laboratory, 1 key laboratory of the Ministry of Education, 4 key laboratories of Beijing, 1 Beijing Collaborative Innovation Center, and 3 local technology research centers, 2 international scientific and technological cooperation bases in Beijing, and 1 key laboratory in industry. In the past ten years, the FACTE has undertaken or is engaging more than 40 national-level major and key projects, and more than 210 national-level research

projects including the National Natural Science Foundation of China, with an average annual funding of more than 100 million RMB. Relevant achievements have won 6 national scientific and technological progress awards, more than 50 provincial and ministerial level scientific and technological progress awards, and more than 700 national invention patents. The faculties' research results have made significant contributions to the construction of major infrastructure projects, comprehensive urban and rural planning, transportation planning and management in Beijing as well as the rest of the country.

The FACTE boasts a complete system of professional training from bachelors, masters to doctors. It has 3 first-level doctoral disciplines in civil engineering, transportation engineering and urban planning, 2 authorized first-level master disciplines including Hydraulic Engineering and Architecture. It also provides a wide range of undergraduate programs including civil engineering, intelligent construction, water supply and drainage science and engineering, built environment and energy application engineering, transportation engineering, transportation equipment and control engineering, architecture, urban and rural planning, landscape architecture, etc. Through these programs, the FACTE has trained over 300 PhD students, over 2000 master students and about 3000 undergraduates during past 10 years. In 2017, the modern urban construction and environmental engineering discipline group with civil engineering, transportation engineering and other core disciplines officially entered the ranks of national first-class discipline construction, and civil engineering, transportation engineering, and architecture were listed in the national first-class programs.

The Faculty and its teaching staff have always actively engaged in various academic and professional organizations such as the International Society of Lifeline and Infrastructure Earthquake Engineering (BJUT as the Chair), the Infrastructure Engineering Seismic Disaster Mitigation Sub-Committee of China Seismological Society, the Earthquake Disaster Mitigation Sub-Committee of the Chinese Society for Survey and Design, the Spatial Structure Sub-Committee of the China Steel Structure Association, and the Academic Committee of Urban Safety and Disaster Prevention Planning of China Urban Planning Society, the Sub-Committee of Cultural Heritage Disaster Prevention and Mitigation of China Association for the Protection of Historic Sites and Cultural Heritage, Beijing Transportation Engineering Society (BJUT as Chair) and etc.

Brief Introduction of Key Laboratory of Urban Security and Disaster Engineering, China Ministry of Education & Key Laboratory of Earthquake Engineering and Structural Retrofit, Beijing

The Key Laboratory of Earthquake Engineering and Structural Retrofit of Beijing was established in 2001, and the Key Laboratory of Urban Security and Disaster Engineering of the Ministry of Education was approved for establishment in 2005, formally passed the acceptance in 2009. At present, the two key laboratories are under unified operation and management. The director of the academic committee of the laboratory is Academician Lili Xie and the director of the laboratory is Professor Xiuli Du.

The laboratory has 84 faculty members, 36 doctoral supervisors, including 2 Changjiang distinguished professor, 1 scholar of the Thousand Talents Program, 2 recipients of The National Science Fund for Distinguished Young Scholars, 3 national candidates of the " Millions of Talents Project in the New Century", 2 "Beijing Scholars", 4 National Excellent Youth Fund recipients, 2 Young scholars of the Thousand Talents Program, 2 Young Changjiang Scholars, 1 National Natural Science Foundation Innovative Research Group, and 6 Beijing Academic Innovation Teams.
The laboratories include engineering structure test center, geotechnical and underground engineering test center, construction material test center, and civil engineering monitoring center, with 10 sub-stations to simulate seismic shaking table array, super-large multifunctional electro-hydraulic servo loading system, large-scale underground engineering comprehensive simulation test platform, mechanical rock breaking test platform and other large-scale characteristic platforms. Among them, the 10-array simulation seismic experiment linkage system is the world's only; the 10,000-ton multifunctional electro-hydraulic servo loading system is the largest pseudo-dynamic loading test machine in Asia; the large-scale underground engineering comprehensive simulation test platform is the most comprehensive and largest underground Engineering test platforms. These distinctive platforms provide technical support to solve technical problems of engineering construction in Beijing as well as nationwide, promoting scientific and technological progress in the capital and the country.

The laboratory has carried out in-depth research in related fields with the needs of energy, transportation and other infrastructure and large public building construction, has presided over the completion of 1 major research program integrated project of the National Natural Science Foundation of China, 1 National 973 Program Project (Chief Scientist Unit) and 9 National Key Projects. In charge of undertaking 7 national key projects such as key projects of the National Natural Science Foundation of China, 973 projects, and scientific and technological support projects. In the past ten years, the relevant achievements have won nine national scientific and technological progress second-class awards (4 of the first completing unit), more than 30 provincial and ministerial scientific and technological progress awards, published 22 books and more than thousands papers; edited or participated in

the compilation of 10 national and industry standards; obtained more than 600 national invention patents, and a number of research results have been applied to major national projects and important construction projects such as Beijing Olympic Stadium.

Geotechnical and Underground Engineering Testing Centre

The geotechnical and underground engineering test platform has been built focusing on the construction needs of major infrastructures such as urban rail transit and underground integrated pipeline corridors, as well as the scientific problems of deep energy geotechnical engineering. Among them, the large-scale underground engineering comprehensive simulation test platform is the largest and most complete underground test platform at home and abroad, which can carry out research on the complex engineering problems that need to be solved during and after the construction of metro tunnels and underground engineering; The mechanical rock-breaking platform is the most advanced mechanical rock-breaking platform in the world, designed and developed independently, which can carry out research on the mechanical rock-breaking mechanism and the optimal design of rock-breaking equipment under real high ground stress environment; The Rock 3D Printing Platform is a comprehensive experimental platform designed and developed independently for the production of complex geological models. It is the first experimental system in China that can produce similar models of engineering geophysics in a multi-material, cross-scale, refined and high-efficiency manner, and can be used to conduct research on safety accidents and geological disasters that exist in the construction of major national infrastructure and energy projects.

Relying on this platform, the laboratory has undertaken a number of important experimental tasks for national major and key projects, and the results have been successfully applied in the construction of shield tunnels for the sand and pebble strata of Beijing Metro Line 10 as well as the composite strata of the South-North Water Diversion East Trunk Canal, the construction of the diversion tunnel for the Jinping II Hydropower Station, the construction of a deep buried sewage tunnel in Singapore, the feasibility study of an underground laboratory for the geological disposal of high discharge waste, the Badaling Great Wall Station of the Beijing-Zhangzhou High-speed Railway (the world's deepest and Asia's largest underground railway station in the mountains) in drainage design and other major engineering and construction projects. The laboratory is currently working with relevant units to carry out large scale model tests for the Tongzhou sub-centre underground integrated pipeline corridor project and the underground integrated pipeline corridor project within the Beijing World Expo Park, the Jinanqiao underground station on Beijing Line 6 (the first monolithic assembled underground station in Beijing) and the Tsinghua Park tunnel of the Beijing-Zhang High-speed Railway (a deep buried large diameter water-rich shield tunnel under the existing Subway Line 10). The results of the research will make a fundamental contribution to the development of national and industry as well as

local codes, and are bound to make a significant contribution to the development and construction of underground space resources in Beijing.

Engineering Structural Testing Centre

Focusing on the construction needs of transport infrastructure and public infrastructure such as the new capital airport, sports stadiums and large bridge projects, the engineering structural testing centre was built. Including the independent development of 10,000 tons of multi-functional electro-hydraulic servo loading, 10 sub-standard seismic simulation shaking table array system, 3000kN dampers test system and many other large sets of equipment, including 10 table array simulation seismic experimental linkage system is the world's only, 10,000 tons of multi-function electro-hydraulic servo loading system is the largest tonnage of the proposed power loading test machine in Asia, a number of advanced international technology or unique. The laboratory has undertaken a number of national major and key projects to complete the test tasks, the relevant results have been successfully applied to the Bird's Nest, Beijing Olympic Badminton Stadium, the first new large-span cable dome project in China - Erdos Yiqi Sports Centre, Shandong Rongcheng Shidao Bay Nuclear Power Station, Shandong Haiyang Nuclear Power Station, Beijing Miyun Yunmeng Bridge and other major engineering and construction projects.

Relying on this platform, it is currently working with Beijing Gonglian Highway Liaison Company Limited and Beijing Municipal Design and Research Institute to undertake a shaking table test research project on the key seismic technology issues of the Yongding River Special Bridge, Xichang Street in Beijing which will be the largest span and most complex bridge project in Beijing upon completion.

Civil Engineering Monitoring Centre

The Monitoring Centre independently develops a remote real-time monitoring system for civil engineering disaster information, an automatic monitoring system for tunnel construction multiple information, a remote real-time monitoring system for large geotechnical displacement, and a real-time online management platform for information-based monitoring of the whole life cycle of structural engineering. The tunnel construction multi-information automatic monitoring system combines modern telemetry technology, integrating sensor data collection of selected sections, 3D laser scanning, blast vibration monitoring and visual monitoring, realising real-time visual display and analysis of tunnel construction palm faces, automatic data collection and analysis of tunnel construction monitoring (control), forming a tunnel construction multi-information monitoring (control) system,

ensuring complex rock geology The system is designed to ensure the safety of tunnel construction under complex geological conditions. The platform can be used to provide safety assurance and technical support for information monitoring and management in the construction and operation phases of highways, railways, subways, building pits, bridges, underground corridors and other projects.

Relying on this platform, we have completed the health monitoring of Tongshun Road Bridge in Tongzhou District, Beijing, the monitoring of Yu Daohe Bridge in the reconstruction project of National Highway 111, the monitoring of Chang'an Expressway 13 Turning Bridge, the monitoring of False Palace Subway Station in Changchun Light Rail Phase III, the structural inspection of Cao Luotuo Tunnel in the reconstruction project of National Highway 108 (Nancun-Shimenying section), and the monitoring of deep foundation pits in Beijing Guangcai Development Centre and other social service projects.

Faculty of Information Technology, Beijing University of Technology

Under the joint efforts of all teachers of the department, the scientific research work of the department has been steadily promoted. With the support of various colleges of the department, we successfully completed the establishment of a scientific research team and the formulation of assessment methods for scientific research workload. According to the unified deployment of the department, based on the first-level team of scientific research, each college established a research institute and completed the three-level institutional reform of the department. Organized a series of activities for young and middle-aged teachers to improve their scientific research ability and NSFC application and guidance, and four times for national fund project application and application writing guidance. To participate in the application and joint construction of the state engineering laboratory for advanced treatment and resource utilization technology of urban sewage. Participated in the application and joint construction of national engineering laboratory of industrial big data. Cooperate with friendship hospital, organize the strength of all disciplines of the whole department, vigorously promote the construction of medical and health big data research and development team, successfully complete the development of medical service APP of Beijing city sub-center, and start the joint application of several projects. Cooperate with China star microelectronics co., ltd. to strengthen the construction of artificial intelligence chip R&D team, and actively promote the application of relevant national key R&D programs. We have actively carried out cooperation and exchanges with enterprises engaged in scientific and technological innovation in Tongzhou district, Lanzhou vocational college and the Chinese and European academy of sciences. Actively organized and organized the "dragon star program" high-end academic seminars, which received a good response and expanded the influence of the information department in the industry.

In 2017, 65.05 million yuan was spent on scientific research. It has obtained 271 authorized patents and 288 software Copyrights. It has applied for 70 projects of national natural science foundation of China, 18 projects of national natural science foundation of China, 47 projects of Beijing natural science foundation of China and 15 projects of national natural science foundation of China. Teachers of the department were awarded 4 provincial and ministerial awards and national social power awards.

Brief introduction of Beijing Key Laboratory of Computational Intelligence and Intelligent System

Beijing Key Laboratory of Computational Intelligence and Intelligent System lay foundation on Beijing Key Discipline "pattern recognition and intelligent system" and College of Artificial Intelligence and Automation with Faculty of Information Technology, Beijing University of Technology, and it is committed to building a shared platform for computational intelligence and intelligent system development and integrating intelligent technology of Beijing University of Technology, focusing on the needs of economic construction and social development of Beijing. The aim of the Laboratory is to form a joint force under the operation mechanism, explore the basic theory and practical technology of computational intelligence, seek new computing and processing methods, and promote the development of information science, especially the development of computational intelligence theory. Acquire self-organizing intelligent control technology, intelligent information processing technology and machine learning technology, develop physical system with intelligent behavior, make the laboratory become a high-level talent training base and high-tech R & D base of information science, and then improve the discipline level of Beijing University of Technology, enhance the information service capacity of the capital, and build Beijing into an innovation city. Beijing Key Laboratory of Computational Intelligence and Intelligent System strives to reach the domestic advanced level in the theoretical research and technological development of computational intelligence and intelligent system, to form features in neural computing, intelligent information processing and machine intelligence, and to reach the international advanced level in individual directions. The laboratory has formed three stable research directions: Computational Intelligence and Intelligent Control, Intelligent Signal and Information Processing, Cognitive Science and Machine Intelligence. The laboratory has a solid research foundation in urban sewage treatment and service robots, and has successively won the national science and technology progress award of China. Some typical works have been reported by national media such as CCTV， China Education Television (CETV) and CHINA SCIENCE DAILY etc.

Faculty of Materials and Manufacturing, Beijing University of Technology

The Faculty of Materials and Manufacturing has 7 disciplines, including Materials Science and Engineering, Mechanical Engineering, Optical Engineering, Mechanics, Instrument Science and Technology, Resources, Environment and Circular Economy and Physics. Materials Science and Engineering and Optical Engineering are National Key Disciplines. Materials Science and Engineering and Mechanical Engineering are both ranked in the top 250 disciplines of QS global universities. Materials Science and Engineering, Mechanical Engineering and Optical Engineering are selected as advanced disciplines in Beijing higher institutions.

The Faculty sets up two colleges named College of Materials Science and Engineering and College of Mechanical Engineering and Applied Electronics Technology which in charge of undergraduates' affairs. The Faculty also sets up 4 institutes named Advanced Materials Research Institute, Intelligent Machinery Research Institute, Institute of Laser Engineering and Institute of Microstructure and Property of Advanced Materials which in charge of graduate students' affairs. The Faculty has 6 Undergraduate Programs, 6 Doctoral Programs and post-doctoral stations, 7 Postgraduate Programs for Academic Master's degree and 4 Postgraduate Programs for Professional Master's degree. The Faculty has two national level research bases and 27 provincial and ministerial level research bases.

At present, the Faculty of Materials and Manufacturing has 486 in-service teaching staff, including 2 academicians of the Chinese Academy of Engineering, 1 National Level Famous Teacher and 9 Beijing Famous Teacher. There are about 200 teachers who won the provincial and ministerial level talent projects. The academic team management system is implemented in the Faculty and more than 30 scientific research teams have been established with the core famous professors. At present, there are 3262 students, including 1148 undergraduates, 2072 postgraduates and 43 international students. There are 3 national level teaching teams, 5 national level excellent courses and more than 10 core courses in Beijing. In the last five years, the Faculty of Materials and Manufacturing has undertaken more than 300 national level major and key scientific research projects, including National Key Research and Development program, the National Science and Technology support program and the National Natural Science Foundation projects, etc., the accumulated funds over 800 million yuan. Relying on the strong support of the research projects, the Faculty won 1 First Prize and 3 Second Prizes of the National Science and Technology Award, 1 First Prize of the Excellent Scientific Research Achievement Award (Science and Technology) of the Ministry of Education, 1 First Prize, 1 Second Prize and 1 Third Prize of Beijing Science and Technology Award, over 10 National Social Power Awards, etc. It has published more than 10 books, more than 2500 high-level academic papers (included in SCI / EI) and over 1500 authorized patents.

Brief introduction of Key Laboratory of Advanced Functional Materials, Education Ministry of China

The Key Laboratory of Advanced Functional Materials, Education Ministry of China was founded in August 2000. Its organization and development are supported by the Education Ministry of China and the College of Materials Science and Engineering, Beijing University of Technology. Based on the Materials Science as one of the National Key Disciplines, the development of the laboratory follows the principal goals and demands for the education and research in the national and BJUT planning. Particularly, in the strategies of "Environment-friendly Beijing, Culture-enriched Beijing and Technology-empowered Beijing", the laboratory emphasizes the coordinated development of materials and resources, energies and environments. Aiming at pioneering and innovative researches on the Eco-materials, multidisciplinary materials science research fields and talent cultivation have been developed in the laboratory with the environment-friendly ideal.

The laboratory has kept the "Excellent" award in the assessment of the Education Ministry of China in the past 15 years. A team consisting of Academicians, "Distinguished Young Scientists", "Outstanding National Scholars" and young professors has been built up in the laboratory. Approved and supported by the Ministry of Education, Ministry of Science and Technology and National Natural Science Foundation of China, the "Academic Innovative Research Team", "High Technology Innovative Team", "National Level Teaching Group of Materials Science and Engineering", and "National Innovative Research Group" have been developed in the laboratory.

Based on the existing features and advantages, the laboratory is opening up the research fields such as life cycle assessment (LCA), environment-friendly recycling, light alloys, hard metals, advanced energy materials, and etc. The main research directions are: principles of Eco-materials, refractory metals and rare-earth materials, energy materials and low dimension optoelectronic functional materials. To solve key issues in the development and applications of the Eco-materials, the laboratory is working on an innovative discipline construction of resources and materials, which is believed to be very important for the overall development of Materials Science and Engineering.

The international and national patents that are applied in the laboratory are about 80 per year on average, from which more than 50% are authorized. The academic publications that are cited by SCI, EI and ISTP database are more than 150 per year, and most of them have been published in the well-known international journals. The research achievements have been awarded by the national and provincial prizes for progress in science and technology. The laboratory has developed international collaborations and academic exchanges with universities and research institutes in USA, Japan, Germany, UK, Switzerland, Netherland, Denmark and so on.

Brief introduction of Beijing Key Laboratory of Nonlinear Vibrations and Strength of Mechanical Structures

Beijing Key Laboratory of Nonlinear Vibrations and Strength of Mechanical Structures is the backbone of both Mechanics and Mechanical Engineering in BJUT. It is committed to expanding theoretical frame of steady and transient dynamics analysis and applying theories into industrial engineering. Focusing on the needs of fast developing of aerospace, aeronautics, and high-speed train engineering in China, the Laboratory has developed different methods, ideas, and tools in dynamic simulation, design and support, including vibration suppression, vibration absorbing, vibration isolation, and parameter optimization. There are more than 30 members belonged to three groups in the Lab, which are the group of nonlinear dynamics, the group of vibration suppression, and application of waves. The Lab has published more than 300 papers in the past five years, which makes the Lab become one of the important R&D bases in the mechanical vibration field. until now, the Lab has been supported by more than 15 National Natural Science Foundations.

A series of services have been conducted in the last decade. Some examples are listed as follows. A vibration analysis software was developed and employed in the launching of rockets. A vibration suppression idea based on the travelling wave phenomena in the pipelines was applied in the design of airplane engines. Flutter prediction was simulated in the design of helicopter propellers. Nonlinear responses of vibrations in complex shells was obtained in the design of fluid-structure interaction components. Periodic and random signals were investigated for high-speed train in different phases. In addition, more than 200 masters and PhDs have graduated from the Lab and contributed to the high-tech development of China.

The Lab has built an active cooperation platform among the Beijing municipal area and some other cities. Any possible cooperation in related researches and developments are welcomed.

Brief introduction of Multiscale Fluid Dynamics Laboratory

Multiscale fluid dynamics laboratory of Beijing University of Technology is affiliated to Beijing Key Laboratory of Advanced Manufacturing Technology. The Laboratory aims to explore the basic theory and practical technology of fluid dynamic in engineering and social development, and forms the research interests as microfluidics and fluid-structure interaction in the engineering.

1. Multi-phase Flow in Microfluidics

The multi-phase flow in microfluidics is the focusing area of this lab in the microscale fluid dynamics. The research group has made particular impact in the following areas of microfluidics, including micro-droplet generation and manipulation, internal flow fields of droplets, and Microcavity flow and particle sorting. Droplet microfluidics is a micro-nanotechnology that uses a mutually incompatible liquid interfacial tension and flow shear force to separate continuous fluids into droplets and accurately manipulate the droplets. In the applications of micro-droplet devices, the droplet size, uniformity and stability all are significant, and understanding of the flow patterns inside droplets is of great significance to enhance reaction efficiency and screen reaction conditions. The flow behavior in microscale cavities has a significant effect on the orbit topology of a particle or a cell, which needs more detailed studies.

2. Multi-phase Flow in Engineering

Multiscale fluid dynamics laboratory also has interests on many multi-phase Flows in the additive manufactory, the Spray characteristics of nozzles, etc. Metal droplets deposition method is operated by forming melting materials into small droplets, and depositing onto a substrate to fabricate 3D components without using special tools or molds. Metal droplets size and their solidification are affected by the multi-phase flow process of the molten metals. For the nozzle in engines, the combustion efficiency can be improved by controlling parameters, including Sauter mean diameter, droplet velocity and spray cone angle, to reduce the ignition energy consumption and the emissions of carbon compounds.

Brief introduction of Laboratory of Advanced Battery Materials and Devices

The Laboratory of Advanced Battery Materials and Devices was established in 2015 and focus on the development of battery materials and devices for the Electric Vehicles and electrochemical energy storage. It attaches to the Faculty of Material and Manufacturing, Beijing University of Technology. Under the leadership of Prof. Haijun Yu, the laboratory has developed rapidly in the past 6 years, which has almost 50 members, including professor/associate professors, lectures and postdocs as well as near 40 postgraduates. There are three research directions in the laboratory, the high-energy cathode materials for next-generation lithium-ion batteries, the key materials and scientific mechanisms of low cost sodium/aluminum ion batteries, and structure design of solid electrolytes and interface regulation of composite cathodes for solid-state batteries. It has established a set of experimental platforms from the materials designs and fabrications, structural characterization, in-situ/ex-situ analysis of battery materials during charging and discharging and combined the theoretical calculations for the mechanism analysis at atomic size. So far, the Laboratory has published more than 100 papers on the international journals on energy and materials with high impacts, and authorized tens of patents. The laboratory has been funded by more than 20 research projects, including the National Talents Program, National Key R&D Program of China, National Natural Science Foundation of China, and the other programs from Beijing Natural Science Foundation and so on. Furthermore, the laboratory has established international cooperation with famous scientific research institutions, like Argonne National Laboratory, and University of Western Ontario of Canada, and has established the joint research and development center with company for the battery materials.

Faculty of Science, Beijing University of Technology

The Faculty of Science of BJUT was established on April 28, 2020, to adapt to the significant strategy needs of the developments of China, Beijing and the Beijing-Tianjin-Hebei region actively, to optimize the discipline distribution, to innovate the discipline organization and to stimulate the vitality of discipline. Its predecessor was College of Applied Sciences.

The Faculty of Science consists of three schools: The School of Mathematics; The School of Physics and Optoelectronics; and The School of Statistics and Data Science. Currently, the faculty has more than 170 faculty members，including 30 professors and 60 associate professors. Among the faculty members, there are 5 specialists who enjoy the State Council Special Allowance, 6 Beijing Municipal Famous Teachers, 1 Beijing Model Worker, 1 National Outstanding Young Scholar, 2 New Century Outstanding Talents of Ministry of Education of China, 2 Beijing Great Wall Scholars，8 talents of Beijing New-star Plan of Science and Technology, 4 First prize winner of Beijing Young Teacher Lecture Competition, 10 top-notch talents of Beijing Municipal Universities. Now the faculty has over 1,000 students (of whom half are graduate students).

In recent years, the faculty has won many National/Beijing Municipal/Industrial Excellent Ph.D. Dissertations Awards (containing Nominations), multiple provincial and ministerial scientific research awards, and has established quality courses/compiled quality teaching materials at Beijing municipal level and State level. High-level scientific research, characteristic personnel training and rich international exchange activities of this college have strongly bolstered the training of interdisciplinary and innovative talents.

The faculty will inherit the BJUT’s school motto, which is “To continue to pursue progress, to continue to innovate”, and position to the strategy arrangement of the “Superior Silences”, and make unremitting endeavor for the development of BJUT about the “Double First-rate” strategy.

Brief introduction of Institute of Information Photonics Technology

Institute of Information Photonics Technology is the Key Discipline and a major part of the Key Inter-Discipline of Nano-Science and Technology of Beijing Municipality. It also constitutes as a major part the Beijing Key Laboratory of Solid Microstructure and Performance. Our institute is featured by the research topics combining ultrafast photonics and information optics and by the advanced research platforms formed by various research directions. The research interests mainly include micro- and nano-optics, optical information processing, optical communication technologies and devices, novel laser devices, ultrafast optical technology, etc. In particular, the research on holographic information processing and acousto-optic signal processing has been one of pioneers of the related research fields in China. Our institute is extremely active in the development of nanophotonic devices for biosensing, optical logic, and light-emitting applications, digital holography and THz imaging of biomolecular structures or living cells, ultrafast lasers and ultrafast spectroscopy. In the past five years, the physics discipline has undertaken more than 50 national and provincial scientific research projects, including some national key projects of National Natural Science Foundation of China (NSFC) in the fundamental research in optics. High-quality research results have produced more than 200 papers in international leading journals, such as Adv. Mat., Sci. Adv.， Nat. Commun., Adv. Sci., Opt. Lett., Opt. Express, and more than 50 patents. In particular, some of the research results have been applied in different forms and are on the way to become commercialized, and awarded the second prize in natural science by the China Education Ministry.

The College of Life Science and Bioengineering, Faculty of Environment and Life, Beijing University of Technology

The College of Life Science and Bioengineering (hereinafter referred to as the College) in Beijing University of Technology (BJUT) was founded in October 2002. In 2002, according to the overall construction and development planning of BJUT, the College was established by integrating the resources of BJUT with respect to environmental biology, bioinformatics and structural biology, biomedical engineering, biochemical analysis and testing center, and natural products & drug research. Professor Yi Zeng, an academician of Chinese Academy of Sciences (CAS), was hired as the academic leader of the College.

At present, the College comprises four divisions: Department of Biomedical Engineering, Department of Biology, Department of Biotechnology, and Experiment-teaching Center. There are three undergraduate majors: Biomedical engineering (BME), Biotechnology, as well as Food Quality and Safety. The College offers a first-level doctoral degree program and a post-doctoral research station for BME, two first-level master degree programs for BME and biotechnology, and a professional master degree program for BME. The BME discipline of the College is one of the Municipal Key Disciplines of Beijing. In the 2016 fourth discipline evaluation by the Ministry of Education, China, the BME discipline in BJUT is at top 15 among the BME disciplines in Chinese universities. There are 78 faculties and staffs in the College, including an academician of CAS, 21 professors, and 29 associate professors. Among them, there are 15 doctoral supervisors and 21 master supervisors. There are 768 students in the College, including 406 undergraduates, 286 postgraduates, 60 doctoral candidates, and 16 international students.

College of Economics and Management, Beijing University of Technology

The College of Economics and Management of Beijing University of Technology (BJUT) was founded in 1997. The college has formed a good situation in which the three discipline groups of Applied Economics, Management Science and Engineering, and Business Administration are mutual developed, and academic degree education and professional degree education advanced side by side. Now CEM has two first-level doctoral degree authorization units for Applied Economics, Management Science and Engineering, three first-level academic master degree authorization units for Applied Economics, Management Science and Engineering, and Business Administration, and four professional master's degree authorization units for Master of Business Administration (MBA), Master of Public Administration (MPA), Master of Finance (MFin), and Master of Professional Accounting (MPACC). It also has one postdoctoral research center for Management Science and Engineering. Management Science and Engineering is selected as the Beijing's key discipline, while International Trade and Quantitative Economics are the Beijing's key construction disciplines. The college has seven undergraduate majors, including Information Management and Information System, International Economics and Trade, Finance, Economic Statistics, Accounting, Business Administration, and Marketing.

At present, the college has 166 faculty members, including 138 teachers. Among the teaching staff, two faculties are receiving the stipend from the State Council; two young faculties are selected as the new century talents of Ministry of Education; two faculties are selected as the Great Wall scholars of Beijing; six faculties are selected as the excellent scholars of Beijing; seven faculties are selected as the outstanding young scholars of Beijing; two faculties are selected as the Jing Hua scholars of BJUT; four faculties are selected as the young talents of BJUT; thirteen faculties are selected as the Ri Xin scholars of BJUT; two faculties are selected in the High-end talent team construction plan of BJUT.

At present, there are 3994 students in the college, including 1025 graduate students, 1868 undergraduate students, 760 undergraduate students with double major degrees and 341 junior college students. There are 101 international students in the college.

Brief introduction of Socio-economic System Analysis and Optimization

The center team currently has 2 professors, 9 associate professors, 4 lecturers, and 1 postdoctoral fellow, the level and total number of personnel is gradually rising. Including 1 Great Wall Scholar and 5 doctoral supervisors. The team carried out research on related topics of "Social Economic System Analysis and Optimization", and made breakthroughs in applying nonlinear science, system dynamics, and complexity science to risk management, economic system optimization, and system multi-objective coordination. The theoretical system of system science has enriched the theoretical research paradigm of risk management and economic system optimization. Our team has rich academic achievements and published relevant papers in important domestic and foreign academic journals such as Omega, Utilities Policy, Energy Policy, System Engineering Theory and Practice, Chinese Management Science, and Management Review. In 2019 and 2020, 1 paper was selected as the top 1% ESI highly cited paper in the world, and 1 paper in 2019 was selected as the top 0.1% ESI hot paper in the world. Our team has also actively carried out close cooperation with the School of Management of the University of Science and Technology of China, the Institute of Science and Technology Strategy Consulting of the Chinese Academy of Sciences, Hefei University of Technology and other scientific research institutions to actively promote the transformation of academic achievements and have cultivated a number of influential academic and cultural achievements.

Our team currently has 55 people. The professional echelon of the team involves economics, management, finance, statistics, automation and other disciplines, including mathematical modeling, computer simulation, socioeconomic system analysis and other research fields.

The team conducts research on related topics of "Social Economic System Analysis and Optimization", intersecting the two subject research systems of management science and engineering and applied economics, and combines complex scientific theories, big data analysis techniques and system engineering theory and practical methods. Research the socio-economic system from the following eight aspects.