



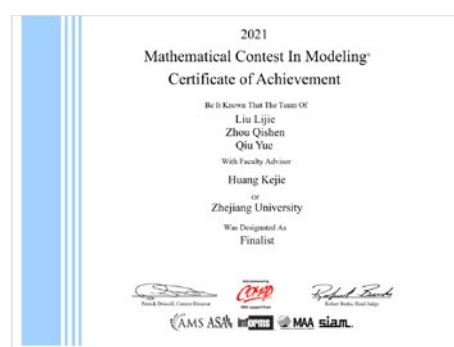
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Student Teams designated Finalist Award in the 2021 International Mathematical Contest in Modeling

April 27, 2021

Article | Stephanie



Recently, several teams of ZJUI students achieved exciting results in the 2021 International Mathematical Contest in Modeling (MCM/ICM). The team consists of LIU Lijie ('23 Civil Engineering), ZHOU Qishen ('23 Computer Engineering), and QIU Yue ('23 Computer Engineering), was designated Finalist Award. The other four teams received the Meritorious Winner of 2021 MCM/ICM, including ZHANG Bolin ('24 Electrical Engineering), FANG Jiahao ('24 Electrical Engineering), WANG Ximo ('23 Mechanical Engineering), and so on. A total of 10053 teams from around the world participated in this year's competition. A total of 284 teams won Finalist awards and a total of 697 teams won the Meritorious Winner award.

The Mathematical Contest in Modeling (MCM/ICM) is an international mathematical modeling competition held annually in the USA and sponsored by the Society for Industrial and Applied Mathematics (SIAM), the National Security Agency (NSA), and the Institute for Operations Research and the Management Sciences (INFORMS). Every year, thousands of teams prepare original mathematical papers in response to modeling problems aimed at real-world problems. Economy, management, environment, resources, ecology, medicine, safety and other fields have been topics of the competition. Teams of three students are required to complete specific tasks in modeling, preparing a solution, validating the work, and writing a paper on the designated problem within 72 hours after it is posted.

This is the four consecutive years that ZJUI undergraduates have achieved outstanding results since they participated in the MCM/ICM. It is also the first time that they have won the Finalist award in the MCM competition and the Meritorious Winner award in the ICM competition. Previously, ZJUI students won the top prize of the competition, Outstanding Winner and the INFORMS Award, in 2019, and won the Meritorious Winner prize in 2018 and 2020. And several teams also won the Honorable Winner and other awards every year. 🇺🇸

Commencement for Class of 2021

June 2, 2021

Article | Stephanie

Photo | LIU Chang, Stephanie



On May 30, ZJUI honored the Class of 2021 with a grand ceremony on the International Campus, Zhejiang University.

President WU Zhaohui delivered an online video address. Robert J. Jones, Chancellor of UIUC addressed the Class of 2021 at UIUC. Also present at the ceremony were HE Lianzhen, vice president of Zhejiang University, Andreas Cangellaris, vice chancellor for Academic Affairs and provost at UIUC, and Reitumetse Mabokela, vice provost for International Affairs and Global Strategies at UIUC.

WU Zhaohui extended his heartfelt congratulations to the Class of 2021 on receiving their degree from UIUC. "In the past five years, ZJU and UIUC have made a series of widely-acclaimed achievements by giving full play to the assets of cooperative education and converging global first-rate resources," he pointed out. He expected students to transform the mottoes of ZJU and UIUC into an unwavering pursuit of life and strive to set good examples in integrating knowledge and action and fusing inheritance and innovation in a new world where changes and constants intersect and newness and renewal coexist.

Robert J. Jones congratulated the graduating class on their successful completion of their studies remotely. He said that it was indeed tough for students to complete their studies, for they had to face unprecedented challenges and conquer unimaginable obstacles during the outbreak of the pandemic. The solid foundation of cooperation and the successful practice of cooperative education also opened up new avenues for the globalization of higher education in the post-pandemic era. He expressed his hope that students would become formidable innovators and change the world with their skills, knowledge, talents and visions.

The commencement was held in the presence of guests from both Chinese and American universities. HE Lianzhen and OUYANG Hongwei, dean of the Zhejiang University Haining International Campus, awarded the Class of 2021 with certificates on behalf of UIUC. Robert J. Jones conferred the UIUC degree on the Class of 2021 by playing a pre-recorded video of Timothy Killeen, president of the University of Illinois System. The Class of 2021 will also obtain their degree from Zhejiang University this June. 🇺🇸

ZJUI Student Wins Runner-up in 2021 American Society Civil Engineering Mid-Pacific Student Conference Essay Contest

May 18, 2021

Article | Stephanie

Translator | JIANG, Junyue; Emmanuel Mayanja

Photo | YAN Xiaoyu provided

The 2021 ASCE Mid-Pacific Student Conference, organized by the American Society of Civil Engineers (ASCE), was held online from April 15 to April 17. ZJUI Civil Engineering Student Xiaoyu YAN won the runner-up prize, under the guidance of ZJUI Adjunct Faculty Dr. Ryan P. Flanagan.

The essay competition in which Xiaoyu participated focused on the participants' critical thinking and oral presentation skills, it required a written essay discussing ethical issues in civil engineering based on the participant's understanding and reflection of the code of ethics for civil engineers, and then defend their main ideas. The competition has high requirements for the originality of the players' viewpoints, logic, fluency in English expression, and speech delivery. Unlike previous engineering ethics competitions, this competition focuses on the role and responsibilities of civil engineers under the current global pandemic with strong practical significance.

The competition not only examines the ability to write essays, but also examines the outstanding performance of candidates and their performance in the defense session which was also the key to making Yan Xiaoyu come out as the victor amongst all other competitors. This experience from participating in the competition, gave Xiaoyu more to think about future responsibilities. "The civil engineers of the new era are not merely just brick-movers on the site, but social builders with feelings and a sense of responsibility. Civil engineers may not be on the front-line fighting viruses like angels in white, but we can still use our expertise to design sustainable, resilient, humane communities and make our contribution to building a sustainable and friendly society."

The American College Student Civil Engineering Competition is a long standing competition established by the American Society of Civil Engineers (ASCE). There are four events in this competition: concrete canoe building, transportation, sustainable design, and thesis writing. The participating teams include the world's top universities in the United States, China, Canada and other places, such as the University of California, Berkeley, Davis, and many other American universities; as well as Zhejiang University, Tongji University, Southeast University, Hohai University, Dalian University of Technology and other Chinese universities.

Peiyao XU, another civil engineering student from Class of 2022, ZJUI, teamed up with students from the College of Civil Engineering and Architecture and won the fifth place in the sustainable design contest. 🇺🇸



ECE 445 / ME 470,
An Innovative Senior
Design Course Which
Meets the Needs of
Society

August 15, 2021

Article | Stephanie
Translator | LU Xinyue
Photo | Stephanie

Not long ago, the unique senior design course for the class of 2021 came to an end in a special award ceremony. Several teams received special recognition:

“A crowd-sourcing urban air quality monitoring system with bikes” won the Most Potentially Socially Impactful Award.

“Augmented Reality and Virtual Reality for Electromagnetics Education” won the Best Software Project Award.

“A Micro-Tribotester to Characterize the Wear Phenomenon” won the Best Engineering Project Award.

“An Engineering Solution to Auto Chess Set” won the Best Interactive Project Award.

“Simplified Device for Fasteners Counter” won the Most Commercially Viable Project Award.

“Wireless Charging Table Supporting Multiple Devices with Arbitrary Placement” won the Most Interdisciplinary Project Award.

ECE445 / ME 470 Senior Design was a course offered in the spring and summer semesters of 2021, with 105 fourth-year students enrolled majoring in Computer, Electrical, and Mechanical Engineering. ZJUI Assistant Professors Mark Butala, Timothy Lee, and UIUC faculty member Professor Arne Fliflet were the instructors. More than 20 professors from ZJUI and UIUC participated in on-site or online project guidance and review.

This course has many distinguishing elements, which include the following.

Innovation 1: Strengthening the process management and development of senior design into a compulsory course:

In undergraduate engineering education, senior design contributes a key, capstone portion of engineering teaching practice, combining theory and practice that cultivates and assesses students' comprehensive ability. In China, the traditional senior design course is an independent link before graduation, and it is usually evaluated through several important steps, such as: project initiation, mid-term, presentation, and defense, with the greatest emphasis given to the final presentation and defense.

At ZJUI, we have adopted the UIUC approach where senior design is a required course which evaluates students' writing, teamwork, presentation skills, and most importantly, the ability to synthesize the theories, knowledge, and skills learned to solve real-world problems in a holistic manner. Developing senior design into a formal course means that the implementation process is more rigorous, and it also means that there is more support and supervision from the course instructor and teaching assistant team in addition to the project supervisor. With the support of numerous lectures, assignments, and rich resources on the course website, the process management of senior design has strengthened so that students can consolidate all aspects of senior design and continuously improve their comprehensive ability to solve the real-world problems including: how to choose a topic, how to record lab notes, how to improve the efficiency of teamwork, how to make group decisions and identify research approaches, to project proposals, individual progress reports, design reports, mock presentations, final reports, peer reviews, teamwork, and many other aspects.

With the construction and utilization of the interactive course website, senior design was conducted in a manner with more intuitive and systematic recording and presentation of the implementation process, more regular auditing and guidance, more regular management and promotion, and a more phased and process-oriented scientific evaluation.

Innovation 2: Realization of cross-disciplinary innovation in senior design

Recently, undergraduate engineering education has assigned greater importance to the cultivation of students' innovation and entrepreneurial ability and cross-border integration ability. In order to promote cross-discipline and cross-cultivation innovation, ZJUI has conducted a novel way to implement senior design, shifting from teams divided by engineering major to cross-disciplinary groups. The course requested students to form teams freely except that teams must include members from different engineering disciplines. Most teams included students from all three majors. In the project design and task development, clear requirements were also provided ensure projects included elements characteristics of the different engineering majors.

Professor Mark Butala told us, "As the interdisciplinary teams were assembled and each team had a certain breadth of expertise, we requested each team to include electronic and mechanical components in their designs. This was actually an additional daunting challenge for each project, and we were pleased to see that many of the teams, exemplified by the 'Wireless Charging Station for Multiple Devices Placed Anywhere' team, produced highly synergistic, cross-disciplinary designs that incorporated mechanical, electrical, and computer science elements.

Professor Arne Fliflet, who has taught the senior design course at UIUC nearly 10 times, said that because almost every team includes mechanical engineering students, the mechanical components of the ZJUI student design project had more depth of development and manufacturing, and the projects at ZJUI were generally more comprehensive and complex.

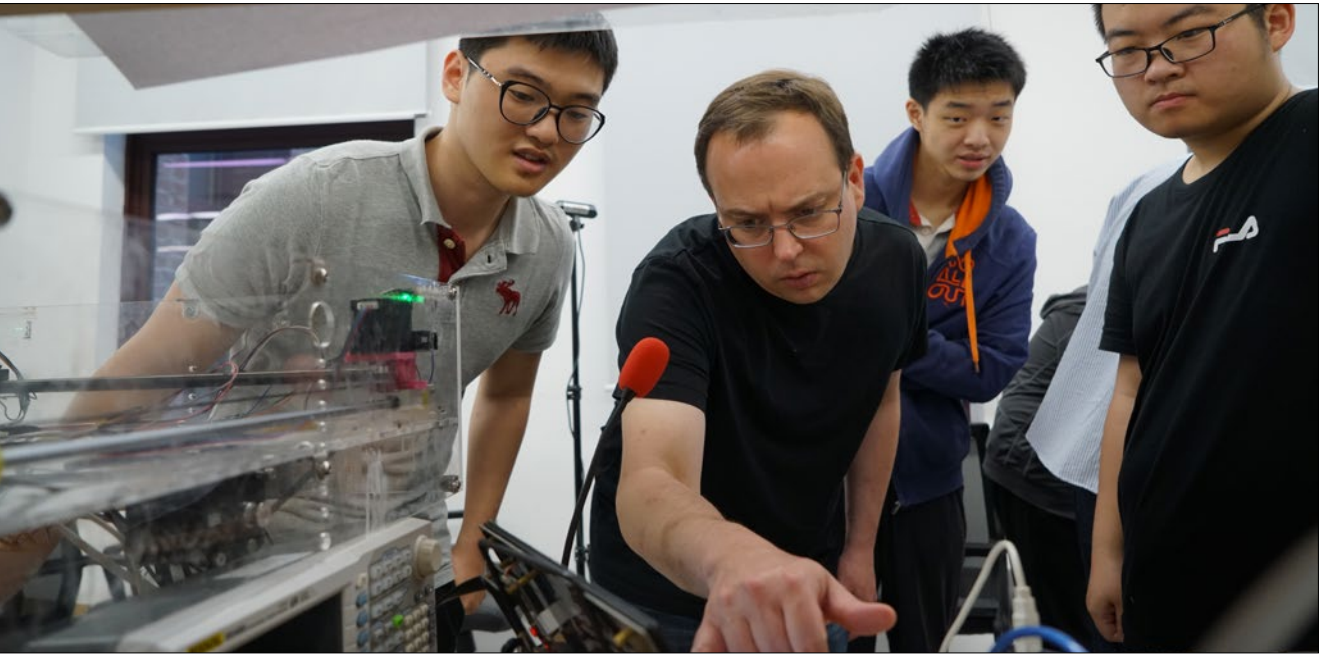
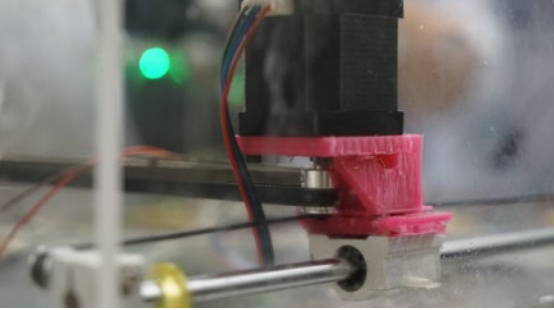
The cross-pollination and cooperation of different majors in this senior design course also generated brilliant creative sparks, broader engineering vision, and stronger ultimate solutions.

Innovation 3: Completing the challenge as a team and incorporating societal needs

The core purpose of senior design is to test students' ability and skill in applying their professional basic knowledge to solve practical engineering problems and help lay a solid foundation for their smooth adaptation to the real-world. Therefore, for this senior design course, ZJUI incorporated proven practices from UIUC: formal and systematic project development, team-based design and implementation, and combining individual and team assessment. The 105 students, with representatives from three engineering majors, formed 27 groups, each with a faculty supervisor, to carry out their senior design tasks based on projects of their own selection.

At the beginning of the course, the instructors taught and provided course content and course materials on

Lab Notebook	Individual	50	PDF
Lab Safety Training	Individual	Lab Access	None
Request for Approval	Team	5	None
Weekly TM Meetings	Team	N/A	None
Project Proposal	Team	25	PDF
Engle Assignment	Individual	10	PDF
Soldering Assignment	Individual	10	PDF
Simulation Assignment (EML)			PDF
Design Document Check	Individual	5	None
Design Document	Team	40	PDF
Requirements and Verification			
Design Review *	Team	20	PDF
Individual Progress Report	Individual	25	PDF
Mock Teams	Individual	5	None
Mock Presentations	Individual	5	None
Total Times *	Team	120	PDF
Total Presentation *	Individual	50	PDF
Total Report Technical	Team	30	PDF
Total Report English/Format	Team	20	PDF
Checklist	Team	N/A	PDF
Peer Review Checklist	Individual	15 (Initial)	None
Teamwork	Individual	40	None
Continuing your project		Priceless	None



teamwork, including how to choose teammates, how to brainstorm, and how to vote scientifically and efficiently to select research objectives, which provided good support for subsequent team management and operation. Professor Timothy Lee emphasized that “Students will have gained valuable insight in other disciplines and how to coordinate efforts to reach a goal through working together in interdisciplinary teams to complete the final project. It will greatly help them in their future careers as the more real-life experience they have, the better off they will be. In the real world, they will be hired by a company or work with a professor, but they will not be allowed to choose what they want to do and who they get to work with. Learning how to collaborate with others to accomplish tasks and challenges is an essential skill.”

At the same time, in order to avoid situations where team members do not contribute evenly or individual contributions are unfairly shared by all team members, the course has mechanisms to balance team and individual performance, in addition to regular supervision by the instructor and teaching assistants. For example, there are several individual assignments that are the sole responsibility of each team member, participation of each team member is compulsory during presentations, and instructors maintain the right to grade individually if contributions are out of balance.

In reference to the development of teamwork throughout the ZJUI curriculum, Professor Butala mentioned that “Many real-world engineering problems are often complex, and engineers must also get used to drawing on the experience of different fields for support and listening to diverse voices and advice.” As Professor Butala said, ZJUI focuses on fostering hands-on research experiences for students as a team in the design of the curriculum and education plan so that students can broaden their knowledge while further exercising their leadership and teamwork skills, familiarize themselves with the process of solving real engineering problems, develop a sense of the big picture, and stimulate innovative thinking.


Innovation 4: Topic selection incorporating diverse features from multiple sources

“We encourage students to propose their own projects, which is an important starting point for innovation. On the other hand, this semester's ZJUI projects benefitted from the ZJUI faculty providing project ideas and mentoring.” As Professor Arne Fliflet said, the student teams selected their projects using a variety of sources, incorporating characteristics from these multiple sources and embracing diverse ideas. The project topics were mainly selected by the students themselves, supplemented by the supervisors' research projects and projects provided from industry, considering the students' interests and the frontiers of science and technology.

Some student teams found inspiration from observing challenges facing students on campus. Some examples include the projects entitled Seat U: Sensing System for Real-time Library Seat Occupation Detection, Sensor-based Automatic Delivery Vehicle, An Engineering Solution to Auto Chess Set, and Wireless Charing Table Supporting Multiple Devices with Arbitrary Placement. Other students focused on the care of disadvantaged groups and taking social responsibility. Examples of this type of project include A Wearable Device Outputting Scene Text for Blind People, An EMG-Controlled Robotic Glove for Rehabilitation, Camera-based Augmented Reality Endoscope Auxiliary System, and A Crowd-Sourcing Urban Air Quality Monitoring System with Bikes. Still other students challenged the frontiers to provide ZJUI solutions to engineering problems. Examples include Radar Object Detection Model for Autonomous Driving, Integrated Synthetic Aperture Radar Remote Sensing System on UAV, Keebot: A Humanoid Robot Performing 3D Pose Imitation, Augmented Reality and Virtual Reality for Electromagnetics Education, and Unsupervised Representation Learning in 3D Medical Imaging.

From problem identification, problem formulation, to problem solving, the students experienced the complete process of solving real engineering problems over the term of this senior design course and accumulated valuable experience for their future careers.

Both the instructors and the team supervisors were positive about the final outcome of most of the teams' projects, and Professor Butala recalled how he taught the ECE 110 course during the same set of students' freshman year, “Comparing the group projects from ECE 110 to the senior design projects, it is incredible how far the students have come and how much they have learned in just a few short years. I was the mentor for two projects this year. Given my regular, direct interactions with them, I feel I can best assess these teams. I was blown away by the final results: the end products were functional, professional, and well-engineered and I was especially delighted by the quality of their final reports.” Professor Arne Fliflet also suggested that through this course, it was found that the students were less involved in the specific details of microprocessor-based device development (e.g., PCB design), and he hoped that in the future, by providing more relevant information and training, the students would be better equipped to carry out cross-disciplinary engineering design.

With the successful completion of the senior design course, ZJUI has taken another solid step in the exploration of cross-disciplinary engineering teaching practice, breaking the barriers of traditional majors, and building an innovative engineering education organization that embraces multidisciplinary interaction. 

ZJUI Student Practice Base Signing Ceremony was Held Successfully

April 22, 2021

Article | XU, Yiyang
Translator | LU, Xinyue, Mayanja
Photo | LIU, Chang




On April 21, a signing ceremony between Zhejiang University University of Illinois Urbana-Champaign Campus Union College (ZJUI), Zhejiang Jinko Energy Co., Ltd. and Tiantong Holding Co., Ltd. was held at Zhejiang University International Union College (Haining International Campus) to establish a student internship program. In the future, ZJUI will establish a school-enterprise internship program in collaboration with Jinko and Tiantong to provide students with more internship opportunities.

Dr. Zhou Jinqi, Assistant Dean of the International Campus and Director of the Education and Teaching Center, highlighted in his welcome speech that the Zhejiang University International Campus acts as an important strategic school base for Zhejiang University. The International Campus actively helps to meet the school's goal of serving the country's major strategic needs and aiding in local economic development, in addition to supporting the layout of key industries such as the Haining Pan semiconductor industry. He expects to better improve the quality of student training through this high-level and promising platform for undergraduate and graduate teaching, training and practice.


Ji Shaoguo, Chief Human Resources Officer of Zhejiang Jinko Solar Co., Ltd., introduced Jinko's main business, future industry development trends and the company's mission. Jinko Solar is a photovoltaic (PV) manufacturer with a vertically integrated industrial chain. The shipment volume of photovoltaic modules has been No. 1 in the country for many years. Its business covers the production of silicon ingots, silicon wafers, solar cells, and high-efficiency single-polycrystalline photovoltaic module manufacturing. He said that starting from the student practice base, the two sides will use provide teaching opportunities and provide advice in aid of building the enterprise, in order to cooperate well and serve the community together.

Zhang Ruibiao, executive director of Tiantong Research Institute of Tiantong Holding Co., Ltd., introduced Tiantong's growth process in line with China's economic reform and development and its different research and development and production priorities at various stages of development. Tiantong Holdings is the first listed company controlled by actual people. , is a scientific research, manufacturing, sales in one of the national high-tech enterprises. It is a national high-tech enterprise integrating scientific research, manufacturing and sales. He also invited ZJUI students to join to help in the technological research and development of Tiantong's strategic development areas such as basic materials, component development, and intelligent manufacturing.

Professor Ma Hao, Vice Dean of ZJUI, briefed the guests on the running and development of the College, expressing his gratitude to the enterprises for providing a practical platform and further expressed their eager expectations for future cooperation.

In the future, both parties will further exert the effectiveness of practical education in the process of education and teaching, strengthen the integration of production and education to further enhance the students capabilities. While at the same time, it will further utilize its discipline advantages to foster local innovation and development. 

In late April, 81 ZJUI college Student Research and Training Projects (S RTP) were approved after strict evaluation by the expert team, including 4 national innovation projects, 5 provincial innovation projects, 12 university-level projects, 57 institute-level projects and 3 scientific research and practice projects. This S RTP has a variety of topics. In addition to the projects in the fields of computer, electronic, mechanic, and civil engineering, there are also interdisciplinary research topics related to the financial field, such as "the impact of corporate innovation ability on IPO pricing". Many of the subjects are interdisciplinary and require multi-disciplinary cooperation. The members of the research team are also composed of students from different majors. Focusing on the problems around them, students put forward projects such as "Demonstrative Digital Twin Campus" and "Research on the Performance of Rotating Atomizer"; focusing on the frontier of science and technology, they began to explore "Construction and Application Research of Intelligent Question Answering System Based on Dynamic Time-Series Knowledge Graph", "Digital Realization of Key Modules of Brain-like Chip", "Safety Test Simulation and Modeling Based on Unmanned Vehicle" and other topics; centering on sustainable society, they put forward some topics such as "Information Map Construction of Natural and Artificial Water System in Yangtze River Delta Ecological Green Integration Demonstration Area" and "Bionic Functional Micro-nano Surface Manufacturing and Testing".

S RTP aims at stimulating students' spirit of exploration, broadening their engineering vision, training students' ability to find, analyze and solve problems, especially cultivating students' ability of problem-oriented autonomous learning. It is believed that the students will lay a good foundation for future innovation talents in the field of engineering through the S RTP. 



Regional Cooperation Research Center for Carbon Neutral Development is Established

May 16, 2021


Article | MO, Chenyi
Translator | LU, Xinyue



On the afternoon of May 14, the signing and unveiling ceremony of ZJUI's first Regional Cooperation Research Center, the Zhejiang University (Ninghai) Joint Research Center for Bio-based Materials and Carbon Neutral Development, was held in Ninghai, Zhejiang Province. Prof. Li Hanying, Acting Vice Dean of ZJUI, Prof. Xiao Yan, Director of the Program for Energy, Environment, and Sustainable Systems Sciences, Wang Junhai, Standing Committee Member and Executive Vice Mayor of Ninghai County, Yang Zuan, Vice Mayor of Ninghai County, Wang Jianhe, Academician from Ningbo China-Canada Institute of Low Carbon New Technology Co. and others attended the ceremony. Ge Renyuan, director of the county admin office, presided over the ceremony. The two sides signed a cooperation agreement to establish the ZJU (Ninghai) Joint Research Center for Bio-based Materials and Carbon Neutral Development, and held an unveiling ceremony. In the future, the two sides will carry out industry-university-research cooperation in basic and applied research on biomass materials, promotion and application of biomass materials in rural and urban construction, policy planning, etc. to create a mutual win-win mechanism, together make a contribution to the goal of carbon neutrality.

Wang Junhai pointed out in his speech that Ninghai County would do its utmost to develop green buildings and biomass materials with the greatest sincerity and efforts, and provide a first-class environment and quality services for the cooperation. He expressed his appreciation for the intellectual support provided by Zhejiang University for the development of Ninghai's biomass materials industry and hoped that this cooperation would further promote the rapid development of Ninghai's biomass materials and carbon neutral construction.

Prof. Li Hanying said that ZJUI would always attach great importance to helping regional innovation development with the establishment of this research center. The center will be established in the context of the national "carbon neutral" goal, taking the construction industry as the key industrial sector to achieve the goal of emission reduction and energy performance optimization, focusing on the research and development of biomass materials and leading the sustainable development of the industry. Prof. Li Hanying believes that the university-local cooperation between ZJUI and Ninghai County can bring more high-end talents, as well as scientific and technological achievements to Ninghai, and inject innovative energy into Ninghai to promote its high-quality development in all aspects.

Prof. Xiao Yan, ZJUI, serves as the director of the joint research center. He is one of the pioneering experts who systematically studied and developed the modern bamboo structures and earned an international reputation. Relying on this university-local cooperation platform, Prof. Xiao will lead his team to offer strong intellectual support for the development of biomass material industry in Ninghai County, provide effective guidance for the landing and transformation of scientific research results of Zhejiang University, and make a positive contribution to the realization of the national carbon neutral goal. 

Prof. LI Binbin received the President's Special Fund for Fundamental Research Funds for the Central Universities


March 30, 2021

Article | MENG, Kexin; JIANG, Sheng Chao



Recently, ZJUI Assistant Professor (Civil Engineering) Binbin Li, together with Professor Yan XIAO and Associate Professor Tingju Zhu, etc., won a 2-year project funded by the President's Special Fund for Fundamental Research Funds for the Central Universities. The project titled "Bio-based Materials and Engineering Application for Carbon Neutrality" aims to build an interdisciplinary platform for research on bio-based materials and corresponding engineering applications. Besides the professors in ZJUI, the project team consists of researchers from Zhejiang University-University of Edinburgh Institute, College of Civil Engineering and Architecture, College of Biosystems Engineering and Food Science and International Business School.

The project will assess the demand for water and land resources during the production of bio-based materials, investigate its influence on the ecological environment, study and improve their mechanical properties, and optimize their practical utilization based on the temporal and spatial constraintss. In addition, the project will conduct the research on the long-term monitoring on the structural performance of bio-composites, and the intelligent design, manufacture, and assembly of modern bamboo structures, as well as the supply chain and its sustainability of biomass engineering materials.

The president's special fund for Fundamental Research Funds for the Central Universities of Zhejiang University is mainly used to support researchers to carry out projects, to support the construction of an excellent innovative team, and to develop fundamentality, supportability, and strategy of interdisciplinary research. The special fund is for the national scientific and technological innovation layout for 2035 and the goals and tasks of the ZJU's "14th Five-Year Plan" innovative development plan. It is geared to young and middle-aged researchers with a scientific research foundation and innovative thinking for collecting projects. 

Professor Li Erping receives Laurence G. Cumming Award

August 21, 2021

Article | Stephanie



On Aug. 17, Prof. LI Erping from the Zhejiang University - University of Illinois at Urbana-Champaign Institute and the Zhejiang University College of Information Science and Electronic Engineering received the 2021 Laurence G. Cumming Award for Outstanding Service at the 2021 Joint IEEE International Virtual Symposium on EMC+ SIPI. The award, established in 1979, is one of the two highest awards of the IEEE EMC Society to recognize the outstanding contributions and service to the EMC community and exceptional technical achievements. This marks the second time that Prof. Li has received the highest award from the EMC Society after winning the Richard R. Stoddard Award in 2015.

Qiushi Chair Professor of Zhejiang University and a fellow of IEEE, Prof. Li is a leading expert in electrical modeling and design of micro/nano-scale integrated circuits, 3D electronic package integration, nano-plasmonic technology, and 5G communications. He authored or co-authored over 300 papers published in internationally renowned journals, and two books published by John-Wiley-IEEE Press and Cambridge University Press respectively. Lots of his research results have been applied to industry.

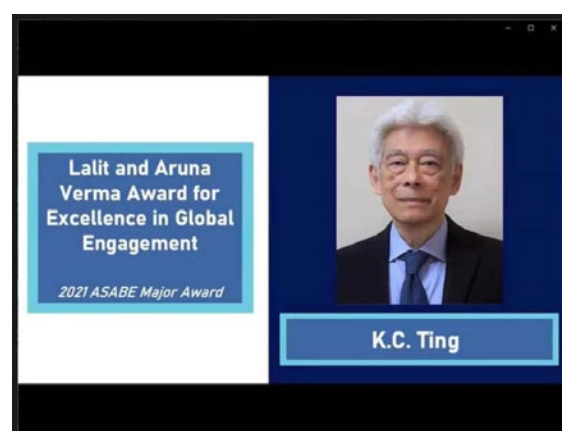
In addition to scientific research, Prof. Li has committed himself to the development of the academic community of electromagnetic compatibility. He founded the Asia-Pacific EMC Symposium (APEMC) in 2008. Today, APEMC, in close collaboration with the IEEE EMC Society, has become the most prestigious EMC symposium in the Asia Pacific region, enhancing EMC development in the Region.

The IEEE is the world's largest association of technical professionals, with more than 420,000 members in over 175 countries, dedicated to promoting the development and application of electrical and electronic technology in theory. The IEEE Electromagnetic Compatibility Society (EMC Society), established in 1957, dedicated to the development and distribution of information, tools and techniques for reducing electromagnetic interference.

ZJUI Professor K.C. Ting, Consultant and Former Vice Dean of the International Campus, Zhejiang University, China, and Department Head Emeritus in the ABE Department, UIUC, received the 2021 Lalit and Aruna Verma Award for Excellence in Global Engagement from the American Society of Agricultural and Biological Engineers (ASABE) on July 15 via the ASABE 2021 Annual International Meeting. Professor Ting was the fifth winner of the award since its first giving. The award recognizes Professor Ting's contributions to the profession of agricultural and biological engineering, excellence in global engagement, and outstanding efforts in international engineering education.

Professor Ting is known for his agricultural systems informatics and analytics work. He has been leading research teams to develop and implement the pioneering Automation-Culture-Environment oriented Systems (ACESys) analysis methodology, Concurrent Science, Engineering, and Technology (ConSEnT) decision support computational platform, and Intelligence Driven and Empowered Agricultural Systems (IDEAS). His work has been highly innovative and at the forefront of agricultural and biological engineering discipline. He has been very active in sharing globally, his knowledge on intelligent agricultural systems and agricultural and biological engineering education and research programs, including over 135 invited presentations and 30 academic program reviews. His contribution to engineering education in the U.S., Asia, Europe, and globally is highly impactful and widely recognized by his peers. He served as department head/chair of agricultural and biological engineering related departments at three U.S. land-grant universities for a total of over 22 years before he was appointed vice dean of International Campus and professor of ZJUI, Zhejiang University, in January 2017 for four years, to provide his many years of technical and educational expertise to contribute in the development and establishment of a brand new university campus. He made major impacts in the strategy development, master planning, and international climate building of this first class international higher education institution in China, and contributed to the education and research progress of ZJUI. In ZJUI, professor Ting has given several courses, like the CEE201-Systems Engineering & Economics, to the undergraduates, being supervisor of two graduates, also provided guidance and help for some team when they participated in international competition - one of a team won a gold award from the Zhejiang College Students' 'Internet Plus' Innovation and Entrepreneurship Competition and bronze award from the National Competition. In early 2020, he provided advice in modernizing the agricultural biosystems engineering program at Royal University of Agriculture in Cambodia.

The ASABE founded in 1907, is an educational and scientific organization dedicated to the advancement of engineering applicable to agricultural, food, and biological systems. The Lalit and Aruna Verma Award for Excellence in Global Engagement, presented each year at the ASABE Annual International Meeting and/or at an ASABE global engagement event, recognizes outstanding contributions to agricultural and biological engineering made towards global engagement, international education, outreach, and/or research. 🇺🇸



The forum of Urban Energy Internet Development and Cooperation Under the Goal of Achieving Peak Carbon Dioxide Emissions and Carbon Neutrality was held successfully

July 17, 2021

Article | Stephanie

Translator | YE, Qlanhe
ZHANG, Shilei Li, Chushan

Photo | Stephanie, ZHANG Shilei,
YANG Lichao



"Fast and Furious": The 2021 International Concrete Dragon Boat Competition

June 14, 2021

Photo | Studio of Just Be Happy

Source | <https://www.zju.edu.cn/english/2021/0614/c19573a2394558/page.htm>



On July 16th, in order to further implement the major decision and Carbon Peaking and Carbon Neutrality, lead the energy transformation development, industrial upgrading, and strengthen academic exchanges in various related fields, the forum of Urban Energy Internet Development and Cooperation Under the Goal of Achieving Peak Carbon Dioxide Emissions and Carbon Neutrality, jointly organized by ZJUI, was held in the International Campus, Zhejiang University (IC). The forum attracted special guests from Tsinghua University, Xi 'an Jiaotong University, Zhejiang University and other universities. More than 200 experts and scholars, including the leaders of key new energy enterprises and the technical elites of the industry, participated in this forum. Prof. QIU Aici, academican of Chinese Academy of Engineering and honorary Dean of the School of Electrical Engineering of Xi 'an Jiaotong University, Mr. CAO Guoliang, Secretary of the Haining Municipal Committee of the CPC, and representatives of faculty in related fields of ZJUI attended the forum. The forum consists of the opening ceremony, the keynote speech, and the sub-forum. Mr. PU Xinda, Executive Vice Mayor of Haining, presided over the opening ceremony and Prof. MA Hao, Vice Dean of ZJUI, presided over the keynote speech.

After the keynote speech session, "Energy Transformation and Development of Emerging Industries", "Theoretical Research and Practice of New Power Systems", and "Demand Side Low Carbon Path under the Background of New Power Systems" three sub-forums were held. Guests and scholars discussed the research progress and industrial development through in-depth communication. 🇺🇸

On 14th June, the 2021 International Concrete Dragon Boat Competition was held on Haining International Campus of Zhejiang University. A total of 49 concrete dragon boats from over 24 universities, including Zhejiang University, Central South University, Southern University of Science and Technology, Dalian University of Technology, Southwest Jiaotong University, Xi'an Jiaotong-Liverpool University, etc., gave a dazzling performance via the fusion of concrete technology and traditional Chinese culture.

The competition consists of four parts: hull testing, appearance display, straight-line battle racing, and the evaluation process which includes obstacle racing, presentations and research papers.

The competition, which combined professionalism, culture, entertainment, collaboration and innovation, aimed at disseminating traditional Chinese culture, promoting international exchanges, reflecting the progress of concrete research and construction technology both at home and abroad, enhancing the comprehensive ability of university students in material and structure design, analysis and calculation, artistic design, automatic control applications and interdisciplinary collaboration.

There was one special prize, three first prizes, six second prizes and tenth prizes as well as nine individual prizes, such as Technical Challenge Prize, Best Design Prize, International Friendship Prize and Honorable Mention Prize. The special prize went to the "Rui Long" team from Xi'an University of Architecture and Technology (XAUAT).

"Student competitions should be interesting and entertaining, and of course dragon boats are aesthetically appealing. Much to my delight, candidates were remarkably passionate and enjoyed this competition very much. In this process of trial and error, candidates' imagination and creativity were further stimulated," said XIAO Yan, director of the Organizing Committee of the 3rd International Concrete Dragon Boat Competition and a professor from the ZJU-UIUC Institute. "This year, we introduced more technology into the competition to make it more interdisciplinary, such as new energy, AI technology, and UAV. We also expect more teams can join this competition next year to bring us more brilliant ideas and breathtaking innovations." 🇺🇸

The “DREMES 2021 Summer Workshop” was held successfully

July 21, 2021

Article | Stephanie



The first summer workshop of the Dynamic Research Enterprise for Multidisciplinary Engineering Sciences (DREMES) was held online in July. It was jointly organized by Prof. Philip Krein and Prof. Erping Li, the two Directors of the ZJU-UIUC Joint Research Enterprise. The workshop included student presentations, highlight presentations, and a progress summary and near-term plans for each of the three theme-area centers supported by DREMES. The center-scale themes include the Center for Pathogen Diagnostics (CPD), the Center for Adaptive, Resilient, Cyber-Physical Manufacturing Networks (CyMan), and the Center for Infrastructure Resilience in Cities as Livable Environments (CIRCLE).

More than 50 scholars and students from the both sides gathered online for presentations and discussion. Digital twins, flexible manufacturing, detection of exosomal RNAs, models of complex urban environments, and SARS-COV2 detection were among the project topics presented at the workshop. The research teams seek to break through barriers of physical space and pandemic travel limitations through online discussions, virtual lab environments, and seminars. The teams carry out collaborative research to embrace important global challenges.

The Dynamic Research Enterprise for Multidisciplinary Engineering Sciences (DREMES) is the joint research enterprise between ZJU and Illinois. It is also a unique umbrella for active collaborations among ZJU, Illinois, and ZJUI. The enterprise explores fundamental global issues in human health, energy and environment, and sustainable manufacturing.



On May 22nd, the forum themed “Future Communities with Intelligent Transportation Systems” was successfully held in the International Campus, Zhejiang University. This forum was jointly organized by Zhejiang University-University of Illinois at Urbana-Champaign Institute (ZJUI), School of Public Affairs of Zhejiang University, International Business School of Zhejiang University (ZIBS), Center for Balance Architecture of Zhejiang University, and Intelligent Transportation Engineering Research Center in Zhejiang. This forum was strongly supported by ZJU Virtual Lab for Computable Digital Transport, Future Mobility Lab, Research Center for Computational Social Sciences, Advanced Electrical International Research Center, and Zhejiang Computer Society.

This forum focuses on intelligent transportation systems, future communities, data science, and other related fields, aiming to promote the implementation of big data, Artificial Intelligence (AI), and Internet of Things (IoT) in the future community construction, as well as deeply explore the digital value of urban transportation.

Prof. Erping Li, vice dean of International Campus, ZJU, and Prof. Hao Ma, vice dean of ZJUI, delivered opening remarks respectively. Prof. Erping Li briefly introduced the education and overall development of the international campus. He said that the international campus has always encouraged interdisciplinary development, and that we’ve built a solid research foundation in the intelligent transportation field. He warmly welcomed more scholars to join us, adhering to innovation-driven development, and achieving breakthroughs together. After that, Prof. Hao Ma introduced ZJUI in terms of research, development, and educational achievements. He expounded upon the strategic layout and activities of ZJUI in building a sustainable society and expressed an ardent welcome for experts and scholars attending the forum.

Mr. Weier Song, director of the Future Community Research Center of Zhejiang Development and Planning Institute, made the keynote speech titled "The Blueprint for the Future Community



Future Communities with Intelligent Transportation Systems
May 25, 2021

Article | SHU, Qinru

Photo | LOU Guofu, HU Xiaoguang



", elaborating the concept and framework of the future community and the practices in Zhejiang Province. He pointed out that the construction of future community should pay great attention to three kinds of values, named humanism, ecology and digitization, and nine scenes for residents. Based on the integration of investment and construction, the framework of "three values and nine scenes" holds promise for building a demonstration benchmark of a future beautiful community.

Afterwards, Prof. Qiang Yang from College of Electrical Engineering, Zhejiang University, Dr. Chao Wu, Assistant Professor of School of Public Affairs, Zhejiang University, and Dr. Simon Hu, Assistant Professor of ZJUI, Zhejiang University, gave impressive presentations and shared their valuable thoughts on the future community enabled by the new generation of artificial intelligence technology from the perspectives of intelligent electrical operation and management, big data analysis technology, and intelligent transportation systems, respectively. A heated discussion on policies, technologies, and other relevant issues was aroused among guests.

The main part of the forum ended with a round table discussion. Mr. Jiahe Jin, director of big data development center of Zhejiang Province, Ms. Hongling Wu from Hangzhou Bureau of Planning and Natural Resources, Ms. Wei Liang from Shanghai Fudan Institute of Planning and Architecture Design, Prof. Qiang Yang, Dr. Chao Wu, and Dr. Simon Hu were invited to join the discussion and shared their thoughts on hot issues and the potential applications of their research in future community construction. The conversation attached much importance to data security and privacy. All the experts reached the agreement that privacy protection and data security should be given special attention to in the process of future community construction and efforts from all walks of life should be united to create a safe and reliable community.

After the forum, all the guests visited the campus and our Future Mobility Lab together.

Experts and scholars from more than 30 institutions and enterprises (i.e. Zhejiang Development and Planning Institute, Hangzhou Bureau of Planning and Natural Resources, Zhejiang Computer Society, Zhejiang University, Xihu University) attended the forum.

News in Picture

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1.2. Class of 2025 arrived on campus on the Registration Day (Aug 21st).

3. Assistant Professor Mark D. Butala received the Honor Award of the 'Beautiful City & Residents' on May 18th.

4. Open Day for Parents & Students in Zhejiang Province was held on May 16th.

5. Advanced Electrical Forum I - New Power Electrical System & Electrical Equipment Under the Goal Achieving Peak Carbon Dioxide Emissions and Carbon Neutrality was held on Jun 5th.

