WUHAN UNIVERSITY OF TECHNOLOGY IS ONE OF THE LEADING CHINESE UNIVERSITIES

About Wuhan University of Technology

Wuhan University of Technology (hereafter referred to as WUT) was merged on May 27th 2000, from the former Wuhan University of Technology (established in 1948), Wuhan Transportation University (established in 1946) and Wuhan Automotive Polytechnic University (established in 1958). WUT is one of the leading Chinese universities under the direct administration of the Ministry of Education and one of the universities in the country's construction plan of world-class universities and first-class disciplines. WUT is also jointly constructed by the Ministry of Education, the Ministry of Transport, the State Oceanic Administration and the State Administration of Science, Technology and Industry for National Defense. In the past 70 years, WUT has fostered over 500.000 engineers and technicians, maintaining itself the largest scale university under the direct administration of the Ministry of Education for nurturing talents oriented in the three industrial sectors: building materials industry, transportation industry and automobile industry and retaining itself an important base of nurturing high-level talents for the three industrial sectors as well as providing significant scientific and technological achievements.

With the practice of long-term student's education, WUT has formed educational ideology system with distinctive characteristics: focusing on the lofty ideal of building an excellent university to win a worldwide recognition and admiration, the University has forged the spirit of «Sound in Morality, Broad in Learning and Pursuing Excellence», promoted the guiding principle of «take the students cultivation as our essence, and take academic development as our priority», and exercised the educational concept of «implementing excellent education, nurturing excellent talents and creating an excellent life». WUT is committed to building an excellent university that provides an excellent education to lead our students to a fulfilled life with excellent pursuit and excellent capability.

The University has three main campuses, namely, the Mafangshan Campus, the Yujiatou Campus and the South Lake Campus, with a total occupying land area of 267 hectares. Currently, WUT has 5.508 staff members, including 3.282 full-time academic staff members, 1 academician of China Academy of Science, 3 aca-

demicians of China Academy of Engineering, 1 foreign member of the Russian Academy of Engineering, 1 member of European Academy of Sciences, 1 fellow of Australian Academy of Technological Sciences and Engineering and 1 member of World Academy of Ceramics. Besides, the University has heldpublic global recruitment of 30 world-renowned professors to be its «Strategic Scientists» in the area of Materials Science & Engineering, Mechanical Engineering, Information Technology and Naval Architecture & Ocean Engineering. WUT owns a great number of academic staff members listed in national high-level talents programs, with 28 of them listed in the Recruitment Program of Global Experts»(known as »the Thousand Talents Plan»), 6 listed in «Ten Thousand Talents Program», 14 listed in «Cheung Kong Scholars Program», 7 listed in «The National Science Fund for Distinguished Young Scholars», 3 listed in «National Renowned Teachers» and 11 listed in «The New Century National Hundred, Thousand and Ten Thousand Talent Project».

The University owns 24 academic schools, 4 State Key Laboratories, 8 State key Disciplines, 77 Doctoral programs, 226 Master's programs as well as 90 Bachelor's programs. The Universityhas 54.986 students, including 36.452 undergraduates, 17,224 postgraduates (Master and PhD students), and 1.310 international students. Besides, Material Science, Engineering Science and Chemistry rank the top 5‰ in ESI (Essential Science Indicators) global discipline ranking list.

WUT owns 34 innovative research centers with international leading level including two State Key Laboratories, one State Engineering Laboratory, one National Engineering Research Center and ministerial or provincial level laboratories in the areas of new materials and building materials, transportation and logistics, mechatronics and automobile, information technology, new energy, resources and environmental technology as well as Public Safety and Emergency Management. Meanwhile, the University has established about 230 Joint Research Centers with local governments and enterprises. From 2010, WUT has obtained 14 National Science and Technology Awards, ranking in the forefront of Chinese higher education institutions.

WUT has established cooperative relations for students exchange and scientific research with more than 190 foreign universities and research institutions from USA, UK, Japan, France, Australia, Russia and the Netherlands, etc. and invited over 300 international famous scholars to be strategic scientist, guest professors or honorary professors. From 2007, WUT was authorized to establish 5 Bases of Foreign Outstanding Expertise-Introduction for Disciplines Innovation in China Leading Universities in Advanced Technology for Materials Synthesis and Processing, Advanced Technology for High Performance Ship, Advanced Technology for Functional Film Materials Fabrication and Its Application in Engineering, Key Technology for New Energy Vehicles and Environmental-friendly Building Materials. As well, the International Joint Laboratory of Advanced Technology for Materials Synthesis and Processing, the Base of International Science and Technology Cooperation in Environmental-friendly Building Materials, the base of International Science and Technology Cooperation on Smart Shipping and Maritime Safety. From 2009, WUT has established 14 International Joint Research Centers with internationally renowned institutions from USA, UK, Italy and the Netherlands, including

the «WUT-UM Joint New Energy Material and Conversion Technology Key Laboratory» with the University of Michigan, the «WUT-UoS High Performance Ship Technology Joint Center» with the University of Southampton andthe «Joint Research Center for Intelligent Ship and Traffic» with Delft University of Technology. In 2016, an international college initiative – the UWTSD Wuhan Ligong College was established in Swansea in partnership with the University of Wales Trinity Saint David, UK.

In 2017, the University was listed in *Times Higher Education World University Rankings, QS Asia University Rankings, U.S. News Best Global Universities Rankings and ShanghaiRanking's Academic Ranking of World Universities*.

Overview of the International School of Materials Science and Engineering

Driven by the great demand for national higher education reformation, the International School of Materials Science and Engineering (hereafter referred to as ISMSE), Wuhan University of Technology (hereafter referred to as WUT) is aimed to build the top-notch innovative talent training base and knowledge innovation centre of Materials Science and Engineering.

WUT is one of the leading Chinese universities under the direct administration of the Ministry of Education and one of the universities constructed in priority by the «State 211 Project» for Chinese higher education institutions.

Since 1996, WUT has implemented the talent cultivation system reforms through setting up pilot classes, including international cultivation programs, undergraduate-Master program and undergraduate-PhD. program. In April 2014, ISMSE was founded and approved by the Hubei Provincial Department of Education. In June 2015, ISMSE was selected into the list of the «Network of International Centers for Education» supported by the Ministry of Education of P. R. China and the State Administration of Foreign Experts Affairs. ISMSE is devoted to building the world-leading MSE discipline through optimization of a high-level research and teaching team and establishment of an innovative talents training system, thereby to support the development of materials industry as a technology platform as well as a talent pool.

WUT's Discipline «Material Science and Engineering» enters Top 2% in the Fourth China Discipline Ranking

China Academic Degrees & Graduate Education Development Center (CDGDC) has recently announced the results of the Fourth China Discipline Ranking, with WUT's Discipline «Material Science and Engineering» listed at the highest level: Level A+ (3 universities listed in all, ranking Top 2% in China).

Among the evaluated disciplines, four disciples of WUT including Mechanical Engineering, Transportation Engineering, Design Science and Marxist Theory are listed at the Level B+ (ranking top 10%–20%), and six disciplines are listed at the Level B (ranking top 20%–30%), including Applied Economics, Civil Engineering, Information and Communication Engineering, Computer Science and Technology, Environmental Science and Engineering and Management Science and Engineering.

Compared with the former three China Discipline rankings, the discipline rankings of WUT has witnessed a substantial improvement, with the discipline of Top 2% rising from scratch. Meanwhile, the number of Top 10%–20% disciplines has increased from zero to four, Top 20%–30% disciplines from four to six. The followings are the disciplines with remarkable improvements: Material Science and Engineering, Mechanical Engineering, Transportation Engineering, Marxist Theory and Applied Economics, etc.

Since the merge of three schools in 2000, driven by the national construction of significant projects such as «State Project 211» and «985 Innovation Platform for Superior Disciplines», WUT's discipline of «Material Science and Engineering» has witnessed a significant growth in disciplinary connotations presented in high-level faculty, scientific researches, cultivation of innovative talents, and international cooperation communications, etc. The discipline's overall strength and level have been boosted in the past years, ranking rising from No. 22 in 2002 to No. 5 in 2012, and further up to No. 3 in this year. Over the past 70 years, the discipline has cultivated a large number of high-level talents for our national building materials and new materials industry with more than 100 significant scientific and technological achievements. It has make historic contributions to the development of the national building materials industry, promoting the Chinese building materials industry to grow steadily to take the lead in the world building industries now.

State Key Laboratory of Advanced Technology for Materials Synthesis and Processing (Wuhan University of Technology)

The State Key Laboratory of Advanced Technology for Materials Synthesis and Processing (short for SKL) is a state key Laboratory in the area of advanced materials which was funded by the National Planning Commission and established in Wuhan University of Technology in 1987. The SKL is under supervision of the administration of the Ministry of Science and Technology of the People's Republic of China. Professor Gu Binglin, an Academician of Chinese Academy of Sciences, is the director of the academic committee of SKL and Professor Zhengyi Fu is the current director of SKL.

SKL aims at the frontiers of world materials science and major national needs, builds a world-class material composite and preparation technology platform, and develops key new materials for the development of national sophisticated weapons and emerging industries to support national strategies; SKL produces original and systematic research results with international influence in transformative technology and frontier new materials and their intersecting fields, leading international development in the research of a number of strategic frontier new material; SKL leads in the training of top-notch innovation talents in world-class disciplines of materials science and engineering with outstanding scientific research, creating an international

collaborative innovation culture, conducting «strong-strong» international cooperation research to enhance the laboratory's international influence, attractiveness and cohesion.

Focusing on the overall positioning and goals, SKL will create and develop multi-component, multi-scale, multi-level composite principle and material design theory as important guides to build material gradient composite technology, in-situ composite technology, nano-composite technology and integrated innovation platform as the core support, to study advanced composite materials for advanced weaponry and equipment for defense, efficient energy conversion and storage materials for new energy technologies, nano-composite biomaterials for life sciences, information functional materials for information technology and transformation-oriented technology. SKL has formed the following five distinctive research directions: gradient composite technology and new materials, in-situ composite technology and new materials, nano-composite technologies and new materials, transformative technologies and cutting-edge new materials, material composite principles and material design.

SKL employs 103 full time researchers, including 1 academician of Chinese Academy of Sciences, 2 academicians of Chinese Academy of Engineering, 1 academician of Belgian Royal Academy of Sciences and European Academy of Sciences, 1 academician of World Academy of Ceramics, 12 Distinguished Foreign Experts, 1 973 Program Chief Scientist, 5 winners for Outstanding Youth Training Fund, 4 leading talents of National Ten Thousand People Program, 7 winners for Pacesetter Engineering in the New Century, 5 Cheung-Kong Scholars, and 18 winners for the New Century Excellent Talents Support Plan of the Ministry of Education. It is a spirited team of innovation and creation. SKL encourages young scholars to visit famous international universities or research institutes for further improvement and cooperation. In recent years, the lab has sent more than 20 young scholars to engage in studies and research collaboration abroad.

SKL has accomplished win-win cooperation with internationally renowned research institutes such as the University of Michigan, the Japan Aerospace Technology Development Agency, the Institute of Metal Materials of Tohoku University in Japan, the Material Research Center of the University of Oxford in the United Kingdom, the Composite Materials Research Center of the University of California, and the National Institute of Fuel Cell Research in Canada. Based on SKL, the Ministry of Science and Technology has established the International Joint Laboratory for New Materials and Compound Technologies, which is one of the first batches of 33 international joint laboratories in the China. The State Administration of Foreign Experts Affairs and the Ministry of Education established the Innovation and Intelligence Base for Material Composite new Technology and Advanced Functional Materials and Advanced Preparation Technology and Application Engineering of new Functional Thin Film Materials. SKL has established the WUT – Harvard University Nano Joint Laboratory, Joint Laboratory of New Energy Materials and Technology of Wuhan University of Technology–University of Michigan, Wuhan University of Technology–University of California, Davis, Multiplex Multi-scale New Technology Laboratory for Composite Materials, Wuhan University of Technology–Oxford Advanced Composite Ceramics Laboratory Etc.. Relying on those important international collaborative research platforms, SKL has undertaken a number international cooperation projects.

With an area of 25350 m^2, SKL possesses the required equipment for advanced materials synthesis and processing, material structure analysis, characterization and performance test, in total value of about 225.38 million RMB.

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