单位介绍
Unit introduction

1 安徽工程大学（Anhui Polytechnic University）

安徽工程大学坐落在国家开放城市——安徽省芜湖市。芜湖市交通便利，毗邻南京（约 40 分钟高铁）、上海（约 2 个半小时高铁）。安徽工程大学是一所以工为主的省属多科性高等院校和安徽省重点建设院校。学校办学始于 1935 年安徽私立内思高级工校，历经芜湖电机制造学校、芜湖机械学校、安徽机电学院、安徽工程科技学院等办学阶段，2010 年更名为安徽工程大学。

学校占地面积 2100 余亩，校舍建筑总面积 50 余万平方米，教学科研仪器设备总值 2.58 亿元。图书馆馆藏图书 150 余万册。现有教职工近 1300 人，其中专任教师 1000 余人，具有博士、硕士学位的教师占专任教师总数的 85%。学校聘请一批包括中科院院士、工程院院士在内的国内外知名学者担任兼职教授，引进“长江学者”等高层次人才担任学科领军人才。

学校现有学科涵盖工、理、文、管、经、法、艺等门类；设有 14 个二级学院。本科生培养方面，有 74 个本科专业，其中国家级、省级特色专业 14 个，国家级、省级综合改革试点专业 15 个，国家级、省级卓越人才教育培养计划专业 12 个。研究生培养方面，有 12 个一级学科，7 个硕士专业学位授权类别，5 个工程硕士领域。目前，学校与芜湖市人民政府共建安徽工程大学国际工程师学院，打造“国际化、工程化、企业化、多元化”特色人才培养模式改革示范区、产学研用一体化科技孵化基地；与美、英、法、德、意、韩、泰等国和台湾地区的近 30 所知名大学建立了合作交流关系，积极开展合作办学、人才培养与科学研究等活动。

近年来，学校承担 863 计划、国家自然科学基金、社会科学基金等国家级科研项目 80 余项，科技部、教育部等部委科研项目 30 余项，省级科研项目 400 余项；荣获省部级以上科研奖励 40 余项。有控制科学与工程省级重大建设学科，以及机械制造及其自动化、检测技术与自动化装置、纺织工程、发酵工程、管理科学与工程、设计艺术学等 6 个省级重点学科。与安徽埃夫特智能装备有限公司合作共建国家地方联合工程研究中心（工程实验室），有国家级纺织行业创新服务中心、皖江高端装备制造省级协同创新中心、“设计艺术研究中心”省级人文社科重点研究基地等 15 个省级以上科技创新平台。学校分析与测试中心具有省级食品检验机构资质。《安徽工程大学学报》被美国《化学文摘》和俄罗斯《文摘杂志》选作收录源期刊。

Anhui Polytechnic University

Anhui Polytechnic University (AHPU) is located in Wuhu City, Anhui Province, a national open city. Wuhu City has convenient transportation, adjacent to Nanjing (about 40 minutes by high-speed rail) and Shanghai (about 2.5 hours by high-speed rail). AHPU is a provincial multi-disciplinary higher education institution with a focus on engineering and a key construction institution in Anhui Province. The university began in 1935 in Anhui Private Neiss Advanced Engineering School. It has gone through the stages of Wuhu Electrical Manufacturing School, Wuhu Machinery School, Anhui Institute of Mechanical and Electrical Engineering, and Anhui Institute of Engineering and Technology. In 2010, it was renamed Anhui Polytechnic University of Engineering.

AHPU covers an area of 2,100 acres, with a total construction area over 500,000 square meters, and a total value of 258 million yuan in teaching and research equipment. The library has more than 1.5 million books. There are approximately 1,300 faculty members, including more than 1,000 full-time teachers. Teachers with doctoral and master's degrees account for 85% of the total number of full-time teachers. AHPU hires a group of well-known scholars at home and abroad, including academicians of the Chinese Academy of Sciences and the Academy of Engineering, as part-time professors, and introduces high-level talents such as "Yangtze River Scholars" as academic leaders.

AHPU's existing disciplines cover engineering, science, liberal arts, management, economics, law, art and other disciplines. There are 14 secondary colleges. In terms of undergraduate training, there are 74 undergraduate majors, including 14 national and provincial characteristic majors, 15 national and provincial comprehensive reform pilot majors, and 12 national and provincial outstanding talent education and training programs. In terms of postgraduate training, there are 12 first-level disciplines, 7 master's degree authorization categories, and 5 engineering master's fields. At present, the school and the Wuhu Municipal People’s Government have jointly established the International Engineering College of Anhui University of Engineering, creating a demonstration zone for the reform of "internationalization, engineering, corporateization, and diversification" of the characteristic talent training model, and an integrated technology incubation base for production, education, research and application. It has established cooperative and exchange relations with nearly 30 well-known universities in the USA, UK, France, Germany, Italy, South Korea, Thailand and other countries and Taiwan, and actively carried out cooperative education, talent training and scientific research activities.

In recent years, AHPU has undertaken more than 80 national-level scientific research projects such as the 863 Program, the National Natural Science Foundation of China, and the Social Science Fund, more than 30 scientific research projects of the Ministry of Science and Technology, the Ministry of Education, and more than 400 provincial-level scientific research projects; won the provincial and ministerial level more than 40 scientific research awards above. There are major provincial-level construction disciplines of control science and engineering, and 6 provincial-level key disciplines, including machinery manufacturing and automation, testing technology and automation equipment, textile engineering, fermentation engineering, management science and engineering, and design art. AHPU and Anhui Eft Intelligent Equipment Co., Ltd. cooperated to

build a national and local joint engineering research center (engineering laboratory). There are 15 technological innovation platforms above the provincial level, including the National Textile Industry Innovation Service Center, the Provincial Collaborative Innovation Center of Wanjiang High-end Equipment Manufacturing, and the "Design Art Research Center" Provincial Humanities and Social Sciences Key Research Base. The Analyzing and Measuring Center has the qualification of a provincial food inspection agency. "Journal of AHPU" was selected as the source journal by American "Chemical Abstracts" and Russian "Journal of Abstracts"

2 信州大学 (Shinshu University)

信州大学是一所日本国立大学，设置有 8 个学部和 8 个研究科，涵盖了工、农、医、经济、教育等学科。学校在 1910 年设立了与蚕丝相关的高等教育机关，之后围绕整个纤维科学技术发展，在 1949 年设立了纤维学部，是日本唯一设有纤维学部的高校，与东京农工大学，京都纤维工艺大学并称为日本纤维三大学，在纤维材料学方面为日本排名第一。从全球范围来说，信州大学纤维学部在纤维及其集合体研究领域享有极高的声誉，与纤维有关的论文数量占世界总数近 10%，位居世界第一。近年来，信州大学纤维学部目前在连续纤维增强复合材料的应用研究、三维立体纺织结构复合材料的制备和性能评价、纺织结构复合材料无损检测、复合材料力学性能的虚拟仿真、纳米复合材料等先端领域也在开展课题研究，技术先进，设备优良，成果颇丰。

Shinshu University

Shinshu University is a Japanese national university with 8 faculties and 8 graduate schools, covering engineering, agriculture, medicine, economics, education and other disciplines. The school established a higher education institution related to silk in 1910. Afterwards, focusing on the development of fiber science and technology, it established the Faculty of Fiber in 1949. It is the only university in Japan with a Faculty of Fiber. It is merged with Tokyo University of Agriculture and Technology and Kyoto University of Textile Technology. Known as the Three University of Textiles in Japan, it ranks first in Japan in terms of fiber materials. From a global perspective, Shinshu University's Faculty of Fibers enjoys a high reputation in the field of fiber and its aggregate research. The number of fiber-related papers accounts for nearly 10% of the world's total, ranking first in the world. In recent years, the Department of Fiber Science of Shinshu University is currently engaged in the application research of continuous fiber reinforced composite materials, the preparation and performance evaluation of three-dimensional textile structure composite materials, non-destructive testing of textile structure composite materials, virtual simulation of composite material mechanical properties, nanocomposite materials, etc. The field is also carrying out subject research, with advanced technology, excellent equipment, and fruitful results.

3 新能源汽车轻量化技术安徽省重点实验室（Anhui Key Laboratory of New Energy Automobile Lightweight Technology）

新能源汽车轻量化技术安徽省重点实验室（以下简称“实验室”）成立于 2017 年 7 月，2019 年 12 月由安徽省科技厅批准认定。实验室依托于奇瑞新能源汽车股份有限公司。现任实验室主任由奇瑞新能源汽车股份有限公司高立新博士担任。

发展新能源汽车是国家应对气候变化、推动绿色发展的重要战略举措，对新能源汽车在重量、成本、安全性、节能减排等方面提出了多重高指标要求，使处于行业发展前沿地位的汽车轻量化技术，面临新材料替换、多材料融合、汽车结构变革等全新挑战。

奇瑞新能源由奇瑞汽车股份有限公司于 2010 年 4 月出资成立，是国内最早研发新能源汽车的公司。建立了完善的节能与新能源汽车研发体系、世界先进的新能源试验中心、试制中心等。奇瑞新能源是安徽省高新技术企业，建有实验室规模达三千余平方，包括新能源汽车轻量化技术实验室、电机系统实验室、电池开发实验室、整车控制实验室、动力总成实验室、环境实验室等模块，同时拥有占地一千余平方米的试验试制工厂，研发类设备固定资产近 3000 万元，具备了较为完善的纯电动汽车整车级开发试验能力。

实验室始终追求以求真务实的工作态度、开拓创新的精神状态投入到技术研究工作中；遵循“开放、流动、联合、竞争”的运行机制，以应用需求为导向、产学研用相结合，推动科研成果转化与应用为研究目标，以高水平团队、高起点平台作为发展目标，立足特色优势领域，发展新兴研究领域，有所为、有所不为，一步一个脚印，将实验室做大、做强。

Anhui Key Laboratory of New Energy Automobile Lightweight Technology

Anhui Key Laboratory of New Energy Automobile Lightweight Technology is established in July 2017 and approved by Anhui provincial department of science and technology in December 2019. This laboratory is backed by Chery New Energy Automobile Co., Ltd. The current director of this laboratory is Dr. Gao Lixin from Chery New Energy Automobile Co., Ltd.

Development of New Energy Automobile is the national response to climate change, promote the green development of the important strategies, the New Energy Automobile in the aspects such

as weight, cost, safety, energy conservation and emissions reduction is proposed multiple high-performance requirements, make in the industry forefront of automotive lightweight technology, face new material substitution, multiple material fusion, automobile structural change and other new challenges.

Chery New Energy was founded by Chery Automobile Co., Ltd. in April 2010, and is the first company to develop New Energy Automobile in China. It has established a sound energy saving and new energy vehicle research and development system, the world's advanced new energy test center, trial production center, and etc. Chery New Energy is a high-tech enterprises in Anhui province, has a lab scale up to 3000 m2, including the new energy automotive lightweight technology laboratory, electrical system, battery development laboratory, vehicle control laboratory, powertrain laboratory, environmental laboratory and etc. Meanwhile, Chery New Energy also has an area of more than one thousand square meters of trial manufacture factory, the research and development equipment fixed assets of nearly 30 million RMB, with a relatively complete pure electric vehicle development and test capability.

This laboratory has always been pursuing a realistic and pragmatic working attitude, pioneering and innovative spirit into the technical research work; Follow the “open, flow, joint, competition” the operation of the mechanism, application demand oriented, and the combination of production, use, promote transformation of scientific research achievements and application as the research target, with high level team and a high starting point platform as a development goal, based on the special advantage, development of emerging research area, and to one step at a time, the laboratory to do bigger and stronger.

4 中电科复合材料研发中心（CETC Wuhu Diamond Aircraft Manufacture Co., Ltd.）

中电科芜湖钻石飞机制造有限公司成立于 2013 年 12 月，是从事通用飞机、特种飞机、无人机及配套设备等产品研发、生产、销售、维修与服务的国有控股高新技术企业。

复合材料事业部是中电科芜湖钻石飞机制造公司重要的科技先导型部门之一，专业从事通用航空及电子装备用先进复合材料研究、开发、生产和销售。事业部建有国内领先的复合材料研制基地，具有强大的先进复合材料技术研究、新产品开发、检测评价等能力。事业部致力于功能材料体系、预浸料技术、复合材料一体化设计和成型工艺技术、复合材料检测评价技术等研究。事业部主要产品包括：通用航空用复合材料整机及部附件、电子装备用天线罩 / 反射面、碳纤维轻量化结构件及轨道交通用轻量化部件等。

CETC Wuhu Diamond Aircraft Manufacture Co., Ltd.

CETC Wuhu Diamond Aircraft Manufacture Co., Ltd. is founded in December 2013. This company is engaged in general aircraft, special aircraft, unmanned aircraft and supporting equipment and other products research and development, production, sales, maintenance and service of state-owned holding high-tech enterprises.

Composites Business Division is one of the important technology leading departments of CETC Wuhu Diamond Aircraft Manufacture Co., Ltd. The department specializes in the research, development, production and sales of advanced composite materials for general aviation and electronic equipment. The business division has a leading composite material research and development base in China, with strong capabilities of advanced composite material technology research, new product development, testing and evaluation. The division is committed to functional material system, prepreg technology, composite integrated design and molding technology, composite testing and evaluation technology and other research. The main products of the business division include: composite equipment and accessories for general aviation, radomes/reflectors for electronic equipment, lightweight carbon fiber structures and lightweight parts for rail transit, etc.

5 中机精密成形产业技术研究院（安徽）股份有限公司 （China Machine Precision Forming Industry Technology Research Institute (Anhui) Co., Ltd.）

中机精成位于安徽省芜湖市三山经济开发区，是由国资委直属中央大型科技企业集团企业北京机电研究所有限公司、芜湖市三山区人民政府共同发起成立的混合所有制股份公司，由北京机电研究所有限公司控股并进行运营管理。

中机精成结合地方产业集群优势，加快区域地方性的产业创新能力的提升，以轻合金精密成形制造技术、低成本纤维增强复合材料快速模压成形技术、高强度钢 / 铝热成形制造技术为三大研究方向，建设具有国际先进水平的轻量化零部件智能化成形生产线，搭建具有行业和区域影响力科研技术服务平台，逐步形成以先进成形工艺技术、智能化制造技术为核心的产业链集群效应，促进智能化制造技术及科技成果在地方产业化，将中机精成打造成为国内具有影响力的公共研发平台、公共检测平台、产业孵化平台。

China Machine Precision Forming Industry Technology Research Institute (Anhui) Co., Ltd.

China Machine Precision Forming Industry Technology Research Institute (Anhui) Co., Ltd. is located in Sanshan Economic Development Zone, Wuhu City, Anhui Province. This company is a mixed ownership joint-stock company jointly initiated by Beijing Institute of Mechanical and Electrical Engineering Co., Ltd., a large science and technology enterprise group directly under the State-owned Assets Supervision and Administration Commission of the People's Government of Sanshan District, Wuhu City, controlled and operated by Beijing Institute of Mechanical and Electrical Engineering Co., Ltd.

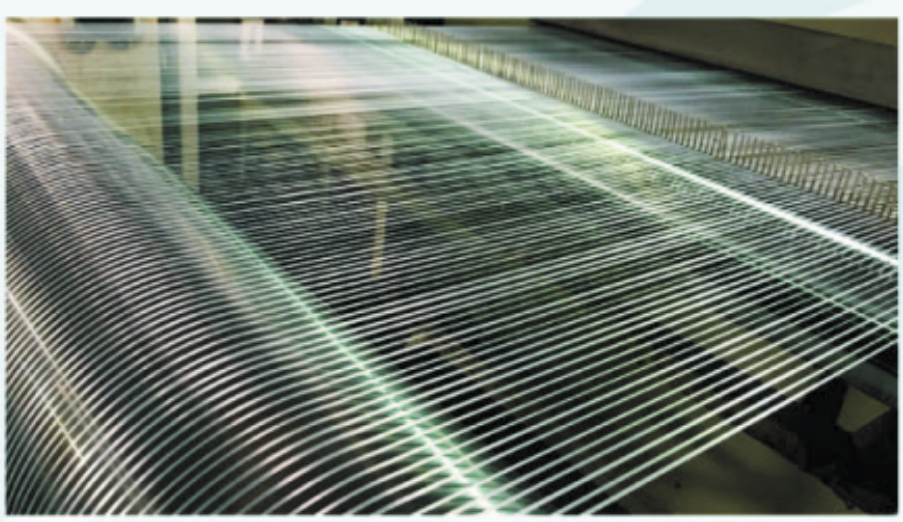
This company combines the advantages of local industrial clusters, accelerates the improvement of regional and local industrial innovation ability, and has three research directions: light alloy precision forming manufacturing technology, low-cost fiber-reinforced composite rapid molding technology, and high-strength steel/thermionic forming manufacturing technology, build an internationally advanced intelligent forming production line for lightweight parts, set up a scientific research and technology service platform with industry and regional influence, and gradually form an industrial chain cluster effect with advanced forming process technology and intelligent manufacturing technology as the core, promote the industrialization of intelligent manufacturing technology and scientific and technological achievements in local areas, and build this company into a domestic influential public research and development platform, public testing platform, and industry incubation platform.

6 长青藤高性能纤维材料有限公司（Evergreen Teng High Performance Fiber Material Co., Ltd.）

长青藤高性能纤维材料有限公司成立于 2015 年 12 月，是一家专业从事超高分子量聚乙烯等高性能纤维及其终端产品研发、生产和销售的企业，位于芜湖长江大桥综合经济开发区。公司建设年产 5000 吨超高分子量聚乙烯纤维及其终端产品项目，用地 460 亩，总投资 15.2 亿元。

Evergreen Teng High Performance Fiber Material Co., Ltd.

Evergreen Teng High Performance Fiber Material Co., Ltd. was established in December 2015. It is an enterprise specializing in the research and development, production and sales of ultra-high molecular weight polyethylene and other high-performance fibers and their end products. It is located in the Wuhu Yangtze River Bridge Comprehensive Economic Development Zone. The company builds a project with an annual output of 5,000 tons of ultra-high molecular weight polyethylene fiber and its end products, covering an area of 460 mu, with a total investment of 1.52 billion yuan.



7 安徽旭升新材料有限公司（Anhui Xusheng New Material Co., Ltd.）

安徽旭升新材料有限公司位于芜湖市三山区，是一家专门从事碳纤维热塑性复合材料生产和研发的国家高新技术企业，2018 年建成第一条碳纤维热塑性复合材料生产线，获第 16 届科学家创新奖，获亚洲新能源汽车创新奖等。成功研发生产 CF+PA6 和 CF+PA66 系列碳纤维热塑性复合材料，应用在笔记本电脑外壳、无人机螺旋桨和新能源汽车上。

Anhui Xusheng New Material Co., Ltd.

Anhui Xusheng New Material Co., Ltd. is located in Sanshan District, Wuhu City. It is a national high-tech enterprise specializing in the production and research and development of carbon fiber thermoplastic composite materials.

In 2018, the first carbon fiber thermoplastic composite production line was built, and it won the 16th Scientist Innovation Award, and won the Asian New Energy Vehicle Innovation Award, etc. The company has successfully developed and produced CF+PA6 and CF+PA66 series of carbon fiber thermoplastic composite materials, which are used in notebook computer shells, drone propellers and new energy vehicles.

8 芜湖创联新材料科技有限公司（Wuhu Chuanglian New Material Technology Co., Ltd.）

芜湖创联新材料科技有限公司于 2020 年 4 月 2 日注册成立，隶属于安徽天航科创集团，位于湾沚区南湖路以北、新芜大道以西，总投资 5 亿元，设有研发中心、复合材料研制中心、芳纶纸蜂窝芯材研制中心、综合楼和新材料研发实验室等。公司主要从事树脂基纤维增强复合材料、芳纶纸蜂窝芯材等产品的研发、制造、维修、销售及服务等，同时积极拓展 3D 打印复合材料、复合材料回收再利用等产业方向。产品可覆盖航空航天、船舶工程、风电能源、轨道交通、石油化工、高端装备及汽车等领域。

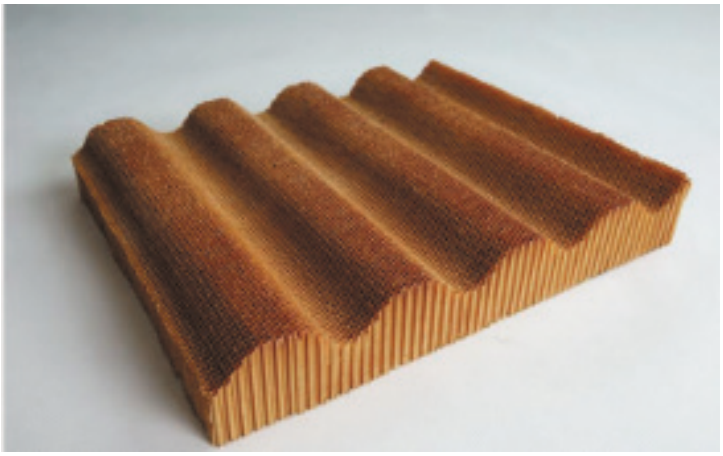
公司复合材料生产线已经完成生产线小试，具备热压罐、真空袋及模压等成型技术工艺能力。产线建成达产后可实现树脂基纤维增强复合材料制品 20 吨 / 年的产能。复合材料制造的主要技术优势包括高性能树脂基纤维复合材料先进成型技术、憎水树脂体系改性技术、纤维表面接触角降低技术和双真空袋压技术。

公司芳纶纸蜂窝生产线目前已完成产线论证和设备采购，具备蜂窝芯材涂胶、浸胶净化、拉伸、固化等的技术工艺能力，建成达产后可达到 2000m ㎡ / 年的产能。公司蜂窝芯材制造的主要技术优势包括功能 / 承载一体化芳纶纸蜂窝制备技术、基于国产芳纶纸的蜂窝制造技术和功能蜂窝夹芯复合材料结构件制备技术。

公司掌握多种材料体系、结构形式及成型工艺复合材料结构损伤无损检测、损伤修理方案设计、修理工艺实施及修理后质量验证等技术工艺能力，主要包括损伤威胁评估，层压板、加筋板阶梯挖补胶接、机械连接修理和常规蜂窝夹芯结构和吸波功能夹芯结构复合材料挖补修理，微波固化修理和金属结构裂纹复合材料胶接修理等。

Wuhu Chuanglian New Material Technology Co., Ltd.

Wuhu Chuanglian New Material Technology Co., Ltd. was registered and established on April 2, 2020. It belongs to Anhui Tianhang Science and Technology Group. It is located north of Nanhu Road and west of Xinwu Avenue, Wanzi District, with a total investment of 500 million yuan. There are R&D Center, composite material research and development center, aramid paper honeycomb core material



research and development center, comprehensive building and new material research and development laboratory, etc. The company is mainly engaged in the research and development, manufacturing, maintenance, sales and service of resin-based fiber-reinforced composite materials and aramid paper honeycomb core materials. At the same time, it actively expands the industry direction of 3D printing composite materials and composite material recycling. Products can cover aerospace, marine engineering, wind power energy, rail transit, petrochemical, high-end equipment and automobiles.

The company's composite material production line has completed a small test of the production line, and has the molding technology and process capabilities of autoclave, vacuum bag and molding. After the production line is completed, it can achieve a production capacity of 20 tons per year of resin-based fiber reinforced composite products. The main technical advantages of composite material manufacturing include advanced molding technology of high-performance resin-based fiber composite materials, hydrophobic resin system modification technology, fiber surface contact angle reduction technology and double vacuum bag pressing technology.

The company's aramid paper honeycomb production line has completed production line demonstration and equipment procurement. It has the technical and technological capabilities of honeycomb core material coating, dipping purification, stretching, and curing. After it is completed, it can reach a production capacity of 2000 ㎡ /year. The main technical advantages of the company's honeycomb core material manufacturing include function/bearing integrated aramid paper honeycomb preparation technology, domestic aramid paper-based honeycomb manufacturing technology and functional honeycomb sandwich composite structure preparation technology.

The company masters non-destructive testing for a variety of material systems, structural forms and molding processing composite material structure damage, design of damage repair plan, repair process implementation and post-repair quality verification and other technical and technological capabilities. It mainly includes damage threat assessment, laminate, stiffened board ladder excavation and repair of glued joints, mechanical connection repair, conventional honeycomb sandwich structure and sandwich structure composite material repair with wave absorbing function, microwave curing repair and metal structure cracked composite material adhesive repair, etc.