<table>
<thead>
<tr>
<th>Laboratory Name</th>
<th>College/Department</th>
<th>Professor</th>
<th>E-mail Address</th>
<th>Telephone No.</th>
<th>Research Area</th>
<th>Project Description</th>
<th>Admission Requirements</th>
<th>Capacity</th>
<th>perks/福利</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laboratories of New-Structured Materials</td>
<td>School of Materials Science and Engineering</td>
<td>Prof. Dr. Jie-Jie Jiang</td>
<td><a href="mailto:jjiang@zju.edu.cn">jjiang@zju.edu.cn</a></td>
<td>+86 571 87910215</td>
<td>Metallic glass, metallic liquids, phase transition</td>
<td>This research project covers widely aspects of phosphorus alloys from synthesis, characterization to properties. Depending on the candidate's background, this area has the potential to attract one of the metallic glasses and metallic liquids research fields, which could be challenging and of potential interest.</td>
<td>Materials Science and Engineering, Physics, Computer Sciences</td>
<td>no requirement</td>
<td></td>
</tr>
<tr>
<td>Surface Engineering Lab</td>
<td>School of Materials Science and Engineering</td>
<td>Changning Gu</td>
<td><a href="mailto:aqdpf@zju.edu.cn">aqdpf@zju.edu.cn</a></td>
<td>+86 13461546568</td>
<td>Coatings, corrosion protection, battery</td>
<td>Novel methods for improving the corrosion resistance of magnesium alloys based on interaction with inorganic solids. 2. Magnesium air battery.</td>
<td>passion; interest; chemical or electrochemical background</td>
<td>1</td>
<td><a href="http://person.zju.edu.cn/gcld">http://person.zju.edu.cn/gcld</a></td>
</tr>
<tr>
<td>Global climate change modeling group</td>
<td>School of Earth Sciences</td>
<td>Long Cao</td>
<td><a href="mailto:lgdx@zju.edu.cn">lgdx@zju.edu.cn</a></td>
<td>+86 13980370668</td>
<td>Global climate change, Carbon cycle, Climate engineering, earth system modeling</td>
<td>Global climate change is one of the most challenging problems facing our world today. Climate engineering, also termed as geoengineering, has been proposed as a way to avoid dangerous anthropogenic climate interference. In this project, we will use climate and Earth system models to explore the consequences of geoengineering on climate change and environment.</td>
<td>2</td>
<td><a href="http://lingos.64/49774.html">http://lingos.64/49774.html</a></td>
<td></td>
</tr>
<tr>
<td>atmospheric aerosol chemistry</td>
<td>School of Earth Sciences</td>
<td>Wei Jin</td>
<td><a href="mailto:weijin@zju.edu.cn">weijin@zju.edu.cn</a></td>
<td>+86 1100300005</td>
<td>Atmospheric aerosol chemistry</td>
<td>Atmospheric aerosol chemistry is important to understand aerosol compositions and formation of haze-fog in urban areas. If we understand aerosols, we can know their sources and further provide any strategy to reduce emissions from various sources. Also, we understand mixing state of aerosol from different sources, we might know aging process following at mass transport. Based on the results, we can understand optical properties of aerosol particles, particularly, the black carbon in the air which enhance climate change.</td>
<td>4</td>
<td>3</td>
<td><a href="http://person.zju.edu.cn/ganqshu">http://person.zju.edu.cn/ganqshu</a></td>
</tr>
<tr>
<td>Geographical Information Science</td>
<td>School of Earth Sciences</td>
<td>Feng Zhang</td>
<td><a href="mailto:zjufzrm11@zju.edu.cn">zjufzrm11@zju.edu.cn</a></td>
<td>+86 13580104519</td>
<td>Spatial-temporal data modeling</td>
<td>Estimating, predicting and conducting of PM2.5 concentrations based on GIS.</td>
<td>1</td>
<td>1</td>
<td><a href="http://person.zju.edu.cn/ganqshu">http://person.zju.edu.cn/ganqshu</a></td>
</tr>
<tr>
<td>Key Laboratory of Animal Virology</td>
<td>Ministry of Agriculture</td>
<td>Department of Veterinary Medicine</td>
<td>College of Animal Sciences</td>
<td>Jin Zhou</td>
<td><a href="mailto:zjujinhua@gmail.com">zjujinhua@gmail.com</a></td>
<td>Molecular Virology, Virology, Immunology</td>
<td>Isolation of animal viruses from clinical samples, analysis of the biological and genetic characters of variant isolates.</td>
<td>1</td>
<td><a href="https://person.zju.edu.cn/ganqshu">https://person.zju.edu.cn/ganqshu</a></td>
</tr>
<tr>
<td>Key Laboratory of Animal Virology</td>
<td>Ministry of Agriculture</td>
<td>Department of Veterinary Medicine</td>
<td>College of Animal Sciences</td>
<td>Mr. Liao</td>
<td><a href="mailto:banyh300414@zju.edu.cn">banyh300414@zju.edu.cn</a></td>
<td>Molecular Virology and Immunology</td>
<td>Isolation of animal viruses from clinical samples, analysis of the biological and genetic characters of variant isolates.</td>
<td>1</td>
<td><a href="https://person.zju.edu.cn/ganqshu">https://person.zju.edu.cn/ganqshu</a></td>
</tr>
<tr>
<td>Animal and Virology</td>
<td>Department of Veterinary Medicine</td>
<td>Yi-Xue Huang</td>
<td><a href="mailto:yxhuang@zju.edu.cn">yxhuang@zju.edu.cn</a></td>
<td>+86 13780101642</td>
<td>Virus, Preparative Veterinary Medicine</td>
<td>Development of potential cross-species transmission of an emerging porcine coronavirus.</td>
<td>Major in life sciences</td>
<td>1</td>
<td><a href="http://person.zju.edu.cn/ganqshu">http://person.zju.edu.cn/ganqshu</a></td>
</tr>
<tr>
<td>Power Economic Lab</td>
<td>Electrical Engineering</td>
<td>Zhenhai Lin</td>
<td><a href="mailto:feikong@zju.edu.cn">feikong@zju.edu.cn</a></td>
<td>+86 15298573793</td>
<td>Power Economic Analysis, Energy Analysis of Power Systems</td>
<td>Development of renewable energy, magnetic levitation, vibration and issue of motion.</td>
<td>2</td>
<td>1</td>
<td><a href="http://person.zju.edu.cn/ganqshu">http://person.zju.edu.cn/ganqshu</a></td>
</tr>
<tr>
<td>Smart Mechatronics</td>
<td>College of Electrical Engineering</td>
<td>Zheng Changsheng</td>
<td><a href="mailto:zhchzl@zju.edu.cn">zhchzl@zju.edu.cn</a></td>
<td>+86 13957674107</td>
<td>Renewable energy, magnetic levitation, magnetic actuation, vibration and issue of motion.</td>
<td>High-speed motors, High-speed high-speed energy, organic energy storage, electromagnetic shielding, vibration and issue of motion.</td>
<td>2</td>
<td>3</td>
<td><a href="http://person.zju.edu.cn/ganqshu">http://person.zju.edu.cn/ganqshu</a></td>
</tr>
<tr>
<td>Power Economic Device Laboratory (POLO)</td>
<td>College of Electrical Engineering</td>
<td>Research Professor</td>
<td><a href="mailto:nanyeang@zju.edu.cn">nanyeang@zju.edu.cn</a></td>
<td>+86 571 87851340</td>
<td>Power semiconductor devices and circuits</td>
<td>Power semiconductor devices and circuits.</td>
<td>4</td>
<td>2</td>
<td><a href="http://person.zju.edu.cn/ganqshu">http://person.zju.edu.cn/ganqshu</a></td>
</tr>
<tr>
<td>Power Economic Device Laboratory (POLO)</td>
<td>College of Electrical Engineering</td>
<td>Power Engineering</td>
<td><a href="mailto:nanyeang@zju.edu.cn">nanyeang@zju.edu.cn</a></td>
<td>+86 571 87851340</td>
<td>Power semiconductor devices and circuits</td>
<td>Power semiconductor devices and circuits.</td>
<td>4</td>
<td>2</td>
<td><a href="http://person.zju.edu.cn/ganqshu">http://person.zju.edu.cn/ganqshu</a></td>
</tr>
<tr>
<td>Power Economic Lab</td>
<td>Electrical Engineering</td>
<td>Wei Lu</td>
<td><a href="mailto:zhkw@zju.edu.cn">zhkw@zju.edu.cn</a></td>
<td>+86 13886061101</td>
<td>Power devices, converter topologies and advanced controls for high-power energy conversion systems</td>
<td>Common mode voltage/balance current in the critical issue of PV generation system. In recent research, the possibility of applying Hybrid Three Level active neutral point clamped converter to the PV system is investigated. Its characteristics of common mode voltage/balance current has not been revealed which will be solved in this project. Novel modulation schemes to eliminate the common mode voltage/current are going to be developed.</td>
<td>For EE undergraduates, graduate students</td>
<td>1</td>
<td><a href="http://person.zju.edu.cn/ganqshu">http://person.zju.edu.cn/ganqshu</a></td>
</tr>
<tr>
<td>Smart Energy Systems Research Lab</td>
<td>System Science &amp; Engineering</td>
<td>College of Electrical Engineering</td>
<td>Guoqiang Yang</td>
<td><a href="mailto:gyp@zju.edu.cn">gyp@zju.edu.cn</a></td>
<td>Data-driven and machine-learning techniques in smart energy systems; Cyber-physical systems; Large-scale complex system data driven analysis and optimization.</td>
<td>Security Risk Assessment and Optimal Defense of Energy Network Cyber-Physical System Under Cooperative Cyber-attacks. Develop hardware for test platform and to verify the machine performance.</td>
<td>Good knowledge in programming and mathematics is preferable. Applicants must also be able to demonstrate scientific research and clinical studies.</td>
<td>2</td>
<td><a href="http://person.zju.edu.cn/ganqshu">http://person.zju.edu.cn/ganqshu</a></td>
</tr>
<tr>
<td>Renewable Energy Control Technology Lab</td>
<td>System Science &amp; Engineering</td>
<td>College of Electrical Engineering</td>
<td>Miao Xu</td>
<td><a href="mailto:dxxuyuan@zju.edu.cn">dxxuyuan@zju.edu.cn</a></td>
<td>Renewable Energy Integration, Smart Distribution Network, Microgrids.</td>
<td>To familiar with the control strategies for renewable energy generation equipment, such as PV, wind turbine, etc. To familiar with the operation control strategy for a small-size microgrid, and to achieve the simulation study in HIL-based platform.</td>
<td>Good knowledge in programming and mathematics is preferable. Applicants must also be able to demonstrate scientific research and clinical studies.</td>
<td>3</td>
<td><a href="http://person.zju.edu.cn/ganqshu">http://person.zju.edu.cn/ganqshu</a></td>
</tr>
<tr>
<td>Bioimaterials for Tissue Repair and Regeneration</td>
<td>Department of Polymer Science and Engineering</td>
<td>Changgui Gao</td>
<td><a href="mailto:cgy@zju.edu.cn">cgy@zju.edu.cn</a></td>
<td>+86 13585818788</td>
<td>Biomaterials, biocomposites, surfaces, nanobiomaterials, tissue engineering and regeneration medicine, polymer synthesis and formulations.</td>
<td>The sources of research findings include the National Science Foundation of China, the Ministry of Science and Technology, the local governments, and industry. Currently, we are focusing on the biomaterials having gradient distribution of signaling molecules, and physical patterning structures, and macroscopic species-responsive biomaterials for regeneration of tissue and organs. Supramolecular fibers and cellular particles are also prepared and used as carriers for drug delivery, Polymer synthesis and characterization, and formation of different types of materials such as fibers, membranes, scaffolds and hydrogels by methods of emulsion, casting and 3D-printing etc.</td>
<td>Knowledge of programming and mathematics is preferable. Applicants must also be able to demonstrate scientific research and clinical studies.</td>
<td>2</td>
<td><a href="http://person.zju.edu.cn/ganqshu">http://person.zju.edu.cn/ganqshu</a></td>
</tr>
<tr>
<td>Biomedical Engineering</td>
<td>School of Public Affairs</td>
<td>Yuqian Zhang</td>
<td><a href="mailto:yqzhang@zju.edu.cn">yqzhang@zju.edu.cn</a></td>
<td>+86 13848103078</td>
<td>Health Economics, Agricultural Finance, Development Economics</td>
<td>Health Economics, Rural social security, Agricultural Insurance</td>
<td>Statistics, Economics, Agricultural Economics</td>
<td>2</td>
<td><a href="http://person.zju.edu.cn/ganqshu">http://person.zju.edu.cn/ganqshu</a></td>
</tr>
</tbody>
</table>
Biomedical Photonics Lab
College of Optical Science and Engineering
Li Gu
keli@zju.edu.cn
+86 571 88981772

Optical microscopy has revolutionized biological research during the past few decades. A lot of work has been done to improve its resolution and imaging field depth. In this imaging mode, the scattering nanometers to the scattering. Nowadays, brain science research is in the core of biological science, which requires in vivo high-resolution optical imaging in living tissue. We are developing deep tissue imaging and focusing techniques, and their application to neuroscience to analyze neural circuits and control neural activity.

1. Have a certain optical basic knowledge
2. Good academic reading and writing skills

Guangzhou Law School
Jiuhong Zhang
jzhang@gz.js.edu.cn
+86 18757152392

Comparing study on Administrative Law
Comparing study on Chinese administrative law with American administration law

1.5 students of low schools in USA
2.4 students of high schools in USA

Laboratory of Graphene Mechanics
School of Aeronautics and Astronautics
Jie Zhou
jzhou@zju.edu.cn
+86 1348296802

two-dimensional materials
3. testing of graphene and other two dimensional
Choose basic experimental skills in USA

Key Lab of Soft Machines and Smart Devices
School of Aeronautics and Astronautics/Department of Applied Mechanics
Shanghai Qi
qisp@zju.edu.cn
+86 571 87952504

Soft Robots, Mechanisms of Soft Active Materials, Composite
To produce high performance bio-compatible hydrogen storage materials

Science and Engineering background

2. laboratory of control of smart structures
School of Aeronautics and Astronautics/Institute of Applied Mechanics
Kevin Z Huang
xhuangh@zju.edu.cn
+86 13967127545

Metamaterials/phononic crystals
To fabricate smart robots made of soft active materials, to produce light performance bio-compatible hydrogen storage materials

1. vibration or elastic wave background, acoustic or sound is also welcome

functional Polymer
College of chemical and biological engineering
Li Wang
zil_wd@njust.edu.cn
+86 571 87955200

1. Optical, electronic, magnetic functional polymer, synthesis and antibacterial polymer materials;
2. Synthesis and self-assembly of block polymers, hyperbranched polymers and dendrimers;
3. Preparation of nanomaterials and nanopolymer coating;
4. Study of novel catalysts for clarifying polymerization;
5. Adhesion, radar absorbing and electromagnetic shielding functional coating, further addition.

Glucone-responsive two component polymer hydrogels will be designed and prepared by dual-stage assembly of 3-acyclohexoyl-based host hydrogels and ferrocene-based guest hydrogels. The novel synthetic route and method will be studied. The effect of the two-component polymer hydrogels on their glucose-responsive property will be studied. The glucose detection mechanism of the glucose-responsive two component polymer hydrogels will be expected and their application will be studied.

The students in polymer science, chemistry, materials science, chemical engineering and related majors

2.6 Key Lab of Chemical Engineering
College of Chemical and Biological Engineering
Wen-Jun Wang
wjiangg@zju.edu.cn
+86 13781179194

Advanced polymer materials, Polymer reaction engineering
Synthesis and characterization of macromolecular organic framework (MOF) materials: the MOFs are emerging nanometer-scale organic solids with pore honeycomb crystal structure and robust covalent linkage between building units. Two-dimensional (2D) MOF flakes with high degree of crystallity and versatile functional properties can be employed in various applications. However, most reported MOFs are in forms of spheres with a relatively low degree of crystallinity. How to control the crystallinity and morphology of the MOFs will be focused.

The students in polymer science, chemistry, materials science, chemical engineering and related majors

Bioprocess Engineering
College of Chemical and Biological Engineering
Dong-Qiang Lin
fendy@zju.edu.cn
+86 571 87951988

Bioreprocessing, materials science, medical simulators, biosensors, design
Modern biotechnology industries heavily depend on the availability of efficient biotechnology processes. The developments of novel bioprocess platform are important and challenging. Our research focuses on the new micro, novel methods and robust bioprocess systems for pharmaceutical manufacturing, including expanded bed absorption, mixed mode chromatography, continuous chromatography and single stage, which could certainly reduce the separation steps, enhance the ability for large scale operation, as well as improving the separation efficiency and reducing the cost.

Majors in Biotechnology, Chemical Engineering, Materials Science or Computer Science.

1.2 Synthesis Metabolic Engineering Lab (SMEL)
Chemical and Biological Engineering
Jiaxiong Lin
jlom@zju.edu.cn
+86 18879530103

Biochemical engineering, Synthetic Biology, Metabolic Engineering
The Synthetic Metabolic Engineering Lab (SMEL) focuses on the construction and optimization of cell factories using metabolic engineering and synthetic biology approaches, with particular interests in the development and application of CRISPR-Cas based genome engineering tools.

Background and interests in bioengineering, biotechnology, microbiology, chemical engineering, or environmental biology

1.2-4 Electrochemical engineering Lab
College of Chemical & Biological Engineering
Min Liang
ming@zju.edu.cn
+86 13875088870

Polymers Science, lithium-ion battery
Current Focus on polymer composite technology for advanced energy systems. Developing new polymers, composite materials and microstructures, and perform structure-function relationship study of the materials and interfaces to understand their fundamental properties in the energy conversion systems. Apply this broad based knowledge of the composite system to improve the performance of energy conversion systems, in particular lithium-ion batteries.

Polymer and battery background

5.4 Air Pollution Control Lab
Chemical and Biological Engineering
Xu He
xhep@zju.edu.cn
+86 17764518129

Computer Simulation, Air Pollution Control
Understanding the Decision Knowledge of Atmospheric Internation in General Electric fields with Molecular Simulations

Major Chemical Engineering

1.4 Teaching Building 102 Room 113
Chemical and Biological Engineering
Meiqin Zhu
meiqin@zju.edu.cn
+86 13875752554

Organic green oxidation, nano catalysis, process intensification, micro-channel and tube reaction, environment & catalysis, green separation
Preparation of various gold hybrid catalytic-homogeneous functional hybrid catalysts and its application in hydrocarbons selective oxidation. During the last two decades the rapid growth of transcatalysis has led to important developments in physical and chemical catalysis by offering advanced tools for arranging atoms in specific nano- and microstructures from the progress of AI, liquid catalysis has derived benefits for tackling solid nanomaterials surface shaping, encapsulated catalysts properties in organic synthesis and environmental control. In fact, the application of gold catalysts only became an important research area several years after the first reports on its catalytic potential for ethylene hydrochlorination (developed to the impressive work of Choppin group) and CO oxidation developed for the impressive work of Irani group, and it is now considered an active promoter of new carbon-based reactions for organic synthesis, oxidation and hydrogenation. As a consequence, new applications of gold have been proposed for commercial synthesis by both academic and industrial researchers. Selective oxidation of natural resources is a risk of key importance for producing coxogenes to be employed in building blocks in chemical processes that range from kilo- to gram-scale applications in pharmaceuticals to thousand tonne-scale in chemicals. Our research topics are as follows:
Cyclodextrin oxidation: a comparison of the catalytic activity of the functionalized hybrid catalysts; Catalysed oxidation of simple aldehydes under supported nano gold/gold hybrid catalyst; In-situ thermogravimetry during catalysis. Our research, which we are currently investigating, includes the use of gold catalysts in a wide variety of applications.
Microfluidics and Soft Matter Lab
School of Energy Engineering
Dong Chen
dchen@zju.edu.cn

This is a multidisciplinary project on Automated Driving vehicle (AVO). We have two main topics for you to participate in: (A) Automated Driving algorithms, including but not limited to sensor fusion, planning, and control; (B) Cellular Nodal Analysis (CNA). Our lab is equipped with very modern supercomputer facilities, ranging from ultrafast simulation systems to an automated vehicle system. (B) AVD and human interaction such as how human drivers operate or interact with AVD, how AVD can perceive the passenger motion sickness issue, how other road users interact with AVD. Our lab is equipped with human factors instruments, e.g., MRI, EEG, eye tracker, etc.

Admission Requirements

Communicate well with others in English and Chinese, and with lecturers as a team.

https://person.zju.edu.cn/en/a/cn/donglab

Human Mobility and
Automation Research Group
Inst. Vehicular Engineering, College of Energy Engineering
Dong Li
dli@zju.edu.cn

This is a multidisciplinary project on Automated Driving vehicle (AVO). We have two main topics for you to participate in: (A) Automated Driving algorithms, including but not limited to sensor fusion, planning, and control; (B) Cellular Nodal Analysis (CNA). Our lab is equipped with very modern supercomputer facilities, ranging from ultrafast simulation systems to an automated vehicle system. (B) AVD and human interaction such as how human drivers operate or interact with AVD, how AVD can perceive the passenger motion sickness issue, how other road users interact with AVD. Our lab is equipped with human factors instruments, e.g., MRI, EEG, eye tracker, etc.

Admission Requirements

Communicate well with others in English and Chinese, and with lecturers as a team.

https://person.zju.edu.cn/en/a/cn/donglab

NEMF (New Energy and
Mechatronics Team)
Energy Engineering College
Bao Shuangting
shuangting@zju.edu.cn

This project is designed for the students (including MA/PhD students, have basic knowledge on Chinese culture).

Admission Requirements

Basic knowledge of electronic, MCU and C code; be familiar with PCB layout or C programming; good communication skills;

https://zjumicrofluidic.wixsite.com/chendonglab

Shake Key Laboratory of
New Energy Utilization
School of Energy Engineering
Menglian Zheng
wenleishi@zju.edu.cn

Our group mainly focuses on microfluidics and soft matter. What we work on is to find out the diachrony of motion expressions in the history of Chinese and its synchrony across modern Chinese dialects. What I work on is to find out the diachrony of motion expressions in the history of Chinese and its synchrony across modern Chinese dialects. What I work on is to find out the diachrony of motion expressions in the history of Chinese and its synchrony across modern Chinese dialects.

Admission Requirements

Basic knowledge of electronic, MCU and C code; be familiar with PCB layout or C programming; good communication skills;

https://zjumicrofluidic.wixsite.com/chendonglab

School of Humanities
Yi WANG
yi@zju.edu.cn

I am currently working on two interrelated projects:

1. History of Chinese language: The history of motion expressions in Chinese

Admission Requirements

Basic knowledge on Chinese should be interested in the Chinese culture.

1

Cultural Heritage
Digitization Lab
School of Humanities
Xia ZHENG
zhengxia@zju.edu.cn

Basic knowledge on Chinese should be interested in the Chinese culture.

1

Uthnic Analysis Lab
School of Humanities
Jiong CHEN
hdy@zju.edu.cn

We welcome students who major in Physics, Chemical Engineering, Mechanical Engineering, Material Science or other related disciplines to join our group.

Admission Requirements

Familiar with Python Programming; basic knowledge of Mechatronics Design on App.

1
<table>
<thead>
<tr>
<th>Laboratory Name</th>
<th>College/School/Department</th>
<th>Professor</th>
<th>E-mail Address</th>
<th>Telephone No.</th>
<th>Research Area</th>
<th>Project Description</th>
<th>Admission Requirements</th>
<th>Capacity</th>
<th>Weblink</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Adaptive Biology of Chemotaxis</td>
<td>College of Life Sciences</td>
<td>Liquan Huang</td>
<td><a href="mailto:hqlq@zju.edu.cn">hqlq@zju.edu.cn</a></td>
<td>+86 571 88981775</td>
<td>Diffusor/gastrointestinal signaling proteins and their physiological roles</td>
<td>The project aims to investigate the signaling pathways that control the movement of animals and plants in response to chemical stimuli.</td>
<td>-</td>
<td>1-2</td>
<td><a href="http://person.zju.edu.cn/linzhi/">http://person.zju.edu.cn/linzhi/</a></td>
</tr>
<tr>
<td>Laboratory of Biophysics &amp; Microscopy</td>
<td>Department of Biomedical Engineering</td>
<td>Huang Kailiang</td>
<td><a href="mailto:zjuphy@zju.edu.cn">zjuphy@zju.edu.cn</a></td>
<td>+86 571 88981269</td>
<td>Biophysics; Optogenetics; Membrane Biology; Image Processing</td>
<td>The overall goal of this project is to develop the method to measure the corresponding optical parameters of living systems.</td>
<td>-</td>
<td>1</td>
<td><a href="http://apps.zju.edu.cn/linzhi/">http://apps.zju.edu.cn/linzhi/</a></td>
</tr>
<tr>
<td>Gansu &amp; Fudan Engineering Center</td>
<td>College of Biomedical Engineering and Food Science</td>
<td>Gang Gu</td>
<td><a href="mailto:gug@zju.edu.cn">gug@zju.edu.cn</a></td>
<td>+86 571 88981754</td>
<td>Agricultural wastewater characterization and control; Agricultural systems design and agricultural buildings and environmental monitoring</td>
<td>The goal of this project is to develop the sustainable agricultural production systems.</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AgroOptics and Imaging Lab</td>
<td>College of Biomedical Engineering and Food Science</td>
<td>Jin Yang</td>
<td><a href="mailto:yjx@zju.edu.cn">yjx@zju.edu.cn</a></td>
<td>+86 571 88981257</td>
<td>Plant phenotyping, DNA remote sensing in agriculture, spectroscopy and imaging</td>
<td>The project aims to develop a novel method to detect and quantify plant diseases and pests.</td>
<td>-</td>
<td>1</td>
<td><a href="http://personal.zju.edu.cn/linzhi/">http://personal.zju.edu.cn/linzhi/</a></td>
</tr>
<tr>
<td>Department of Mathematics</td>
<td>Lin, Zh</td>
<td><a href="mailto:zhlin@zju.edu.cn">zhlin@zju.edu.cn</a></td>
<td>+86 1004256369</td>
<td>Applied FOD, Fluid Mechanics, Geometric Modeling</td>
<td>Water Transport and Mixing in Geophysical and Biological Fluids</td>
<td>The project aims to develop new mathematical models for water transport and mixing in geophysical and biological fluids.</td>
<td>-</td>
<td>1</td>
<td><a href="http://apps.zju.edu.cn/linzhi/">http://apps.zju.edu.cn/linzhi/</a></td>
</tr>
<tr>
<td>School of International Studies</td>
<td>Max Kazi</td>
<td><a href="mailto:mmax@zju.edu.cn">mmax@zju.edu.cn</a></td>
<td>+86 13888816168</td>
<td>British and American literature</td>
<td>Focusing on the teaching of British and American literature and the development of pedagogical strategies.</td>
<td>-</td>
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<td></td>
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</tr>
<tr>
<td>Institute for Interdisciplinary Studies of World Literature and Department of English, School of International Studies</td>
<td>Mei Zhenhao</td>
<td><a href="mailto:xhzxh@zju.edu.cn">xhzxh@zju.edu.cn</a></td>
<td>+86 15008210269</td>
<td>Literary theory, ethical literary criticism, text studies, comparative literature, cognitive studies</td>
<td>According to the theory of literary criticism, each type of literature has its own special features. The original definitions of oral literature refer to the literature disseminated orally.</td>
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<tr>
<td>Laser and optics lab</td>
<td>Department of Physics</td>
<td>Li-Gang Wang</td>
<td><a href="mailto:wangyf@zju.edu.cn">wangyf@zju.edu.cn</a></td>
<td>+86 13888813947</td>
<td>Laser physics, Optical tweezers, quantum optics, coherence optics</td>
<td>The project aims to develop new methods for manipulating and controlling light at the nanoscale, and to study the interactions between light and matter.</td>
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<td>1-2</td>
<td><a href="http://person.zju.edu.cn/linzhi/">http://person.zju.edu.cn/linzhi/</a></td>
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<tr>
<td>Biophysics</td>
<td>Department of Physics</td>
<td>Engyuan Li</td>
<td><a href="mailto:jingyuanLi@zju.edu.cn">jingyuanLi@zju.edu.cn</a></td>
<td>+86 17705437771</td>
<td>Computational Biophysics, Molecular Dynamics Simulation</td>
<td>The project aims to develop new methods for simulating and understanding the complex systems of biological macromolecules.</td>
<td>-</td>
<td>5</td>
<td><a href="http://person.zju.edu.cn/linzhi/">http://person.zju.edu.cn/linzhi/</a></td>
</tr>
<tr>
<td>Institute of Modern Physics</td>
<td>Department of Physics</td>
<td>Chi-King Lim</td>
<td><a href="mailto:ckl@fudan.edu.cn">ckl@fudan.edu.cn</a></td>
<td>+86 15158542039</td>
<td>Cold atoms and condensed matter theory</td>
<td>The project aims to develop new methods for manipulating and controlling cold atoms at the quantum level.</td>
<td>-</td>
<td>2</td>
<td><a href="http://apps.zju.edu.cn/linzhi/">http://apps.zju.edu.cn/linzhi/</a></td>
</tr>
<tr>
<td>Qinghai Institute of Modern Physics</td>
<td>Department of Physics</td>
<td>Genzao Wang</td>
<td><a href="mailto:genzao@zju.edu.cn">genzao@zju.edu.cn</a></td>
<td>+86 18768866035</td>
<td>Theory of cold atomic gases, statistical mechanics, theory of open quantum systems</td>
<td>The project aims to develop new methods for studying the behavior of quantum systems at the nanoscale.</td>
<td>-</td>
<td>1</td>
<td><a href="http://apps.zju.edu.cn/linzhi/">http://apps.zju.edu.cn/linzhi/</a></td>
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<tr>
<td>Institute of Optics</td>
<td>Department of Physics</td>
<td>Jun Sheng</td>
<td><a href="mailto:jsheng@zju.edu.cn">jsheng@zju.edu.cn</a></td>
<td>+86 15958543140</td>
<td>Quantum noise and quantum control</td>
<td>The project aims to develop new methods for manipulating and controlling quantum systems at the nanoscale.</td>
<td>-</td>
<td>1</td>
<td><a href="http://apps.zju.edu.cn/linzhi/">http://apps.zju.edu.cn/linzhi/</a></td>
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</table>
**Laboratory Name** | **College/School/Department** | **Professor** | **E-mail Address** | **Telephone No.** | **Research Area** | **Project Discription** | **Admission Requirements** | **Capacity** | **Weblink**
---|---|---|---|---|---|---|---|---|---
Millimeter-Wave and lidar Lab | Information Processing and Communications Group | Zhiqiang Shi | zhq@zju.edu.cn | +86 18857167052 | Array signal processing, anti- | Spine arrays process the signals beyond the Roseau limit, where the trade-off between the performance and the complexity is well balanced. This project aims to explore the potential superpowers of the popular spine array configurations (such as co-prime arrays, etc.) for direction finding of several spatial sources and beamforming. Developing solid theories and novel algorithms based on the practical requirements. Also the filed experiments will be conducted on an antenna system called AES-LX developed in Zhejiang University, where a comprehensive understanding of the subroutines and challenges for practical spine array signal processing will be made. | 1. Good Background in Mathematics or Electrical Engineering 2. Familiar with MATLAB Programming 3. Good English Listening, Speaking and Writing Skills 4. Good Cooperation Ability | 1 | http://person.zju.edu.cn/zhq

State Key Lab of Silicon Materials/Micro- and nano- electronics | Information Processing and Communications Engineering | Jinhong Xu | jhx@zju.edu.cn | +86 18857167674 | two-dimensional materials and semiconductor devices | The two-dimensional materials and semiconductor devices have interest in using chemical and physical engineering approaches towards synthetic and fabrication of 2-dimensional (2D) layered materials with novel electronic and magnetic properties, and fabricating devices using the 2D materials. | 1. Master or PhD student | 1 | http://person.zju.edu.cn/jhx

Any laboratory of Silicon Materials/Micro- and nano- electronics | Information Processing and Communications Engineering | Jinhong Xu | jhx@zju.edu.cn | +86 18857167674 | two-dimensional materials and semiconductor devices | The two-dimensional materials and semiconductor devices have interest in using chemical and physical engineering approaches towards synthetic and fabrication of 2-dimensional (2D) layered materials with novel electronic and magnetic properties, and fabricating devices using the 2D materials. | 1. Master or PhD student | 1 | http://person.zju.edu.cn/jhx


SafeLab(Secure Architecture and Frontier Forensics Laboratory) | Information Processing and Communications Engineering | Xiaofeng He | feng_he@zju.edu.cn | +86 15858104516 | cyber-security | This project is going to explore the latest passive side channel attacks (power, SHM, timing, etc) and active side channel attacks (fault) on new platforms such as Intel SGD, Cloud etc. Knowledge of embedded system, hardware security, cyber security, Implementation, system security or side channel attacks and communications. Good programming skills. | 1 | http://www.zju.edu.cn/zhf.Http

**Lab of Visual Image Processing and Artificial Intelligence** | Information Processing and Communications Engineering | Haoyu Hu | huyu_hu@zju.edu.cn | +86 18795710077 | Computer Vision, Image Processing, Machine Learning | The main focus of our lab is to elucidate the molecular pathways and cellular interactions that mediate and regulate tumorigenesis and development of cancer cells; The effect of gene expression; the development and treatment of cancer and autoimmune diseases. The Wang laboratory uses an interdisciplinary approach to the study of the molecular and cellular mechanisms underlying cancer. | 1. Ph.D. candidates with a background in immunology or cell biology. 2. English native speaker, or good command of English. 3. How to submit a brief statement of research interest, curriculum vitae and a list of references by email to linyufeng1@gmail.com. | 1-2 | http://wanglab.zju.edu.cn/

**Laboratory of Clinical Regulation** | School of Medicine | Lu Lirong | lu.lirong@gmail.com | +86 571 88981177 | Immune Regulation | The main focus of our lab is to elucidate the molecular pathways and cellular interactions that mediate and regulate tumorigenesis and development of cancer cells; The effect of gene expression; the development and treatment of cancer and autoimmune diseases. The Wang laboratory uses an interdisciplinary approach to the study of the molecular and cellular mechanisms underlying cancer. | 1. Ph.D. candidates with a background in immunology or cell biology. 2. English native speaker, or good command of English. 3. How to submit a brief statement of research interest, curriculum vitae and a list of references by email to linyufeng1@gmail.com. | 1-2 | http://wanglab.zju.edu.cn/

**Zhang Lab** | School of Medicine | Zong Jin | zj@zju.edu.cn | +86 15858015416 | Neuroscience | Identifying molecules that increase with brain aging | 1. BSc in psychology, neuroscience, or other related major | 1 | http://www.cmm.zju.edu.cn/zhongjin/indennis.html

**Nan Lab** | School of medicine and public health, Department of Toxicology | Nanmananda zaman@nmananda.com | +86 13641583018 | Toxicology and Pharmacology | Toxicological study of invertebrates, their pharmacological potential Invertebrates development and its comprehensive studies; Development of new composite strategies for the treatment of various AIDs. | There is no special admission requirements | 1 | http://person.zju.edu.cn/nman

**Translational Medicine of Materials** | Institute of Translational Medicine, School of Medicine | Ben Wang | benwang@zju.edu.cn | +86 13668778095 | Biomaterials and Biomechanics | The Wang laboratory uses an interdisciplinary approach that integrates materials science, biology, chemistry and engineering to solve problems in human health. It is emphasized that using Nature's design principles to develop bio-inspired materials and devices to treat various diseases is a unique strategy. | 1 | http://benwanglab.zju.edu.cn/zhongjin/indennis.html

**Dr Wei Zou’s Group** | Institute of Translational Medicine and the Fourth Affiliated Hospital, Zhejiang University School of Medicine | Wei Zou | zouweizju@126.com | +86 18643030138 | Neurodevelopment and neurogeneregulation | The main focus of our lab is to identify novel molecular and cellular mechanisms underlying neurodevelopmental and neurodegeneration. We are particularly interested in understanding how neurons develop and function and how these structures are properly maintained in various organs. We hope that our research can help to cure human diseases, including Alzheimer's disease and Parkinson's disease. | 1. Ph.D. candidates with a background in biology or medical science. 2. Candidates should have good command of English or Chinese. 3. How to submit a brief statement of research interest, curriculum vitae and a list of references by email to zouweizju@126.com | 1 | http://benwanglab.zju.edu.cn/zhongjin/indennis.html

**Laboratory of Systems of Developmental Biology** | School of Medicine, Institute of Genetics | Jun Ma | jma@zju.edu.cn | +86 571 88283930 | Systems Developmental Biology | Cellular decisions in development and disease with novel genetic approaches. We are especially interested in the pathways and cellular interactions that mediate and | 1 | http://person.zju.edu.cn/majun

**Laboratory of Systems of Developmental Biology** | School of Medicine, Institute of Genetics | Feng He | feng_he@zju.edu.cn | +86 571 88285940 | Quantitative Biology and Modeling | Quantitative and modeling studies in various biological systems | 1 | http://person.zju.edu.cn/majun

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Admission Requirements

1. Be eager to participate in scientific research and have innovative spirit.
2. Be good at communication and cooperation.
3. Have a solid theoretical knowledge in biomedical area.
4. Have research experience in immunology and molecular biology and have achieved basic research skills.
5. Provide a study plan for the two-month international communication before admission.

1. Have the ability to handle basic math and science problems.
2. Have some computer data processing knowledge.
3. She/He has some computer data processing knowledge.
4. Proficient in English reading and writing.
5. Proficient in English speaking.

1. Be familiar with traditional Chinese medicines (TCM) and their effects on various diseases.
2. Have equipment experience in TCM and laboratory equipment.
3. Have research experience in TCM and drug development.
4. Have a solid theoretical knowledge in TCM and molecular biology.
5. Provide a study plan for the two-month international communication before admission.

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2. Be good at communication and cooperation.
3. Have a solid theoretical knowledge in biomedical area.
4. Have research experience in immunology and molecular biology and have achieved basic research skills.
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3. Have research experience in TCM and drug development.
4. Have a solid theoretical knowledge in TCM and molecular biology.
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<table>
<thead>
<tr>
<th>Laboratory Name</th>
<th>College/School/Department</th>
<th>Professor</th>
<th>E-mail Address</th>
<th>Telephone No.</th>
<th>Research Area</th>
<th>Project Description</th>
<th>Admission Requirements</th>
<th>Capacity</th>
<th>Weblink</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institute of Intelligent Transportation Systems</td>
<td>College of Civil Engineering and Architecture</td>
<td>CHEN Xiqun</td>
<td><a href="mailto:chenxiqun@zju.edu.cn">chenxiqun@zju.edu.cn</a></td>
<td>+86571-88208938</td>
<td>Traffic and Transportation Management, Transportation Big Data Analytics, Traffic Flow Modeling and Simulation, Simulation-Based Optimization, Transportation System Analysis</td>
<td>This project focuses on the ridesourcing system optimization. Modeling and behavioral analysis of the shared mobility on-demand. The on-demand ride service platform, e.g., Uber, Didi, or DiDi Chuxing, is an emerging technology with the boom of the mobile internet. Ridesourcing or transportation network companies (TNC) refer to an emerging urban mobility service mode that private car owners drive their own vehicles to provide for-hire rides. The platform serves as a coordinator who matches requesting orders from passengers (demand) and vacant registered cars (supplies). There exists an abundance of levers to influence drivers' and passengers' preferences and behavior, and thus affect the demand and supply. To realize the profits of the platform or achieve the maximum social welfare. The following research efforts are ongoing in Prof. Xiqun Chen's team: (1) On-demand ride services platform and government regulation policy optimization via coordinating supply and demand; (2) Urban road network-wide performance evaluation by exploring real-world emerging ridesourcing order data extracted from DiDi's platform; (3) Learn on-demand ridesplitting behavior; and (4) Demand/supply/traffic forecasting. These research initiatives help decision makers better understand the emerging on-demand ride services.</td>
<td>Good background or great interests in operations research/computer programming/big data analytics</td>
<td>4</td>
<td><a href="http://person.zju.edu.cn/xiqun">http://person.zju.edu.cn/xiqun</a></td>
</tr>
</tbody>
</table>