



The 4th “Zhi-Hong” International Summer School of Advanced Materials (ISS-AM)

-Advanced Metallic Materials-

► OVERVIEW AND PURPOSE

> Purpose

The “Zhi-Hong” International Summer School of Advanced Materials (ISS-AM) is organized by School of Materials Science and Engineering (SMSE) at Shanghai Jiao Tong University (SJTU), aiming at promoting the interactive cultural and academic exchange between top-level scholars and students from all over the world. The ISS-AM is named as “Zhi-Hong” not only to commemorate the school founder Professor Zhihong Zhou, but also to inspire the summer school participants since “Zhi-Hong” in Chinese means “being ambitious”. “Zhi-Hong” ISS-AM is a two-week program with one theme. The theme in 2019 is “Advanced Metallic Materials”.

In the last three years, the 1st to 3rd “Zhi-Hong” ISS-AM with the themes of “Advanced Metallic Materials”, “Advanced Functional Materials” and “Advanced Materials Processing” were organized successfully. The three events attracted 73 foreign students from Carnegie Mellon University, UC Berkeley, The Ohio State University, University of Padova, Peter the Greatest Saint-Petersburg Polytechnic University, University of Novi Sad, Federal University of Sao Carlos, Nazarbayev University, Alexandria University, University of the Punjab and so on, as well as 76 outstanding Chinese students. Many renowned experts and scholars from our school and foreign institutes, e.g. Northwestern University, The Ohio State University, Osaka University, National Institute for Materials Science in Japan, Monash University, Federal University of Sao Carlos, were invited to give academic lectures. The summer school also offered various activities, e.g., field trips, student seminars, culture festival, and culture tours.

> Introduction to SMSE

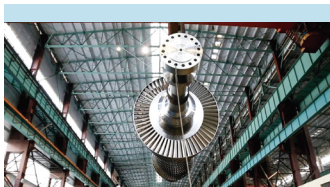
SJTU pioneered in setting up the discipline of Materials Science and Engineering (MSE) in China, based on the program of heat treatment of metals which was established in 1952. Nowadays, the MSE program in SJTU has been consistently ranked among the national top five, being No. 1 in 2003, as evaluated by the Minister of Education. In 2007, the MSE program of SJTU was authorized as the State Key Academic Program at Primary Discipline Level. MSE program of SJTU was ranked 25 in 2018 QS world university ranking and has been listed in the world top 0.1% discipline of ESI for ten years.

> What to expect

The “Zhi-Hong” ISS-AM will offer lectures and professional practice of all areas of advanced metallic materials and organize student seminars, visits to research laboratories, culture festival, and culture tours in Shanghai. The “Zhi-Hong” ISS-AM is also a platform provided for graduate and senior undergraduate from all-over the world to interact and build friendship. A “Zhi-Hong” ISS-AM Certificate of Accomplishment will be issued to the participant.

> Enrollment

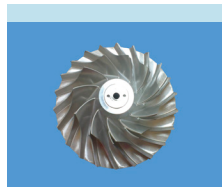
Qualified students all over the world are welcome to apply for this program. A committee composed of SMSE professors at SJTU will make the final selection and determine scholarship winners based on the applicant’s capability and academic records. SJTU will provide necessary assistance for the participants to apply for the visa to come to China.



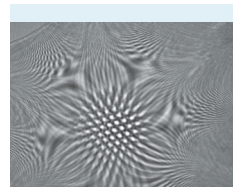
Low pressure rotor of steam turbine for nuclear power unit



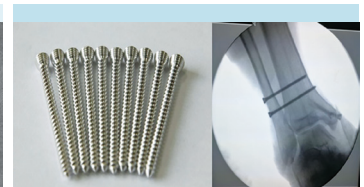
Alumina component applied to the Tiangong No.2



Titanium matrix composite compressor impeller



Pure Mg by using JEM-ARM200F TEM



Biodegradable JDBM magnesium alloy orthopaedic implants



▶ TIME AND VENUE

Time: July 7-20, 2019
Venue: Minhang Campus, SJTU

▶ CONTENTS

> Lectures

Topics of the lectures include structural metals, functional metals, processing of advanced metals, advanced characterization methods and computational simulation. All the lectures will be given by distinguished professors from overseas universities and SJTU.

> Field trips

On campus:

The research labs affiliated to SMSE at SJTU, e.g. State Key Laboratory of Metal Matrix Composites, Light Alloy Net Forming National Engineering Research Center.

Off campus:

Visits to research institutions and companies of advanced metallic materials in or near Shanghai, e.g. Shanghai Synchrotron Radiation Facility, Bao Steel, SAIC Volkswagen Company.

> Student seminars

All participants will be teamed up into several study groups. Students in each group will work together on a topic. Groups will make a final competition with each other through PPT presentation. The faculty committee will choose the best group and present the group members "Award of Excellent Team".

> Culture tours

Campus tour, Chinese culture activities, and Shanghai city tour will be arranged.

▶ ELIGIBILITY

Graduate and senior undergraduate who are majored in Materials Science and Engineering (MSE), or any other majors related to MSE, such as mechanical engineering, physics, and chemical engineering. A total of 60 domestic and overseas participants will be recruited.

▶ LECTURERS

Professor Yip-Wah Chung, Northwestern University, USA
Professor Glenn Daehn, The Ohio State University, USA
Professor Jianfeng Nie, Monash University, Australia
Professor Michael Ferry, University of New South Wales, Australia
Professor Tao Deng, Shanghai Jiao Tong University, China
Professor Hong Wang, Shanghai Jiao Tong University, China
Professor Hiroyuki Kokawa, Shanghai Jiao Tong University, China
Professor Jiajun Gu, Shanghai Jiao Tong University, China
Professor Lanting Zhang, Shanghai Jiao Tong University, China

For most updated list of confirmed lecturers, please visit the website of "Zhi-Hong" ISS-AM:
<http://en.smse.sjtu.edu.cn/admission/admission.aspx?id=5>

▶ FEES

Tuition: 3000 RMB
Others costs: meals (~50 RMB/day) and transportation
The summer school will cover the costs of lecture materials, lodging (in SJTU student dormitory), and transportation for group activities.

▶ SCHOLARSHIPS

Type A: "Zhi-Hong Future" Scholarships

Amount: 8000 RMB/person
Number: 5
Each "Zhi-Hong Future" scholarship covers the tuition fee (3000 RMB) and part of the international travel costs up to 5000 RMB/person.

Type B: "Zhi-Hong Excellence" Scholarship

Amount: 3000 RMB/person
Number: more than 80% of the enrolled participants
Each "Zhi-Hong Excellence" scholarship covers the tuition fee (3000 RMB).

▶ HOW TO APPLY

The applications should be submitted to Ms. Weihui Xie by email at (zh_iss@sjtu.edu.cn).

Application materials: 1) application form, 2) CV, 3) academic transcripts, 4) IELTS/TOEFL/CET6 score certificate or any other certificate showing the competency of English (waived for native English speakers), and 5) a one-page personal statement.

Application deadline: Apr. 15, 2019

*International student should also apply on the website <http://apply.sjtu.edu.cn>.

PROGRAM OVERVIEW (Tentative)

Day	Time	Event
1	7-Jul, Sun	Arrival, Registration
2	8-Jul, Mon	Opening Ceremony, Teaming-up, Ice-breaking, Campus Tour, etc.
3	9-Jul, Tue	Lectures
4	10-Jul, Wed	Lectures
5	11-Jul, Thu	Lectures
6	12-Jul, Fri	Off-campus Field Trip
7	13-Jul, Sat	Culture Tour
8	14-Jul, Sun	Free time
9	15-Jul, Mon	Lectures
10	16-Jul, Tue	Lectures
11	17-Jul, Wed	Lectures, Cultural Festival
12	18-Jul, Thu	Off-campus Field Trip
13	19-Jul, Fri	Group Presentation, Awards & Closing Ceremony
14	20-Jul, Sat	Departure



CONTACT US

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