Preface

Held in Jinan, Shandong, China from July 17th to 18th, 2020, IWMSE 2020 [The 6th Annual International Workshop on Materials Science and Engineering] hopes to provide an excellent international platform for all the invited speakers, authors, and participants. The conference enjoys a wide spread participation, and we sincerely wish that it would not only serve as an academic forum, but also a good opportunity to establish business cooperation. Any paper and topic around materials science and engineering would be warmly welcomed.

IWMSE 2020 proceeding tends to collect the most up-to-date, comprehensive, and worldwide state-of-art knowledge on materials science and engineering. All the accepted papers have been submitted to strict peer-review by 2-4 expert referees, and selected based on originality, significance and clarity for the purpose of the conference. The conference program is extremely rich, profound and featuring high-impact presentations of selected papers and additional late-breaking contributions. We sincerely hope that the conference would not only show the participants a broad overview of the latest research results on related fields, but also provide them with a significant platform for academic connection and exchange.

The Technical Program Committee members have been working very hard to meet the deadline of review. The final conference program consists of 133 papers divided into 6 sessions. The proceedings would be published in a volume by IOP Publishing - Journal of Physics: Conference Series (JPCS).

We would like to express our sincere gratitude to all the TPC members and organizers for their hard work, precious time and endeavor preparing for the conference. Our deepest thanks also go to the volunteers and staffs for their long-hours work and generosity they’ve given to the conference. The last but not least, we would like to thank each and every of the authors, speakers and participants for their great contributions to the success of IWMSE 2020.

IWMSE 2020 Organizing Committee
The IWMSE 2020 Conference is sponsored by **East China University of Technology (ECUT)**.

**Introduction about the School of Mechanical and Electronic Engineering, East China University of Technology (ECUT)**

East China University of Technology (ECUT) is jointly founded by Jiangxi Province, the Ministry of Land and Resources, and State Commission of Science and Technology for National Defense Industry. There are more than 10 national and provincial laboratories, located in Nanchang and Fuzhou campus in ECUT. With an open attitude to innovation, ECUT presents a great potential in scientific research and has collaborated with overseas universities and research institutes from more than 20 countries.

The School of Mechanical and Electronic engineering of the ECUT, headed by Prof. Ke Wang, is distinguished in Electronic Films and Devices, Intelligent Instruments and Advanced Manufacturing. There are three master programs in Electronic Science and Technology, Control Engineering and Mechanical Engineering, and four bachelor programs in Mechanical Engineering, Electronic Information Engineering, Electronic Science and Technology, and Automation. The discipline of Electronic Science and Technology is rated as the Key Discipline and the Cultivating Discipline for First-class Disciplines of Jiangxi Province. The bachelor program of Mechanical Engineering is granted as National First-class Undergraduate Specialty Construction, Electronic Information Engineering is granted as the national excellent engineer construction project. Currently, there are over 2000 students studying in the School. Sino-foreign cooperation bachelor program in Mechanical Engineering with Athlon Institute of Technology has been set up.

In recent five years, the School has undertaken about 80 research projects, in topics such as semiconductor material fabrication and device design, advanced polymer molding technology and equipment, control theory and application. These projects mostly are funded by various national organizations: Natural Science Foundation of China (NSFC), Chinese Ministry of Science and Technology, and Chinese Ministry of Education funds up to 200 million. Various awards including the Prize of National Science and Technology Progress Awards are granted.

**VIRTUAL DICLAIMER:**

We have held the IWMSE2020 in the hotel. but there were only some authors to attend the conference because of the COVID-19/travel restrictions. and most of authors can not to attend the conference, and they can access the conference and give the speech and have discussion online via Wechat Group. the authors can ask questions and discuss the topics via Wechat Group.

The IWMSE 2020 Conference is organized by East China University of Technology (ECUT) and Science and Engineering Research Center. East China University of Technology (ECUT) is jointly founded by Jiangxi Province, the Ministry of Land and Resources, and State Commission of Science and Technology for National Defense Industry.
some of authors attended the conference and some of others attend the conference by Wechat. keynote speech -30 minutes, 15 mins-oral speech.

**Keynote Speech I: Prof. Ke Wang**  
**School of Mechanical and Electronic Engineering, East China University of Technology, Nanchang, China**

- any technical difficulties--NO  
- any drawbacks in the delivery of the conference virtually, e.g. impact on the community?--there was no impact who attended the conference. but some impact for the online authors. they need the network, and someone will get off the line when they get the phone or have not the singal.
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