



International Symposium on Structural Integrity

Dongguan, China, November 5-8, 2024

<https://issi2024.china-sic.net>

Second Announcement

WELCOME

The 2024 International Symposium on Structural Integrity (ISSI2024) will be held in Dongguan, China, by Centre of Excellence for Advanced Materials (CEAM), during November 5-8, 2024. The predecessor of the annual symposium, Fracture Mechanics series, took place each year from 2003 to 2009, was renamed as Structural Integrity series after 2010, and organized by China Structural Integrity Consortium (CSIC).

The theme of ISSI2024 is “Structural Integrity for Advanced Manufacturing”. The aim of this symposium is hence to bring together people from both academic and industrial communities to exchange ideas and network friendship by discussing emerging structural integrity issues related to advanced manufacturing, where papers toward are mostly welcome.

You are cordially invited to attend the symposium, to meet and network colleagues and friends and enjoy your stay in Dongguan, China.

Prof. Shan-Tung Tu

Chairman of Symposium Series

East China University of Science and Technology

Dr. Shu-Yan Zhang

ISSI2024 Executive Chairman

Centre of Excellence for Advanced Materials



KEY DATES

Deadline for submission of abstract-----	1 Aug 2024
Notification of acceptance of abstract-----	15 Aug 2024
Deadline for pre-conference registration-----	30 Sept 2024
Conference registration-----	5 Nov 2024

ORGANIZER

Organizer

- **China Structural Integrity Consortium**, including following members:

- East China University of Science and Technology
- Hefei General Machinery Research Institute
- China Special Equipment Inspection and Research Institute
- Zhejiang University
- Beihang University
- Nanjing Tech University
- Zhejiang University of Technology
- Zhengzhou University
- Southwest Jiaotong University
- Shandong University
- Changsha University of Science and Technology
- Tianjin University
- Jiangsu Province Special Equipment Supervision Institute
- Suzhou Nuclear Power Research Institute Co., Ltd.
- Centre of Excellence for Advanced Materials

Local Organizer

- Centre of Excellence for Advanced Materials

Sponsors

- International Council on Pressure Vessel Technology - Asian-Oceanic Regional Committee
- International Institute of Welding (IIW) - Pressure Vessels, Boilers & Pipelines
- Chinese Materials Institution - Committee of High Temperature Strength of Materials
- Chinese Pressure Vessel Institution
- Chinese Failure Analysis Institution

Symposium Chairs

- Prof. Shan-Tung Tu, ECUST (Chairman of symposium series)
- Dr. Shu-Yan Zhang, CEAM (Executive Chairman)

Symposium Secretariat

- Dr. Gui-Yi Wu, CEAM (guiyi.wu@ceamat.com)

Symposium Coordinator

- Prof. Jian-Feng Wen, ECUST (jfwen@ecust.edu.cn)

INTERNATIONAL ADVISORY BOARD COMMITTEE

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- G.Y. Tian (Newcastle Univ, UK)
- D. Nash (Univ Strathclyde, UK)
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- Xu Chen (TJU)
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- Wei-Qiang Wang (SDU)
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- Su-Jun Wu (BHU)
- Fu-Zhen Xuan (ECUST)
- Du-Yi Ye (ZJU)
- Qun-Jia Peng (CGN)
- Xian-Cheng Zhang (ECUST)

PLENARY AND KEYNOTE SPEAKERS



Modeling and analysis of the integrity of architected materials and structures

J.N. Reddy

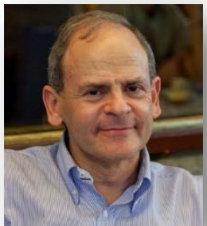
Member of National Academy of Engineering
Texas A&M University, USA



Fatigue: still an intractable problem - a review of outstanding issues

Roderick Smith

Fellow of Royal Academy of Engineering
Imperial College London, UK



Corrosion and mechanical degradation of additively-manufactured Mg scaffolds for tissue engineering applications

Javier LLorca

Member of the Academia Europaea
Polytechnic University of Madrid, Spain



The Rational Experimental-Computational Correlation (RECC) – reliability improvement toolkit for materials technologies in aerospace design

Alexander Korsunsky

Editor-in-Chief of Materials & Design
University of Oxford, UK



Structural integrity and life of materials and components made by additive manufacturing

Aleksandar Sedmak

President of European Structural Integrity Society
University of Belgrade, Serbia



AI for Science (AI4S) - AI for Structural Integrity

Tong-Yi Zhang

Member of Chinese Academy of Sciences
Hong Kong University of Science and Technology (GZ), China



Mechanics and mechanisms of environmentally assisted cracking and its implication to structural integrity assessment

Tetsuo Shoji

Member of the Japan Academy of Engineering
Tohoku University, Japan

PLENARY AND KEYNOTE SPEAKERS



Determination of fracture energy of refractory materials

Hong-Xia Li

Director of State Key Lab of Advanced Refractories
Sinosteel Group Corporation, China



Research on the processes, material properties and residual stresses in additive manufacturing

Shu-Yan Zhang

Dean of CEAM
Centre of Excellence for Advanced Materials, China



Isothermal and thermo-mechanical fatigue crack growth analysis based on multi-physics computations, fractography and DIC

Valery Shlyannikov

Head of Department at Federal Research Center
Federal Research Center of the Russian Academy of Sciences in Kazan, Russia



Effect of laser induced residual stress on fatigue properties of titanium alloys

Oleg Plekhov

Member of Russian Academy of Sciences
Federal Research Center of the Russian Academy of Sciences in Perm, Russia



Wei-Hong Zhang

Member of Chinese Academy of Sciences
Northwestern Polytechnical University, China



En-Hou Han

Member of Chinese Academy of Engineering
South China University of Technology, China



Hong-Biao Dong

Fellow of Royal Academy of Engineering
University of Leicester, UK



Masao Sakane

Former Chairman of the Committee on High Temp. Strength of Materials, JSMS
Ritsumeikan University, Japan



Seán Leen

Established Chair of Mechanical Engineering at University Galway
University of Galway, Ireland



Kee Bong Yoon

Former Managing Director at Chung-Ang University
Chung-Ang University, South Korea

More to be announced...

SCOPE AND TOPICS

- Structural integrity for advanced manufacturing
- Reliability-centered manufacturing
- Fatigue and fracture under extreme conditions
- Innovative non-destructive testing and monitoring techniques
- Multi-scale material testing, modelling and analysis
- Genetics-based material design
- Additive manufacturing
- Design and assessment codes and standards
- Time-dependent failure (creep, corrosion, fatigue etc.)
- Structural health monitoring and life extension
- Artificial intelligence and big data
- Residual stress and deformation
- Risk informed structural integrity assessment
- Small specimen testing methods of materials
- Fluid-structure interaction
- International workshop on battery safety and reliability

Topics not covered above but fall within the general scope of this symposium are also welcome. Abstracts and full papers should be written in English. Early submission of full papers is advisable in order to get the full benefit of editorial assistance and fast publication.

CALL FOR PAPERS

The official language of the conference is English. Abstracts (less than 500 words) prepared according to the layout should be submitted to symposium website: <https://issi2024.china-sic.net>

Extended version of qualified papers presented in the symposium will be published in special issues of selected international journals after the symposium.

AWARDS

The Conference Organizers are delighted to sponsor Best Student Paper Awards, International Journal of Structural Integrity (IJSI) Best Presentation Award and Best Poster Awards for full-time students or poster authors, with a bonus of 300-1500 USD. Please visit <https://issi2024.china-sic.net> for more information.

REGISTRATION AND ACCOMMODATION

Registration fee will be 360 USD. Students are welcome with a reduced registration fee of 270 USD. The registration fee covers admission to all technical sessions, two refreshment breaks each day of the conference, lunches, dinners, conference banquet, and a copy of the conference proceedings, but not accommodation.

Conference hotel: Royal Garden Hotel

Address: 769 Meijing Road, Dalang Town, Dongguan, Guangdong 523788, China

CONFERENCE AGENDA

Full-day registration-----	5 Nov 2024
Conference opening and series sessions-----	6 Nov 2024
Parallel sessions-----	7 Nov 2024
Parallel sessions and conference closing-----	8 Nov 2024
Technical visiting-----	8 Nov 2024

CONTACT

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