

Announcement for the On-line International Workshop on Material Service Performance in Nuclear Power Plants (MSPNP)- 2020 Multiscale Characterization

Oct. 20 2020

1. Organized by:

Shanghai University, Shanghai, China

Shanghai Nuclear Society, Shanghai, China

Shanghai Dianji University

2. Key Dates

MSPNP2020 Workshop Time: Oct. 20, 2020, whole day

Oct. 15, 2020: Deadline for submitting title and abstract to, jr_ma@shu.edu.cn (Jiarong Ma) and zplu@t.shu.edu.cn (Zhanpeng Lu)

3. General Information

Nuclear power energy generation from water-cooled nuclear power plants is an important source for the world's supply of electric power. Safe and economic operation as well as lifetime prediction and extension of nuclear power plants are strongly affected by materials service performance and related environmental degradation issues. International Symposium on Material Service Performance in Nuclear Power Plants(MSPNP) has been initiated in 2014 and continuing to 2019, for providing an international forum for the exchange of research results and reactor operating experience related to evaluation, analysis and prediction of materials performance and degradation in water-cooled nuclear power reactor systems in relation to macroscopic and microscopic properties of materials, manufacturing and fabrication processes and operating conditions. In MSPNP2014, service performance and materials characterization were emphasized. In MSPNP2016, the importance of international cooperation and joint research was emphasized. In MSPNP2018, the service performance under extreme conditions was emphasized. In MSPNP2019, intelligent monitoring and reliability assessment of materials degradation is emphasized.

In 2020,

In light of the COVID-19 pandemic, MSPNP2020 focusing on Multiscale Characterization is shifting from In-person Symposium to On-line Workshop, for facilitating communication and promoting cooperation for the academia and industries internationally.

The working language of the conference is English.

The workshop is free accessing to the participants to whom the meeting information will be sent in advance.

4. Topics

Workshop topics include, but are not limited to:

- Safety and reliability of nuclear power reactors in relation to materials service performance.
- Optimization of manufacturing and fabrication processes for improving service performance
- Experimental evaluation of service performance of nuclear power plant materials.
- Conventional and advanced methods for measurements and analyses of materials properties and degradation mechanisms.

- Analysis of the root causes and key factors for environmental degradation issues in plants
- Intelligent monitoring of material degradation and reliability assessment
- Predictive and proactive approaches for plant lifetime assessment and extension.
- Multiscale characterization of Materials

5. Contact us

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