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**TMS2024**  
153<sup>rd</sup> Annual Meeting & Exhibition

MARCH 3–7, 2024  
HYATT REGENCY ORLANDO  
ORLANDO, FLORIDA, USA  
#TMSAnnualMeeting



SUBMIT AN ABSTRACT FOR THE FOLLOWING TMS2024 SYMPOSIUM:

MATERIALS SYNTHESIS AND PROCESSING

**PROCESS METALLURGY AND  
ENVIRONMENTAL ENGINEERING:  
AN EPD SYMPOSIUM IN HONOR OF  
TAKASHI NAKAMURA**



Professor Takashi Nakamura has a great deal of experience in development of processes related to nonferrous metal resources, development of social systems for recycling, and environmental engineering. He has not only conducted research on individual issues and basics of physical chemistry of nonferrous metallurgy but has also had a significant impact on recycling-related legislation in Japan as well as international standards for nonferrous metals. In this symposium, we are going to review the history of the research on the physical chemistry of smelting and recycling processes for nonferrous metals such as copper, lead, and zinc, and on the environmental issues related to the circulation of nonferrous metals. Furthermore, we are going to discuss the technological, social, and environmental challenges that need to be addressed to realize a sustainable society in the future.

**ORGANIZERS**

**Takanari Ouchi**, University of Tokyo, Japan  
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**Leandro Andrs Voisin**, University of Chile, Chile  
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**SYMPOSIUM SPONSORS**

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TMS Pyrometallurgy Committee  
TMS Recycling and Environmental Technologies Committee

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**QUESTIONS?**  
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