

# Optical Technology and Measurement for Industrial Applications 2021 OPTM 2021

Sponsored by **SPIE., The Japan Society for Precision Engineering (JSPE)**



Conference Co-Chair  
**Takeshi Hatsuzawa**

*Laboratory for Future Interdisciplinary Research of Science and Technology (FIRST), Tokyo Institute of Technology*

This is the third conference of OPTM (Optical Technology and Measurement for Industrial Applications Conference) since 2019. More than 50 presentations including oral and poster in 2019, and 20 oral and 15 poster presentation in 2020 have been presented. Although conference restrictions are increasing due to the spread of COVID-19, it looks like the OPTM activity has taken root among researchers.

The aim of the OPTM 2021 is to provide an international opportunity for introducing up-to-date technology in the field of optical measurement and their applications for industries, at the same time, providing a networking opportunity among young researchers and students is another important role of the conference. Also in the venue, other optics related exhibitions and conferences will be held, which will be a good chance to foster interest in different technical fields. We hope your visit to port of Yokohama will be a nice experience in your technical and research carrier.



Conference Co-Chair  
**Rainer Tutsch**

*Technische Universität Braunschweig*

It is really a pleasure to me to welcome you to the third Conference of Optical Technology and Measurement for Industrial Applications. This year again the program committee was able to arrange a set of presentations that give an insight into various fields of optical metrology, covering topics from theoretical simulation to industrial applications. In these hard times of limited access to laboratories and travel restrictions this is not a matter of course and I want to express my appreciation to the members of the program committee and special thanks to the program committee chair, Professor Yukitoshi Otani. The young OPTM conference series is on a good way to become a cornerstone event for the scientific community in optical metrology.

Though I am happy that today's information technology makes it possible to attend this conference even without being able to travel, it makes me sad that we do not have the opportunity to meet physically. International personal contacts are essential for the progress of science. The annual OPIC conference and trade fair event at Yokohama is an excellent setting for meeting international colleagues. I wish OPIC a flourishing future in the following years.

Even if you are not able to visit Yokohama this year I wish all of you a pleasant OPTM conference. I am sure that for everybody there is some new information to find and maybe you get aware of a colleague whom you did not know before.

Enjoy the conference and hopefully we will meet again next year at Yokohama!



Conference Co-Chair  
**Toru Yoshizawa**

*Tokyo University of Agriculture and Technology, Prof. Emeritus  
Non-Profit Organization: 3D Associates, Director*

We are delighted to have the 3rd conference on Optical Technology and Measurement for Industrial Applications (OPTM) as part of OPIC 2021. These years we have been forced to persevere through difficult times caused by natural (and human-made) disaster, and especially coronavirus pandemic.

This conference has potentially its origin in SPIE meetings and relates in any way to another concept optomechatronics that was originally born in Japan.

Conventionally research is apt to be evaluated higher from the theoretical or analytical viewpoint.

However, in addition to theoretical or analytical result, research should be also assessed from practical utility. Industrial-application-conscious research as well as fundamental research should be attracted more attention.

In the near future, after we succeed in overcoming problems, we expect truly useful and excellent result will be realized from the academic and practical viewpoint.

Let's enjoy this meeting and produce new result by exchanging opinions.

## Conference Co-chairs

**Takeshi Hatsuzawa** *Tokyo Institute of Technology, Japan*

**Rainer Tutsch** *TU Braunschweig, Germany*

**Toru Yoshizawa** *NPO 3D Associates, Japan*

## Organizing committee,

### Program Committee chair

**Yukitoshi Otani** *Utsunomiya Univ., Japan*

## Program Committee

**Masato Aketagawa** *Nagaoka Univ. of Technology, Japan*

**Yasuhiko Arai** *Kansai Univ., Japan*

**Prathan Buranasiri** *King Mongkut Institute of Technology Ladkrabang, Thailand*

**Juergen Czarske** *TU Dresden, Germany*

**Motoharu Fujigaki** *Univ. of Fukui, Japan*

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**Yu-Lung Lo** *National Cheng Kung Univ., Taiwan*

**Yasuhiro Mizutani** *Osaka Univ., Japan*

**Yukitoshi Otani** *Utsunomiya Univ., Japan*

**Pavel Pavlicek** *Institute of Physics of the Czech Academy of Science, Czech*

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**Hayato Yoshioka** *Tokyo Institute of Technology, Japan*

**Song Zhang** *Purdue Univ., USA*