



**1<sup>st</sup> International Conference**  
**Advances in 3OM:**  
**Opto-Mechatronics, Opto-Mechanics and Optical Metrology**  
**13-16 December 2021**  
**Timisoara, Romania**

**SPIE.**  
Affiliated Conference

<http://3om-group-optomechatronics.ro/advances-in-3om-conference-2021/home/>

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*The 3OM concept* unites three complementary domains:  
 (1) *Opto-Mechatronics* is a blend of Optics & Photonics, Precision Mechanics, Electronics, Control & Automation, as well as IT.

(2) *Opto-Mechanics* usually fills the gap between the high requirements of Optical Design and the capabilities of Mechanical technologies, addressing tolerances, errors, positioning issues, and methods to tackle them. Kinematic and dynamic aspects of optical systems with moving parts are also approached, and this leads back to Control & Automation, but also to material issues, involving for example Finite Element Analysis (FEA).

(3) *Optical Metrology* is a large umbrella of applications which benefits from both domains above and includes fields as diverse as industrial measurements (such as Non-Destructive Testing (NDT)), biomedical imaging (with a range of techniques, for example Optical Coherence Tomography (OCT) or Photo-acoustics), Remote Sensing, as well as Security & Defense.

Other fields that apply 3OM are also within the topics of the Conference, including but not limited to Laser Manufacturing and Robotics, as well as Lasers in Medicine.

**We extend a warm invitation to this forum to all interested researchers and participants!**

**General Chairs**



**Virgil-Florin Duma**  
*Aurel Vlaicu* University of Arad  
 Polytechnic University of Timisoara  
 (Romania)



**Jannick P. Rolland**  
 University of Rochester  
 (USA)



**Adrian Gh. Podoleanu**  
 University of Kent  
 (UK)

The Conference is held in the beautiful city of [Timisoara – 2021 European Capital of Culture](#), in the Western part of Romania, honoring 2021 International Day of Light (IDL) and celebrating 100 years of the Polytechnic University of Timisoara.

**Publication**

Accepted contributions can be published in [Proceedings of SPIE](#) (indexed in ISI Web of Science). Papers recommended by the Scientific Committee can be submitted for publication in (and they will undergo the regular peer-review process of) several **Special Issues of high-impact journals**, including: [Photonics SI 1](#), [Photonics SI 2](#) (IF 2.140), [Applied Sciences SI 1](#), [Applied Sciences SI 2](#) (IF 2.474), [Medicina SI](#) (IF 1.205), [Materials SI 1](#), [Materials SI 2](#), and [Materials SI 3](#) (IF 3.057).