

# Conference Agenda

## Session

### SES-09: Material Characterization II

*Time: Friday, 07/Feb/2025: 9:00am - 10:40am*

*Session Chair: Johann Christopher Engster*

## Presentations

### **Sparse-view Material Decomposition for Spectral X-ray CT using Neural Radiance Fields**

**Takumi Hotta<sup>1,4</sup>, Tatsuya Yatagawa<sup>2</sup>, Yutaka Ohtake<sup>1</sup>, Toru Aoki<sup>3,5</sup>**

<sup>1</sup>The University of Tokyo; <sup>2</sup>Hitotsubashi University; <sup>3</sup>Shizuoka University; <sup>4</sup>Zodiac Co., Ltd.; <sup>5</sup>ANSeeN Inc.

### **Volumetric sub- $\mu$ -CT imaging for forensic wood identification**

**Jannik Stebani<sup>1,2</sup>, Tim Lewandrowski<sup>3</sup>, Kilian Dremel<sup>1</sup>, Simon Zabler<sup>1,4</sup>, Volker Haag<sup>3</sup>**

<sup>1</sup>Fraunhofer Development Center X-ray Technology EZRT; <sup>2</sup>Lehrstuhl für Röntgenmikroskopie, Julius-Maximilians-Universität; <sup>3</sup>Thünen Institute of Wood Research; <sup>4</sup>Deggendorf Institute of Technology

### **Determination of the image quality in computed tomography and its standardisation**

**Anne-Françoise Obaton<sup>1</sup>, Uwe Ewert<sup>2</sup>, Holger Roth<sup>3</sup>, Janka Wilbig<sup>1</sup>, Clément Remacha<sup>4</sup>, Nicolas Cochenne<sup>4</sup>, Lionel Gay<sup>4</sup>, Marko Katic<sup>5</sup>**

<sup>1</sup>Laboratoire National de Métrologie et d'Essais (LNE), France; <sup>2</sup>Kowotest GmbH, Germany; <sup>3</sup>Waygate Technologies, Baker Hughes, Germany; <sup>4</sup>Safran Tech, France; <sup>5</sup>University of Zagreb, Croatia

### **Single X-ray Projection Material Decomposition using a Mesh Projector**

**Fleur Linsen<sup>1</sup>, Domenico Iuso<sup>1,2</sup>, Jan Sijbers<sup>1,2</sup>**

<sup>1</sup>imec-Vision Lab, Department of Physics, University of Antwerp, Antwerp, Belgium; <sup>2</sup>DynXlab: Center for 4D Quantitative X-ray Imaging and Analysis, Antwerp, Belgium

### **CO<sub>2</sub> adsorption on microporous metal–organic frameworks unravelled by high-resolution X-ray computed tomography**

**Diponker Karmoker<sup>1,3</sup>, Jorge Martinez-Garcia<sup>2</sup>, Damian Gwerder<sup>2</sup>, Benjamin Fumey<sup>1</sup>, Philipp Schuetz<sup>2</sup>**

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