

# Conference Agenda

## Session

### SES-09: Material Characterization II

Time: Friday, 07/Feb/2025: 9:00am - 10:20am

## 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 Otake<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.

<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

<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 Cochennec<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

<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

<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