

SPIE Optical Metrology

Videometrics, Range Imaging, and Applications (co-organized by ISPRS WG V/1) 22-23 June 2015, Munich, Germany

From June 22nd to 23rd 2015, the 13th SPIE conference “Videometrics, Range Imaging and Applications” was held at the International Conference Centre in Munich, Germany. The conference was organized as part of SPIE Optical Metrology conference that included other meetings like Optical Measurement Systems for Industrial Inspection IX, Methods for Inspection, Characterization, and Imaging of Biomaterials II, Modeling Aspects in Optical Metrology V, Optics for Arts, Architecture, and Archaeology V, Automated Visual Inspection and Machine Vision.

The Videometrics conference chairs are Fabio Remondino (FBK Trento, Italy) and Mark Shortis (RMIT University, Melbourne, Australia). The conference was co-located within the World of Photonics Congress, sponsored by SPIE, WLT German Scientific Laser Society (WLT) and the European Optical Society (EOS).

The first Industrial Vision Metrology conference was arranged by Sabry El-Hakim (Carleton Univ., Canada) in 1991 and held at Winnipeg in Canada. Renamed to Videometrics, it was then part of Photonics East at Boston and Philadelphia (1992-1995). The conference was then moved to southern California in 1997, first as part of SPIE Photonics West and later in SPIE Electronic Imaging. The last meeting in North America was held in San Diego in 2009 as part of SPIE Optics + Photonics. Since 2011 Videometrics is held in Munich within SPIE Optical Metrology.

The 2015 Videometrics meeting featured 9 papers from Germany, 4 papers from Italy, 3 papers each from the UK and Greece, 8 papers from elsewhere in Europe, 8 papers from Asia and 4 papers from North America. The conference was divided into 7 technical sessions, with 30 papers delivered as oral presentations and 9 papers presented in the poster session. The topics of the oral sessions were “Light Field Videometry”, “Structured Light and Fringe Analysis”, “Calibration and Accuracy”, “Metrology Applications”, “Image Sequences and Tracking”, “Image Matching and Surface Models” and “Range Imaging Modelling and Analysis”.

There were three invited presenters: Bernd Jahne (Ruprecht-Karls-University Heidelberg, Germany) who gave a keynote titled “Light field-based videometry”, Stuart Robson (Univ. College London, UK) with a keynote titled “Optical metrology with low-cost camera systems for advanced manufacturing” and Reinhard Koch (Christian-Albrechts-University Kiel, Germany) with a talk on “Tracking of object deformations in color and depth video: deformation models and applications”.



The whole SPIE Optical Metrology 2015 conference brought together scientists, engineers, researchers, and product developers engaged in optical metrology, art conservation and multimedia. The Munich event was an important exchange of ideas and views among the attendees (more than 300 for the cluster of six Optical Metrology conferences). The single stream of Videometrics sessions attracted an increasing worldwide interest, with up to 60 participants in the audience for each of the invited presentations.

The next Videometrics event is planned for 2017, again in Munich as part of SPIE Optical Metrology.

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