

**Advanced fibre laser and coherent source as tools
for society, manufacturing and lifescience****2nd Working Group Meeting****Dresden, Fraunhofer IWS 12-13 October 2015****MONDAY 12 October 2015**

0900 Welcome from IWS Fraunhofer

0910 Presentation of Action MP1401, Stefano Taccheo, Swansea University, UK

0920 WG1 Meeting, Kay Schuster, IPHT Jena, Chair, Introduction and SG presentation

0940 (invited) Cesar Jauregi-Misas, IAP Jena, Germany "Performance scaling of fiber laser systems: current challenges"

1010 Franz Beier, Fraunhofer IOF, Germany, "In situ Temperature Measurements in an Ytterbium Fiber Amplifier up to the Mode Instability Threshold"

1025 Nicoletta Haarlammert, Fraunhofer IOF Germany, "Fiber Technologies for Multi-kW Single-Mode Yb-doped Fibers"

1040 Kay Schuster, IPHT Jena, Germany "Advanced preform technology and the challenges in the realization of aperiodic fibers"

1055 Coffe Break

1115 Andreas Theodosiou, CUT Cyprus "Femtosecond laser inscription of Bragg gratings in single-mode, multi-mode and speciality optical fibres"

1130 Dominik Dorosz, Bialystok University of Technology, Poland "RE codoped glasses in VIS-NIR range"

1145 Pawel Peterka, Institute of Photonics and Electronics, Prague, Czech Republic, "Thulium doped fibers with enhanced fluorescence lifetime and their application in ultrafast fiber lasers"

1200 Wilfred Blanc, Université Nice Sophia Antipolis, France, "Partition of Er³⁺ ions in phase-separated nanoparticles smaller than 10 nm demonstrated with Atom Probe Tomography"

1215 Jaroslaw Sotor, Wroclaw University of Technology, Poland, "All-fiber, mode-locked Ho-doped fiber laser based on graphene saturable absorber"

1230 Discussion

1300 Lunch

1400 WG2 Meeting, Marian Marciniak, Warsaw University, Poland and Angela Seddon, Nottingham University, UK, Chair, Introduction and SG presentation

Modeling

1415 Slawomir Sujecki, Nottingham University, UK and Francesco Prudenzano, Politecnico di Bari, Italy, "**Round Robin** on MIR active fiber modeling"

1425 Pavel Peterka Institute of Photonics and Electronics, Prague, Czech Republic, "Numerical modeling of pump absorption in coiled and twisted double-clad fibers" in collaboration with LPMC in Nice

1440 Hovik Baghdasaryan, National Polytechnic University of Armenia, Armenia, "MSE application for fiber lasers modelling"

1505 Slawomir Sujecki, Nottingham University, UK "Modelling of MIR lasers"

Devices

1520 A. Ishayaa, Ben Gurion University, Israel, "Compact, high peak-power, PCF lasers"

1535 Yuan Zhu, IPHT Jena Germany. "Repulsed rod amplifiers with first results on tapered amplifiers for peak power scaling"

1550 Gabor Fekete, Budapest University of Technology and Economics, Hungary "Fibre lasers in optical comb sources"

1605 Sébastien Février, XLIM CNRS - Univ. of Limoges, France, "High power ultrafast fiber lasers beyond 1.7 μm"

1615 Céline Caillaud, Université de Rennes 1, France "Fabrication of chalcogenide microstructured optical fibers for mid-IR applications"

1630 Marcin Kochanowicz, University of Technology, Poland "RE doped optical fibres - technological aspects"

1645 Mathieu Jossent, XLIM CNRS - Univ. of Limoges, "Fiber gratings in few-mode fiber for Tm amplifier"

1655 Philippe Roy, XLIM, Limoges, France "talk on last results in laser configuration" "

1705 Discussion

1800 End of Meeting

Evening. Social Event: common dinner, location TBD

Tuesday 13 October 2015

0845 WG3 Meeting, Annet Klotzbach, Fraunhofer IWS, chair, Introduction and SG presentation

0900 (invited) Beat Neuenschwander, University of Applied Sciences, Bern, Switzerland: "Laser applications for microprocessing"

0930 (invited) Peter Hartmann, FH Zwickau, Germany.: "Application potential of coherent laser sources for measurement applications"

1000 (invited) Jens Standfuß, IWS Fraunhofer, Germany : "High power brilliant fiber laser changes the world of laser welding for automotive industry! "

1030 (invited) Daniela Comelli, Politecnico di Milano, "Lasers for Cultural Heritage"

1050 Csaba BALÁZSI, Budapest University, Hungary, "Optical communications and sensing applications of fiber lasers"

1105 Primož Podržaj University of Ljubljana, Slovenia: "Real-time power control of remote fibre laser welding based on visual process monitoring"

1120 Dan Sporea, National Institute for Laser, Plasma and Radiation Physics, Romania: "Radiation effects in optical fibers for terrestrial and spaceborne applications",

1135 Discussion (specific on WG3 and on all WGs)

1210 **Lab tour: "Manufacturing with Lasers"**

1300 **Lunch**

1350 SIG Meeting, Matej Komanek Chair

1400 Dermot Brabazon, University of Limerick, Ireland, Title TBD

1415 End of WG Meeting, closing remarks

1430 MC Meeting

1700 End of MC Meeting (but room available until 1700)