



COST MP1401 Annual Conference and 2nd MC meeting 12-15 April 2016, Zadar, Croatia



WG 3: Applications



Chair: Annet KLOTZBACK

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The COST Action AFLASER will either propose **applications of new sources or new/enhanced applications** for existing sources.

The main targets are:

- Manufacturing by either testing power scaled IR sources for material processing (automotive applications) or UV sources for solar cell production, battery production (enhanced electro mobility) for green energy, biomedicine and healthcare
- Test of interaction with soft materials (e.g. plastic) using new MIR sources. Development of cost effective lab-on chip devices will be performed using within WG2
- Healthcare and Biomedical Applications: to prove new sources can effectively provide benefits in term of interaction with biological tissues (ophthalmology, low-cost lab-on chip components, imaging, submicron surgery using MIR wavelength early recognition of diseases). New pulsed UV/VIS sources and continuum sources will be tested for two-photon microscopy

<http://www.aflaser.eu/wg-3/>

Working Group 3: applications



13.50 Andres Lasagni: opening WG3

13.55 Miklos Veres MTA, **Hungary**: "Raman spectroscopy and surface enhanced Raman scattering, with a focus on biomedical applications" [WG3.1]

14.15 Andres Lasagni, Fraunhofer IWS, **Germany**: "Direct Laser Interference Patterning, a new tool for large area micro and sub-micrometer structuring" [WG3.2]

14.35 Jonathan Griffiths, University of Lincoln, **UK**: "Suitability of Fibre Laser Sources for Applications Involving Laser-Induced Breakdown" [WG3.3]

14:50 Vedran Đerek, Ruder Boskovich Insitute, **Croatia**: "NIR laser light sensors based on nanosilicon/organic semiconductor junctions for telecom applications" [WG3.4]

15.05 Ivan Petryshynets, Slovak Academy of Sciences, **Slovakia**, "Modification of domain structures at Fe-Si alloy surface via the laser scribing technology" [WG3.5]

15.20 Klobčar Damjan, University Ljubljana, **Slovenia**, "Case studies of laser welding and weldability". [WG3.6]

15.35 OPEN DISCUSSION