

Agenda

Management Committee / WGs scientific Meetings and BM1205 Workshop

COST Action no. BM1205

Action Title: Skin Cancer Detection using Laser Imaging

**Venue: Grand Hotel Excelsior, Great Siege Road, Floriana, FRN1810, Malta
BM1205 meeting room,**

Date: 29-30 April 2014

First Day: Tuesday 29 April

10:00 Arrival to the Meeting Room in Hotel Excelsior, and Registration and Coffee/tea in the meeting room

10:30 BM1205 MC meeting

13:00-14:00 Working lunch

15:00- Joint WGs meetings and BM1205 Workshop:

15:15- 16:00 Keynote lecture, prof Peter Anders, Technical University of Denmark, Roskilde, “Diode-based lasers for biophotonic imaging”.

16:00- 16:45 Keynote lecture, prof Marcin Gnyba, Gdańsk University of Technology, Poland, “Selected applications of spectroscopic measurements”

[Spectroscopic studies of biomedical materials and other investigations related to biophotonics and material science carried out at the Department of Metrology and Optoelectronics of the Gdansk University of Technology will be presented.]

16:45-17:30 - Discussion

Second Day: Tuesday 29 April

9:30 Joint Working Groups Meeting and BM1205 Workshop

9:30 –Invited talks of new MC members

1. Prof Georgie Stanciu “Far field and near field used in laser scanning microscopy techniques”.

2. Prof Ekaterina Borisova, “General overview and activities in the field of skin cancer research of National Center on Biomedical Photonics of Institute of Electronics - Bulgarian Academy of Sciences”; [A short overview of the research activities of NCBP of IE-BAS will be presented. The existing infrastructure - equipment, human potential, existing national research network related, as well the recent investigations and achievements in the field of biophotonics will be briefly described. Special attention will be paid on skin cancer research activities using endogenous and exogenous fluorescence spectroscopy, diffuse reflectance spectroscopy, and colorimetric analysis of the spectra of different benign, dysplastic and malignant cutaneous lesions. Some recent results on the diagnostics of skin tumours will be presented.]

3. Prof Carla Carmelo Rosa, Universidade do Porto, Porto, Portugal “ Photonic tissue imaging and sensing” , [presentation on the work on photonics that is being developed at Porto and our future perspectives]

11:20 Coffee Break

11:30- Presentations of ESRs on their completed STSMs

1. Faustino Wahaia, “Study of Colon and Gastric Cancer Samples Using Terahertz Techniques” [In this work, samples of healthy and adenocarcinoma-affected human colon and gastric tissue samples were analyzed using transmission time-domain THz spectroscopy (THz-TDS) and spectroscopic THz imaging (STI) at 201 and 590 GHz to sort out the contrast-contributing factors other than water, the main contrast mechanism factor in in-vivo or in freshly excised bio-tissue. The work shows that it is possible to distinguish between normal and cancerous regions in dehydrated, dried and paraffin-embedded samples by analysis of the obtained 2-D transmission STI images and THz-TDS plots of absorption coefficient $f\tilde{N}$ and refractive index n of normal and cancer affected tissues as some examples are presented.]
2. Łukasz Suraczyński/ Aleksandra Zienkiewicz “Near-infrared spectroscopy as a method of tissue metabolism monitoring” [Presentation will cover short introduction of measurement method with NIRS in the area of tissue screening. We will explain the idea of use, show preliminary results and present future plans.]
3. Francisco Javier Azcona Guerrero “DSMI method as an approach for fluid media characterization”

12:30 Workshop round table