



# Newsletter



July 2017

## AFLASER

Advanced fibre laser and coherent source as tools for society, manufacturing and lifescience

Dear Reader,

Welcome to the first issue of the AFLASER COST Action e-Newsletter! Fibre lasers are, both as research and commercially, the youngest, yet the fast growing type of laser due to several factors, performance, reliability flexibility and last but not least, cost-effectiveness. To fully exploit their potentiality we created the COST MP1401 AFLASER Network to provide the first multidisciplinary arena where experts in fundamental material science, established laser and component groups, fibre laser manufacturers and end-users will be able to actively interact, share know-how and focus on common goals.

The Action is 4-year EU-funded COST Action Network. The peculiarity and beauty of a COST Action is that it is an open network so anyone is able to associate anytime; for this please write to the Action Chair and to the appropriate working group Chair ([Aflaser.eu](http://Aflaser.eu)). We have already 28 associated European Countries and over 150 partners, with further partner from all over the world.

Main scientific focus is on new laser wavelengths, to cover the 3-6 micron wavelength interval, and beyond, to support mid-infrared applications. We also look into more efficient visible and ultra-violet wavelength generation for biophotonics and healthcare applications. The Action will also investigate new glass materials and fibre designs to overcome present limits.

We have three main working groups: Materials and Components, Laser sources and Applications. The Action support Meetings to share know-how and report recent progresses. We do also support exchange of scientists among partners to perform joint experiments and establish new collaborations. We are also keen to promote Early Career Investigator and Women Scientists careers.

We made already good progresses in laser materials and components and in this issue you will find a report from the working group on Materials. This year we will focus on laser sources and a training school and a topical meeting is planned beginning of 2018. For updated information please follow [aflaser.eu](http://aflaser.eu).

The aim of this quarterly e-Newsletter is to disseminate Action results and related events, with main aim to attract the people from all over the world to the research running in AFLASER COST Action.

We do hope this e-Newsletter, quarterly edited, will provide you useful information.

Stefano Taccheo, Action Chair, and Lidia Zur, Dissemination Officer

**EAGLES workshop**, a Working Group Meeting mainly devoted to WG1 and WG2 interests, has taken place in Trento from 18 to 19 October at Bruno Kessler Foundation (FBK). We had 104 participants well balanced among students and senior researchers as well as in gender. 25 oral presentations were given. Worthy to note the student time, 1hr each day, where PhD MSc students had around 10 minutes to present and shortly discuss their research. It was fantastic to attend these presentations covering the several scientific fields of our multidisciplinary Action. At the end of the first day 50 minutes was devoted to meet personalities with important competences in the technology transfer and industrial management. Surely interesting the remarks of Maurizio Sbetti, person in charge of an industry having the core business in laser material processing and laser cutting, as well as the talk of Eduardo Giuliani, Vice-Director of TECNOPUC, who described the Brazilian innovation strategies in several scientific and technological fields having relation with the research performed in the framework of our Action. Finally, this meeting succeeded in the important items of the Action:

- provide an exhaustive description of the consolidated activity in the framework of the WG1- Materials, Fibers, Components and Technology and its technical and scientific synergic connections with the WG2- New laser and amplifier devices,
- clearly define the challenges to be addressed, the technologies and protocols to be further developed and the short-term strategies to implement the action, make easy the link among industrial needs and research outcomes.

Kay Schuster & Maurizio Ferrari

### UPCOMING EVENTS

The 3<sup>rd</sup> Annual conference and 4<sup>th</sup> MC meeting will be held in Jena, Germany. Call for scientific contributions falling into the scope of the Action (Development and Applications of Fibre Lasers) are welcome. Travel Grants are available to presenters. Scientists and Companies are welcome. The deadline for the submission is **30<sup>th</sup> of July 2017**.

More information on [aflaser.eu](http://aflaser.eu)



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**Want to share your research? Have new ideas for COST Action?**

**Don't hesitate to contact key people or contact us through the <http://www.aflaser.eu>**

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