

WORK PACKAGES APPOLO INFO EUROPEAN PROJECT » appolo «

Collaborative project of 7<sup>th</sup> Framework

**WP2.** Assessment of the ps-laser for CIGS scribing

WP1.

(RTD)

Operation of the hub of application laboratories

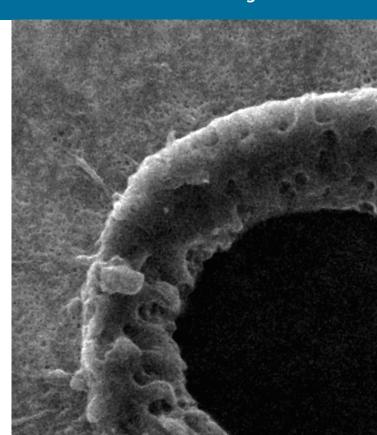
- **WP3.** Assessment of the scribing technology for CIGS solar cell with ps-lasers
- **WP4.** High-speed surface texturing by Lasers
- **WP5.** Surface functionalization by laser texturing
- WP6. Laser direct writing for flexible 3D electronics
- **WP7.** Laser direct writing for flexible electronics and photovoltaics
- **WP8.** On-line monitoring tools for laser-based technology assessment
- **WP9.** Dissemination, training and exploitation
- **WP10.** Project management and implementation of the Competitive calls
- **WP11.** Implementation of assessment selected via competitive call

- Programme (large integrated project)
- Call: FP7-2013-NMP-ICT-FOF Factories of the Future"
- **Objective:** FoF-ICT-2013.7.2 Equipment assessment for sensor and laser based applications
- EC Grant Agreement N° 609355
- Start: 01 September, 2013; End: 31 August, 2017
- Project duration: 48 months
- EC funding ~11 M Euro
- Consortium consists of 36 partners from 10 countries (LT, CH, DE, ES, FI, IS, IT, NL, BE, GR)

Supported by the

European Commission

- Public research & universities 6
- Industrial research 1
- SMEs 22
- Large companies 7



Hub of Application Laboratories for Equipment Assessment in Laser Based Manufacturing





Valstybinis moksilnių tyrimų institutas Fizinių ir technologijos moksių centras (FTMC) Leibniz-Institut für Oberfiächenmodifizierung (IOM), Germany.



Berner Fachhochschule (BUAS), Switzerland.



Lappeenrannan teknillinen yliopisto (LUT), Finland.



Universidad Politécnica de Madrid (UPM)

Ekspla UAB (Ekspla)

Lumentum

OneFive GmbH (ONE5)



NeXT Scan Technology B.V. (NST)



AMSYS Ltd. (AMS)



ELAS UAB (ELAS)



Lightmotif BV (LM)



Eidgenössische Materialprüfungs- und Forschungsanstalt (EMPA)



Centro Ricerche Flat S.C.P.A (CRF)



Daetwyler Graphics AG (DG)



Abengoa Solar New Technologies (ASNT)



Mondragon Assemby (MONA)



Bloage SA (BIOA)



Engage AG (ENG)



FLISOM AG (FLISOM)



Sächsische Walzengravur GmbH (SWG)



SCANLAB GmbH



SKF B.V.



LaserSpec



OSAI Automation Systems SPA



Nanotypos Nanotypos





IRIS SRL



OP1 Photonics SRL



Robert Bosch GmbH



General Electric



MAIER S.Coop.



SISMA LASER



LAC S.p.a.

## PONT:

Breakthrough solutions in resonance NIR Laser texturing of polymers

## **PARTNERS:**

- Laserspec SPRL (Belgium),
- OSAI Automation System SPA (Italy),
- it4ip SA (Belgium)
- FTMC (Lithuania)

Polymer NIR Laser Resonance Texturing:

- Testing of a new genuine wavelength laser sources for polymer surface texturing;
- Application of the new laser texturing process on bio-polymer coated implants;
- Validation of high productivity and precision industrial process.

