



Contact details

- Organisations: Munich University of Applied Sciences (MUAS) / Sunplugged (AT) / Universidad Politecnica de Madrid (ES)
- Contact name: Prof. Heinz P. Huber
- Country: Germany
- Email: heinz.huber@hm.edu
- Telephone: +49 89 1265 1686 / +40 172 8434036

Add your organisation logo / photo here

MUAS organisational profile

MUAS is focusing on applied research as well as on industrial cooperation in the fields of micro- and nano-processing based on lasers. Its staff (1 professor, 4 scientists, 10 students) has been involved in research and development of laser scribing processes for all types of CIGS thin-film solar cells (first all-laser CIGS interconnected module, world record module efficiency). With time-resolved studies and FEA simulations we investigate the physics of laser processes for their industrial optimization.

What challenge area is your project idea focused on for the Solar ERA-Net 2nd call

A.2.1 Low cost, large area deposition process equipment, global deployment of laser technology and control methods



Technology Strategy Board
Driving Innovation

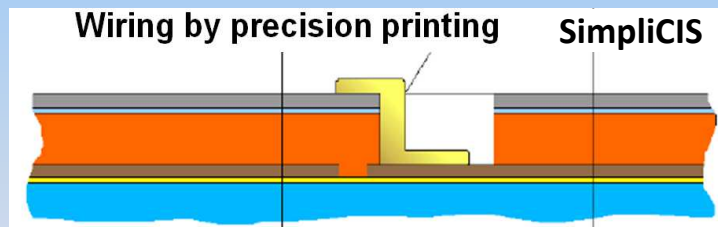


Project idea: Low Cost Roll-to-roll CIGS Custom Module Manufacturing

•Summary:

- Complete CIGS layer system is deposited on 300mm wide roll
- “Mono-Scribe” laser process + contact print for interconnection (“SimpliCIS”)
- Development front-end laser process: In-line, real-time process control and solar efficiency monitoring
- Development back-end laser processing: Custom format laser lamination, custom module format cutting, contact opening

•Diagrams/pictures:



•Partners: Precision printing for structuring of metal contacts