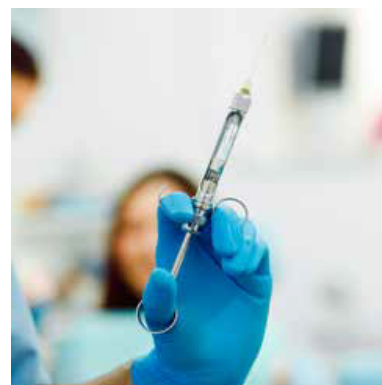


# How **CALIPSOplus** intensify collaboration with industry?

Alejandro Sánchez Grueso  
ALBA Synchrotron



CALIPSOplus has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 730872

# CALIPSOplus – H2020 European Project

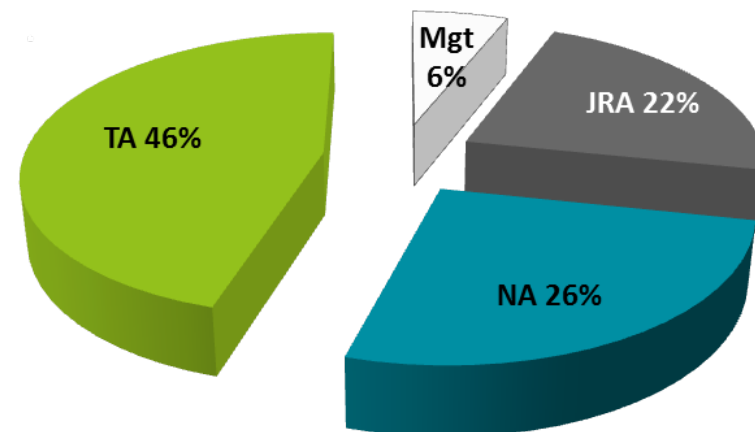
Convenient Access to Light Sources Open to Innovation, Science and to the World



**CALIPSOplus** brings together 19 partners offering access to 14 synchrotrons and 8 FELs in Europe and the Middle East

- EU project within Horizon2020 - the financial instrument implementing the Innovation Union, a Europe 2020 flagship initiative aimed at securing Europe's global competitiveness
- Budget of CALIPSOplus: 10 million Euro
- 19 Partners, 3 associated partners, several observers
- 4 Networking Activities, 2 Joint Research Activities
- Provision of more than **82,500 hours of trans-national access** to **14 synchrotrons** and **8 free electron lasers**
- **Trans-national access tailor-made to SME**
- Project running time: 1 May 2017 – 30 April 2021

<http://www.calipsoplus.eu/>

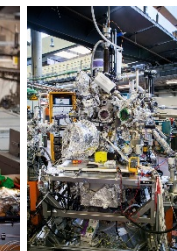
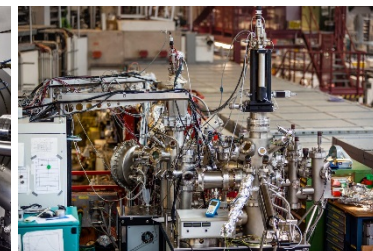




More than 270 Beamlines

More than 30.000 users

More than 5.000 publications



## Techniques available

- XMCD 38
- UVCD 8
- Time-resolved studies 38
- NEXAFS 83
- IR spectroscopy 22
- EXAFS 51

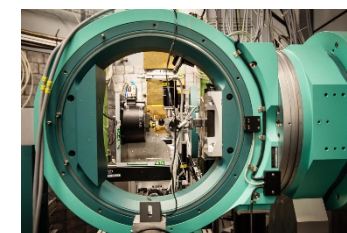


- X-ray Photoelectron emission
- X-ray Imaging
- X-ray Scattering
- X-ray Emission or Reflection
- X-ray and IR Absorption
- X-ray Diffraction

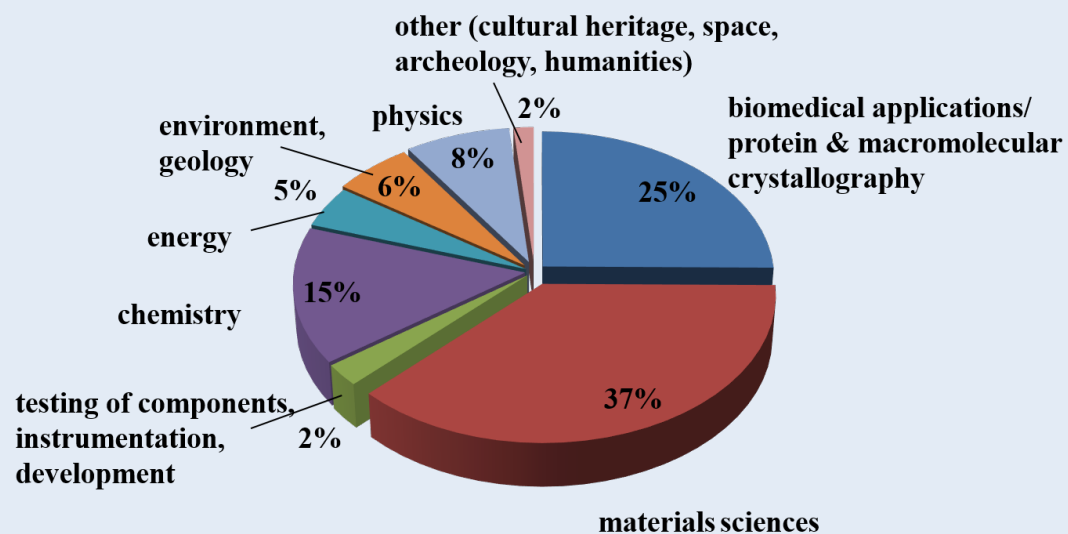
- XPS 59
- UPS 38
- Time-resolved studies 15
- Spin-resolved ARPES 7
- Photoelectron diffraction 19
- Angular Resolved PES 46



- Topography 5
- Time-resolved studies 30
- Surface diffraction 31
- Powder diffraction 43
- Crystallography (material science) 50
- Crystallography (biological macromolecules)



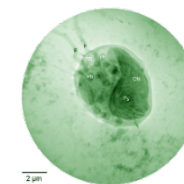
<http://wayforlight.eu/eng/search-beamlines.aspx>



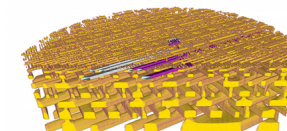
Cultural Heritage:  
the Sky Disk of Nebra



Biomedical Research:  
A living cell



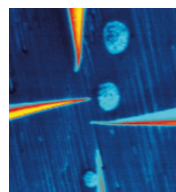
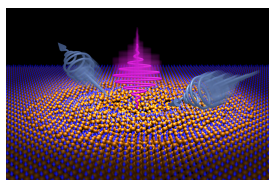
Material Science:  
Inside a chip



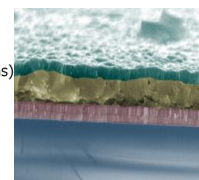
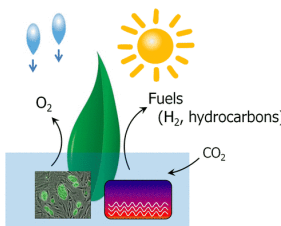
Instrumentation:  
An X-Ray Undulator



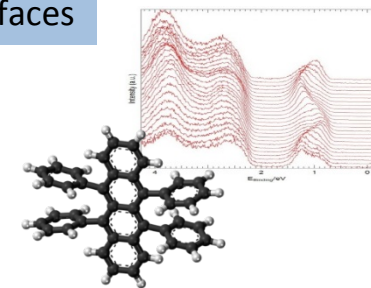
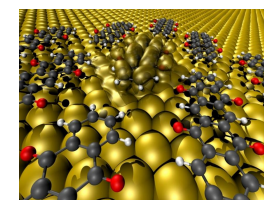
Physics: Elementary Processes –  
Understanding and Dynamics



Energy Research:  
Photovoltaic and Solar Fuels



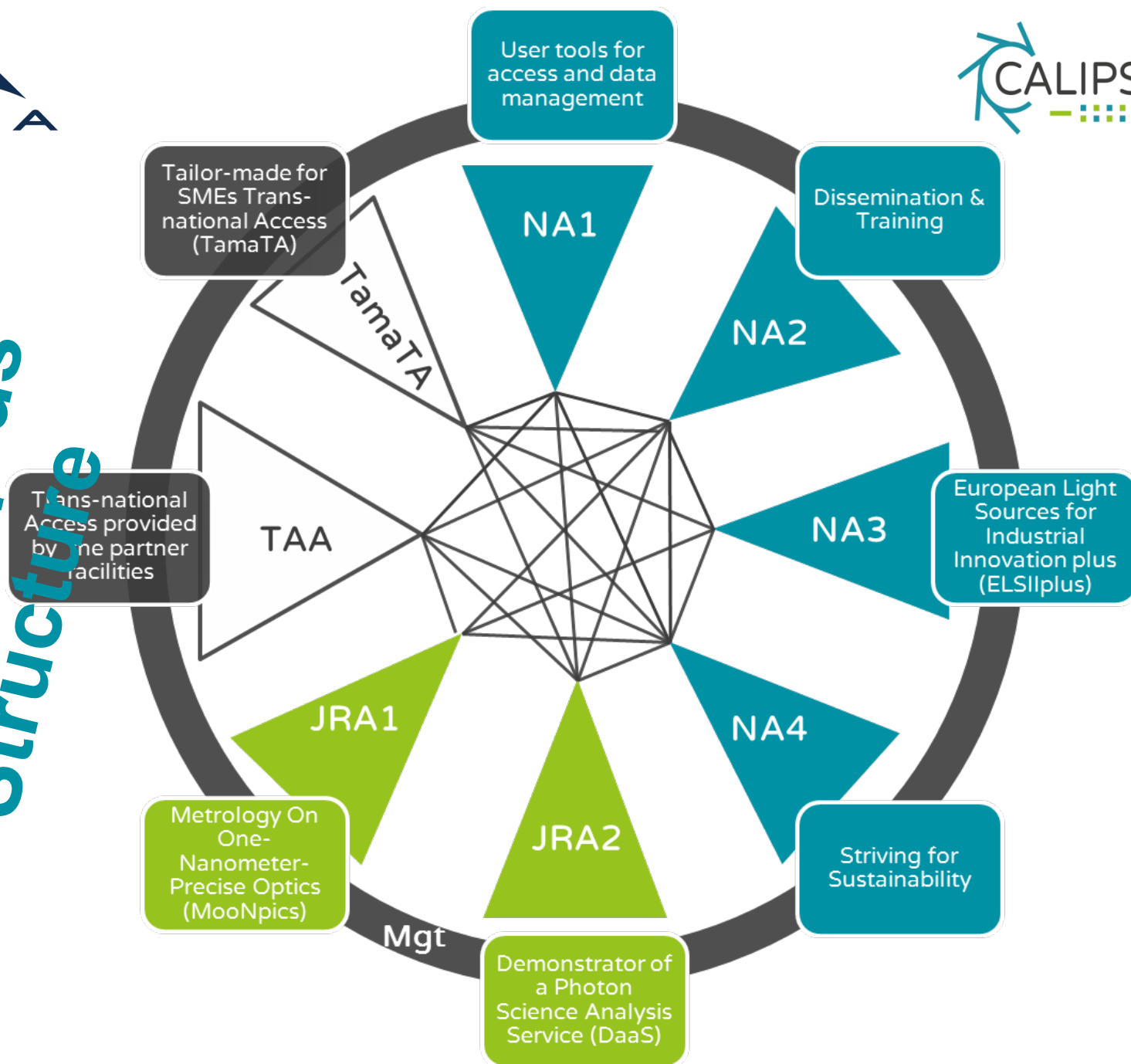
Chemistry:  
Catalysis and Surfaces



# CALIPSOplus goals for Industry

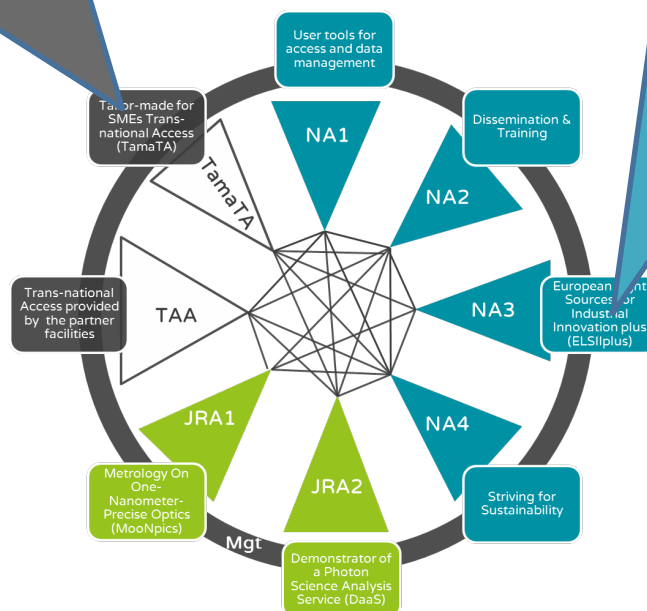
- Increase European Industry innovation and competitiveness, especially SMEs, through the use of light source infrastructures
- Overcome the roadblocks for Industry, in particular for SMEs, to access to light sources infrastructures

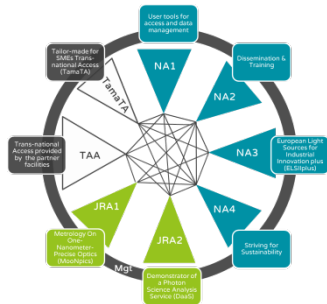
# CALIPSOplus Structure



Tailor-made  
for SMEs  
Trans-national  
access  
(TamaTA)

NA3: European  
Light Sources  
for Industrial  
Innovation plus  
(ELSIplus)





## NA3: European Light Sources for Industrial Innovation plus (ELSIplus)

Emphasis on European Regional Industry with SME awareness, training, feasibility

Industry events

LS2B

Support for staff

Common NDA

Feasibility access

European Strategic Light Source Positioning for Industry

Position paper

High level event

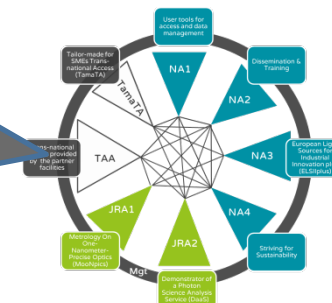
Industry Advisory Board

Industry feedback

Industry/Business Offices Network meetings

Best practices

# Tailor-made for SMEs Trans-national access (TamaTA)



Friendly and  
rapid access,  
Pilot activity  
(200k€),  
Full service with  
data analysis  
and report

Light sources offering Industrial access across Europe

Open call

Understand SME problem

Design experiment

Perform experiment

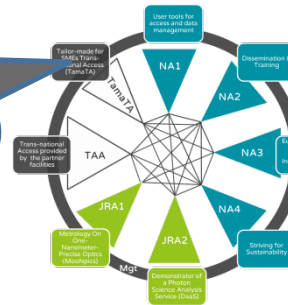
Report results



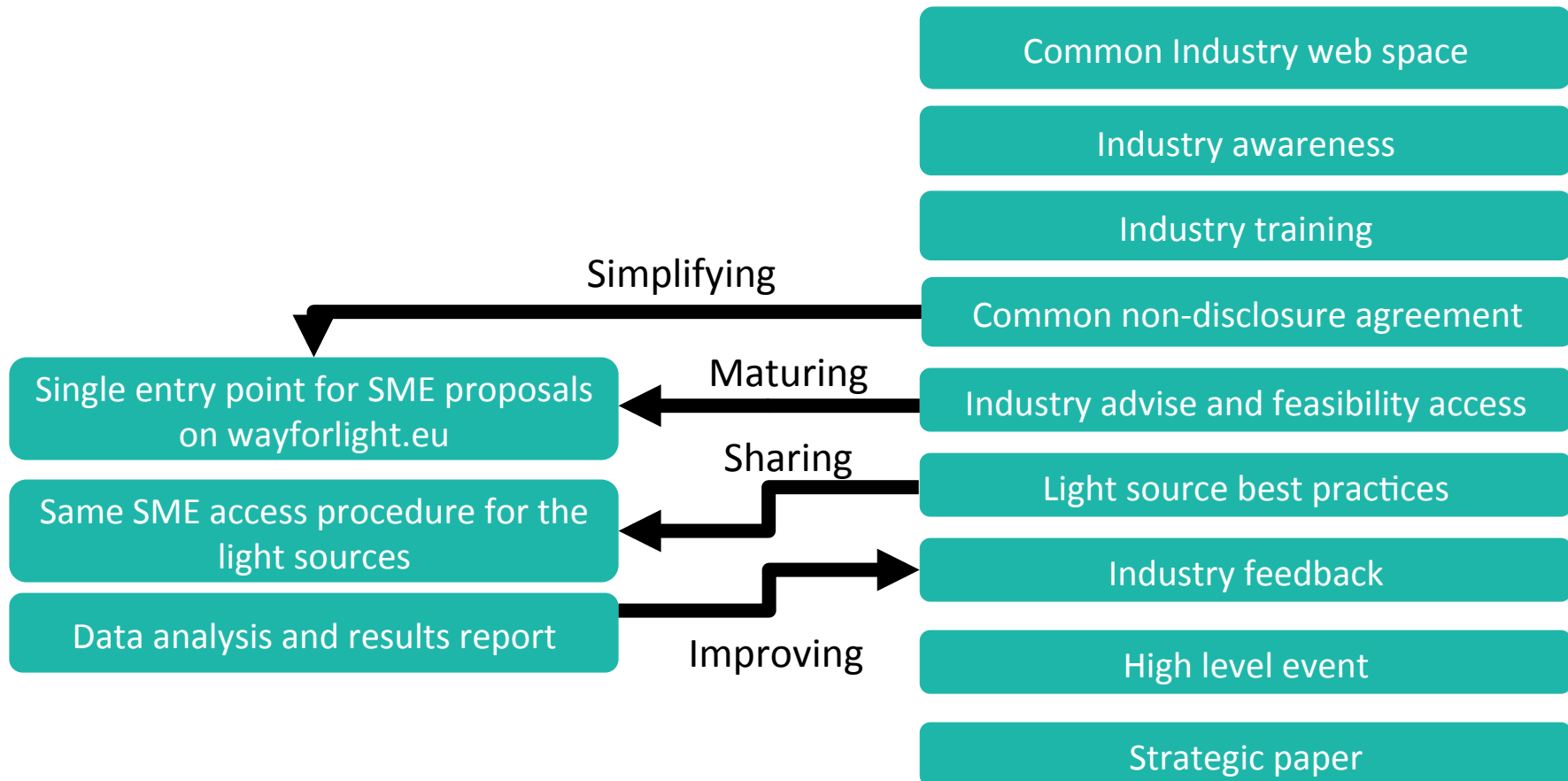
# Outcomes



Tailor-made for  
SMEs Trans-national  
access (TamaTA)



NA3: European Light  
Sources for Industrial  
Innovation plus  
(ELSIplus)



- **CALIPSOplus presents a wide range of activities for industry engagement covering from outreach through strategic issues with especial emphasis in SMEs.**
- **Industrial activities have been intensified in CALIPSOplus. Two complementary work packages devoted to Industry.**
- **A new common trans-national access for SMEs is offered by CALIPSOplus, lowering the barriers for light source usage**

# Thank you for your attention



<http://www.calipsoplus.eu/>