



European infrastructure for spectroscopy, scattering and imaging of soft matter

Transnational Access made easy by EUSMI



If you only remember two things

EUSMI is free

- Use of instruments and services (TNA)
- Accommodation and subsistence costs are covered for up to 2 persons;
- Travel cost is covered up to 500 Euro per person.
- Support for open access publication

Contact our Industrial Liaison Officer:

Dr. Anna Stenstam, CR Competence AB, Sweden

- Help you find the right instruments
- Help you with application and proposal



Outline

- Overview and key facts
 - Who are we?
 - What does EUSMI offer?
- EUSMI and industry
 - Overview of industrial participation
 - Successful case stories
- How to apply?
 - Submit your proposal via EUSMI web portal
 - Special support for industrial users
- Dos an Donts



Overview and key facts

- **Who are we?**
- **What does EUSMI offer?**

The consortium

- 23 Beneficiaries
 - 9 companies
 - 6 research centres
 - 8 universities
- 15 partners providing transnational access
- Coordinator : Prof. J.K.Dhont, Forschungszentrum Jülich GmbH

Timeline

- Start date 01. July 2017
- Duration: 48 months + 6 months extension due to Covid-19
- Extension till **31.12.2021**

TNA at a glance : 5 work packages

- **WP1:** Spectroscopy and rheology facilities
 - NMR: Univ. Lille, Adam Mickiewicz University
 - Rheology: ETH Zürich, FORTH
- **WP2:** Scattering and diffraction facilities
 - Neutron scattering: Jülich-JCNS,
 - cSAXS: Paul Scherrer Institut
 - Light scattering: Jülich-IBI4, FORTH, ULUND
- **WP3:** Imaging facilities
 - AFM: University of Bayreuth
 - Electron microscopy : EMA, University Antwerp
 - Confocal microscopy: University Edinburgh



ETH zürich



THE UNIVERSITY
of EDINBURGH

TNA at a glance : 5 work packages

- **WP4:** Synthesis and up-scaling facilities
 - BIOMA: functional nanoparticles
 - biomedical application, biosensor
 - DWI: intelligent materials
 - functional latex particle, microgels
 - SyMO-Chem: tailored molecular synthesis
- **WP5:** Supercomputing : Jülich – JURECA
 - 1872 compute nodes
 - 12 visualisation nodes
 - total of 45216 CPU nodes

CICbiomaGUNE
CENTER FOR COOPERATIVE RESEARCH IN BIOMATERIALS

DWI Leibniz-Institut
für Interaktive Materialien

SyMO-Chem





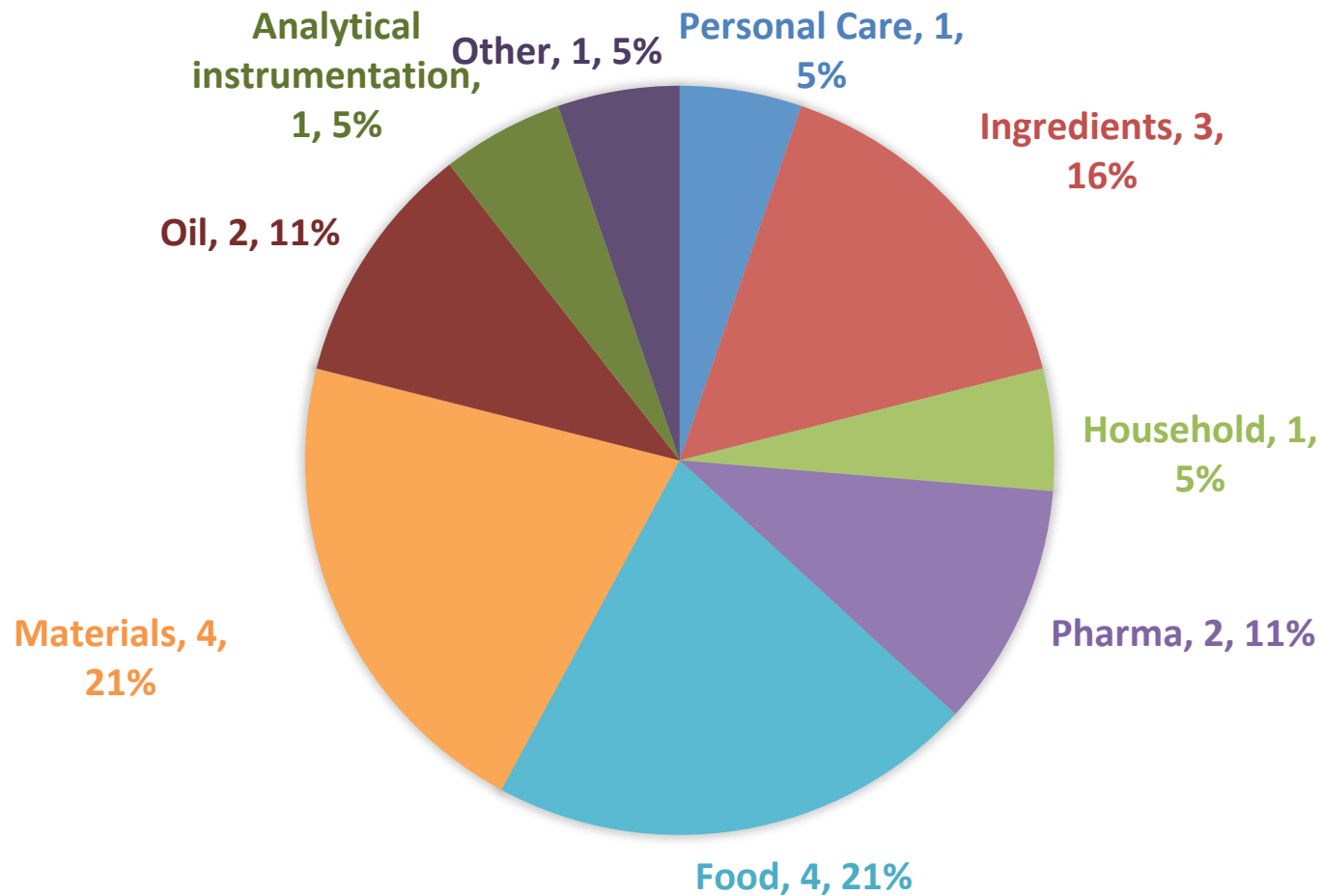
EUSMI and Industry

- **Overview of industrial participation**
- **Successful case stories**

Key achievements

- **19** applications from industry
 - **10%** of all accepted applications
- **15** companies
 - **9** different business areas
 - **8** different countries of origin
- **26%** of accepted industry-applications are from SMEs
- **12** EUSMI labs involved
- **44** in-depth discussions with industry
- **5** commercialisation plans

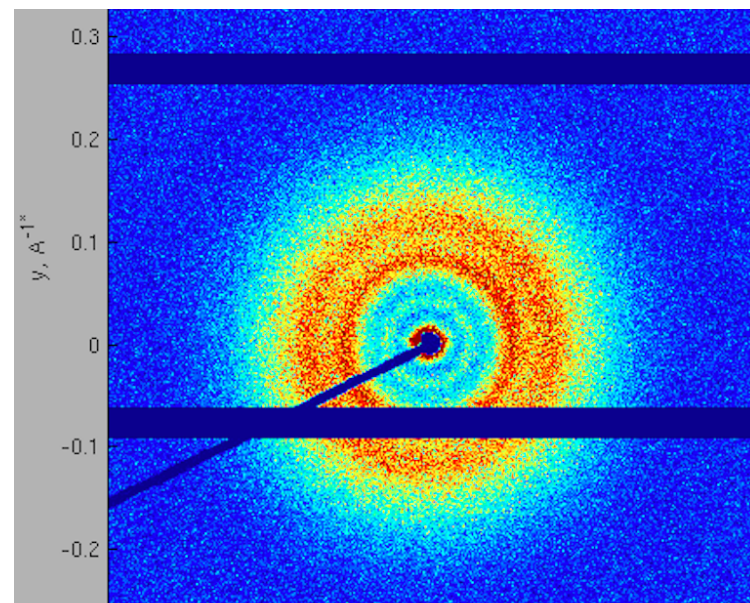
Business areas – accepted proposals



Successful case stories

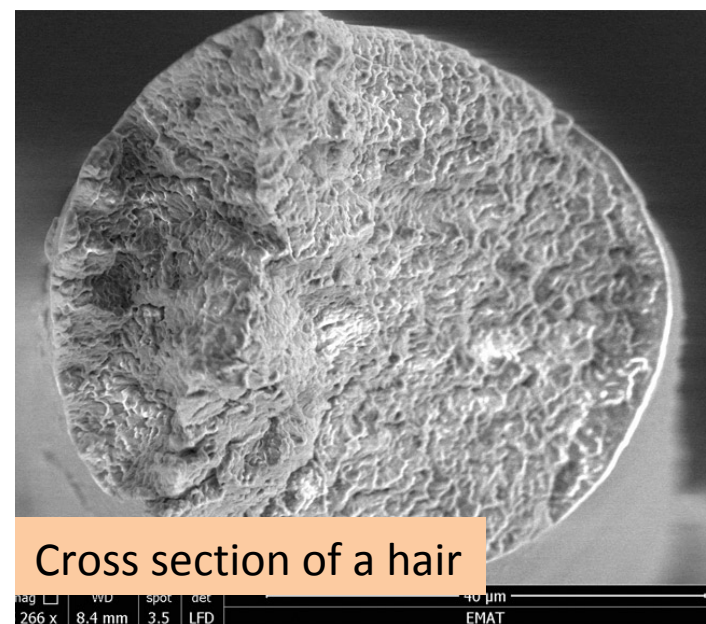
Case story 1 : Characterization of surfactant aggregates

- KAO Chemicals Europe
- Business sector: personal and home care
- **Challenge : to correlate the macroscopic behavior with the structure of the surfactant aggregates**
- Method: small and wide angle X-ray scattering
- EUSMI: University Lund



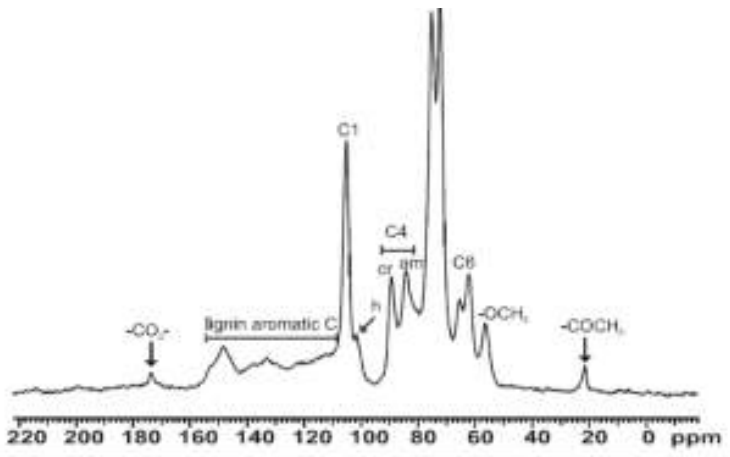
Case story 2 : Film forming effect on hair

- Provital
- Business sector: cosmetic ingredients
- **Challenge : Hair structure after treatments?**
- Method: Electron Microscopy
- EUSMI: EMAT, University Antwerp

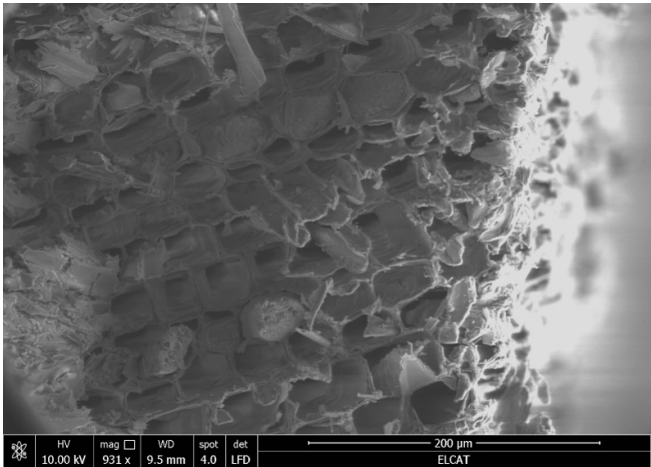


Case story 3 : Collaboration with OrganoClick AB

- Business sector: clean technology, functional wood
- **Challenge : fundamental structure-property relationship of next generation wood protection.**
- Method 1: Solid-state NMR at University Lille
- Method 2: Electron microscope at EMAT University Antwerp



chemical structure at atomic scale



morphology
penetration depth
fixation mechanism

Testimonials from industrial users

"We were able to get a detailed image of the hair structure along the fiber after different treatments so that we could select the best option."

"These results will help us push our projects and develop new products with stronger scientific base."

"It has been an exceptional collaboration, with ideal communication and scientific advice before and during the process."

" As a small- medium size Greentech Company with a great focus on the research and development, EUSMI helped us a lot in order to characterize the next generation of our environmentally friendly products."

"



How to apply ?

- Submit your proposal via EUSMI web portal
- Special support for industrial users

Apply for Access at: <http://eusmi-h2020.eu>

Registration → find your instrument → write and submit the proposal

ACCESS FREE OF CHARGE

GET FREE ACCESS TO THE NEWEST AND MOST
ADVANCED TOOLS FOR SOFT MATTER RESEARCH

SIMULATION FROM
POWERFUL SUPERCOMPUTERS

After logging in, you can come to the User Area

The screenshot shows the EUSMI User Area interface. The top navigation bar includes links for HOME, ABOUT, NEWS, ACCESS, INDUSTRY, MEETINGS, CONTACT, and USER AREA. The left sidebar contains a user profile for Yi Liu (y.liu@fz-juelich.de) with buttons for 'Enter proposal processing', 'Data Repository', 'Edit Profile', and 'Logout'. Below the profile are links for 'MY PROPOSALS', 'PROPOSAL SUBMISSION', 'REPORT ON PROPOSAL', 'DOWNLOADS', and 'DOCUMENTS'. The main content area is titled 'PROPOSAL SUBMISSION // PREPARATION' and provides instructions on how to submit a proposal. A red box highlights the 'Terms of Reference' link in the list of steps. A red arrow points from this link to a box containing the text 'Term of Reference : exact rules and conditions'. Blue arrows point from the 'DOWNLOADS' and 'DOCUMENTS' links to boxes containing the text 'Tutorial: how to submit your proposals step by step' and 'template, advertisement materials' respectively.

EUSMI

Logout

HOME ABOUT NEWS ACCESS INDUSTRY MEETINGS CONTACT USER AREA

Yi Liu
y.liu@fz-juelich.de

Enter proposal processing

Data Repository

Edit Profile

Logout

MY PROPOSALS

PROPOSAL SUBMISSION >

REPORT ON PROPOSAL >

DOWNLOADS >

DOCUMENTS >

PROPOSAL SUBMISSION // PREPARATION

This is where you start to submit a proposal under the EUSMI Transnational Access programme. In order to optimize the chances for a successful application, it is strongly recommended that you follow these steps:

1. contact the scientist in charge of the requested installation to identify the most suitable instrument for your needs
2. approach a local contact of the selected instrument; this can be done also with the help of the scientist in charge of the infrastructure
3. discuss with the local contact the details of the planned experiments, and follow their advice concerning instrument configuration and especially the amount of requested access
4. Please consider the guidelines for proposal writing, which you can find here:
[Terms of Reference](#)
together with the terms of reference for transnational access.

Term of Reference : exact rules and conditions

Tutorial: how to submit your proposals step by step

template, advertisement materials

Special support for industrial users



Classroom Science Competition Logout

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EUSMI FOR INDUSTRY

GET FREE ACCESS TO THE NEWEST AND MOST ADVANCED TOOLS FOR SOFT MATTER RESEARCH

ADVANCED SPECTROSCOPY, SCATTERING, AND IMAGING TECHNIQUES

WELCOME TO EUSMI FOR INDUSTRY

If you *do not know* what instrumentation you need to solve your challenge, we are here to help you and guide you through all steps.

[Click here to learn more.](#)





DOs and DONTs

-- rules for application

DOs and DONTs

- Do contact me or Anna for potential applications.
- Do bookmark the EUSMI web portal and register.
- Don't hesitate ! EUSMI runs till 31.12.2021.
- Don't overlook the **Eligibility Rule**
 - The majority of the proposers must be affiliated to countries which are different from the instrument location
 - Example: Provital case
 - proposers → affiliated to Spain
 - applied instrument → located in Belgium
 - Formally eligible ! Proposal entered review process immediately.

Contact information

- Web portal
 - <http://eusmi-h2020.eu>
- Get our newsletter as registered user
- Write an email
 - anna@crcom.se
 - p.lang@fz-juelich.de
 - y.liu@fz-juelich.de
- Follow EUSMI on Twitter
 - [@EUSMI_H2020](https://twitter.com/EUSMI_H2020)



ACCESS TO:

- a neutron scattering facility
- a coherent x-ray beam line
- most advanced electron microscopes
- world leading synthesis laboratories
- one of the fastest supercomputers in Europe
- about 70 highly specialized instruments for a large variety of experiments

How to make use of EUSMI

All soft matter scientists are invited to register at
www.eusmi-h2020.eu

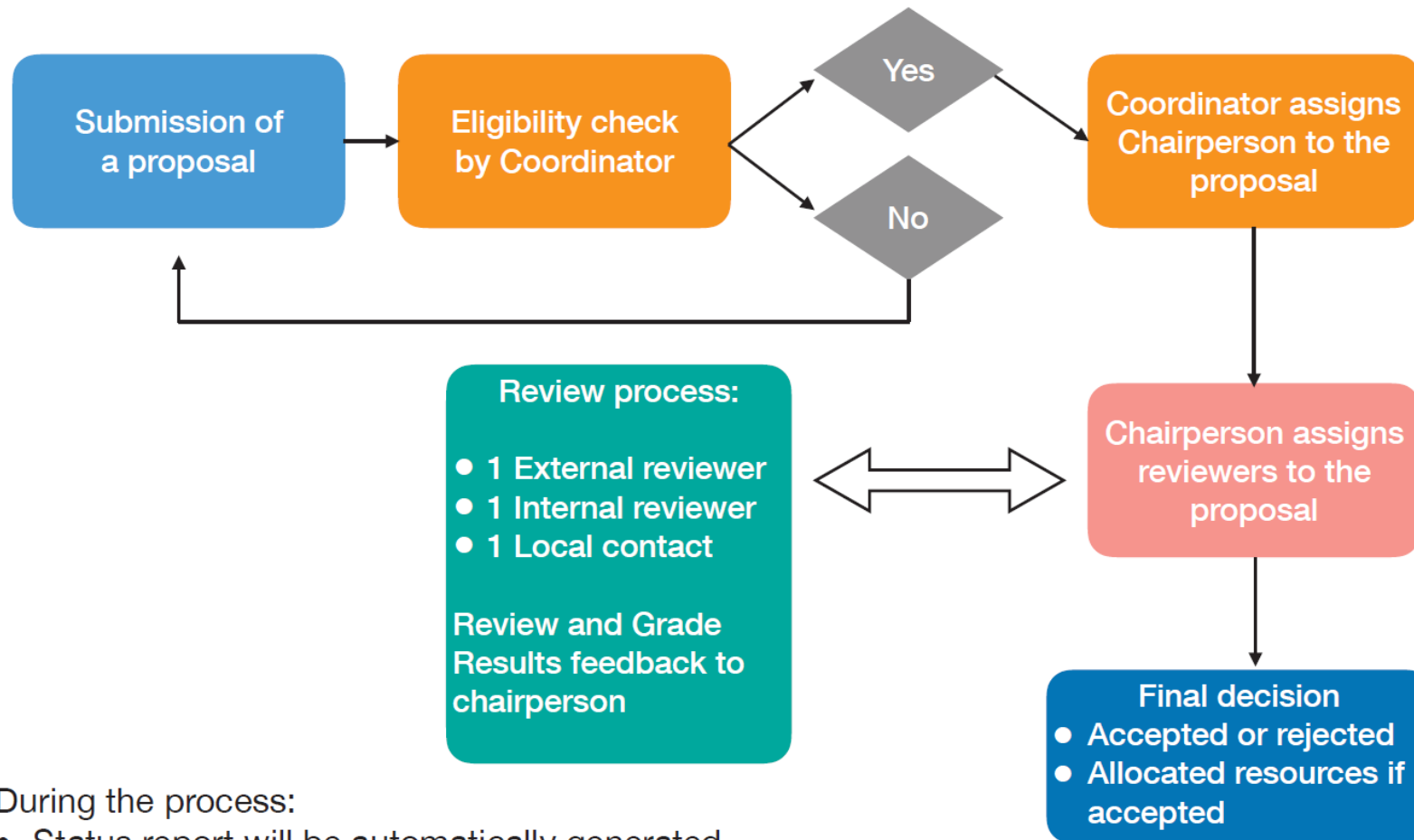
Registered users can take advantage of the EUSMI transnational access programme by submitting an application via the online proposal system at the EUSMI web portal. Proposals will be evaluated **within a month** by a panel of internationally renowned experts.

WHEN A PROPOSAL IS ACCEPTED

All costs for using the EUSMI infrastructure, travel, accommodation and subsistence costs will be covered by EUSMI for up to 2 persons per proposal.

Life circle of a proposal

Life cycle of EUSMI proposal



During the process:

- Status report will be automatically generated
- Corresponding person will receive notification emails