



nffa.eu

PILOT

2021
2026

DELIVERABLE REPORT

WP17 JA7 – Communication and Dissemination

D17.4

Mid Term Review on all Outreach and Training activities

Due date

M30



This initiative has received funding from the EU's H2020 framework program for research and innovation under grant agreement n. 101007417, NFFA-Europe Pilot Project

PROJECT DETAILS

PROJECT ACRONYM

NEP

PROJECT TITLE

Nanoscience Foundries and Fine Analysis - Europe|PILOT

GRANT AGREEMENT NO:

101007417

FUNDING SCHEME

RIA - Research and Innovation action

START DATE

01/03/2021

WORK PACKAGE DETAILS

WORK PACKAGE ID

WP17

WORK PACKAGE TITLE

Communication and Dissemination

WORK PACKAGE LEADER

Dr. Flavio Carsughi (FZJ)

DELIVERABLE DETAILS

DELIVERABLE ID

D17.4

DELIVERABLE TITLE

Mid Term Review on all Outreach and Training activities

DELIVERABLE DESCRIPTION

Dissemination and Communication activities of the NFFA-EUROPE PILOT project play a major role in advertising the NFFA-EUROPE PILOT infrastructure and attracting new users, the main goal of NFFA-EUROPE PILOT. A detailed description of all the actions is contained in this report.

DUE DATE

M30 (Month) 31/08/2023

ACTUAL SUBMISSION DATE

31/10/2023

AUTHORS

Riccardo Brancaleon (Promoscience), Flavio Carsughi (FZJ), Dmitri Petrovykh (INL), Emanuel Stratakis (FORTH)

PERSON RESPONSIBLE FOR THE DELIVERABLE

Flavio Carsughi (FZJ)



NATURE

R – Report

DISSEMINATION LEVEL

- ☒ P - Public
- ☐ PP - Restricted to other programme participants & EC: (Specify)
- ☐ RE - Restricted to a group (Specify)
- ☐ CO - Confidential, only for members of the consortium

REPORT DETAILS

ACTUAL SUBMISSION DATE

31/10/2023

NUMBER OF PAGES

39

FOR MORE INFO PLEASE CONTACT

Flavio Carsughi
Forschungszentrum Jülich
Outstation at MLZ
Lichtenberg strasse 1
85748 Garching - Germany

VERSION	DATE	AUTHOR(S)	DESCRIPTION / REASON FOR MODIFICATION	STATUS
1	25/10/2023	Riccardo Brancaleon (Promoscience), Flavio Carsughi (FZJ), Dmitri Petrovykh (INL), Emanuel Stratakis (FORTH)		Final Draft



CONTENTS

SUMMARY.....	5
DESCRIPTION OF WORK	5
WP 17 Board	5
Task 1 - Communication.....	5
Communication plan	6
Website and social media	6
Website analytics	13
Social media analytics	14
Video performance analytics	15
Printed materials.....	16
Task 2 - Dissemination	16
Dissemination plan	16
Highlights proposals	17
Scientific highlights showcased on the website	18
Outcomes showcased on the website.....	19
NFFA-EUROPE PILOT Dissemination events.....	23
EMRS Meetings	23
On-demand workshops.....	24
Dissemination events.....	25
Academic dissemination	25
Task 3 – Worldwide users.....	26
Promoting access outside Europe.....	26
Contacts with International Partners	27
Task 4 – Training and Education.....	28
NFFA-EUROPE PILOT Training Schools	28
NFFA-EUROPE PILOT Special Training Visits.....	34
E-learning videos	36
NFFA-EUROPE PILOT Staff Exchanges for Access Providers.....	38



SUMMARY

In the first 30 months of the NFFA-Europe Pilot project a lot of activities have been carried out in the field of communication and dissemination. They are listed and described in the detail in this document, and include the following ones:

- an update of the Communication plan
- the website and the social media have been updated regularly with news and information
- website, social media and video analytics to prove their effectiveness
- printed materials
- dissemination events and academic dissemination
- highlight proposals
- scientific publications
- worldwide network
- training programme

All the activities described here have the multiple effects to inform the scientific community on what the NFFA-Europe Pilot project can offer in terms of infrastructure and other opportunities and how to access them.

The WP17 Board aims to identify those events that are strategically important for the awareness campaign as well as for the international networking.

The pandemic biased the first part of the NFFA-Europe Pilot project, however the NFFA-Europe Pilot project was able to be on track thanks to the participation to virtual conferences.

DESCRIPTION OF WORK

WP 17 Board

As described in the Terms of References of the Dissemination Plan (Deliverable Report D17.2), decisions on the WP17 activities are taken by the WP 17 Board, which consists of the Task Leaders of the 4 WP17 Tasks, namely:

- Task 17.1 Riccardo Brancaleon Promoscience
- Task 17.2 Flavio Carsughi Forschungszentrum Jülich
- Task 17.3 Dmitry Petrovykh INL
- Task 17.4 Emmanuel Stratakis FORTH

Task 1 - Communication

In the ever-evolving landscape of nanoscience and nanotechnology, effective communication plays a crucial role in disseminating knowledge, highlighting scientific opportunities, fostering collaboration and engaging stakeholders. This is particularly relevant in the framework of our project, especially to raise awareness about the NFFA-Europe Research Infrastructure, to share progress and achievements, and to promote the research opportunities offered thanks to NFFA-Europe Pilot.

Hereby we provide a comprehensive overview of the communication outreach activities undertaken within NFFA-Europe Pilot and their outcome, to ensure that our communication efforts are not only reaching our target audience but also resonating with them. Through rigorous data analysis and tracking, we aim to continually refine our communication strategies for maximum impact.



Communication plan

The Communication plan for NFFA-Europe Pilot (D17.1, delivered in month 4) has been meticulously designed and implemented, as described in detail in the previous deliverables. The plan encompasses a comprehensive range of communication activities tailored to promote awareness about the NFFA-Europe Research Infrastructure, with a specific focus on highlighting the new research opportunities offered by NFFA-Europe Pilot.

Furthermore, the Communication toolkit (D17.3, delivered in month 6) has been updated to ensure that it effectively conveys the new features of NFFA-Europe Pilot. The Communication toolkit comprises a flyer, a brochure, three different posters, a roll-up and a project master presentation. Each of these elements provides a comprehensive overview of the project's structure, objectives and offer, as well as its mission and vision.

Additionally, substantial revisions and enhancements have been made to the project website, and efforts have been dedicated to revamp social media channels with new media content specifically crafted for LinkedIn and Twitter.

Website and social media

NFFA-Europe Pilot's website (<https://www.nffa.eu/>) and social media platforms (LinkedIn and Twitter) serve as crucial communication channels for disseminating project updates, breakthroughs and insights.

During the period from March 2021 to August 2023, 37 news pieces have been created and featured on our project website, highlighting the latest project updates and upcoming events.

The titles and dates of publication of the news pieces are listed below.

Project updates

- NFFA-Europe PILOT for new research infrastructure schemes (15/03/2021)
- Open Call for industrial partners: DEADLINE EXTENDED! (8/06/2021)
- 1st call for proposals NFFA-Europe: DEADLINE EXTENDED (27/08/2021)
- NFFA-Europe Research Infrastructure kicks off new PILOT project (15/10/2021)
- Second batch of NFFA-Europe proposals: evaluation completed! (17/03/2022)
- Third batch of NFFA-Europe proposals: evaluation completed! (17/03/2022)
- NFFA-Europe Memorandum of Understanding for the implementation of a long-term programme signed by 10 leading European Research Organizations (18/03/2022)
- Article about NFFA-Europe on the major Italian financial newspaper (11/07/2022)
- NFFA-Europe best poster award at this year's EMRS Spring Meeting goes to Julius Bürger (19/07/2022)
- Extended deadlines for training opportunities (25/08/2022)
- Fourth batch of NFFA-Europe proposals: evaluation completed! (4/10/2022)
- Fifth batch of NFFA-Europe proposals: evaluation completed! (4/10/2022)
- Work programme 2023-2024 officially published (9/12/2022)
- Opportunities in the frame of the NFFA Dissemination Campaign (6/03/2023)
- Sixth batch of NFFA-Europe proposals: evaluation completed! (8/03/2023)
- Seventh batch of NFFA-Europe proposals: evaluation completed! (8/03/2023)
- Eighth batch of NFFA-Europe proposals: evaluation completed! (8/03/2023)
- Best Poster Award MaRDA 2023 (22/05/2023)



Events


- ICTP Workshop on 2D Materials for Spin-Orbitronics (9/04/2021)
- NFFA-Europe @ EuroNanoForum 2021 (30/04/2021)
- ATMO-ACCESS Kick-Off meeting (6/05/2021)
- 1st GNeuS webinar (16/12/2021)
- Call for Application - CAROTS 2.0 Start-up school for scientists (14/02/2022)
- Symposium: New trends in advanced lithography and pattern transfer methods (30/05/2022)
- EMRS Spring Meeting 2022 (30/05/2022)
- 1st NFFA-Europe Pilot Training School (13/07/2022)
- JCNS Workshop 2022 Trends and Perspectives in Neutron Scattering: Experiments and data analysis in the digital age (22/07/2022)
- NFFA-Europe at Trieste Next 2022 (22/09/2022)
- Workshop on materials characterization and software tools (2/12/2022)
- 2nd International Conference on Nanotechnologies and Bionanoscience "NanoBio 2023" (27/03/2023)
- JCNS Workshop 2023 - Trends and Perspectives in Neutron Scattering: Future Instruments at Pulsed Sources (4/04/2023)
- NFFA-Europe Symposium "Quantum Nanomaterials" at EMRS Fall Meeting 2023 - Call for abstracts (25/05/2023)
- Two joint NFFA-Europe workshops on open data, microscopy and analytical large-scale facilities (15/06/2023)
- A keynote speech on NFFA-Europe at ANM 2023 (21/07/2023)

Other

- ERC says goodbye to Impact Factor to evaluate candidates (21/07/2021)
- Two open positions as UniMI researcher within NFFA-Trieste (5/10/2021)
- Success at Trieste Next 2022 (26/09/2022)


Below, we provide some examples of news pieces showcased on the website.

Project updates




Eight batch of NFFA-Europe proposals: evaluation completed!


46 proposals were collected at the deadline of 1 March 2023 and evaluated.



Seventh batch of NFFA-Europe proposals: evaluation completed!



Best Poster Award MaRDA 2023



Sixth batch of NFFA-Europe proposals: evaluation completed!



Project updates

08 Mar 2023



Eight batch of NFFA-Europe proposals: evaluation completed!

46 proposals were collected at the deadline of 1 March 2023 and evaluated.



38 of them had successfully passed the technical feasibility check and then undergone a scientific evaluation by the Access Review Panel.

31 are now the proposals accepted and that will access the most suitable NFFA-Europe site/sites in the next few months.

OTHER PROJECT UPDATES

Seventh batch of NFFA-Europe proposals: evaluation completed!

Best Poster Award MaRDA 2023

Sixth batch of NFFA-Europe proposals: evaluation completed!

Opportunities in the frame of the NFFA Dissemination Campaign

Fifth batch of NFFA-Europe proposals: evaluation completed!

Work programme 2023-2024 officially published

Events

SEP. 18TH
MONDAY

🕒 14.00 - 17.20

SEP. 19TH
TUESDAY

🕒 09.00 - 12.40

11 Sep 2023

NFFA-Europe Symposium “Quantum Nanomaterials” at EMRS Fall Meeting 2023 – Final Agenda

Discover the final Agenda of the Symposium on Quantum Nanomaterials organized by NFFA-Europe at the 2023 Fall Meeting of the European Materials Research Society.

11 Sep 2023



A series of NFFA-Europe webinars at NanoBio 2023



21 Jul 2023

A keynote speech on NFFA-Europe at ANM 2023

15 Jun 2023



Two joint NFFA-Europe workshops on open data, microscopy and analytical large-scale facilities

Industrial Access
datashare
login / register
your wishlist
submit your application

nffa.eu
research infrastructure

ABOUT
the infrastructure
OFFER
tools catalogue
APPLY
guidelines
OUTCOMES
the latest outcomes
NEWS
events & highlights

Events
15 Jun 2023

26 SEP 2023 - HEINZ MAIER-LEIBNITZ ZENTRUM (MLZ), GARCHING BEI MÜNCHEN, GERMANY

Two joint NFFA-Europe workshops on open data, microscopy and analytical large-scale facilities

Join us for two half-day workshops on cutting-edge topics in the world of nanoscience and nanotechnology.

NFFA-EUROPE WORKSHOPS

26.09.2023
Hybrid event:
Online | Heinz Maier-Leibnitz Zentrum (MLZ), Garching/Munich, DE

9.00 - 13.00
FAIR AND OPEN DATA IN NFFA-EUROPE PILOT AND BEYOND

14.00 - 17.50
BRIDGING MICROSCOPY AND ANALYTICAL LARGE-SCALE FACILITIES

NFFA-Europe is glad to announce **two upcoming workshops** which will explore some highly relevant issues in the world of nanoscience and nanotechnology. The

OTHER EVENTS

SYMPOSIUM
NFFA-Europe Symposium "Quantum Nanomaterials" at EMRS Fall Meeting 2023 - Final Agenda

A series of NFFA-Europe webinars at NanoBio 2023

A keynote speech on NFFA-Europe at ANM 2023

NFFA-Europe Symposium "Quantum Nanomaterials" at EMRS Fall Meeting 2023 - Call for

JCNS Workshop 2023 - Trends and Perspectives in Neutron Scattering: Future Instruments at Pulsed

2nd International Conference on Nanotechnologies and Bionanoscience "NanoBio 2023"

Fig. 1: Examples of project updates and events showcased on the NFFA-Europe Pilot website

Building upon the content found on our website and additional information, we are planning to create and circulate a newsletter containing project updates, offerings, scientific highlights from our users and details about joint activities, also including links to training videos and interviews.

LinkedIn and Twitter

During the reporting period, we have also established a substantial social media presence by creating and publishing engaging and informative posts tailored to the interests of our community, which comprises groups and individuals interested in nanoscience and nanotechnology.

The two social media channels chosen for our communication activities are LinkedIn and Twitter, which are commonly used by scientists, professionals and other individuals who are potentially interested in project-related issues.

Our posts are published on a regular basis and aim to inform visitors about research and training opportunities offered by NFFA-Europe Pilot; upcoming conferences, workshops and events organized or attended by NFFA-Europe researchers; scientific highlights and publications by NFFA-Europe users and researchers; news articles related to NFFA-Europe and any other topics of interest to our community.

Below, we provide some examples of posts published on LinkedIn and Twitter.



1

BROWSE & CHOOSE

Find nano/fabrication tools you need

2

SUBMIT YOUR PROPOSAL

Create single-entry point

3


HAVE IT EVALUATED

Ranked by an international peer-review panel

4

GET FREE ACCESS

and receive a contribution for travel & subsistence costs



NFFA-Europe

European distributed infrastructure providing open access to the widest range of tools for research at the nanoscale.

Research Services - Trieste · 486 followers · 1 employee

Riccardo & 2 other connections follow this page

✓ Following
Visit website
More

Home
About
Posts
Jobs
People


About

NFFA-Europe is a distributed research infrastructure that integrates nanofoundries (growth, synthesis and nano/micro-fabrication) with advanced characterization and fine analysis available at European large-scale facilities, and with theoretical and simulation tools. It offers users the possibility to carry out cut ... see more

Show all details →

Page posts


<
>



NFFA-Europe


486 followers · 1d · Edited ·

14 days to go! Join us for two workshops which promise to provide fresh insights on hot ...see more



5 · 2 reposts


Like
Comment
Repost
Send



NFFA-Europe

486 followers · 1w · Edited ·

10 days to go for two joint NFFA-Europe workshops focused on hot topics in #nanoscience a ...see more



2

Like
Comment
Repost
Send



NFFA-Europe
486 followers
3w •


Is your company conducting R&D projects on Materials for renewable energy?

NFFA-Europe provides free-of-charge access to more than 600 state-of-the-art instruments for research projects at the nanoscale.


- ✓ Reference persons for industrial users are available to GUIDE YOU throughout your journey.
- ✓ Experts can give you FREE SUPPORT and deliver technical feasibility checks of your workplan.

Find here the catalogue <https://bit.ly/3rjQWtt>
or contact us at tlnet@nffa.eu

#mems #nanomaterials #nanotechnology #innovation #knowledge transfer #RIs #research




FREE-OF-CHARGE ACCESS FOR INDUSTRY



CASE STUDY: Materials for renewable energy

- Solar power
- Hydrogen technologies
- Next generation batteries
- Wind energy



Possible workflow

- Pulsed Laser Deposition
- X-Ray Diffraction
- X-Ray Photoelectron Spectroscopy
- Transmission Electron Microscopy

FREE COMBINED ACCESS TO DIFFERENT TECHNIQUES
nffa.eu • 2 min read

NFFA-Europe
486 followers
3mo •


📢 We are excited to announce two half-day workshops focused on cutting-edge topics in the world of nanoscience and nanotechnology.

The two joint events will be held on September 26th at the MLZ (Heinz Maier-Leibnitz Zentrum) premises in Garching, Munich (Germany) and can be attended either in person or remotely.

The first workshop "FAIR and Open Data in NFFA-Europe Pilot and Beyond" will be focused on Open Data practices and FAIR principles and their relevance for the progress of nanoscience research.

The second workshop "Bridging Microscopy and Analytical Large-Scale Facilities" will switch the focus on how to seamlessly combine cutting-edge experiments at analytical large-scale facilities with complementary lab-based microscopy.


Find out more about these exciting events and register here:
bit.ly/448sxYS




NFFA-EUROPE WORKSHOPS

📍 Hybrid events: 26.09.2023

- Online
- Heinz Maier-Leibnitz Zentrum (MLZ), Garching/Munich, Germany



🕒 9.00 - 13.00
FAIR AND OPEN DATA IN NFFA-EUROPE PILOT AND BEYOND



🕒 14.00 - 17.50
BRIDGING MICROSCOPY AND ANALYTICAL LARGE-SCALE FACILITIES

Fig. 2: Examples of posts published on the NFFA-Europe Pilot LinkedIn page





Fig. 3: Examples of posts published on the NFFA-Europe Pilot Twitter profile



Website analytics

NFFA-Europe Pilot's website and social media platforms are critical hubs for disseminating information, engaging with the community and promoting the project's goals. For this reason, it is particularly useful to monitor and analyse the performances of these channels, in order to constantly improve their communication effectiveness.

Below, we provide some key website analytics for the reporting period.

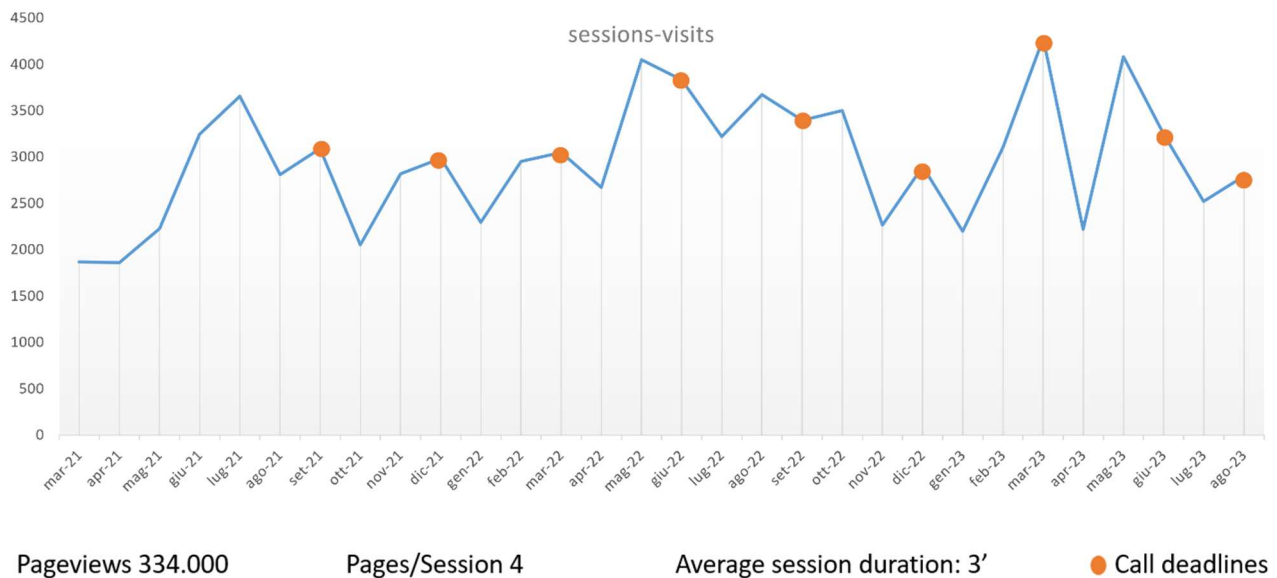


Fig. 4: Number of visits per month and related performance analytics

The project website received a total of 334,000 page views, with the number of visits per month ranging from about 2000 at the beginning of the reporting period to more than 4000 visits per month in May 2022, March 2023 and May 2023.

The number of visits has increased during the reporting period, with significant peaks around the call for proposal deadlines.

Both the number of pages viewed per session (4 pages) and the average session duration (3 minutes) are indicators of good website performance.

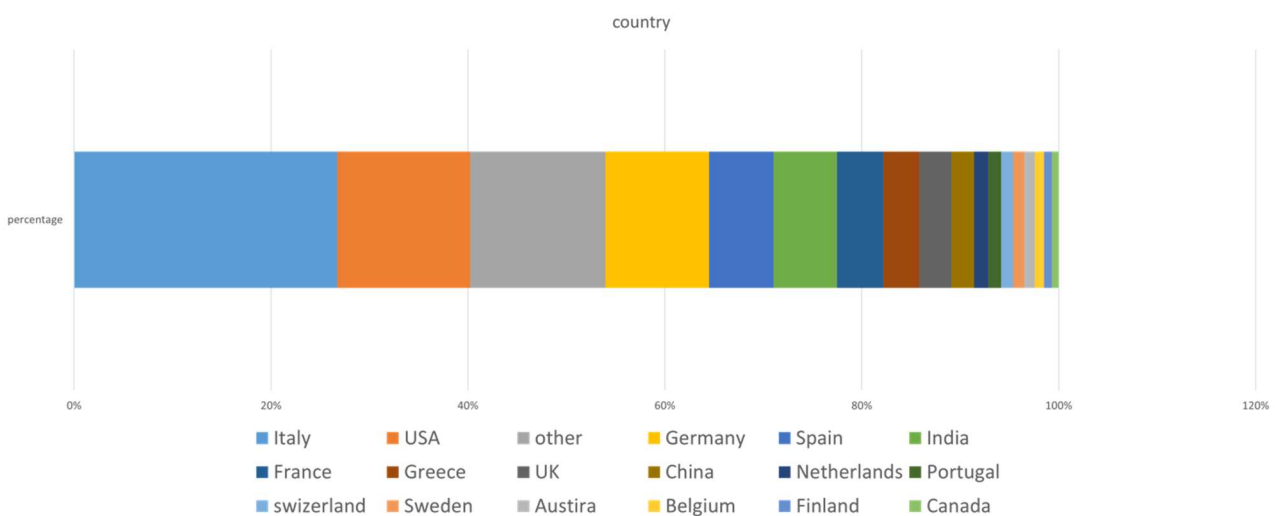


Fig. 5: Percentage of visits per country



Regarding the country of visitors, it is interesting to note the significant interest in the website from users based in the United States and, to a lesser extent, in India. The high percentage for Italy is predictable and likely influenced by the number of website visits made by the development and management team, which is based in Trieste. Germany, Spain, France, Greece and the UK collectively account for about 30% of the visitors' countries.

Social media analytics

Across all social media channels (LinkedIn and Twitter), the project reached a combined audience of 565 followers. Both channels have shown a steady growth throughout the reporting period.

Below, we provide a comprehensive and detailed breakdown of the analytics for each social media channel.

LinkedIn

The NFFA-Europe LinkedIn account currently counts 488 followers, mostly scientific researchers and students from fields related to nanoscience and nanotechnology. The number of followers has shown a regular and significant increase, with more than 250% increase since the beginning of the project.

The NFFA-Europe LinkedIn page received 701 views in the last year, with 301 views from desktop and 400 views from mobile devices, and 342 unique visitors.

In the same period, we published a total of 48 posts, maintaining an average posting rate of one post per week. The number of reactions was 323, with 58 reposts.

Over the last two years, the average number of impressions per month was 1330, with peaks of 3123 and 1882 impressions in 2023 (respectively in March and June) and peaks of 4990, 3552 and 3569 impressions in 2022 (respectively in May, July and September).

The average number of impressions per post was 314.

As far as the visitor demographics is concerned, the majority of visitors belong to the research services industry (28.1%) and to the higher education sector (7.2%). Most visitors are located in Italy, France, Germany, Belgium, UK and Spain.

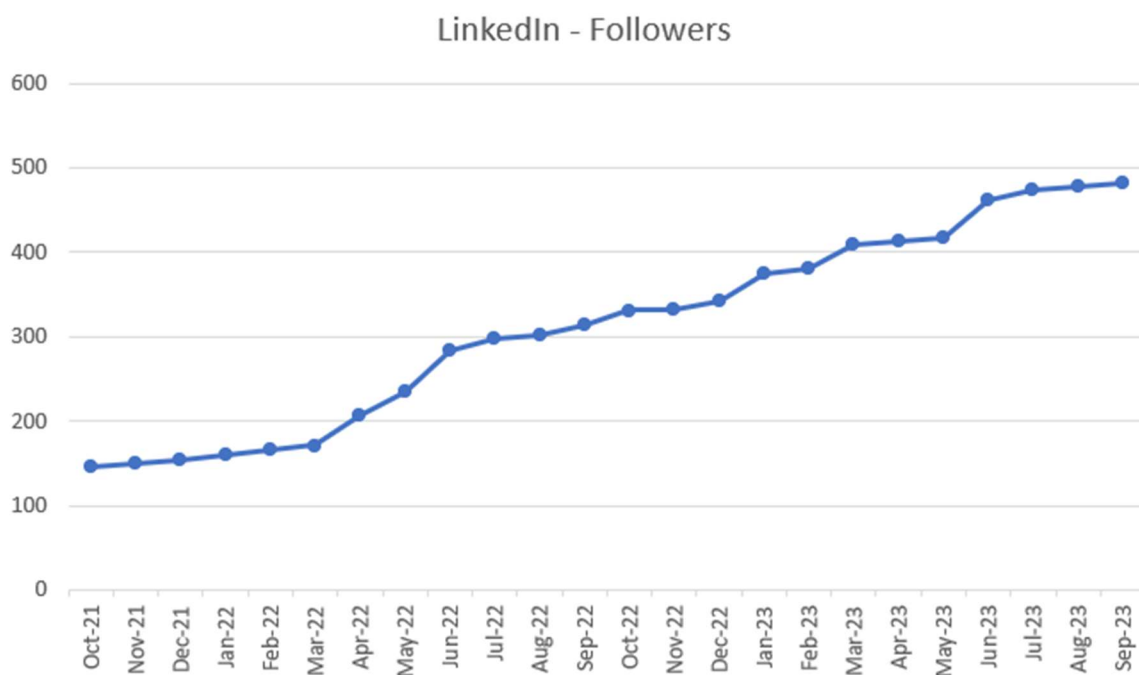


Fig. 6: Number of followers on LinkedIn over time

Twitter

The NFFA-Europe Twitter account presently has 77 followers, while it follows 73 individuals and institutions. The follower count has consistently risen, with a notable peak in new followers between April and July 2022.

Our Twitter community comprises a diverse mix of research scientists and students, EU institutions and projects, scientific conferences and private individuals.

During the reporting period, we published 99 posts, maintaining an average posting rate of one post per week/every ten days.

The average number of tweet impressions per month was 909, with peaks of 2156 and 1425 impressions in 2023 (respectively in March and June), peaks of 1807, 1807 and 1975 impressions in 2022 (respectively in March, May and July) and a peak of 1865 impressions in July 2021.

The average number of tweet impressions per post was 299.

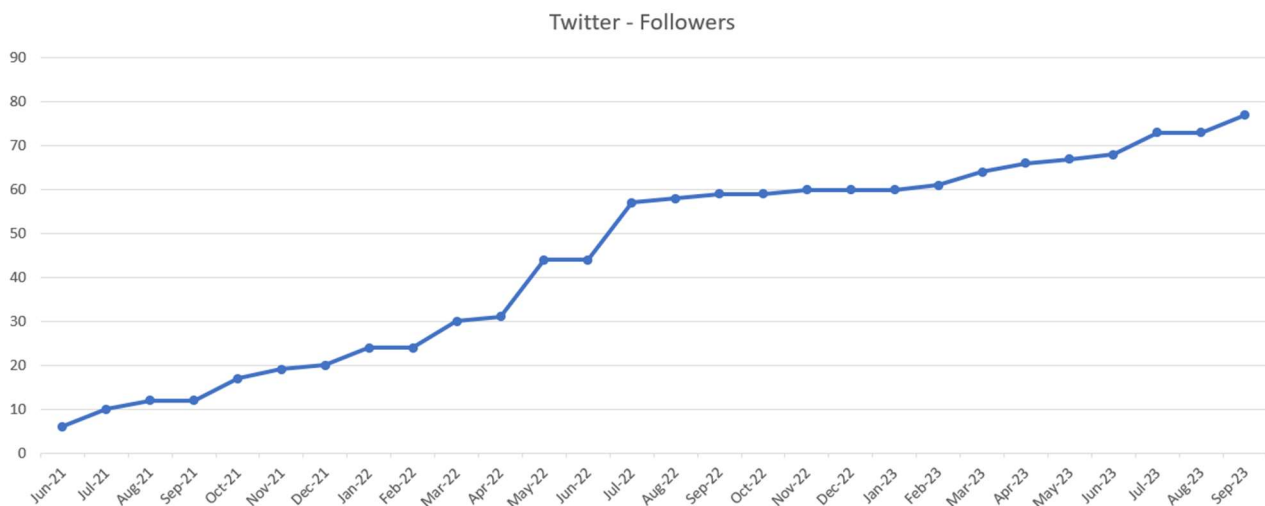


Fig. 7: Number of followers on Twitter over time

Video performance analytics

The videos showcased on the NFFA-Europe YouTube channel include three presentation videos of the project and twelve introductory videos on nanotechniques. These videos were not created within the framework of the current project, but the performance analytics remain of interest and for this reason we present them in this report.

The video content amassed a total of 102,038 views on YouTube, with a total watch duration of 1621.6 hours. The total number of subscribers to the NFFA-Europe YouTube channel is 850. Some of the videos have received an exceptionally high number of views, with the two videos on nanofabrication reaching more than 43,000 and 39,000 views. The overall numbers of impressions and engagement rate are also satisfactory.

Video content has therefore proven to be an effective medium for conveying complex nanoscience concepts. For this reason, we plan to produce a series of short video stories featuring our users and scientists, discussing their research and providing insights into the infrastructure in general.



Printed materials

The Communication toolkit designed and realized for the NFFA-Europe Pilot project includes (i) a project flyer which provides a general overview of the project, its offer and consortium; (ii) a project brochure which outlines the project and its offer in more detail; (iii) three posters focused on different aspects of the project; (iv) a project roll-up for display at partner institutions, conferences and events; (v) a project presentation to be used during conferences and talks.

The entire range of printed materials, including the different types of leaflets and posters and the roll-up, have been displayed and distributed at conferences, workshops and various types of events, as described in the next section of this report. Printed leaflets, in particular, remain an essential tool for outreach and communication. During the reporting period, 1100 leaflets were printed and strategically distributed at conferences, workshops and events. In addition to this number, project partners independently printed more copies of the leaflets.

In conclusion, NFFA-Europe Pilot places a strong emphasis on monitoring and reporting communication activities to ensure the efficacy of our outreach efforts. The analytics presented here reflect the effectiveness of our communication strategies, as well as our commitment to continuous improvement. These insights will guide us in optimizing our communication efforts and strengthening our impact within the nanoscience and nanotechnology community.

Task 2 - Dissemination

Efficiently disseminating project outcomes and results stands as a crucial pillar in advancing knowledge within the fast-evolving domains of nanoscience and nanotechnology. In this section, we present the variety of dissemination activities carried out in order to highlight the results achieved within the NFFA-Europe Pilot project.

Our dissemination efforts have made a significant contribution to advancing knowledge and showcasing accomplishments within the dynamic fields of nanoscience and nanotechnology. Through our comprehensive dissemination activities, we have effectively highlighted the results achieved within the NFFA-Europe Pilot framework, also providing researchers with a platform to share their scientific contributions and thereby expanding their reach.

Furthermore, the website section dedicated to project outcomes has allowed us to present a wealth of valuable materials, including scientific publications, deliverables, access statistics and nano-education resources that can greatly benefit the advancement of nanoscience and nanotechnology.

Despite the COVID pandemic has affected the dissemination activities until spring 2022, creating barriers that allowed only few activities, many activities have been carried out, as described here below, especially since the situation turned out to be again normal.

Dissemination plan

Within the end of Month 4, the dissemination plan has been delivered within the deliverable report D17.2. It recalls the activities identified in the WP17 of the EU GA. The management of the highlight proposals, in terms of criteria, award and success stories have been decided and made available for their use. Three types of dissemination events are included in the NFFA-EUROPE PILOT dissemination plan, namely the EMRS Meetings, the on-demand workshops and the academic dissemination, being detailed criteria and their implementation described in the D17.2.

Here below the results obtained during the first 30 months are described in detail.



Highlights proposals

Eighteen proposals received the *highlight* status during the review of the submitted ones, as described in the table below as a function of NFFA-EUROPE PILOT Call:

Call	1	2	3	4	5	6	7	8
Number of highlight proposals	0	4	2	2	1	4	3	2

Tab. 1: highlight proposals as a function of NFFA-EUROPE PILOT Call

These highlight proposals belong to different scientific and technological fields, as described in Fig. 8.

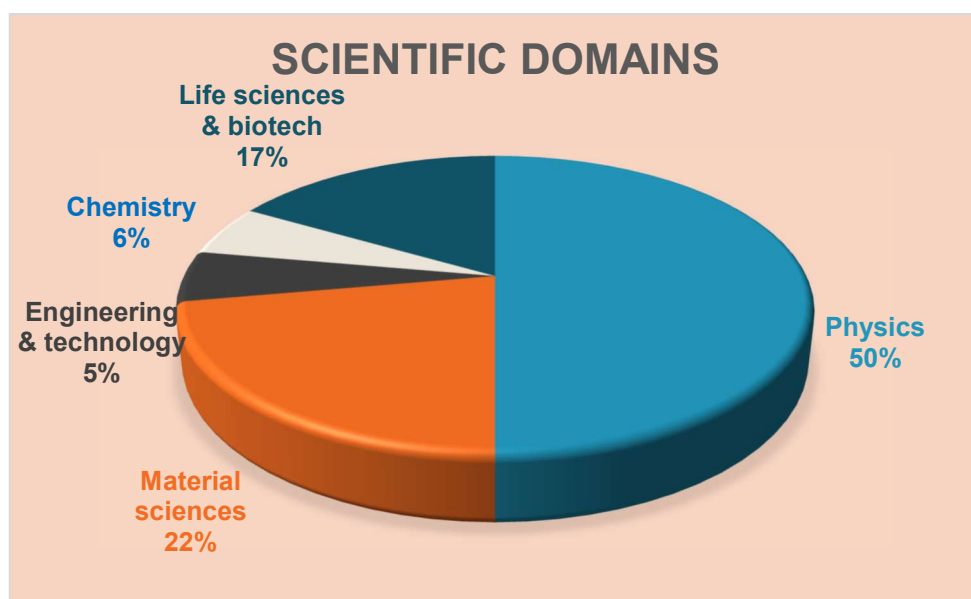


Fig. 8: the scientific domains of the highlight proposals submitted to NFFA-EUROPE PILOT.

The NFFA-EUROPE PILOT Partners associated to the highlight proposals are shown in Fig. 9.

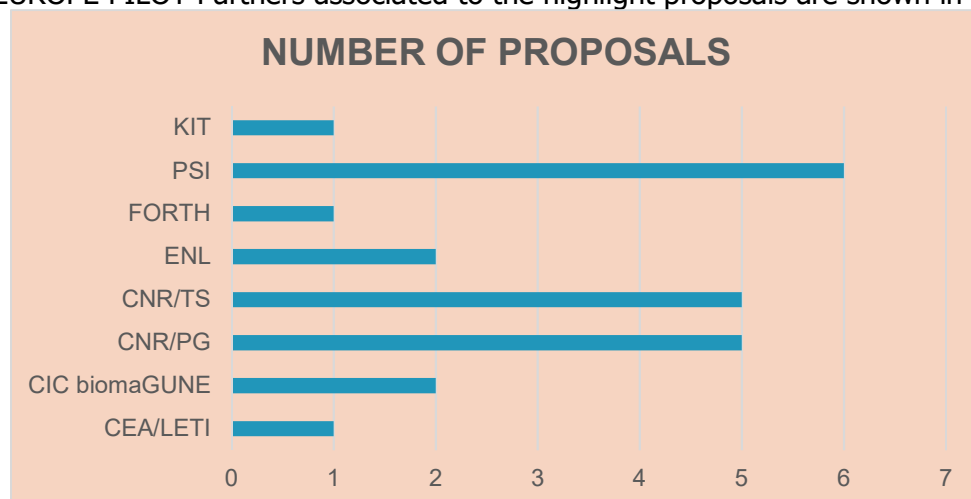


Fig. 9: the NFFA-EUROPE PILOT partners associated to the access of the highlight proposals

The highlight proposals received priority schedule for accessing the allocated instrument, and as soon as the results will become available, success stories on these proposals will be prepared and published.

Scientific highlights showcased on the website

Some researchers who have received support from NFFA-Europe are offered the opportunity to publish a short article in the Scientific Highlights section of the NFFA-Europe Pilot website, where they provide an overview of their recent research published in recognized scientific journals.

The researchers are chosen based on the results achieved during the research activities conducted within NFFA-Europe. They are asked to point out which NFFA-Europe facility they have collaborated with and which techniques they have used.

Their research findings are not only showcased on the NFFA-Europe Pilot website but are also promoted on the social media channels (LinkedIn and Twitter).

During the reporting period, the following 7 scientific highlights have been featured on our project website.

- pH-triggered interactions of viruses with nanocellulose for advanced filtration materials (10/05/2022)
- Unprecedented view of a single catalyst nanoparticle at work - X-rays reveal compositional changes on active surface (25/05/2022)
- Novel Charge Configuration Memory Devices - the study of energy efficiency, speed and scalability (10/06/2022)
- Generation of optical Schrödinger cat states in intense laser-matter interactions (13/06/2022)
- Dynamics of ultrafast excitonic Mott transition revealed using free-electron laser (15/07/2022)
- The secret life of single-atom catalysts (1/12/2022)
- Near-ambient pressure X-ray photoelectron spectroscopy enables in-situ observation of dynamic covalent chemistry in two-dimensional frameworks (21/03/2023)

The diagram below shows the number of views of all scientific highlights showcased on the website, including those published before the reporting period.

The top five highlights received more than 200 views during the reporting period, with the top one scoring almost 350 views. It is worth noting that articles published since March 2021 are among the most read. Additionally, it is noteworthy that the high interest in nanolithography is also confirmed by YouTube video analytics.



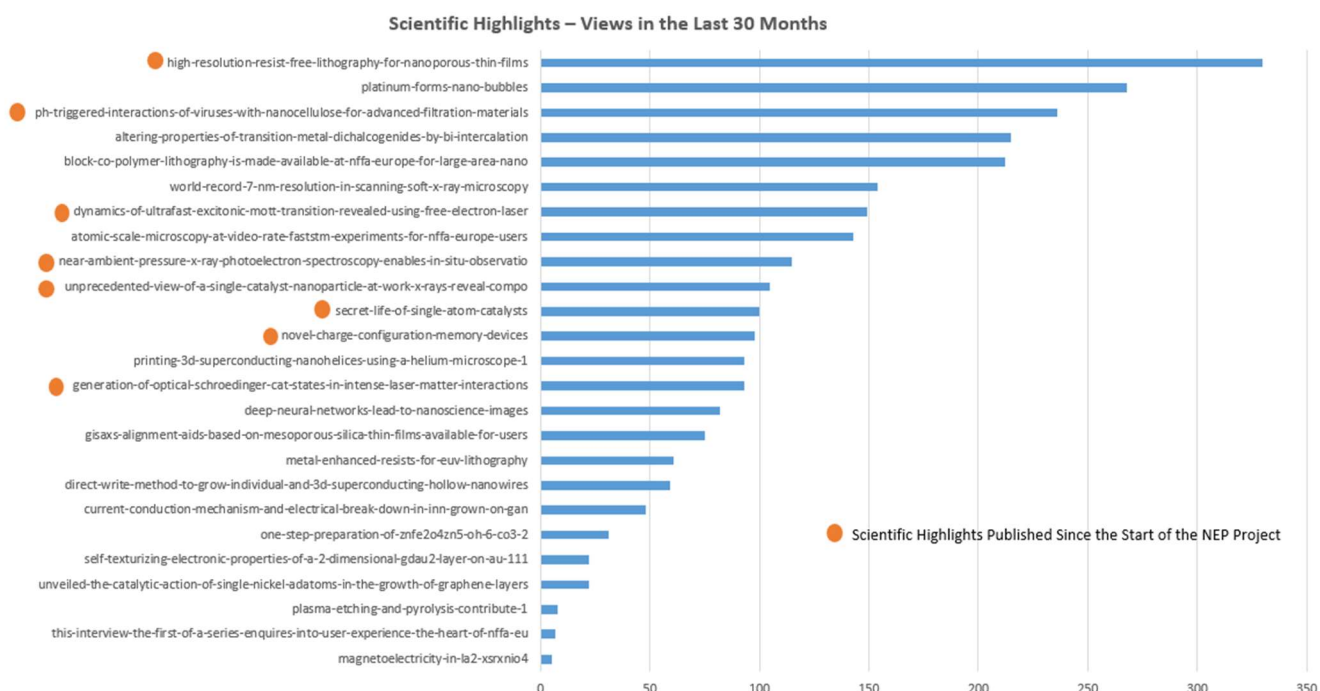


Fig. 10: Number of views of the scientific highlights showcased on the website

Outcomes showcased on the website

The NFFA-Europe Pilot website has a whole section dedicated to the outcomes of NFFA-Europe Pilot and NFFA-Europe projects. The Outcomes section showcases the scientific publications written by NFFA researchers and users, the deliverables produced in the framework of the project, the access statistics and the NFFA materials produced for nano-education.

Publications

The entire collection of scientific articles published by our researchers and users is available on the Outcomes>Publications section of the NFFA-Europe Pilot website and can be accessed through this link: <https://www.nffa.eu/outcomes/publications/>

Below, we provide some examples of publications showcased on the website.

Publications
[view all](#)


from our users

Materials Today Energy: 37 pp. 101395

Solar-assisted approach for the synthesis of nanoadsorbents for biogas desulfurization using wastes

K. Simeonidis; C. Martinez-Boubeta; I. Kellartzis; A. Makridis; E. Delli et al.

[Read Abstract](#)

[Link to publication](#) 


from our users

Chem. Mater. 2023

Lithium-Induced Reorientation of Few-Layer MoS2 Films

M. Sojková, I. Píš, J. Hrdá and T. Vojteková et al.

[Read Abstract](#)

[Link to publication](#) 

our research

ACS Nano 2023, 17, 16, 16080–16088

Culling a Self-Assembled Quantum Dot as a Single-Photon Source Using X-ray Microscopy

A. B. Dey, M. K Sanyal and A. Schropp et al.

[Read Abstract](#)


[Link to publication](#) 

Fig. 11: Examples of publications on the web site

Deliverables

The public deliverables produced in the framework of the project are available on the Outcomes>Deliverables section of the NFFA-Europe Pilot website and can be accessed through this link: <https://www.nffa.eu/outcomes/deliverables/>

Below, we provide some examples of deliverables published on the website.



Deliverables view all
<p>WP12 - JA2 - X-ray Wavefront Metrology, Correction and Manipulation</p> <p>D12.4 - First user experiment with corrected hard X-ray nanobeam</p> <p>Read Abstract</p> <p>Download full report </p>
<p>WP15 - JA5 - Correlative Nano-Spectroscopy and Nano-Diffraction</p> <p>D15.3 - Fabrication of nanoparticle pattern templates</p> <p>Read Abstract</p> <p>Download full report </p>
<p>WP2 - MGT2 - Pilot scheme for the management of a distributed research infrastructure offering harmonised, interoperable and integrated services</p> <p>D2.4 - First call for additional providers</p> <p>Read Abstract</p> <p>Download full report </p>

Fig. 12: Examples of publications on the web site

Access statistics

The NFFA-Europe Pilot webpage is constantly updated with data and statistics related to transnational access and proposals submitted and accepted.

Transnational Access Statistics

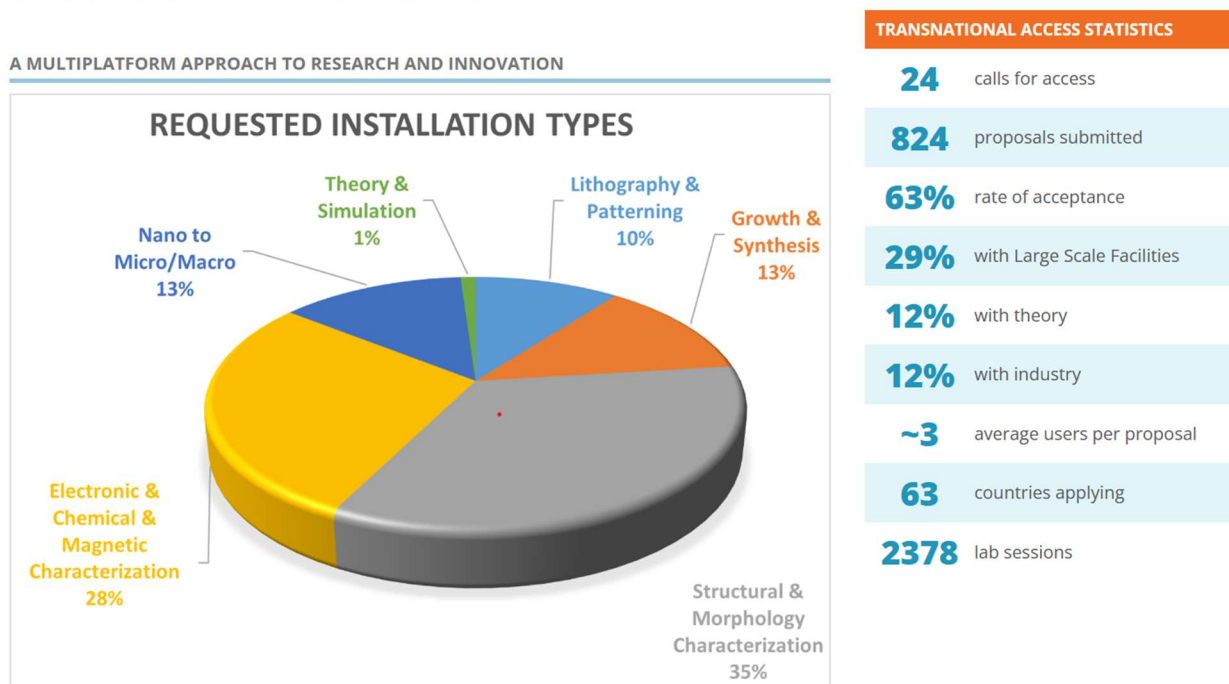


Fig. 13: Statistics on TransNational Access in terms of requested installations

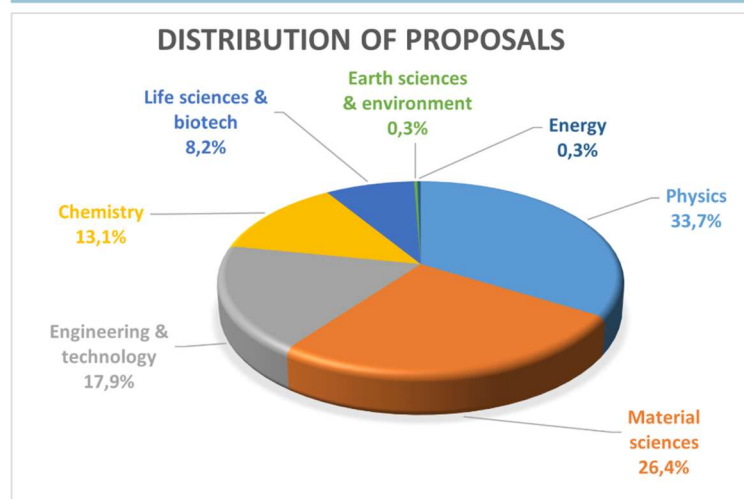


Fig. 14: Statistics on TransNational Access in terms of scientific fields of the submitted proposals

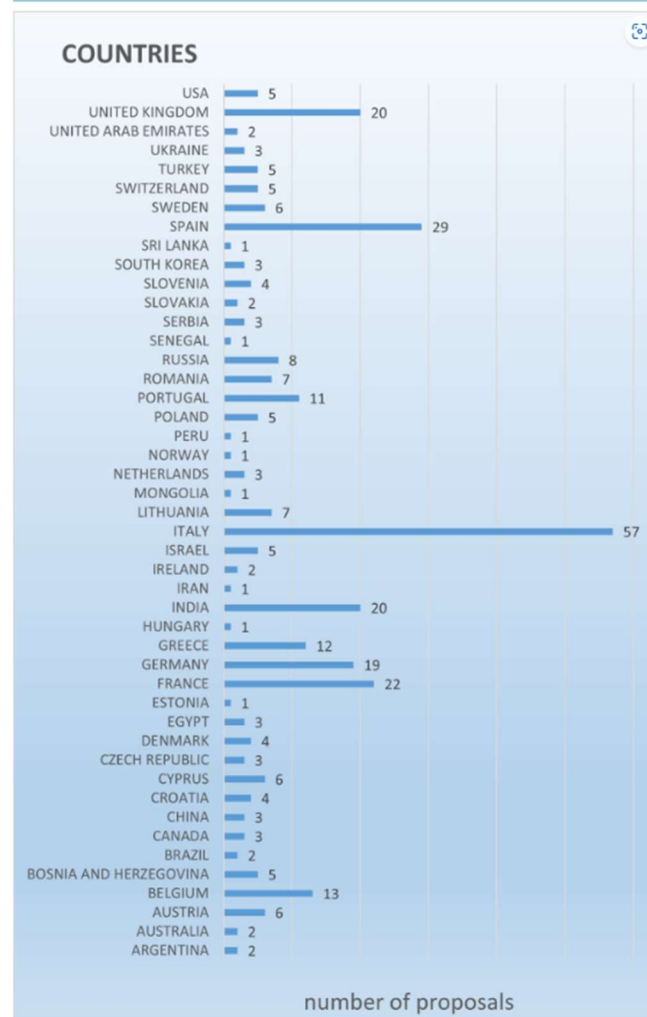


Fig. 15: Statistics on TransNational Access in terms of country of the PI

NFFA-EUROPE PILOT Dissemination events

The organization of NFFA-EUROPE PILOT events for disseminating the knowledge developed within the NFFA-EUROPE PILOT project plays a crucial role, in terms of attraction of new users and advertising the potentiality of the NFFA-EUROPE PILOT infrastructure. To this goal, NFFA-EUROPE PILOT committed to two types of events, namely NFFA-EUROPE PILOT sessions with the EMRS Meetings, on-demand workshops and events organized by the NFFA-EUROPE PILOT beneficiaries.

EMRS Meetings

As planned in the Annex 1B to the GA, the Symposium *New Trends in Advanced Lithography and Pattern Transfer Methods* was organized at the EMRS Spring Meeting 2022, on Monday May 30 and Tuesday May 31, 2022. The Chairs of the NFFA Symposium were Flavio Carsughi, FZJ, Germany, Francesc Perez-Murano, CSIC, Spain, Ivan Maximov, Lund Nano Lab, Sweden and Yasin Ekinci, PSI, Switzerland.

The Symposium was included in the official programme and the participants submitted their contributions through the EMRS submission system. The submitted contributions were assessed by the Chairs and the final programme was published on the EMRS Spring Meeting 2022 official web portal. The programme included:

- 1 presentation of the NFFA project of 15 min
- 7 invited talks of 30 min each
 - o Yasin Ekinci, PSI, Switzerland
 - o Damiano Giubertoni, Fondazione Bruno Kessler, Italy
 - o Gregor Hlawacek, HZDR, Germany
 - o Armin Knoll, IBM, Switzerland
 - o Alex Robinson, U. Birmingham, UK
 - o Raluca Tiron, CEA-LETI, France
- 14 contributed talks of 15 min each
- 15 posters

The EMRS Spring Meeting 2022 was an online event and all the presentations were held online, despite the world tended to turn out from the pandemic.

The participants at the Symposium fluctuated between 66 (during the closing remarks) and 112 throughout the whole Symposium, with an average number of 92.8 ± 11.8 .

The best contribution to the poster session was awarded with the best poster award decided by the Chairs to Julius Bürger, Paderborn Univ, Germany.



Fig. 16: the best poster award during the NFFA Symposium *New Trends in advanced lithography and pattern transfer methods* at the EMRS Spring Meeting 2022, online event.

During the first reporting period, the Symposium *Quantum Nanomaterials* at the Fall Meeting 2023 in Warsaw, Poland, was organized, although it will take place in the second reporting period (18-19

September 2023). The Chairs of the workshop are Connie Bednarski-Meinke, FZJ, Germany, Flavio Carsughi, FZJ, Germany, Jose Martin-Gago, CSIC, Spain and Giancarlo Panaccione, CNR, Italy. The contributions were collected through the EMRS portal by using the same procedure of the EMRS Spring Meeting 2022. The preliminary programme consists of

- 1 presentation of the NFFA project of 15 min
- 3 invited talks of 40 min each
 - o Domenico di Sante, Univ. Bologna, Italy
 - o Gloria Platero, CSIC, Spain
 - o Alex Hayat, Technion, Israel
- 10 contributed talks of 20 min each

Three invited speakers and 10 contributed talks have been selected by the Chairs. It was decided to allocate more time to each talk than the time allocated at the previous EMRS Meeting. Moreover, it was decided not to organize the poster session because it was physically located in another building. The EMRS is a subcontractor of the NFFA-EUROPE PILOT GA. Due to many reasons, among which the first online Symposium, the amount of funds foreseen to these Symposia was higher than the funds really used.

The trend shows already in the web analytics that nanolithography is one of the most successful topic of the NFFA-EUROPE PILOT project is confirmed also in the interest shown by the attendees of the EMRS Meetings.

On-demand workshops

The organization of on-demand workshops was foreseen in connection to the NFFA-EUROPE PILOT General Assembly, which was planned to take place on October 13, 2023, in Garching, Germany, one day after the NFFA-EUROPE PILOT General Assembly. In the present reporting period, we can only report on the organization of these two workshops, which will take place in the next reporting period.

Workshop 1 – FAIR and OPEN Data in NFFA-Europe Pilot and Beyond

September 26, 2023, from 09:00 to 13:00

Chairs: Rossella Aversa, KIT, Germany; Giuseppe Piero Brandino, eXact Lab, Italy; Mirco Panighel, CNR, Italy

Open Data practices and FAIR (Findable, Accessible, Interoperable, Reusable) principles are more and more central to various European research infrastructure activities as they allow to verify and reproduce data, fundamental processes for the progress of science. While their benefits start to be clear also to a broader scientific community, a significant effort is needed to make scientific results useful and sustainable. Good practices and an insight from other communities will be explored.

Workshop 2 – Bridging Microscopy and Analytical Large-Scale Facilities

September 26, 2023, from 14:00 to 17:50

Chairs: Marie-Sousai Appavou, FZJ, Germany; Thomas Keller, DESY, Germany

It aims to foster the application of X-ray and neutron experiments at analytical large-scale facilities combined with complementary lab-based microscopy. The opportunity to collect different microscopic, spectroscopic information and to extract one-to-one structure-property-relationships utilizing different imaging modalities is highly attractive for interdisciplinary nanoscience communities.

Both workshops have interdisciplinarity aspects as Data as well as TEM observations are not focussed on a special application, but apply to many different scientific ones, making both topics very important for the whole scientific community.



Dissemination events

The NFFA-EUROPE PILOT project has planned to finance 1 dissemination event per year, up to 4 events in total, with a financial contribution limited to 10.000€ or 50% of the total costs, whichever is the lowest.

Up to now, despite the announcements sent to the members of the NFFA-EUROPE PILOT partner, no request has been submitted to organize a NFFA-EUROPE PILOT dissemination event.

Although the pandemic has blocked the organization of events until spring 2022, this deviation shall be investigated in detail and corrective measures have to be implemented.

Academic dissemination

The NFFA-EUROPE PILOT project has committed to advertise the access to its Research Infrastructure as well as the results obtained by external users. These activities are managed in different ways:

- Decided by the WP17 Board, to advertise the NFFA-EUROPE PILOT project to new audiences
- Scientists who attend the conferences
- NFFA-EUROPE PILOT Communication and Dissemination experts on portal, social media ...

A NFFA-EUROPE PILOT Dissemination Register has been implemented, where every NFFA-EUROPE PILOT member that has carried out a Dissemination Activity, such as, for example but not only, attending a conference showing results obtained by the NFFA-EUROPE PILOT infrastructure, or presenting the NFFA-EUROPE PILOT project to a new audience, reports the activity therein. The data shown here below have been collected by analysing all the entries available in the Dissemination Register.

Tab. X shows the activities carried out in terms of frequency and targeted persons.

Activity	Number	Targeted persons
Participation to scientific events	47	6.600
Portal	5	6.000
Organization of events	4	400
Summer Schools / training events	4	85
Non scientific publications	1	200
Flyers	1	
Press releases	1	
Total	63	12.335

Tab. 2: NFFA-EUROPE PILOT dissemination activities in terms of frequency and targeted persons

The means used for the dissemination activities are reported in Tab. X, which shows that the largest mean of dissemination used by the NFFA-EUROPE PILOT members is the oral presentation, followed by the poster presentation and all the other means counts 9 actions.

Dissemination mean	Number
Oral presentation	32
Poster	21
Newsletter	3



Portal	3
Flyers	1
Video	1
Press release	1

Tab. 3: Means used in the Dissemination Activities

The targeted audiences reached by the Dissemination Activities are reported in Tab. X

Audience	Number
Scientific community	55
Industry	10
Stakeholders	4
Policy makers	3
Data Management community	4
Employees of the institute	2
General public	2
Students	2
Medias	1

Tab. 4: Targeted audience reached by the Dissemination Activities

Task 3 – Worldwide users

The activities focused on promoting NFFA-EUROPE PILOT access by users from outside of Europe. INL was able, as planned, to utilize its network as an international organization. The major limitation of the activities during 2021 and 2022 has been the COVID-19 pandemic, which resulted in cancellations and other changes for in-person events. Residual effects of the pandemic restrictions continued into 2023, as events have been postponed to 2023 from the preceding years and post-pandemic recovery introduced new uncertainties into planning processes for events.

Promoting access outside Europe

Due to the COVID-19 pandemic restrictions during 2021 and 2022, the major international events, where promotion of NFFA-EUROPE PILOT access was planned to address large audiences in the fields that can take advantage of NFFA-EUROPE PILOT infrastructure, have been either cancelled or switched to virtual format.

For example, the AVS International Symposium, an annual major event in the US and well attended by researchers from other countries, happened only in the virtual format in 2021. The virtual format offered limited promotional opportunities, in part because the switch to the virtual format was decided shortly before the event. As at other virtual events, there was no effective model found for interacting with virtual participants. NFFA-EUROPE PILOT attempted to use a promotional banner on the event website, as offered by the AVS, but the banner, despite being prominently displayed, did not generate any significant traffic to the nffa.eu website.

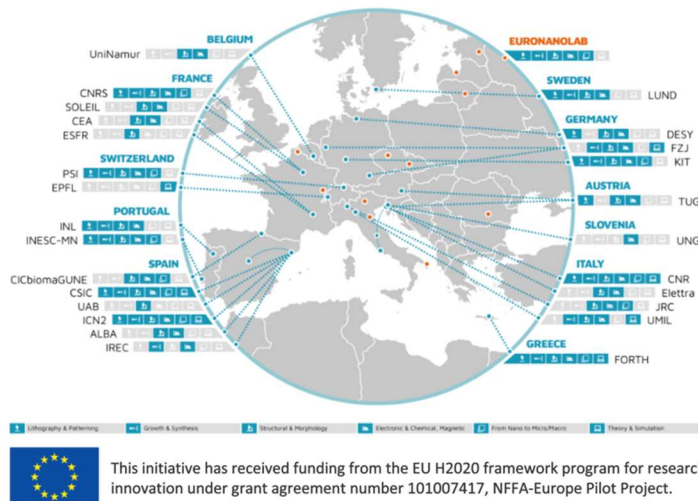
The Vacuum Society of Australia (VSA) organized the Virtual Vacuum Congress 2021 (VVC-21), which was attended by participants from Australia and countries in the Pacific region, as well as from Europe.



<https://vacuumcongress.com.au/>

INL was able to take advantage of a promotional opportunity that emerged as a format in virtual events whereby a scientific presentation of a result being highlighted is followed by a brief introduction of the enabling facilities. While not all the major events allowed such a format, the organizers of the VVC-21 did. Below is one of the slides about user access offered by NFFA-EUROPE PILOT, as presented during VVC-21.

Access to Advanced Infrastructure



- NFFA offers the widest range of tools for research at the nanoscale
 - Fabrication & characterization
 - Including large-scale facilities
- Free open access for users worldwide
 - Supported by EU funding
 - Regular calls for access applications

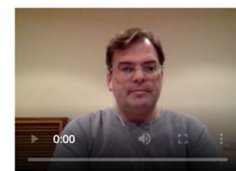


Fig. 17: a slide about user access offered by NFFA-Europe Pilot presented during VVC-21

The audience of VVC-21, however, was relatively small (<100 people), due to the challenges of promoting virtual events that were common in 2021.

Another example of a major international event planned initially as an excellent opportunity to promote access to NFFA-EUROPE PILOT for researchers from Japan, Australia, and other countries in the Asia/Pacific region was the 22nd International Vacuum Congress (IVC-22) organized by IUVSTA in Sapporo, Japan in September 2022. While in 2021 the organizers were planning for a physical event, the pandemic situation in Japan in 2022 made it impractically expensive and complicated to travel to Japan from Europe. The plans for a physical event, however, also meant that the organizers did not develop viable opportunities for promotion in the virtual format, so it was not possible for NFFA-EUROPE PILOT to participate.

Finally, the European Nanofabrication Research Infrastructure Symposium (ENRIS), a major international event with a focus on research infrastructure has been rescheduled for 2023. While an effort has been made to include the NFFA-EUROPE PILOT activities, the compressed schedule for preparing the conference logistics, coupled with the uncertainties of planning the first post-pandemic ENRIS made the addition of such specialized (or satellite) activities impossible to arrange with the organizers.

The dramatically increased costs of travelling internationally post pandemic also resulted in participation of NFFA-EUROPE PILOT in 2023 only in events in European countries. The situation is being monitored for the outlook in 2024 for practical possibilities to participate in events outside of Europe.

Contacts with International Partners

A productive cooperation has been established with another infrastructure-access project, ASCENT+. In particular, the coordinator of NFFA-EUROPE PILOT was invited to present at the virtual workshop



on “Research and Technology Infrastructures for the European Nanotechnology Ecosystem” that ASCENT+ organized during the virtual EuroNanoForum 2021 event.

<https://www.ascent.network/webinars/euronanoforum2021-workshop/>

Both virtual and in-person interactions with ASCENT+ continued in 2023, including at apc|m conference (see Fig. 18). and during research infrastructure sessions at EuroNanoForum 2023.



Fig. 18: Luis Fonseca and Dmitri Petrovykh at the ASCENT+ booth at apc|m

Contact has been established with Global Quantum Leap (GQL) project for international cooperation that has been funded by NSF and includes the US National Nanotechnology Coordinated Infrastructure (NNCI) and Nanotechnology Platform Japan as partners. Networking activities and events organized by GQL, however, have been limited due to the pandemic conditions. One of the specific goals of this interaction is to maintain the contacts as national initiatives in the US and Japan are evolving in upcoming funding cycles.

Contact has been initiated with the office of the US National Science Foundation (NSF) that deals with international cooperation.

Contact has been established with the US National Nanotechnology Coordination Office (NNCO).

Contact has been established with RIKEN Europe Office, with a particular emphasis on the role of RIKEN in managing and operating research infrastructure in Japan.

Contacts with potential partners in China have been limited, due to the continued restrictions on travel to and from China.

Contact has been initiated with the Australian National Fabrication Facility (ANNF).

Discussions are currently ongoing with ASCENT+, ANNF, GQL, and NNCI to cross-promote access provision by exchanging links on the project websites.

Task 4 – Training and Education

In the attempt to make young scientists fully aware of using research infrastructures as a unique resource for their research and scientific carrier, specifically in nanoscience a series of training schools and special training visits are organised.

NFFA-EUROPE PILOT Training Schools

A dedicated website (by Promoscience) was created in order to inform the participants about the school, the submission process, and general information. The website is: <https://www.nffa.eu/NFFA-Europe-Pilot-training-school/>



The 1st NFFA-EUROPE PILOT Training School is open to graduate students, post-docs, young researchers, including technicians & engineers, and, in general, to all scientists from academic and industrial communities interested in acquiring knowledge and hands-on experience about the instruments and techniques offered by NFFA-Europe. The training school will emphasize possibilities and synergies, using different Fine Analysis techniques for nanocharacterization of materials or devices. Participants will be selected on the basis of their scientific and technical background. Some photos of the website are shown below:

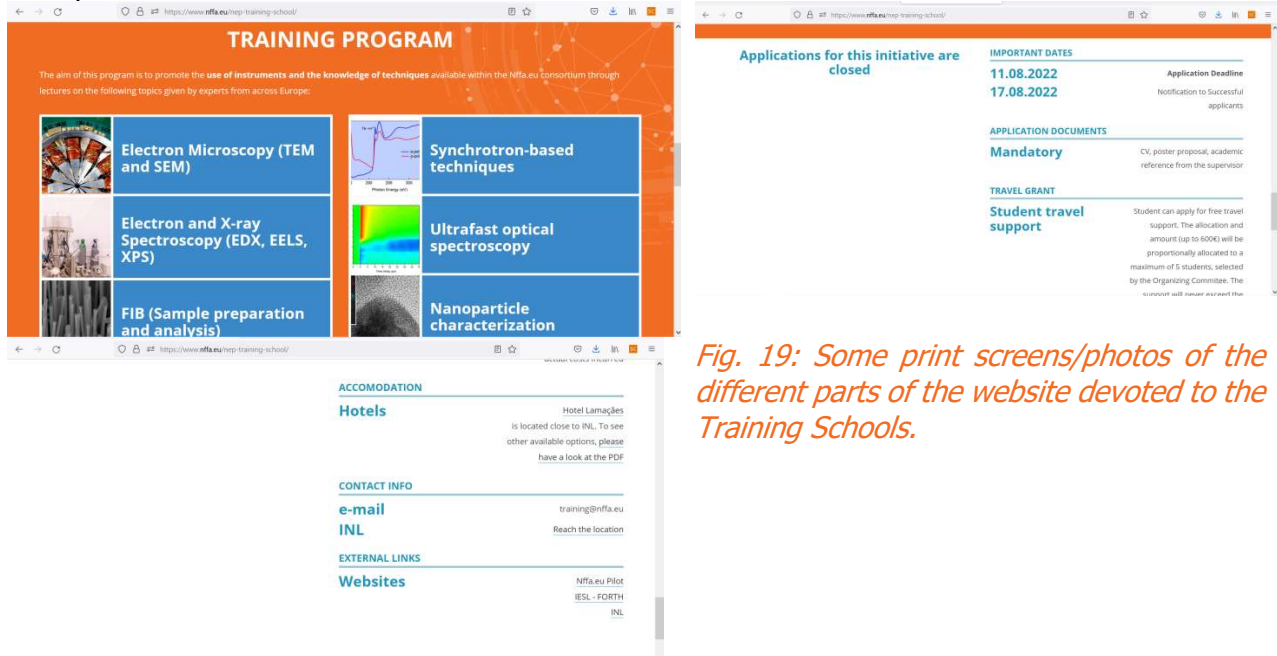


Fig. 19: Some print screens/photos of the different parts of the website devoted to the Training Schools.

The 1st NFFA-EUROPE PILOT Training School was organised by INL, Portugal, FORTH, Greece and the NFFA coordinator devoted to "Fine-analysis tools for nanocharacterization".

The program and poster of the school are shown below:



1st Nffa.eu Pilot Training School 27-28 September 2022, INL, Braga - Portugal

Program

Tuesday 27 September	Wednesday 28 September
Registration 08:30 - 09:00	EDX and EELS 09:00 - 10:00 Lecturer: Dr Enrique Carbo
Welcome and practical information 09:00 - 09:30	Poster Session & Coffee-Break 10:00 - 10:30
Transmission Electron Microscopy I 09:30 - 10:30 Lecturer: Prof Paulo Ferreira	Scanning Electron Microscopy 10:30 - 11:30 Lecturer: Dr Enrique Carbo
Poster Session & Coffee-Break 10:30 - 11:00	Non-Linear Microscopy and Spectroscopy I 11:30 - 12:30 Lecturer: Dr Sotiris
Transmission Electron Microscopy II 11:00 - 12:00 Lecturer: Prof Paulo Ferreira	Lunch 12:30 - 14:00
X-Ray Photoelectron Spectroscopy 12:00 - 13:00 Lecturer: Dr Alex	NP Characterization I 14:00 - 15:00 Lecturer: Dr Caterina Minelli
Lunch 13:00 - 14:30	Poster Session & Coffee-Break 15:00 - 15:30
Focused Ion Beam 14:30 - 15:30 Lecturer: Dr Leonard Francis	NP Characterization II 15:30 - 16:30 Lecturer: Dr Luis Carlos
Laboratories Tour 15:30 - 17:00	Non-Linear Microscopy and Spectroscopy II 16:30 - 17:30 Lecturer: Dr Sotiris
Social Dinner 19:30	



TRAINING SCHOOL SERIES
ON NANOSCIENCES AND NANOTECHNOLOGIES

Training school on

Fine-analysis tools for nanocharacterization

The 1st Nffa.eu Pilot training school aims at promoting the use of instruments and the knowledge of techniques available within the consortium

INL, Braga - Portugal
September 27-28th 2022

Interested in acquiring knowledge and hands-on experience?

Our program includes:

- Lectures by experts from across Europe
- Visits to dedicated INL facilities furnished with TEM, SEM, FIB, and XPS instruments.

TOPICS:

- Electron Microscopy
- Electron and X-ray Spectroscopy
- FIB
- Synchrotron-based techniques
- Ultrafast optical spectroscopy
- Nanoparticle characterization

All lessons will be held in English
Student travel support available
Application deadline: 22.07.2022

Contact us:
training@nffa.eu

Find out more & register at
nffa.eu/nfp-school-2022

Fig. 20: 1st NFFA-EUROPE PILOT Training School on Fine-Analysis tools for nanocharacterization at INL, Braga, Portugal on 27-28th September 2022: the program (left) and the Poster of the School (right).

On Tuesday, 27th September 2022, the first day of the school, Dr. Dmitri Petrovykh, the local organiser of INL facility welcomed all the participants.



Fig. 21: 1st NFFA-EUROPE PILOT Training School at INL, Braga, Portugal. A group photo of all the participants and the lecturers of the 1st day of the school, Tuesday, 27th September 2022, the morning session.

The Lecturers Prof. Paulo Ferreira, Dr. Alex Bondarchuk and Dr. Leonard Francis presented their Fine-Analysis Nanocharacterisation techniques as shown below:



Fig. 22: Prof. Paulo Ferreira (INL facility) presented the TEM principle, sample preparation and various findings of this Electron Microscopy technique.

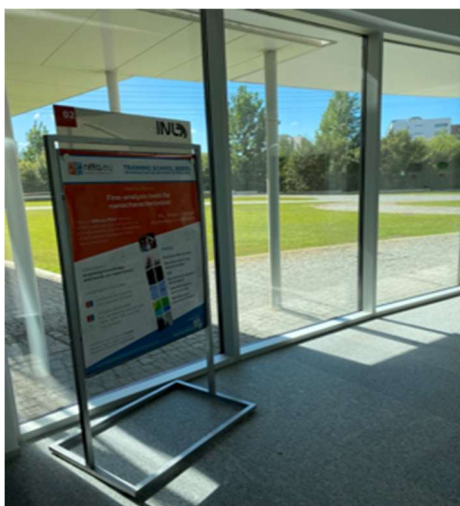


Fig. 23: Dr. Alex Bondarchuk (INL facility) discussed the XPS technique and the advantages and disadvantages of this Fine-Analysis technique.



Fig. 24: Dr. Leonard Francis (INL facility) described the Focused Ion Beam technique.

There was a Poster Session during both days, where the participants had the chance to present their projects and discuss with the rest of the participants and lecturers' issues that they might have. Pictures taken during the Poster Sessions are shown below.



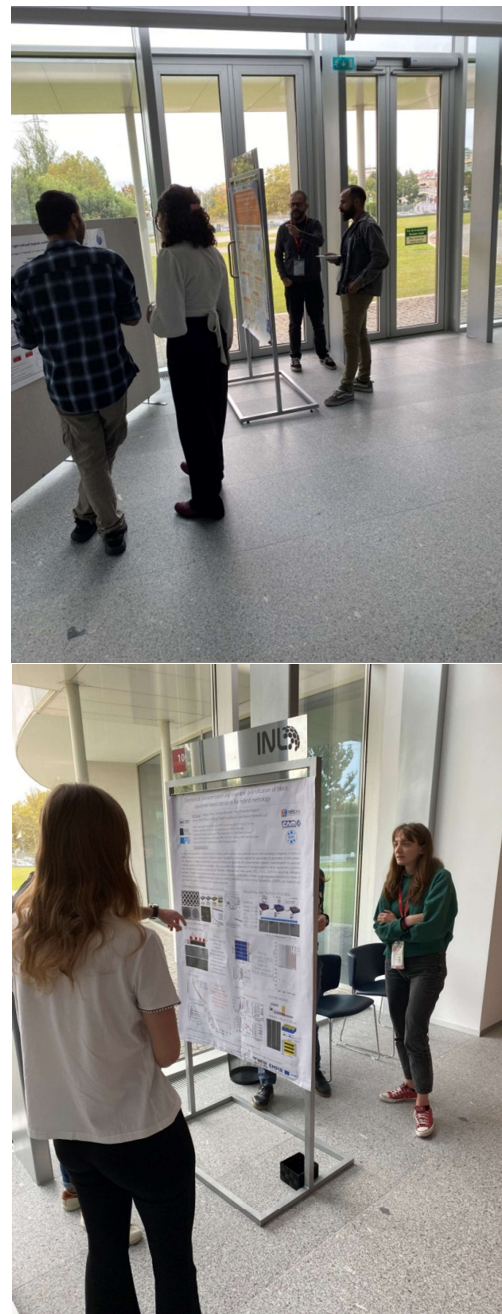


Fig. 25: Poster Sessions taking place during the Coffee breaks at both days of the Training School.

Furthermore, one of the most exciting event in the Training School program was the tour to the INL Facilities. It was a 2 hours tour where all the participants had the opportunity to see the facilities such as Clean Rooms, XPS, TEM and SEM and ask many questions about practical issues and more general information as shown below.

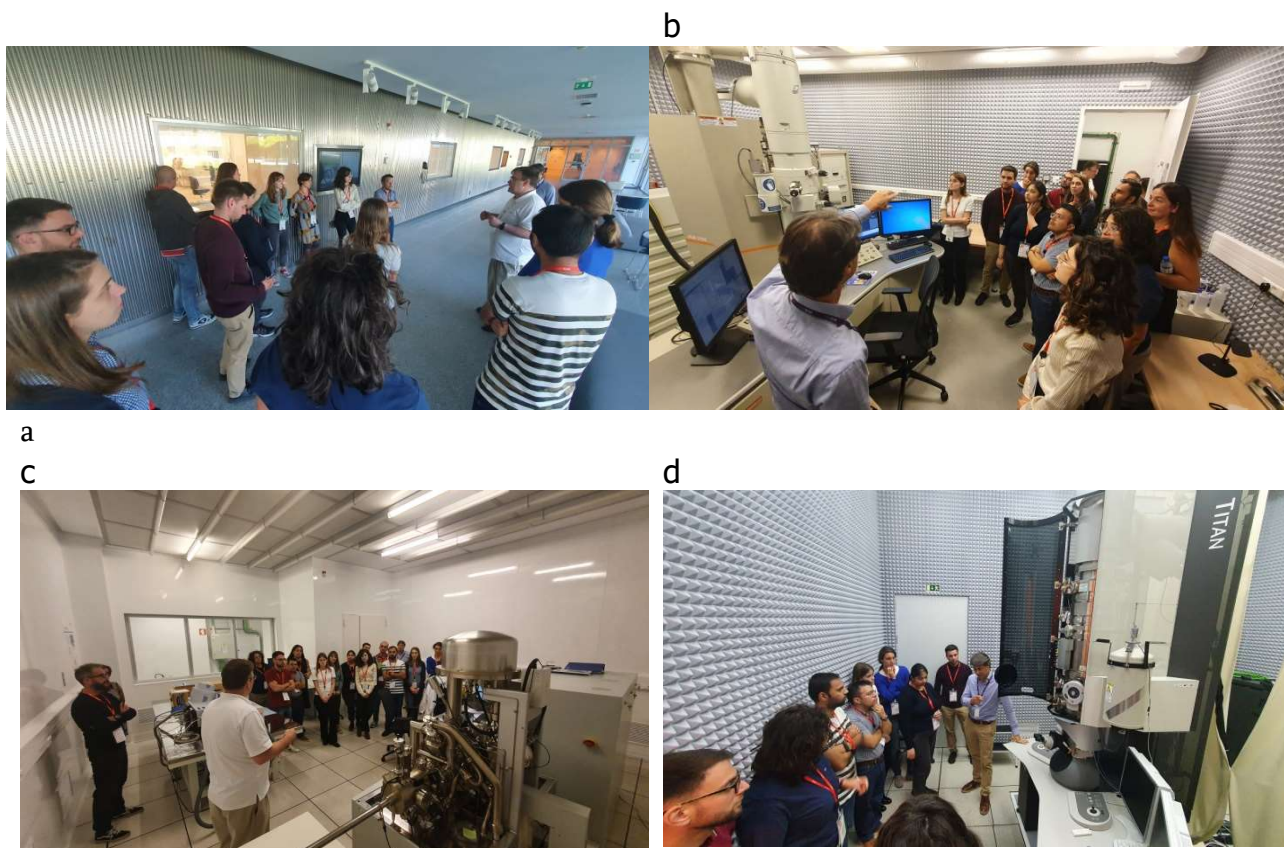


Fig. 26: Tour to the INL facilities: a) clean room b) SEM c) XPS d) TEM

The Social Program of the School included a Social Dinner on Tuesday, 27th September 2022 and socialising among the participants at the last day of the school as shown below.

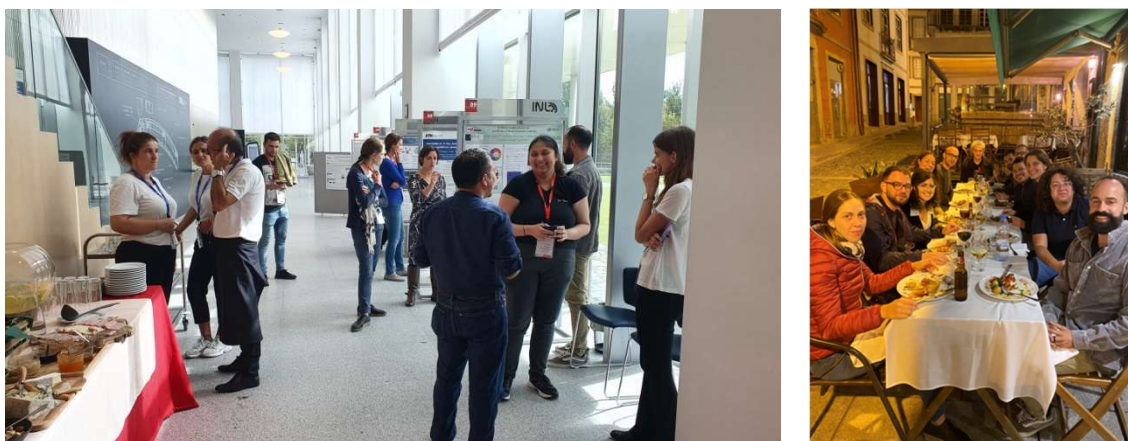


Fig. 27: Socializing during the coffee breaks at the School and in the evening.

On Wednesday, 28th September 2022, the second day of the school, the Lecturers included Dr. Enrique Carbo-Argibay, Dr. Sotiris Psilodimitrakopoulos, Dr. Caterina Minelli and Dr. Luis Carlos Colocho Hurtarte as shown below.



Fig. 28: Dr. Enrique Carbo-Argibay (INL facility) presented the SEM and EDX techniques.



Fig. 29: Dr. Sotiris Psilodimitrakopoulos (FORTH) introduced the Non Linear Microscopy & Spectroscopy technique and showed examples in Biology and in 2D materials



Fig. 30: Dr. Caterina Minelli (NPL facility) presented different nanocharacterisation techniques e.g. XPS for NanoParticles characterisation and pointed out the importance of ISO standards and guidelines.



Fig. 31: Dr. Luis Carlo Colocho Hurtarte (ESRF) described other Fine-Analysis techniques for Nanoparticles characterisation.

NFFA-EUROPE PILOT Special Training Visits

A dedicated website (by Promoscience) was created in order to inform the participants about the training visits, the submission process, and general information. The website is: <https://www.nffa.eu/NFFA-Europe-Pilot-special-training>. The NFFA-EUROPE PILOT Special Training Visits are open to team members of granted proposals (one per each granted proposal) who can benefit from hands-on sessions in the assigned provider's laboratory before the scheduled access. This aim to get users acquainted with the techniques and methods needed for their experiments before the actual start of the access session. The newly acquired skills will allow them to contribute with more insider knowledge to their investigations, use time at their disposal more effectively and build future collaborations with the in-house staff. Participants should communicate with training@nffa.eu to check the availability of Special Trainings at their assigned access site and for assistance in obtaining the facility's consent to be visited. The duration should typically not exceed 2 weeks and should take place within 6 months from their approval. NFFA-Europe will cover the



travel and subsistence of the trainee as a simple extension of the scheduled transnational access. The service will be provided as long as the allocated budget is available.

Some photos of the website are shown below:

SPECIAL TRAINING APPLICATION FORM

Please fill out in English | *Mandatory Field

Host Institution*

NFFA-Europe Proposal ID*

Estimated Duration*

Objectives of the Training Visit* (0/150 words used)

USER INFORMATION

First Name* Last Name*

Affiliation*

E-mail Address*

Job / Research Role

CV* Time and Task Plan

☐ I accept that the form entries are checked for spam and stored encrypted for 14 days.

APPLY

Personal data will be processed according to [NFFA-Europe privacy policy](#)

IMPORTANT DATES

Starting Date Accepted Special Training Visits should take place **within 6 months from their approval** and before the related proposal scheduled access.

DURATION

Visit Length The duration of Special Training Visits should typically not exceed **2 weeks.**

APPLICATION DOCUMENTS

Mandatory CV

Optional Time and Task Plan (e.g. Gantt Chart)

SUPPORT

Trainee financial support Travel and subsistence of the trainee will be covered by NFFA-Europe as a simple extension of the scheduled transnational access.

CONTACT INFO

e-mail training@nffa.eu
tlnet@nffa.eu

Fig. 32: Some print screens/photos of the different parts of the website devoted to the Training Visits.

FORTH has undertaken the necessary communication with the users. In particular, FORTH checks the availability of Special Trainings and assists in obtaining the facility's consent to be visited.



Finally, in the framework of NFFA-EUROPE PILOT Training Visits two users have already visited the host Institutions of their choice. Moreover, one additional user is currently scheduling his visit. In the following table, all the statistics are presented in detail.

Number of applications	Accepted	Rejected	Ongoing	Finished
5	3	2	1	2

Tab. 5: statistics of the Training Visits

E-learning videos

A series of videos will be collected from various NFFA-EUROPE PILOT JA participants. The main requirements of the videos are: 15-45 minutes pre-recorded videos. The main options of the videos are i) on topics including general management of user access, interactive remote access, integration of complementary analytical tools, optimization of growth methods or protocols for a given class of materials (e.g. quantum materials), management of the acquired data sets, FAIRification and archiving, tutorials for open-access codes for modelling and computer simulation, transfer of scientific results to innovation, etc; ii) material from lectures performed remotely in conferences/seminars etc and iii) NFFA-EUROPE PILOT specialised lecture or webinar on specific expertise topic.

FORTH in the framework of the 2nd International Conference on Nanotechnologies and Bionanoscience "NanoBio 2023" which took place from 11th-15th September 2023 in Heraklion, Crete, Greece organized online seminars where the audience could watch the speakers' presentations. Fig. 33 shows the announcement of the NFFA-Europe webinars at NanoBio 2023 on the website (<https://www.nffa.eu/news/events/nanobio2023-webinars/>).

11 SEP 2023 - HERAKLION, CRETE (GREECE)

A series of NFFA-Europe webinars at NanoBio 2023

Join us for a series of instructive webinars on cutting-edge topics that will be delivered at the International Conference on Nanotechnologies and Bioscience.



UPCOMING WEBINARS

📅 11-15 September 2023 | 📍 Hybrid | ✉️ training@nffa.eu









International Conference on Nanotechnologies and Bionanoscience

NFFA-Europe is thrilled to announce a **captivating series of webinars** that will delve into a wide range of topics related to cutting-edge aspects of nanoscience and nanotechnology.

These webinars are being organized as part of NFFA-Europe's e-learning and digital schools on-demand activities.

OTHER EVENTS

-  NFFA-Europe Symposium "Quantum Nanomaterials" at EMRS Fall Meeting 2023 – Final Agenda
-  A keynote speech on NFFA-Europe at ANM 2023
-  Two joint NFFA-Europe workshops on open data, microscopy and analytical large-scale facilities
-  NFFA-Europe Symposium "Quantum Nanomaterials" at EMRS Fall Meeting 2023 – Call for
-  JCNS Workshop 2023 - Trends and Perspectives in Neutron Scattering: Future Instruments at Pulsed
-  2nd International Conference on Nanotechnologies and Bionanoscience "NanoBio 2023"



We invite you to register for these exciting webinars by contacting us at the following email address: training@nffa.eu

EVENT INFORMATION	
FROM	11 Sep 2023
TO	15 Sep 2023
LOCATION	Heraklion, Crete (Greece)
ORGANIZER	Emmanuel Stratakis and Emmanuel Kymakis
Go to event website	

They will be delivered as **plenary lectures**, chaired by Emmanuel Stratakis and Emmanuel Kymakis, at the 2nd International Conference on Nanotechnologies and Bionanoscience (NanoBio2023) that will take place from **September 11th to 15th in Heraklion, Crete (Greece)**.

The first webinar is scheduled for **Monday, September 11th at 8:30 (CET)** and will explore two diverse aspects of nanotechnologies:

- **Intelligentsia of Nano-Architected Hierarchical Materials**, presented by Julia Greer, California Institute of Technology (Caltech), USA
- **Autophagic mechanisms and cellular homeostasis during ageing**, presented by Nektarios Tavernarakis, Foundation for Research and Technology-Hellas (FORTH), Greece

The second webinar will be held on **Tuesday, September 12th at 8:00 (CET)** and will delve into three different topics:

- **Nanobiotechnology and Intelligent Materials in a Diverse, Inclusive and Convergent World**, presented by Nicholas Peppas, The University of Texas at Austin, USA
- **Metallic two dimensional materials for lithium sulphur batteries**, presented by Manish Chhowalla, University of Cambridge, UK
- **Inelastic molecular collisions & the gas mean free path in air**, presented by Sotiris Pratsinis, ETH Zurich, Switzerland

Lastly, the third webinar will take place on **Friday, September 15th at 8:00 (CET)** and promises to provide fresh insights into the following issues:

- **Materials for Eco-Design Strategies for an Innovative Industry**, presented by Rodrigo Martins, NOVA University Lisbon, Portugal
- **Thin Film Implants for Bioelectronic Medicine**, presented by George Malliaras, University of Cambridge, UK

Fig. 33: Some print screens/photos of the announcement of the NFFA-Europe webinars at NanoBio 2023 on the website (<https://www.nffa.eu/news/events/nanobio2023-webinars/>).

Indicative images of the presenters are also shown below:

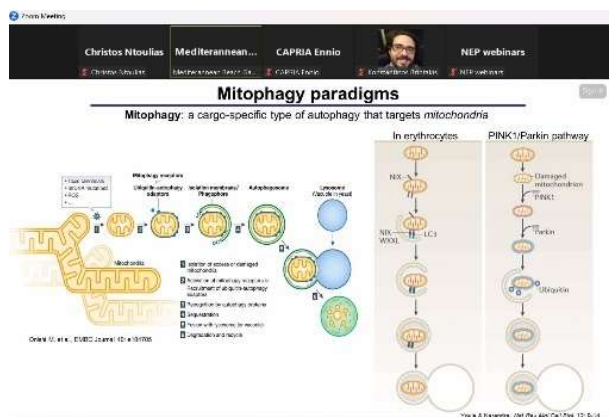


Fig. 34: Prof. Nektarios Tavernarakis delivered a presentation on "Autophagic mechanisms and cellular homeostasis during ageing".

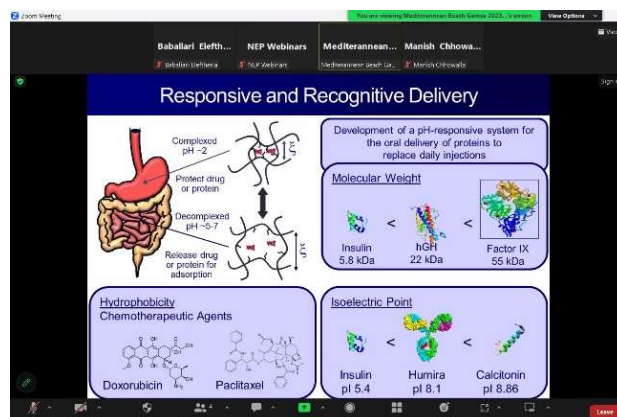


Fig. 35: Prof. Nicholas Peppas delivered a presentation on "Nanobiotechnology and Intelligent Materials in a Diverse, Inclusive and Convergent World".



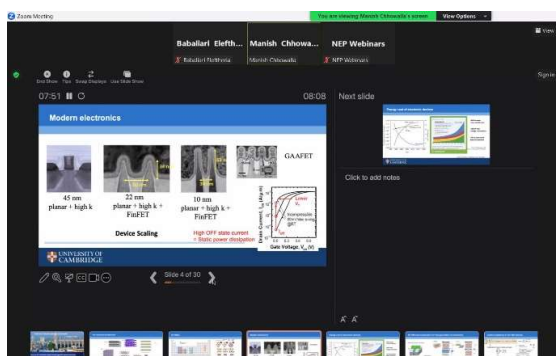


Fig. 36: Prof. Manish Chowalla delivered a presentation on "Metallic two dimensional materials for lithium sulphur batteries".

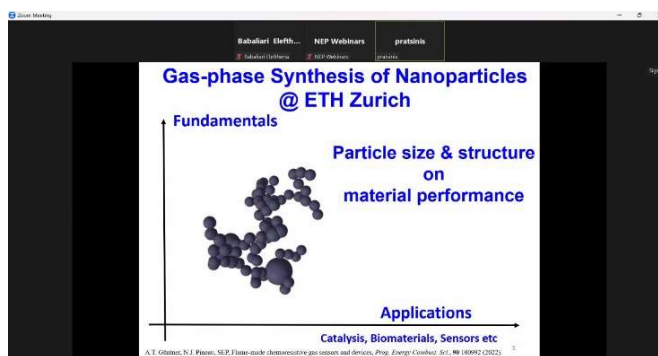


Fig. 37: Prof. Sotiris Pratsinis delivered a presentation on "Inelastic molecular collisions & the gas mean free path in air".

The overall e-learning material will support NFFA-EUROPE PILOT dissemination activities, teaching and training actions and will be publicly available, since all material prepared will be uploaded to the NFFA-EUROPE PILOT website and the NFFA-EUROPE PILOT Youtube channel. Specific guidelines with the details on the recordings will be given upon request.

NFFA-EUROPE PILOT Staff Exchanges for Access Providers

A dedicated website (by Promoscience) was created in order to inform the participants about the staff exchanges, the submission process, and general information. The website is: <https://nffa.eu/NFFA-Europe-Pilot-staff-exchange>

The NFFA-EUROPE PILOT Staff Exchanges for Access Providers are open to Access Providers' researchers and technicians for short-term Staff Exchanges among the participating institutions. This initiative aims to enable the exchange of expertise, procedures and knowledge among researchers and technicians of the NFFA-Europe Infrastructure to enrich their wealth of experience and foster future collaborations for improving users' access to the facilities and the usage of instrumentation. Participants should communicate with tlnet@nffa.eu with Cc to training@nffa.eu to check the availability of Staff Exchanges at their assigned access site and for assistance in obtaining the facility's consent to be visited. The duration should typically not exceed 2 weeks and should take place within 6 months from their approval. NFFA-Europe will cover the travel and subsistence of visiting researchers and technicians. The service will be provided as long as the allocated budget is available.

Some photos of the website are shown below:

NFFA-Europe Staff Exchanges for Access Providers

3RD CALL FOR PROPOSALS

NFFA-Europe invites Access Providers' researchers and technicians to submit proposals for short-term Staff Exchanges among the participating institutions.

This initiative aims to enable the exchange of expertise, procedures and knowledge among researchers and technicians of the NFFA-Europe Infrastructure to enrich their wealth of experience and foster future collaborations for improving users' access to the facilities and the usage of instrumentation.

APPLICATIONS ARE CLOSED

IMPORTANT DATES

01.04.2023	Applications Open
20.05.2023	Application Deadline
26.05.2023	Notification to successful applicants
Starting Date	Accepted Staff Exchange Visits should take place within 6 months from their approval

DURATION

Visit Length	The duration of Staff Exchange Visits should typically not exceed 2 weeks
---------------------	--

APPLICATION DOCUMENTS

Mandatory	CV
Optional	Time and Task Plan (e.g. Gantt Chart)

TRAVEL GRANT

Staff financial support	NFFA-Europe will cover the travel and subsistence of visiting researchers and technicians.
--------------------------------	--

CONTACT INFO

e-mail	training@nffa.eu tinnet@nffa.eu
---------------	---

Fig. 38: Some print screens/photos of the different parts of the website devoted to the Staff Exchanges.

FORTH has undertaken the necessary communication with the users. In particular, FORTH checks the availability of Staff Exchanges and assists in obtaining the facility's consent to be visited. Finally, in the framework of NFFA-EUROPE PILOT Staff Exchanges, four users have already scheduled their visits at the host Institutions and particularly one of them visited the FORTH. In the following table, all the statistics are presented in detail.

Number of applications	Accepted	Rejected	Ongoing	Finished
8	4	4	3	1

Tab. 6: statistics of the staff exchanges