

Deliverable 6.1 Mid-term dissemination and annual presentation and report

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Table of contents

DELIVERABLE DESCRIPTION	2
1. ADVANCES FOLLOW-UP	2
1.1. ESR Reporting.....	2
1.2. Network-wide events	2
1.3. Virtual scientific seminars.....	3
1.4. Industry webinars	3
2. ADVANCES - SHORT SUMMARY	3
2.1. Materials Delivery	3
2.2. Dissemination	4
3. CONCLUSIONS.....	4

Deliverable description

“The ESRs will present their work to ATHOR members every 6 months and to the FIRE members every year at the FIRE general annual meeting. They will present reports with the same periodicity for this two audiences. Industrial seminars will be organized for the ESRs and academic members every year, in phase with the FIRE annual meeting. These seminars will be open to FIRE members. All the documents will be available on line.”

Present document describes the reporting and advances follow-up procedures and practices established by the consortium. Deliverable 6.1 summarizes the achievements, made since the recruitment of ESRs and plans for future improvements for the implementation stage of the ATHOR project. It will also describe how the knowledge exchange between the established and young researchers functions.

1. Advances follow-up

1.1. ESR Reporting

In order to raise the awareness of the achieved results by the consortium experts and other consortium members, each ESR is to produce an advancement report every 6 months. First such reported was submitted by 11 ESRs by the 31/08/2018. Other 4 young researchers are in their early post-recruitment stage and will start their reporting from the next period (01/09/2018 – 01/03/2019).

The semi-annual ESR report has the main following criteria:

- 6 pages length
- Include WP advancements
- 5-6 highlights
- Encountered problems and their solution
- Planning for the next 6 months
- Actualized individual Gantt chart

The existence of ESR reporting practice is crucial first of all to help ESR structuring the obtained results, reveal problems/anomalies and keep trace of their work. It will also be used to produce the scientific part of the progress and mid-term review reports of the project.

All the periodic ESR reports are proof-read by ESR supervisors and stored in the project platform “Ucloud / ESR Periodic Report” folder.

1.2. Network-wide events

Network-wide training events and seminars are organized by ATHOR beneficiaries in the agreement with the project’s Gantt Chart. The first training event took place between 11 and 15 of June in Leoben, Austria. It gathered 25 participants including 13 ESRs and was dedicated to mechanical properties of refractory materials. The second training event takes place during the last week of September 2018 in Aachen, Germany. At the same time Aachen hosts the 61st International Colloquium on Refractories, in important for the refractories research community event, attracting more industries and academies to attend this scientific week. All network-wide training events include industrial partner site visits to help researchers better imagine the scientific and technological challenges of the Iron & Steel manufacture.

Such training events are another good opportunity for consortium members to reunite in the frame of other groups, in particular, FIRE community (ATHOR partner) chaired by Sido SINNEMA - Tata Steel Europe synchronizes its meeting with some of ATHOR workshops.

Another aspect is that these training events allow to organize regular presentation of ESRs advancements and practice their public speech skills. During the last RTC1 part1 course in Leoben all recruited ESRs made short presentations/introductions to their research works. The first recruited students could already demonstrate their first experimental results and further work schedule. Such presentation practice will continue during the RTC1 part2 in Aachen in the form of a poster session, held in the frame of the 61st International Colloquium on Refractories. 14 ATHOR PhD students will present their works on the 26th of

September. Moreover, a special booth dedicated to the project will be set by RWTH university in the exposition hall of the EUROGRESS colloquium venue, which is a great opportunity for specialized and general public to get acquainted with our European project, to discuss the contribution that it intends to make to the steel making industry while fostering the next generation of highly qualified engineers in the field of refractory materials and linings.

1.3. Virtual thematic seminars

Starting from June 2018 the ESR council initiated monthly virtual WebEx meetings dedicated to various scientific topics. Based on the "[Interests & Competences](#)" matrix, the consortium members are invited to attend those meetings, which correspond to their expertise marked in the table.

By now there have been 3 thematic visio-conferences on the following topics:

- Mechanical properties (18 attendees)
- Numerical Simulations (13 attendees)
- Thermal properties (14 attendees)

These reunions is a good opportunity for ESRs to discuss in detail their research progress, reveal challenges and search experts advice. Every seminar is recorded via WebEx and stored in the Ucloud subfolder "ESRs Working Space\Thematic Scientific Meetings"

1.4. Industry webinars

Webinars given by the scientists from [ATHOR industrial partners](#) debuted in June 2018. They are accessible for all consortium members and other volunteers (subject to maximum number of allowed WebEx participants) and cover wide range of directly industry related topics. These webinars are recorded and stored in Ucloud repository space to keep it available for all ATHOR members. Additionally, the recordings are planned to be integrated in the online learning platform ELEANOR, elaborated and maintained by the RWTH partner.

The first webinar entitled "Steel ladle usage in the steel plant and the effect of refractory wear" was given by Dr. Rinus Siebring, Knowledge group Leader R&D on refractories in Tata Steel Europe on the 01.06.2018 and attended by 35 participants including 13 ESRs.

The next lecture is scheduled on the 11th of October 2018 and will open a series of webinars dedicated to the introduction to refractory materials and various class of raw materials used for refractories and produced by IMERYS Refractory Minerals.

These online lectures are another great opportunity for PhD students to connect as a team, get closer to the real problematics of the modern I&S companies, receive the knowledge and ask questions directly to the leading specialists of the top European industries.

2. Some advances

2.1. Materials Delivery

12 of the recruited ESRs have covered main part of their bibliographic review and are engaged in first tests, related to their PhD subject. Two other ESRs has recently signed their PhD contracts and are at the initial stage of the their work. One ESR has quit his position and new recruitment is expected within the few following months.

The advancement of the experimental part of work directly depends on the scheduled delivery of the materials. First sample bricks were delivered to all academic poles in the beginning of March 2018, second delivery took place in June 2018 and next shipping scheduled for the nearest future (before October 2018). Materials supply directly affects most of ESRs works and this is one of the most challenging parts at the current stage of the project due to the delays in logistics and industrial scale production. In spite of certain delays in the organization process, the materials supply is now well-established.

Deliverable D 7.3 states that the Industry Advisory Board (IAB), in close interaction with other Principal Investigators of the consortium defines the selection of refractory materials to be studied in priority and all useful equipment available at various partner facilities are currently inventoried within in a synthetic excel table. All these key information is available in Ucloud storage platform via excel sheets:

- a) "Main research refractory materials":
<https://ucloud.unilim.fr/public/main-research-refractory-materials>
- b) "Available Experimental Devices":
<https://ucloud.unilim.fr/public/experimental-devices>

2.2. Dissemination

As described in Deliverable 7.3, communication to general public is realized via:

- ATHOR website www.etn-athor.eu communicating news and actualities within the project (responsible Daria Barsuk - ATHOR project manager, UNILIM). Project website page is connected with all ATHOR social pages: Facebook, Twitter, LinkedIn. Moreover, a special "Communication" website section gives access to the public documentation of the project (PU deliverables) and different videos. "Home" page of the website regularly updates visitors on the upcoming or past events involving ATHOR project.
- [Twitter](#) @ETN_ATHOR, [Facebook](#) (responsible Diana Vitiello - ESR1, UNILIM) and [LinkedIn](#) (responsible Soheil Samadi - ESR14, MUL) are "living" social pages, fed by the everyday experiences and multi-scale events.
- Coordinating university website www.unilim.fr (Nota Benes ([1](#), [2](#)), actualities ([1](#), [2](#)))
- Dissemination via flyers, [posters](#), promotional objects ([T-shirts](#), [bloc-notes](#)). One of the most important public dissemination events of this year will take during 25-26 September in Aachen in the frames of the 61st International Colloquium on Refractories where all of ESRs will make a group poster appearance and where ATHOR project will have a dedicated promotional stand in the exposition hall of the EUROGRESS colloquium venue.
- Press releases: France 3, Le Populaire, L'Echo, Actualités Limoges, Ministry visits.
- [YouTube](#) account, at current stage only for private use (Farid Asadi - ESR3, UNILIM)
- Semi-annual Newsletters issued with via Refractory World Forum virtual magazine ([1](#), [2](#)). ESRs actively contribute to the newsletter construction, in particular, the second RWF Newsletter was made in collaboration with ESR 6 Lucas Teixeira (UORL)
- Promotional videos:
 - ATHOR DrawMyLife animation is on the stage of production of numerical drawings, which will further be used to create the animation (by Canal Sup UNILIM). Project deadline was changed to the 1st of November 2018.
 - ATHOR short documentary is in the stage of concept approval and is planned to be recorded in the frames of a collaborative action between ATHOR and Canal Sup UNILIM in the period between 01/10/2018 and 01.01.2019.

As a result of kick-off meeting, a collaboration with Centre Sciences - Orleans (Regional Promotion Centre of Technical and Industrial Scientific Culture for the Centre - Val de Loire region - France) has been established and a preliminary roadmap for "Mobile Exhibition" on refractory materials (Task 6.5) is proposed:

Scheduled Installation Surface: 150 m² between 12 and 15 islands or themes;

Scheduled Design: 2018-2019;

Scheduled Achievement: end of 2019 - beginning of 2020;

Scheduled Touring of the exhibition: 2020 - 2021.

At current stage, all beneficiaries are involved in research of the ideas for experimental demonstrations and additional funds for the installation of the exhibition.

3. Conclusions

After 12 months from the official start of the project all required procedures and good practices are well established and being followed by the consortium members. Early stage researchers are interconnected on various levels: ESR Council, Supervisory Board and thematic scientific meetings, network-wide training events, industry lectures. They are also actively involved in the promotion of the social image of the project and represent ATHOR in national and international conferences and congresses.

ATHOR management team and consortium in general greatly encourage pro-activity, independent thinking, initiative and capacities of team work of ESRs. Locally and across the network, the project aims to create necessary conditions for the best development of each young researcher.

More detailed information on the practical advancements of each ESR will be provided in the upcoming annual Progress Report (Deliverable 7.4)