

Innovation Hub CLC Central NEWSLETTER

April 2020

GENERAL INFORMATION

BERND SCHÄFER WILL JOIN EIT RAWMATERIALS AS ITS NEW CHIEF EXECUTIVE OFFICER AND MANAGING DIRECTOR ON 1 MAY 2020.

Bernd Schäfer has been appointed as a CEO and Managing Director of EIT RawMaterials Innovation Community by the Executive Board of EIT RawMaterials.

Mr Schäfer brings to the position a deep understanding of the metals and raw materials sector, resilient and inclusive leadership approach, as well as a proven track record and experience of successful strategy implementation and commercialisation.



Bernd Schäfer has extensive business experience. Prior to his recent role as CEO/Managing Director at apt Group, leading European supplier of extruded, anodised and processed aluminium products, he was the VP Commercial, Global Commercial Transportation and Industrial in Alcoa. His area of accountability included global market responsibility as well as execution of

the innovation and technology roadmap in close cooperation with R&D. Mr Schäfer is Board Member with the Gesamtverband der Aluminiumindustrie (the trade association of the aluminium industry) and the Wirtschaftsvereinigung Metalle (the umbrella of metal producing companies in Germany).

POSITION PAPER STEERING COMMITTEE

On Friday 6 March, Andreas Klossek, interim CEO and COO of EIT RM, was invited to give a presentation at the Central CLC Steering Committee on the coming EIT RawMaterials strategy and the ways to support the sustainability of our organisation.

Based on the presentation, he highlighted that 2020 is a crucial year and a turning point, first due to the preparation of the next 7 years period and the high expectations of EIT regarding the sustainability of the KIC, and secondly due to high opportunities to develop and reinforce our current organization with the support of European Commissioner Breton and Vice President Šefčovič who agreed to prioritise innovation on raw materials and advanced materials as strategic for the European industry.

From the discussion, it was obvious that there is a need to define a new roadmap for the KIC, and the SteerCo members highlighted the following 4 main topics that were summarized in a position paper:

At first it was observed that EIT is constantly changing the rules in the middle of the game (e.g. task partner to become project partner, co-funding level on KAVA projects, backflow mechanisms) and that this behaviour is not in line with a business-orientated strategy. Indeed, by doing this, the risk is that EIT will kill the initial concept of the KICs, and make them less attractive for partners who might not contribute any more to the community and terminate their membership.

Among other mechanisms that might support innovation, the EIC was identified as a new key player, and the SteerCo members highlighted that EIC could learn a lot from what the KICs have implemented and better perform its mission in synergy with the KICs. In that regard, it was proposed to create a task force to initiate this process.

The relevance of Higher Education was also mentioned, and specifically the positive impact that could be generated by the labelled programs providing T-shaped professionals that are needed for the development of the raw and advanced materials sectors.

Finally, the Central CLC members suggested that the KIC should rapidly perform a survey among partners and define a constructive process to get them more involved in the definition of this new roadmap.

#STAYHOMEANDINNOVATE

To support the EIT RawMaterials Innovation community in this challenging time, we continue to foster innovation, new ways of learning and teaching, and boost entrepreneurship with a number of running initiatives:

SUBMIT YOUR CIRCULAR BUSINESS IDEA

Do you have a new business model idea supporting the efficient implementation of the Circular Economy in Europe?

New business models that foster repairing, reuse and sharing, are an essential part of the circular economy, specifically in European cities, where on the one hand most of the material- and energy throughput occurs and on the other, innovative solutions can be rolled out best due to the inherent characteristics of the urban form (i.e. large availability of materials, high population density and urban consumption patterns).

This call is specifically focused on ideas for "new" business models supporting the efficient implementation of the Circular Economy in Europe; ideas in the following themes are expected:

- Repair
- Reuse
- Sharing Economy/Sharing Platforms
- Circular products, products designed for circularity (easy to repair, reuse or recycle)

Application deadline is 31 May 2020!

YOUR START-UP OR SME OFFERS SUSTAINABLE SOLUTIONS FOR THE RAW MATERIALS SECTOR?

Our Booster programme provides support to start-ups and SMEs to develop innovative products/services that can produce an impact in the raw materials sector or benefit our partners.

Besides funding and customised services, the selected Start-ups and SMEs will also get access to the EIT RawMaterials partner network, participating in our networking events, as well as gain visibility through EIT RawMaterials network channels. Eventually, supported Start-ups and SMEs may join our network as an associate or full member to benefit from the ecosystem fully.

RM Booster Call 2020 for start-ups and SMEs is open all year long with next cut-off date 15 May 2020!

SMALL AND MEDIUM ENTERPRISES: BRING YOUR INNOVATION TO THE MARKET

EIT RawMaterials is committed to supporting Small and Medium Enterprises (SMEs) as they lead activities that will improve innovation capacity across its community. The call aims to boost and accelerate the launch on the market of new products within the context of the value chains and topics of the three EIT RawMaterials Lighthouses on Sustainable Discovery and Supply, Sustainable Materials for Future Mobility, Raw Materials and Circular Societies. This call supports innovation and business creation, accelerating the commercialisation of innovation to the benefit of European citizens.




The SME Call is especially suited to companies that are facing a challenge to bring their specific innovative product, process, solution or service to the market, and that are seeking additional financial support of up to €500 000 to solve their challenge.

Application deadline is 6 May 2020!

IMPORTANT DATES

-  **11-15 May 2020** *Project reviews Central CLC – via webconference*
-  **8-9 June 2020** *Central CLC Steering committee – via webconference*
-  **20 May 2020 pm** *EIT RM General Assembly – via webconference, registration until 13 May*

IMPORTANT DEADLINES & ACTIONS

-  **6 May 2020** *SME Call*
-  **15 May 2020** *Booster Call, cut-off 2*
-  **31 May 2020** *Circular Economy - business model idea competition*

UPCOMING EVENTS

 23-25 SEPTEMBER

RM Summit

PARTNER NEWS

1. VALIDATION AND ACCELERATION SECTION

EUROPEAN GEOTHERMAL LITHIUM BRINE (EUGELI) LED BY ERAMET IDEAS

Project duration January 2019 - December 2021

EuGeLi is a collaborative research and innovation project whose principal aim is to validate an active-solid process co-developed by Eramet, achieve better estimates of lithium reserves contained in European geothermal deposits, and develop a profitable economic model that covers the entire process, from the extraction of the lithium to its refinement into battery-quality products.

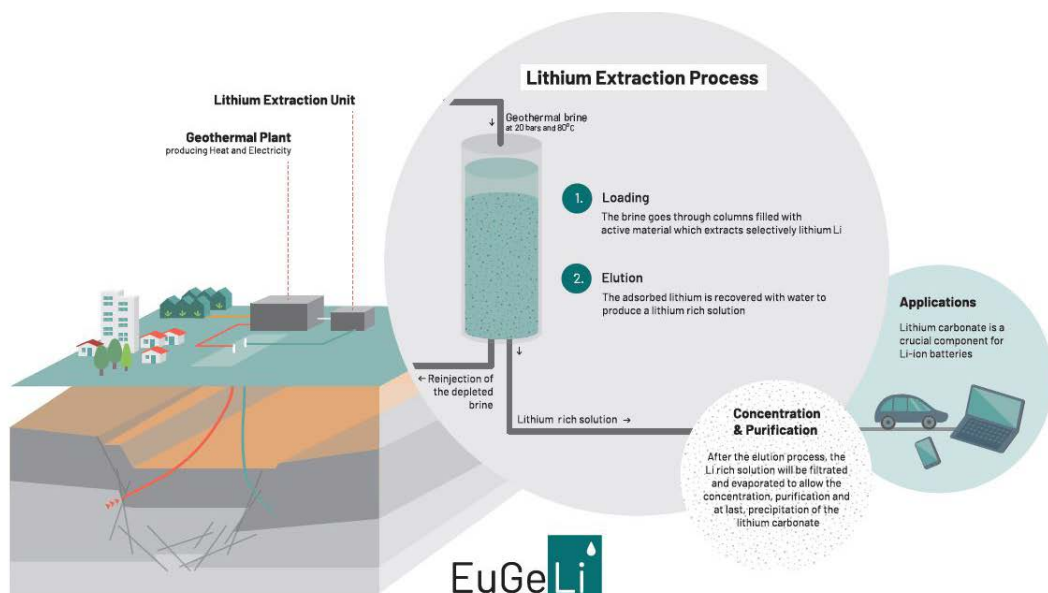
A consortium of nine partners, including manufacturers, academic institutions, and research centers, was assembled for this project, which began in January 2019 and will

conclude in December 2021. Nearly 85% of its €3.9m budget was financed by EIT-Raw Materials. As the project progresses, five weeks of pilot testing will be conducted at a geothermal plant in Alsace in order to evaluate the process.

THE CHALLENGE: DEVELOPING AN EFFICIENT AND ECO-FRIENDLY EXTRACTION PROCESS

The main challenge of the EuGeLi project is to adapt the direct extraction process that was developed for the Lithium Project in Argentina to European geothermal brines and their operating conditions, particularly the temperature and pressure conditions of the reinjection branch (80°C, 20 bars).

Additionally, since the pumped-up brine is subsequently reinjected into the sub-soil, the lithium extraction process must not under any circumstances impact or disrupt the natural environment of the sub-soil. Lastly, the end-product of the process, lithium carbonate, must be extremely pure in order to be used in lithium-ion batteries.



ACTIVITIES PERFORMED DURING THE PROJECT

The project is divided into three major and interconnected workstreams:

- 1.** The first workstream focuses on evaluating the lithium deposits contained in European geothermal water. This assessment addresses issues related to the origin of the lithium and attempts to establish predictive models based on geological parameters, including the temperature of the water and the make-up of sub-soil rocks.
- 2.** The goal of the second workstream is to develop the direct extraction process. First, the active material used to capture the lithium from the brine will be optimized at laboratory scale, so that it may be used in geothermal temperature and pressure conditions.

Next, the material will be produced at a semi-industrial scale, and two direct extraction pilot tests will be conducted on a geothermal well in Alsace, in order to produce a concentrated lithium solution.

The last pilot test will be conducted at the Eramet Ideas center, in order to produce the lithium carbonate using the concentrated solution from the initial pilot tests. The objective in this case is to assess the technical and economic feasibility of the process.

- 3.** Lastly, the results of the first two workstreams will feed into a study that will establish various economic models for producing lithium from geothermal deposits. This study is designed to assess the overall profitability and feasibility of an industrial project for lithium and energy co-production.

Link : [ERAMET Website](#)

Project consortium :



2. EDUCATION

MINEHERITAGE LED BY FCT NOVA

Project duration January 2019 - December 2021

Historical Mining – tracing and learning from ancient materials and mining technologies.

The Wider Society Learning project “MineHeritage” aims to reach society on the importance of raw materials through mining history using a cultural approach and gamification for all generations.

Europe’s raw materials have been explored and traded since prehistorical times, and they have been key factors in the development of European Culture and Society.

MineHeritage is gathering information on important mining sites across Europe through their 13 partners, which forms the the basis of the web based multilevel game and App for mobile devices currently in development.

During this #StayAtHome period, discovery adventures are ready for the internet user at the project website <https://mineheritage-project.eu/> where 13 booklets on selected Historical Mining Sites are already available to be explored. This comprehensive collection of sites from different historical ages from 11 European countries is also available on the social networks, where it is possible for the general public to interact and further engage with the project partners.

Another highlight which is already available to be explored is the 3D mapping video of Tibães Historical Mine in Portugal, while 13 dissemination videos of European Mining Sites are still under development.

With a wide commitment in dissemination, and an outreach to society in the first year of more than 5000 people, using specially designed activities and dissemination events, the aim of the project is to increase awareness for these important historical heritage sites and their contribution for the development of technology. Indeed, on a higher level, the project raises awareness on the importance of raw materials to society and our culture.



Lousal Mine, Portugal



Argentario Ecomuseum, Trentino, Italy



Almaden Mining Park, Spain



3. BUSINESS CREATION

EIT RAWMATERIALS SUPPORTED START-UP CYANO GUARD RAISES OVER CHF 3M AND CLOSES SEED ROUND

On 14 April 2020, the Swiss chemical technology start-up CyanoGuard announced the successful closing of its seed round led by Wingman Ventures with the participation of BlueOcean Ventures, and the award of a non-dilutive EIC Accelerator, SME Instrument grant by the European Union's Horizon 2020 Programme.

Established in 2016, CyanoGuard has since developed and commercialized its next-generation cyanide monitoring solutions applicable to gold mining operations, food safety testing and in healthcare. In the past years, Co-Founders Benedikt Kirchgässler (CEO) and Mathias Cherbuin (CTO) have brought an innovative chemical technology for rapid toxin detection from the labs of the University of Zurich and developed it into a comprehensive digital solution package which finds its first commercial application in the gold mining industry.



With the newly raised capital from this seed round, CyanoGuard plans to accelerate its go-to-market strategy in the global mining industry.

The freshly obtained funds are also intended to further expedite the development of CyanoGuard's product offering for food safety and healthcare applications. This is also one of the reasons Geneva-based MedTech and life sciences venture firm BlueOcean Ventures has joined the financing round.

CyanoGuard is a part of the EIT RawMaterials Community since it has been selected by Innovation Hub Central CLC in 2018 among the best innovative start-ups that receive funding and coaching as a part of our RM Accelerator programme. They have successfully completed Phase 1 and 2 and are engaged in Phase 3 to exploit and better commercialise their innovative solution. EIT RawMaterials team connected CyanoGuard with potential clients and investors on the European and global levels (South America, Canada, South Africa).

"We have recognised the high potential of this innovative company combining chemistry and digital for Cyanide monitoring on gold mining facilities, and the EIT RawMaterials Accelerator programme was perfectly adapted to speed up the development from the lab scale prototype to sales of a mature product." said Didier Zimmermann, Director of Innovation Hub Central (CLC).

Links :

[Press release](#)

[EIT RawMaterials News](#)

*Thank you for your interest. Your feedback is highly appreciated.
Please feel free to comment or send us news you would like to share with the community.*



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