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— MAISON IRÈNE ET FRÉDÉRIC JOLIOT-CURIE

Raw materials at stake

Wednesday 17 April 2024

Maison Irène et Frédéric Joliot-Curie, 100 Rue du Trône, Brussels

The European Commission has launched an action plan on critical raw materials to develop value chains for EU industrial ecosystems, reduce dependency through resource circularity and innovation, and strengthen and diversify national supply. The actors of the Lorraine site, together with their European partners, are strongly involved at European and global level in the whole value chain, understood in a global way and with all the socio-economic stakeholders.

This will involve taking stock of substitution issues with geopolitical implications, recycling, which is set to develop considerably, and finally the training and skills needs at European level in these areas.

This seminar will also be an opportunity to strengthen the dialogue with representatives of European institutions, academics and socio-economic stakeholders.

8.30 – 9.00 Welcome - coffee

9.00 – 9.30 Introduction

- Fabrice Lemoine, *Vice-president of Université de Lorraine in charge of Europe*
- Evangelos Tzimas, *head of unit, JRC, European Commission (under finale confirmation)*

9.30– 10.30 Round table 1 : The challenges of substitution

Objectives : Questions of substitution of materials by resources and new materials linked to AI, as well as the whole chain (substitution and production of new materials) and the use of the database. Based on the state of the art of the transition of materials, the round table aims to analyse the uses and availability of materials and to open up perspectives in terms of circular economy and substitution: bottlenecks and levers...

Moderator : Alexandre Nomine, *Assistant Professor, Université de Lorraine*

Speakers :

- Milan Grohol, *Policy officer “Energy intensive industries, raw material, hydrogen”, DG Grow, European Commission (Confirmed)*
- Wu Chen, *University of Southern of Denmark (confirmed)*

- Jacqueline Cole, Professor, *Cambridge university (confirmed)*
- Michel Cathelineau, *research director, CNRS (confirmed)*

10.30-11.30 **Round table 2 : Life Cycle Analysis: a sustainable activity based on advanced materials**

Objectives : by addressing the challenges of recycling, including the explosion of advanced materials through AI and the necessary selections, processes, transformations and process changes. The discussion will extend to considerations of material scarcity and its necessary sustainability through recyclability, identifying potential barriers and proposing concrete solutions. The upstream design of materials according to their final use in equipment is a constant challenge to improve their recyclability and limit the need for raw materials. This holistic approach aims to chart a course towards sustainable practices, emphasising adaptability and resilience in material life cycles.

Moderator : Thierry Belmonte, *Research director, CNRS*

Speakers :

- Javier Sanfelix, Policy officer, *DG R&I, European Commission (confirmed)*
- Thibault Quatravaux, *holder of the "liquid metal" industrial Chair, institution Jean Lamour, universit  de Lorraine (confirmed)*
- Sophie Rivoirard, *CNRS researcher, Head of the Startup MagREESource (confirmed)*

11.30-12.30 **Round table 3 : the challenges of education and skills**

Objectives : The upcoming round table aims to outline training requirements both within the European context and specifically for the Lorraine site. It will encompass various strategies pertaining to continuing education, lifelong learning, and skill demands. The expert panel will also examine the trajectory of permanent employment, addressing questions such as our current skill landscape and future requirements. Additionally, emphasis will be placed on fortifying the relationship between industry and academia while exploring the array of resources accessible at the European level.

Moderator : Alexandre Chagnes, *Professor at the University of Lorraine, Scientific Director of LabEX RESSOURCES21*

Speakers :

- Felix Rohn, *Skills Agenda Unit, DG EMPL, European Commission (confirmed)*
- Eric Pirard, *professor, Universit  de Li ge (confirmed)*
- Kerstin Forsberg, *Associate professor, KTH Royal Institute of Technology, Sweden (Confirmed)*
- Justo Garcia, *Executive Director at the Battery European Partnership, Orano, France (Confirmed)*

12.30 **Conclusions**

12.45 **Networking lunch at the Maison Ir ne et Fr d ric Joliot-Curie**

Afternoon workshops

14.00 – 16.00 The roundtables will be followed by collaborative workshops open to participants who wish to contribute to possible recommendations to the European Commission and to the re-launch of EU projects.