The Challenge of CRM under EXTREME conditions

The lifeblood of the European industry is increasingly under pressure!

Some RAW MATERIALS (like Cr, Co, Nb, W, Y), that confer specific characteristics to high-tech materials, are now CRITICAL (rare / expensive / not available) especially in high value alloys and metal-matrix composites used under extreme conditions of temperature, loading, friction, wear and corrosion.

The challenge is to strengthen EU competence and gain the leadership in efficient use of raw materials, to achieve what is foreseen in the EU roadmaps towards 2050.

- EU can count on its excellence in areas of knowledge crucial to CRMs,
- EU high-tech SMEs and automotive, aerospace and energy industries can ensure suitable innovation paths from labs to market.

The Challenge of CRM-EXTREME Network

- to promote significant advance of knowledge in fundamental and applied research
- to create a good synergy with the KIC on Raw Materials set up by the European Institute of Technology
- to enhance the competitiveness of EU industries, identifying viable solutions for CRMs substitution in materials of technological impact

Understanding the role of CRMs
Design and Material production
Industrial validation
Value chain impact

CRM EXTREME has rooms for:
- Inclusiveness,
- Gender Balance,
- Early Career Investigators

Join US
Email: crm-extreme@univpm.it
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Light green = Inclusiveness Target Country

Austria  Belgium  Bulgaria  Croatia  Czech Republic  Denmark  Estonia  Finland  France  FVEY Macedonia  Germany  Greece  Hungary  Israel  Italy

29 Participants

Countries

Lithuania  Luxembourg  Norway  Poland  Portugal  Romania  Serbia  Slovenia  Slovakia  Sweden  Switzerland  Turkey  United Kingdom