



EULANETCERMAT

CRICIUMA MEETING
4-6 NOVEMBER 2013



EULANET-CERMAT Resume: Objectives, WP's and Deliverables for the first year, by Dr. José Luis Briansó – UAB (Spain) Prof. Ruben C. Reinoso - ADRAM (Brazil)

EULANETWORK IN CERAMIC MATERIALS WITH ENVIRONMENTAL AND INDUSTRIAL APPLICATIONS (EU – LA)

EULA-NETCERMAT will be focused on advanced/modern ceramic materials (MAC) applied in high added value industrial sectors for both EU28 (Croatia a new MS) and LA countries with existing S&T cooperation agreement such as Argentina, Brazil and Chile.

The specific scientific and technological issues where Marie Curie Fellowships will be focused on 3 main areas such as:

1. Science and Technology of Advanced ceramics
2. Socio-economic studies
3. Impact on civil society

Through different issues listed in the slide number 4

PEOPLE-IRSES LA PARTNERS: ONLY COUNTRIES WITH S&T AGREEMENT WITH THE EU-28

BRAZIL



CHILE



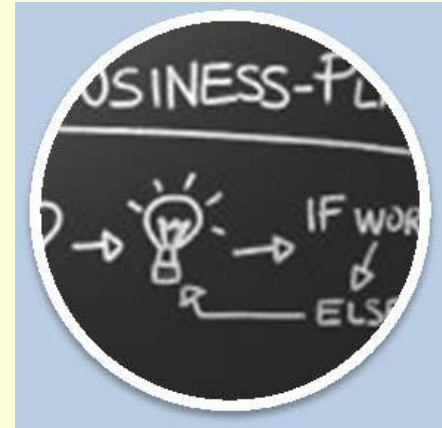
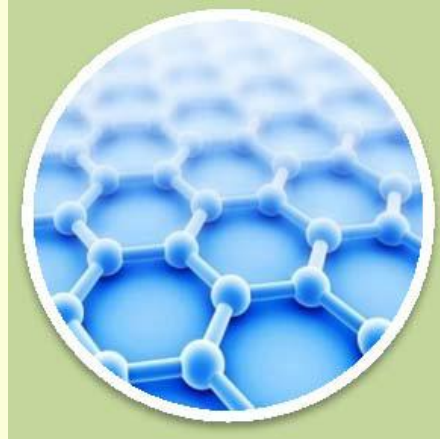
ARGENTINA



MEXICO



Main tasks distributed by WPs and partners



Advanced Ceramics Synthesis and Characterization

WP1: SYNTHESIS AND CHARACTERIZATION OF MACs

UAB, ICMAB-CSIC,
KTH, INTEMA, UCH,
UFMG, ADRAM,
SENAI

Applications

WP2: APPLICATIONS OF MACs

CBS, ICMAB-CSIC,
KTH, INTEMA,
ADRAM, UCH, UFMG,
ADRAM, SENAI

Socioeconomic aspects and Impacts

WP3-4: SOCIOECONOMIC, GENERAL AND SPECIFIC IMPACTS

ADRAM, UNLu,
SENAI,
ICMAB-CSIC, UAB

Dissemination activities

WP5: DISSEMINATION ACTIVITIES

*All the partners
of the Consortium*

In order to complete these objectives series of activities will be undertaken such as:

1. Mobilities: A total of 206 exchanges (263/m) are planned (66 exchanges/year). 26 % (1st year), 31 % (2nd year), 23 % (3rd year), 20 % (4th year). The greatest part of the exchanged corresponds to researchers (seniors or young), the rest to technics-administrative.

2. **Education and Training:** by educational modules on MACs topics capable to generate economic activities with attendant socio-economic impacts on local populations. After completing the modules a platform for on-line courses at the involved LA universities will be created (UNLu responsibility).
3. **Action and Business plan:** such documents derived from the EULA-NETCERMAT SWOT analysis, will identify and prioritize which systems and processes must be sustained and provide the necessary information for maintaining the activities in order to reach future objectives (scientific-technological and also in economic terms).
4. **Dissemination of results:** through the specifically designed tools

WP1: SYNTHESIS AND CHARACTERIZATION OF MACs

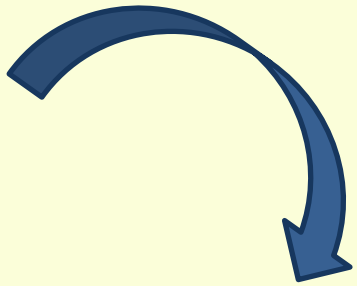
UAB, ICMAB-CSIC, KTH, INTEMA, UCH, UFMG, ADRAM, SENAI

Description of work (3 Tasks). Conduct a comprehensive overall study on MACs and its applications in some important sectors of industrial interest for the EU and LA countries to carry out the complementary and scheduled socio-economic study (WP3) and the diffusion of results (WP5)

- **TASK 1.1: Synthesis** of ceramic materials with applications in environment (water and soils) (ICMAB-CSIC-KTH)
- **TASK 1.2: Characterization** of MACs (UCH) by diffraction with x-rays, electrons or neutrons, and various forms of spectroscopy and chemical analysis such as Raman spectroscopy, energy-dispersive spectroscopy (EDS), ICP-MS, ICP-OES, FP-XRF, chromatography, thermal analysis, electron microscope analysis, etc., in order to understand and define the properties of ceramic materials.

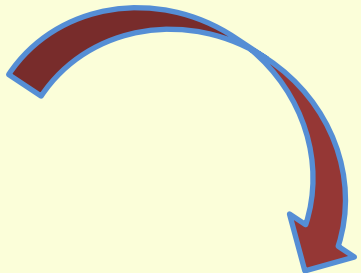
- **TASK 1.3:** Identification of the most relevant **networks of Ceramic Materials**, Advanced Ceramic Materials and Nanotechnologies in EU and LA, by employing several tools (internet, surveys, congress assistance, CORDIS-EC consultation, DG RTD et.). The results will be grouped in:
 - 1) List of EU and LA Networks and core research issues for further evaluation by the consortium as potential partners in future projects or networks;
 - 2) Distribution of all the Nets (LA and EU) by ceramic sub-sectors.

Deliverables: in blue or red colours



Blue arrow

Means deliverables for the first period M1-12



Red arrow

Means deliverables for the 2nd period M13-24

WP 1: Deliverables (M1-12)



- D1.1 Reports on training and R&D knowledge transfer concerning advanced ceramics synthesis, characterization and application. (M12/24/36/40)
- D1.2 Report on state of the art and needs, identifying the existing requirements and potentials in academia and industry at both EU and LA concerning MACs. (M12)
- D1.3 Database of existing EU and LA networks concerning MACs useful for potential stakeholders. (M36)
- D1.4 Preparation of at least 2 new consortiums addressed to NMP/ENV FP7/H2020 calls on MACs topics (M40)

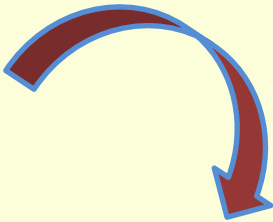
WP2: APPLICATIONS OF MACs

CBS, ICMAB-CSIC, KTH, INTEMA, IRELAC, ADRAM, UCH, UFMG, ADRAM, SENAI

Description of work (3 Tasks). The new and emerging family of MACs utilize highly refined materials and new forming techniques. These “new” or “advanced” ceramics, when used as an engineering material, possess several properties/applications which can be viewed as superior to metal-based systems. These properties place this new group of ceramics in a most attractive position, not only in the area of performance but also cost effectiveness. To properly exploit these characteristics the WP2 involve the following tasks:

- **TASK 2.1: Applications** of the advanced ceramic and nanoceramics materials in Developed and/or Emergent Countries (BRAU and Chile) (INTEMA, ICMAB-CSIC, ADRAM, SENAI)
- **TASK 2.2:** Develop and qualify **methods and techniques** in co-creating innovation (CBS, UNLu, ADRAM)
- **TASK 2.3: Road map** from idea generation and conceptualization to development (IRELAC, UNLu, CBS, ADRAM, SENAI)

Deliverables



- D2.1 Methods for co-creating innovation on MACs applied to environment, health and aeronautics (M24)
- D2.2 Road map to speed up the process from idea generation to implementation of MACs in the addressed sectors (M36)

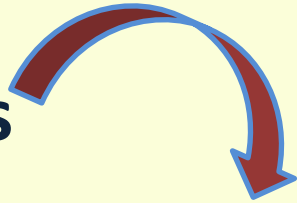
WP3: SOCIOECONOMIC STUDIES ON CERAMIC MATERIALS

IRELAC, CBS, UAB, ICMAB-CSIC, UNLU, ADRAM, SENAI

- **Description of work (2 Tasks).** EULA-NETCERMAT partners collaborate in creating a more competitive knowledge economy; putting into practice the Lisbon Strategy summing up the collaborative efforts of knowledge based design, innovation and entrepreneurship in a context of participation of all interest groups in and across local and regional spaces. This WP will be carried out by the following specific tasks:

- **TASK 3.1:** Evaluation of the impact of advanced ceramic materials expressed in research publications and economic terms (IRELAC, ADRAM, CBS)
- **TASK 3.2:** SWOT Analysis and Employment in the advanced ceramic sector (ICMAB-CSIC, UAB, UNLu, ADRAM).

- **Deliverables**



- D3.1 Report of socioeconomic and environmental impact of MACs in EU-LA (M18)
- D3.2 SWOT of the competitive position of EU-LA MACs sector (M20)
- D3.3 Action and business plan on EU-LA MACs sector (M44)

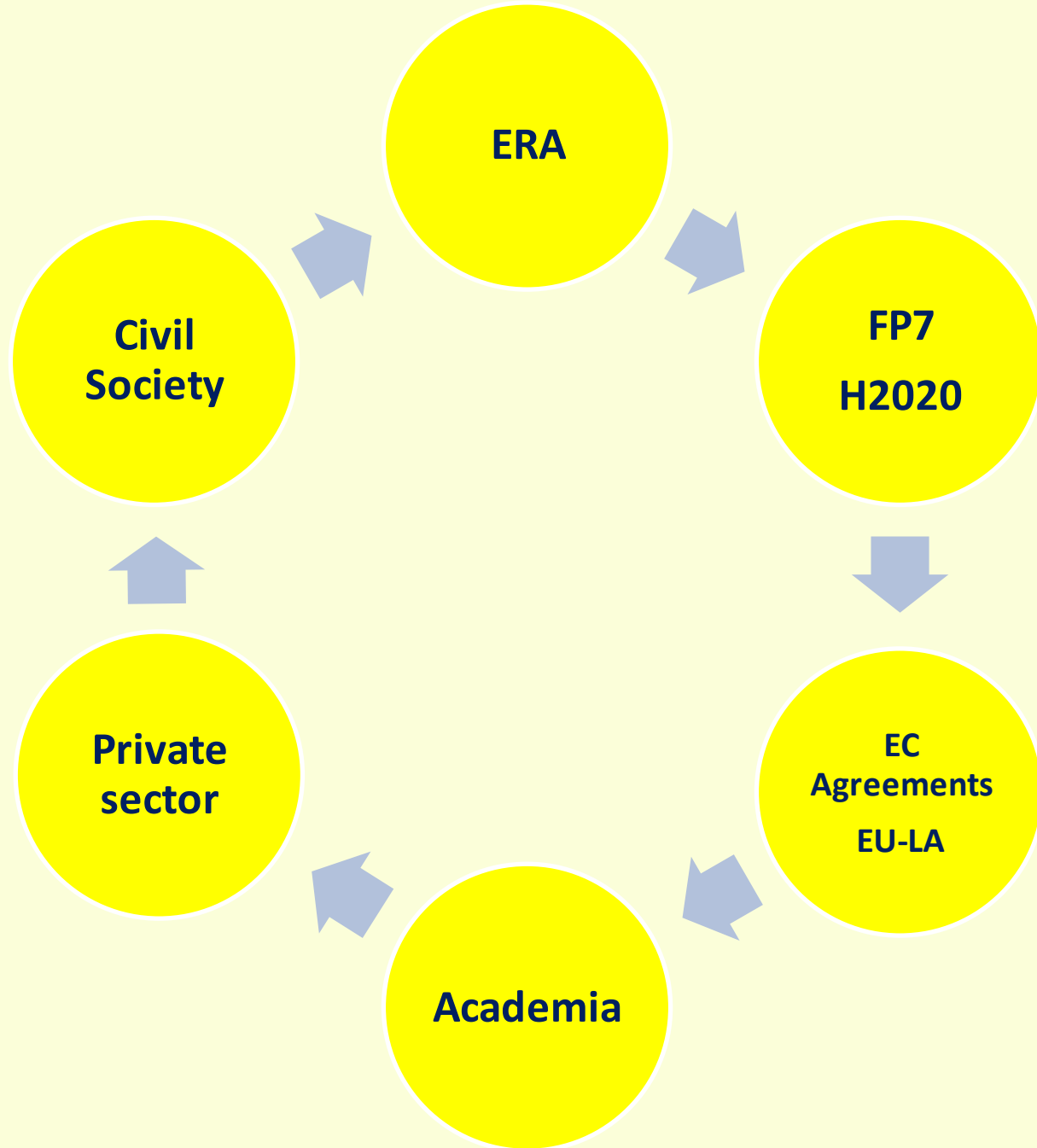
WP4: GENERAL AND SPECIFIC IMPACTS

ADRAM, UNLu, SENAI, IRELAC, ICMAB-CSIC, UAB

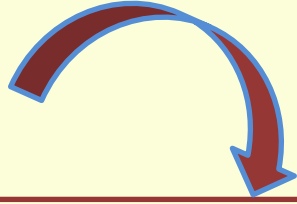
- **Objectives and Work (6 Tasks).** A strong and positive impact on the research potential of the consortium, opening opportunities for cooperation between EU and LA countries, upgrading the RTD capacity and capability as well as quality of research leading to better integration in ERA and in the international cooperation framework (an important point for the Strategic Forum for International Science and Technology Cooperation- SFIC) participation in FP7 and in the future H2020

- **TASK 4.1:** Impacts to ERA (ICMAB-CSIC)
- **TASK 4.2:** To FP7 and H2020 cooperation and bilateral cooperation (UAB and ICMAB-CSIC)
- **TASK 4.3:** Impacts for the EC Agreements in Science and Technology (All partners)
- **TASK 4.4:** Impacts to the Academia (UAB – UCH)
- **TASK 4.5:** Impacts to the private sector (SENAI, ADRAM and CBS)
- **TASK 4.6:** Impacts to the civil society (IRELAC, ADRAM, UNLu)

EULANETCERMAT IMPACTS



- **Deliverables**



- D4.1 Strategic plan for future cooperation and bilateral cooperation in FP7&FP8 with significant impact on ERA and EC agreements (M18)
- D4.2 Workshops on nanotechnology, ceramics, applications and relationships academia & industry. (M40)
- D4.3 Reports on impact to academia, private sector and civil society and related regional development of the R&D in MACs. (M42)

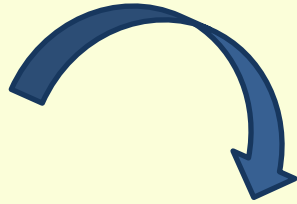
WP5: DISSEMINATION ACTIVITIES

All the partners of the Consortium

- **Objectives and Work (2 Tasks)** EULA-NETCERMAT will emphasize activities concerning spreading excellence, exploiting results and dissemination knowledge in order to increase the visibility and efficiency of the NET at regional, national and international level. To reach the significant numbers of stakeholders. Exploitation and dissemination activities will start in the first phase of the project (M12) and will run parallel to the other activities. ERA and FP7 and H2020 presents all the major activities dedicated to the enhancement of the visibility of EULA-NETCERMAT. Additionally, the performance of other WPs will contribute to the success of the promotion and dissemination strategy

- **TASK 5.1:** Dissemination activities at international level (All partners)
- **TASK 5.2:** Dissemination activities at regional and national level, (All partners)

- **Deliverables**



- D5.1 Web site, creation and maintenance (**M6 creation**, maintenance until M48)
- D5.2 Multimedia tools: Leaflets, seminars, open days, posters/banners etc. (**M12**, 24, 36 and 46)
- D5.3 Virtual platform for training and short courses of all partners developed (**M10**)
- D5.4 High level students and local populations training courses (in-situ and on-line) (M 30-46)
- D5.5 Project Presentation and progress to local HE in the territory under study to achieve the proposed networks. (M28)
- D5.6 Project Presentation, including the Action Plans, on local newspapers, local radios, local TVs etc. (M40-48) and to local authorities (M 44-48)

WP6: PROJECT MANAGEMENT

UAB (With the collaboration of UNLu)

- **Objectives** To effectively implementate the management structure of EULA-NETCERMAT and timing control of all the described tasks. To ensure successful performance of the project and fulfilment of all tasks on schedule. To ensure reasonable use of resources and adequate allocation of the budget according to the activity plan. To adjust activities of the consortium to high level standards. To ensure an efficient training between experts of the EU and the technical staff of LA partners for the formulation of new projects in H2020 (and the last calls of FP7) or others activities like ALFA. Solve any discrepancy between partners or deviation from the planned activities during the Project. To ensure efficient and adequate reporting and communication with the European Commission due to the schedule

- **Description of work (4 Tasks).**

- The Project Coordinator (PC) Prof. José Luis Brioso will be directly involved in the day-to-day management activities.
- In these tasks Dr. Gustavo Perez (UAB), the project manager (PM) will be supported by Florencia Crocci (UNLu) and R. Reinoso (ADRAM) for the coordination of the specific activities with the LA partners.
- PM will be supported by EULA-NETCERMAT secretariat (Geology and Chemistry Departments) in all administrative, financial and reporting activities, including the help of the International Department of the UAB, for specific administrative roles

Emails of PC and PM

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- Teresa.puga@uab.cat/es UAB Geology
- Queralt.gonzalez@uab.cat/es UAB

- **TASK 6.1.** Establish the communication and decision-making procedures
- **TASK 6.2.** Financial and administrative management
- **TASK 6.3.** Project management and monitoring
- **TASK 6.4.** Reporting to EC-IRSES

Deliverables

Period: from month 1 to 12

(Report to the EC IRSES: End of November 2013)

- D1.1 Reports on training and R&D knowledge transfer concerning advanced ceramics synthesis, characterization and application. (**M12/24/36/40**)
- D1.2 Report on state of the art and needs, identifying the existing requirements and potentials in academia and industry at both EU and LA concerning MACs. (**M12**)
- D5.2 Multimedia tools: Leaflets, seminars, open days, posters/banners etc. (**M12, 24, 36 and 46**)
- D6.1 Project management plan (**M3**)

- **UAB, ICMAB-CSIC, KTH, INTEMA, UCH, UFMG, ADRAM, SENAI, UNLu**

Deliverables

Period: from month 1 to 12

- D5.1 Web site, creation and maintenance (**M6** creation, maintenance until M48)
 - D5.3 Virtual platform for training and short courses of all partners developed (**M10**)
- ❖ UNLu martinelliirene@gmail.com

Deliverables

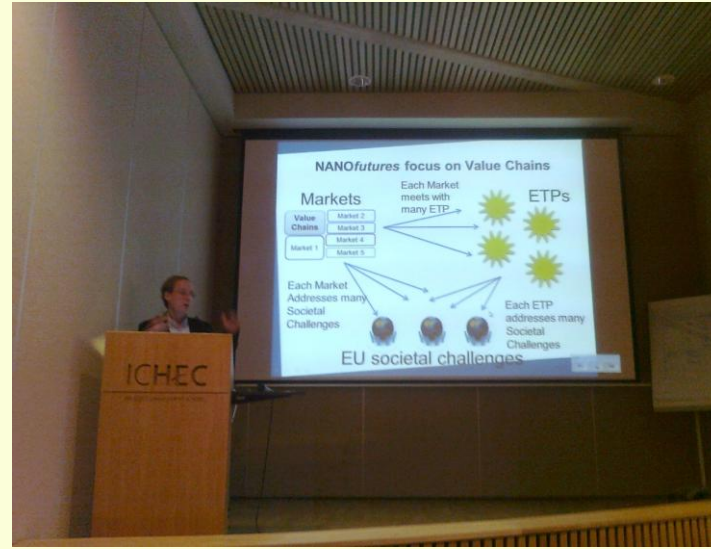
Period: from month 13 to 24

Periodic and Interim report (M24-26)

- D1.1 Reports on training and R&D knowledge transfer concerning advanced ceramics synthesis, characterization and application. (M12/**24**/36/40)
- D2.1 Methods for co-creating innovation on MACs applied to environment, health and aeronautics (M24)
- D3.1 Report of socioeconomic and environmental impact of MACs in EU-LA (M18)
- D3.2 SWOT of the competitive position of EU-LA MACs sector (M20)

- D4.1 Strategic plan for future cooperation and bilateral cooperation in FP7 & H2020 with significant impact on ERA and EC agreements (M18)
- D5.1 Web site, creation and maintenance (M6 creation, maintenance until M48) **M24**
- D5.2 Multimedia tools: Leaflets, seminars, open days, posters/banners etc. (M12, **24**, 36 and 46)
- D6.2 Interim report (IR)/ final reports (FR) for EC (**M24/M48**)
- **In total 8 deliverables for the second period (M13 TO M24)**

Pics Gallery of the KoM in Brussels



SENAI
and
IRELAC
PRESENTATIONS

ICMAB-CSIC

and

ADRAM



And KTH – UAB presentations





THANKS A LOT

EULANETCERMAT