



RESET



Raw Elements Substitution in Electronic and optoelectronic Technologies

Recognized as a Raw Materials Commitment (RMC) by the High Level Steering Group of the EIP.

Presents:

1st WORKSHOP on:

***“Substitution of Critical Raw Elements:
synthesis, characterization and processing of new Advanced Materials”***



Cagliari (Italy) 9-10 April 2015

Hotel Regina Margherita

The workshop aims to cover the most important application areas in sectors related to the electronic and lighting industries for which CRMs are key components.

The workshop intend to be the right place to discuss in order to:

- Create a common state of the art document identifying new criticisms.
- Elaborate a roadmap and time-line actions for substitution of CRM in electronic devices.

The main scientific areas include:

- **Optoelectronic Advanced Materials**
 - Transparent conductive materials
 - Displays
 - Phosphors
 - Light devices
- **Advanced Materials for Industries**
 - Catalysis
- **Advanced Materials for Medical applications**
 - Biosensors
 - Drug delivery

Workshop on Critical Raw Elements Substitution in Electronic and optoelectronic technologies:

Agenda

9 - April

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|--------------|----------------------------|--------|--|
| 09:30 | <i>Opening session</i> | | |
| 10:00 | Santiago Cuesta | ICCRAM | <i>Research and Enterprise in the field of Critical Raw Materials. The road by Castilla y Leon.</i> |
| 10:40 | Dario Della Sala | ENEA | <i>THE STARTUP OF THE EUROPEAN KNOWLEDGE INNOVATION COMMUNITY ON RAW MATERIALS.</i> |
| 11:20 | Break | | |
| 11:40 | Pier Carlo Ricci | UNICA | <i>Rare Earth free phosphors for LED devices</i> |
| 12:20 | Mauro Fasoli | UNIMIB | <i>Substituting critical elements in luminescent materials: a spectroscopic potential approach</i> |
| 13:00 | Lunch | | |
| 14:30 | Maria Luisa Grilli | ENEA | <i>CRMs-free p and n type transparent conductors</i> |
| 15:10 | Nadhira Laidani | FBK | <i>Synthesis processes and characterization of TiO₂ and ZnO films for optical and transparent electrodes applications</i> |
| 15:50 | Break | | |
| 16:10 | Angela Rizzi | UGOE | <i>Epitaxial Growth of GaN-based nanostructures</i> |
| 16:50 | Sönke Fündling | TUBS | <i>Technology and applications for 3D GaN</i> |
| 17:30 | <i>Networking Cocktail</i> | | |

10 - April

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|--------------|--|--------------------|---|
| 09:00 | Christophe Detavernier | UGENT | <i>Coating of powders by atomic layer deposition</i> |
| 09:40 | Gianluca Gulleri | STmicroelectronics | <i>Research and Manufacturing: which is the priority?</i> |
| 10:20 | Break | | |
| 10:40 | MariaLaura Lucariello | Sardegna Ricerche | <i>Critical Raw Materials: a review on their use in fuel cells and hydrogen storage</i> |
| 11:20 | Claudio Melis | UNICA | <i>Atomistic Modeling of nanostructured materials for energy and biomedical applications.</i> |
| 12:00 | <i>Round Table</i> | | |
| 13:00 | Lunch | | |
| 14:30 | <i>Summarizing discussion and concluding Remarks</i> | | |
| 16:30 | <i>End of the Workshop</i> | | |