

How to reach the Venue:

Arriving by plane,

- From Malpensa Airport: train "Malpensa Express" to Milano Cadorna; from Cadorna F.N. station, train to Milano Domodossola (1 stop); Federchimica is at two minutes walking distance from Milano Domodossola (map).
- From Linate Airport: Bus to Railway Station "Milano Centrale"; from the Railway Station Milano Centrale": Metro Line n.2 (green line) to Railway Station "Cadorna F.N."; from Cadorna F.N. station, train to Milano Domodossola (1 stop); Federchimica is at two minutes walking distance from Milano Domodossola (please see the map).



Arriving by train,

From the railway station Milano Centrale: Metro line n.2 (green line) to railway station Cadorna F.N.; from Cadorna F.N. train to Milano Domodossola; Federchimica is at two minutes walking distance from Milano Domodossola (please see the map).

Registration online, by 28th November 2014, on Federchimica web site (www.federchimica.it) in the section "Da Leggere" - "Eventi":

[21th International Workshop of T.A.C.E.C. Programme](#)

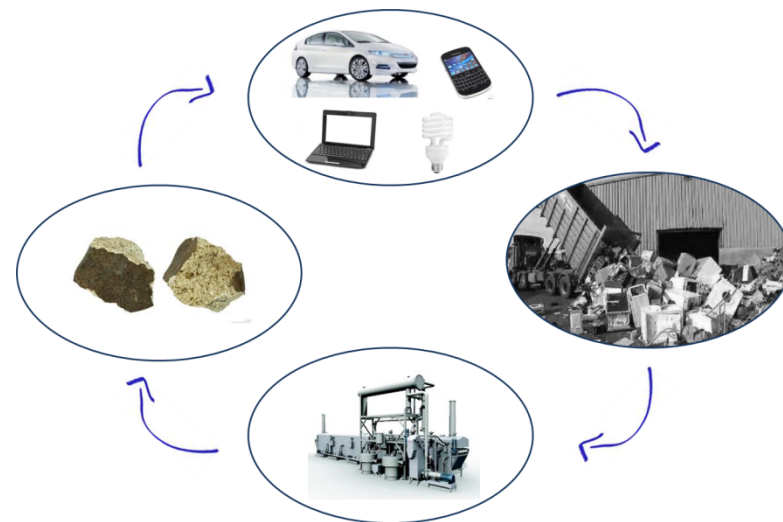
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The 21st International Workshop of T.A.C.E.C. Programme:

“The opportunities for the Critical Raw Materials: how to find the new hidden nuggets from refining, recycling and recovering.”



Milan, December 04, 2014
Auditorium, Federchimica

The Organizers:



FEDERCHIMICA_s the National Federation of the Chemical Industry and it represents more than 1,400 Chemical Companies with yearly sales of € 54,3 B (2012) and around 90,000 employees. Federchimica regroups 17 Sector Groups with the mission to support the sustainable development of the Chemical Industry in Italy. Federchimica is Member of Confindustria, in Rome and Member of Cefic, in Bruxelles.



The T.A.C.E.C. Programme has been started in 2009 by Federchimica, to provide: 1. management tools to increase energy efficiency, exchanges of technical knowledge and industrial experiences on low carbon technologies; 2. leverage on financial resources to realise the sustainable development with a global approach. The T.A.C.E.C. Programme has realised up to now 17 Workshops and 4 yearly Conferences participated by more than 2,000 Managers, Scientists, Venture Capitalists, NGOs Professionals, Public Officers.

The Critical Raw Materials:

European Union is dedicating deep analysis and is adopting public policy to manage of the issues of the Critical Raw Materials and it is supplying the innovation to generate business opportunities. In particular, the “Rare Earths” (REE) are subjected to decisions from non EU Countries and threatened on the long term supply. So that Federchimica too is committed to study the 40 Critical Raw Materials markets and to support the Chemical Companies on how to negotiate, to refine, to use, to substitute them. To remember how the Rare Earths are important for the Manufacturing Industries in Italy, the main applications are:

- **Energy** (engines of wind turbine; batteries and light sources; magnetic refrigeration; oil cracking catalysts),
- **Transport** (catalytic converters; hybrid vehicles; air engines),
- **High-tech-Nanotechnology** (Magnets; LCD panel displays; MP3 players; Lasers; glasses; ceramics),
- **Agriculture** (feed additives).

Agenda(*)

09:30 Registration of Participants.

Chair: **Patrizia Maccone** – Solvay Specialty Polymers, Bollate.

Introduction to the Workshop

10:00 **Vasili Nicoletopoulos** - Natural Resources GP, Athens:
"Recent developments in Critical Materials Technology and Policy".

10:25 Q&A

1st Session: The status of art of the Recovery Technologies

Chair: Dino Fiorani - Aimagn, Rome:

10:35 **Iakovos Yakoumis** – Monolithos Ltd., Athens:
"How to treat catalyst to recover precious metals and rare earths.".

11:00 **Dimitrios Panias** – National Technical University of Athens, Athens:
"Ionometallurgy: A new route for recovery rare earths from primary and secondary resources".

11:25 **Giuseppe Devincenzis** – Unità Tecnica Tecnologie ENEA Trisaia, Rotondella:
"From a pilot plant to the industrialization of the process of recovery rare earths".

11:50 Q&A.

12:00 Brunch.

2nd Session: The present and the future uses of Critical Minerals in 2 segments of industries

Chair: Dario della Sala – ENEA Casaccia, Rome.

12:45 **Irena Skulj** - Magneti Ljubljana d.d., Ljubljana:
"The use of rare earths in the permanent magnets industry".

13:10 **Marco Visentin** – Esmar S.r.l, Sassuolo:
"How to use the recovered raw materials in the ceramics industry".

13:35 Q&A.

13:45 **Urs Gmur** - REE Fund, Nyon:
"REE-Investments - Chances and Risks".

14:10 **Patrizia Maccone**
"Conclusions".

(*) English – Italian translation will be available.