

4th Workshop Raw Matters Ambassadors @ Schools

July 4 and 5, 2016

School of Mining and Energy Engineering
and Foundation Gomez Pardo



Visiting address: Rios Rosas Street nº 21 28003 Madrid Spain



Raw Matters Ambassadors @ Schools AGENDA

July 4, 2016

Fourth RM@Schools Workshop

Monday July 4, 2016 - Focus on the RM@Schools Learning Pathways

- ✓ 13:00h Participants registration
- ✓ 13:30h Welcome
- ✓ 13:45h 1^{RST} STEERING COMMITTEE MEETING Status of the RM@Schools project Armida Torreggiani CNR -ASTER (IT)
- ✓ 14:15h How to introduce RM-related themes to students Eric Pirard University of Liege (BE)- remote presentation
- ✓ 14:45h LEARNING PATHWAYS: Discussion on how to present the learning pathway and understanding of the *hands-on* experiment protocols

GEOLOGY & MINING

- Liliana Medic Universidad Politécnica de Madrid ES: (1) Geology games: Mineral and Rock Identification and techniques used in mineral and rock recognition; Rocks on my face; Rocks in my body; (2) From minerals' discovery to returning to the land in the natural state: Mineral Prospecting, Development, Mining Operations, Closure of Mines; Gold Panning Activity
- Martine VanHerck University of Liege BE: Metallurgy of copper
- Christian F.Otto Technische Universitet Clausthal- DE: **Metal Separation** (a) Precipitation and leaching; (b) Separation of Cu2+ and Fe3+ by an ion exchanger;
- ✓ 16:00h Coffee break
- ✓ 16:30h ENERGY SUPPLY & SUBSTITUTION
 - Marco de Graaff Stichting Wetsus NL: Blue Energy Stack
 - Christian F.Otto Technische Universitet Clausthal- DE: (1) Cation Trap; (2) Miscellaneus Hands-on Experiments on fluorescence, high magnetic flux density and memory alloy Metals
- ✓ 17:30h CIRCULAR ECONOMY
 - Marco de Graaff Stichting Wetsus NL : P- Recovery Struvite from urine
- **✓** 18:00h Closing
- ✓ 21:00h Dinner



Tuesday July 5, 2016

- ✓ 9:00h RECYCLING
 - Cation exchanger Christian F Otto TU-Claustal
 - **Deinking** Christian F Otto TU-Claustal DE
 - Metal Separation: examples of fish hooks in reclying strategies Christian F Otto TU-Claustal DE (30 min)
 - **Dismalting of mobile phone** *Martine VanHerck University of Liege BE*
 - **Recycling of Aluminium** *Martine VanHerck- University of Liege BE (20 min)*
 - **RM in HDD**: **Identify rare earths within a Hard Disk Drive (HDD)** How to create Educational Cards *Cristiano Albonetti CNR* –*ASTER* (20 min)
- ✓ 10:10h Coffee break
- ✓ 10:40h RM@School vitual centre & Web site Alessandra Degli Esposti CNR ASTER (20 min)
- ✓ 12:10h Working plan: Discussion on the state of art of the project
 - o Presentation of the RM@Schools project to schools (i.e. leaflet) -Patricia Groo'-Nagy Bay Zoltan Hu
 - preparation of teaching supporting materials, creation of the Local Network (i.e. involvement of Companies), etc.
- ✓ 12:40h Visit in School of Mining and Energy Engineering (Museums, Historical Library, Underground Mine, etc...)
- ✓ 14:00h Lunch/Closing



GENERAL INFORMATION

Organizing Committee

Benjamin Calvo, Liliana Medic, Armida Torreggiani

Contacts

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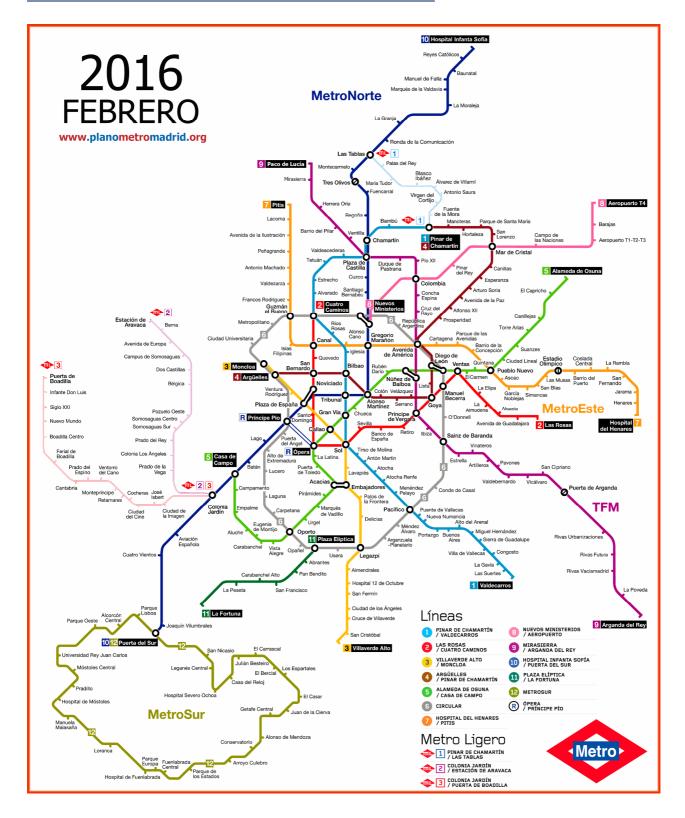
Suggested Accommodation:

Student Residence next to School or Hotels

Meeting Venue: ALENZA Street nº 1; Foundation Gomez Pardo Building (meeting room VIII)



How to reach us: Metro station: Rios Rosas Blue Line 1





Please follow this link

