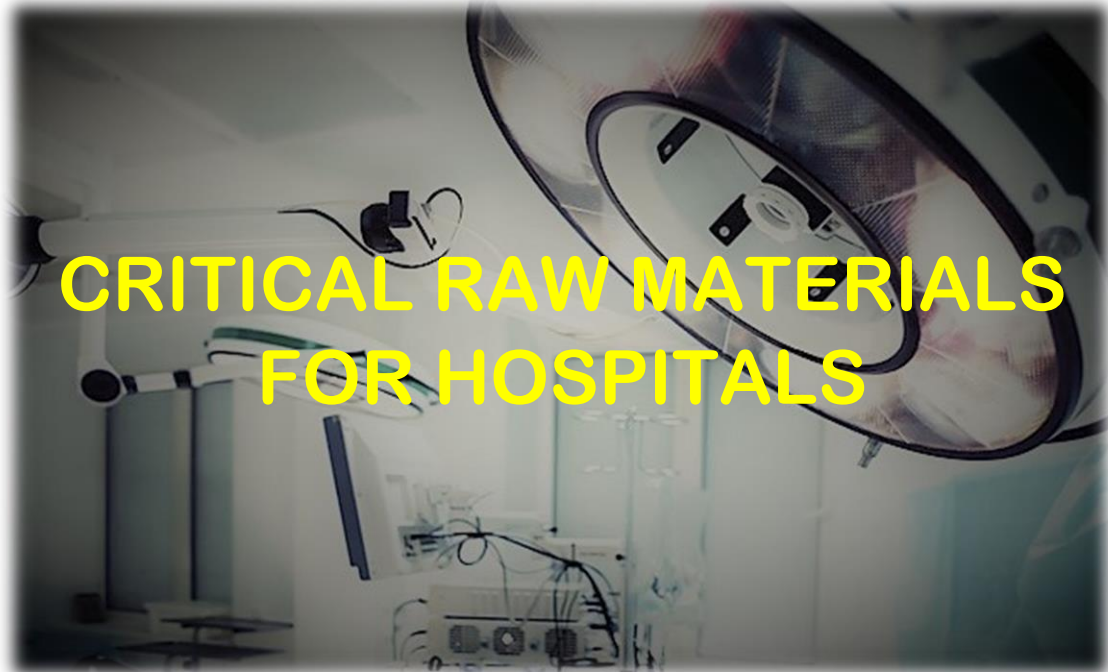


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# RM@SCHOOLS CONTEST

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## COMPETITION RULES

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### Foreword

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Critical raw materials (CRM) are raw materials which are economically and strategically important for the economy but have a high-risk associated with their supply and there is a lack of viable substitutes. The importance of those materials is such that they are critical for the technology development and present in a wide range of sectors. The aim of this competition is to increase the high school student's knowledge regarding critical raw materials by doing a minor research of critical raw materials used in health care, which are being crucial in the fight against SARS-CoV-2 (COVID-19).

### How to participate

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Students who would like to participate should make a **poster individually** about critical raw materials and their use in hospitals. The list of critical raw materials can be downloaded from the [communication prepared by the European Commission](#) and are summarised in the following table:

Table 1. European Critical Raw Material list, 2018.

Critical Raw Materials			
Antimony	Fluorspar	LREEs	Phosphorus
Baryte	Gallium	Magnesium	Scandium
Beryllium	Germanium	Natural graphite	Silicon metal
Bismuth	Hafnium	Natural rubber	Tantalum
Borate	Helium	Niobium	Tungsten
Cobalt	HREEs	PGMs	Vanadium
Coking coal	Indium	Phosphate rock	

(HREEs = Heavy Rare Earth Elements<sup>1</sup>, LREEs = Light Rare Earth Elements<sup>2</sup>, PGMs = Platinum Group Metals<sup>3</sup>).

<sup>1</sup> dysprosium, erbium, europium, gadolinium, holmium, lutetium, terbium, thulium, ytterbium, yttrium.

<sup>2</sup> cerium, lanthanum, neodymium, praseodymium, samarium.

<sup>3</sup> iridium, platinum, palladium, rhodium, ruthenium.

Students are free to choose the number (no minimum or maximum has been fixed) and elements to be included in their work. Posters can be designed manually (using paper, cardboard, photos, etc.) or using any kind of software, including the title at the top. In both cases, posters should be sent in portable document format (pdf) or picture format (jpg, jpeg, png, tiff) via on-line to the competition email [rawmaterialsforhospitals@gmail.com](mailto:rawmaterialsforhospitals@gmail.com) and filled-in the [application form](#). The deadline to submit the poster will be **miércoles, 30 de septiembre de 2020**, inclusive.

## Requirements for the participants

Participants need to be enrolled in a **Spanish** educational institution in the academic year 2020/2021. There are two differentiate categories for the contest:

- **Category 1:** students born between 2003-2005. They have to **include a summary in English** in the poster (**or** they can **submit the English version of the poster** in addition to the Spanish one).
- **Category 2:** students born between 2006-2008.

## Posters evaluation

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All the works sent for the competition will be evaluated by a scientific-educational committee made up of teachers from the **School of Mining and Energy Engineering (UPM)**, who will choose the 3 award-winning posters for each category, on the basis of scientific approach, originality and graphical design.

On **30 de octubre de 2020** there will be an exposition of all the participant's posters in the **School of Mines and Energy (UPM)** in Madrid, followed by awards ceremony (publishing the list of winners and notifying them in advance). In case the event cannot be held in person for health reasons, the date may be changed by the organisers or an exhibition may be held virtually.

## Prizes

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Certificates of participation will be given to all contestants. For each category there will be a total of 3 winners:

1<sup>st</sup> Prize: **Tablet computer + mineral box**

2<sup>nd</sup> Prize: **USB flash drive + mineral box**

3<sup>rd</sup> Prize: **Mineral box**