

Workshop

“Methods and technologies for valorisation of waste and recovery of critical materials”

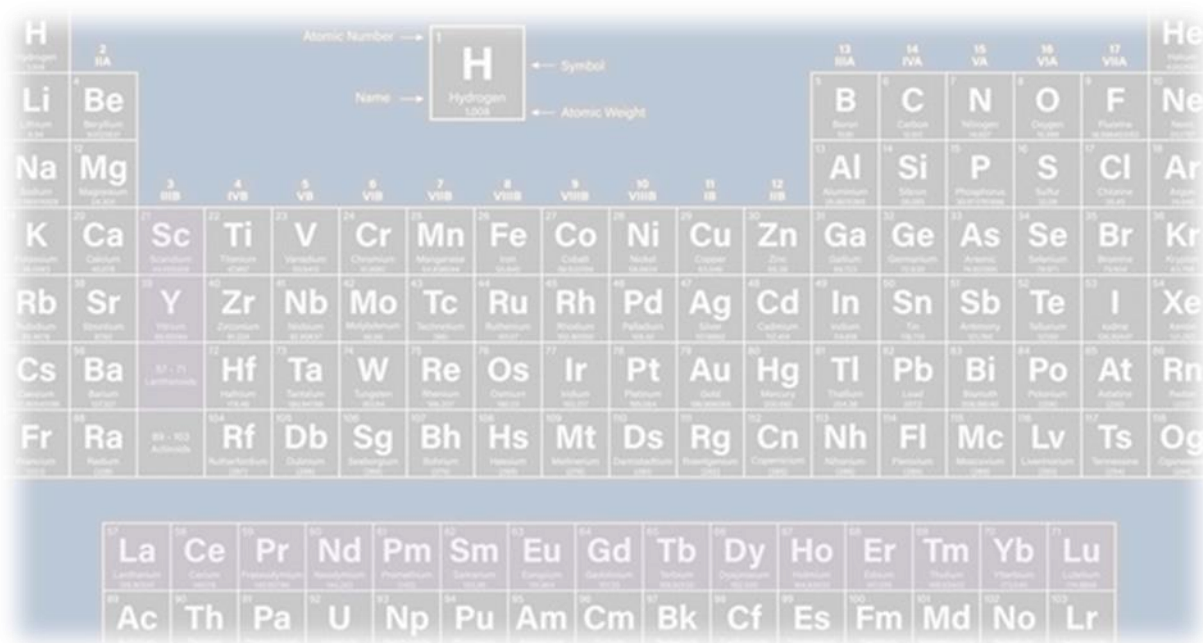
22/01/2026

Universitat Autònoma de Barcelona - UAB

Sala de Junes – Facultat Ciències

Organized in the framework of the project

FREECOVER: “Eco-Friendly Hydrometallurgy for Rare Earths Recycling”
HORIZON-MSCA-2023-SE-01, #101182579



1 H Hydrogen 1.008	2 He Helium 4.0026																	18 Ar Argon 39.948	19 K Potassium 39.0983	20 Ca Calcium 40.078	21 Sc Scandium 44.9559	22 Ti Titanium 47.867	23 V Vanadium 50.9415	24 Cr Chromium 51.9961	25 Mn Manganese 54.9380	26 Fe Iron 55.845	27 Co Cobalt 58.9332	28 Ni Nickel 58.6934	29 Cu Copper 63.546	30 Zn Zinc 65.38	31 Ga Gallium 69.723	32 Ge Germanium 72.630	33 As Arsenic 74.9216	34 Se Selenium 78.96	35 Br Bromine 79.904	36 Kr Krypton 83.798	37 Rb Rubidium 85.4678	38 Sr Strontium 87.62	39 Y Yttrium 88.9058	40 Zr Zirconium 91.224	41 Nb Niobium 92.90638	42 Mo Molybdenum 95.94	43 Tc Technetium 98	44 Ru Ruthenium 101.07	45 Rh Rhodium 102.9055	46 Pd Palladium 106.36	47 Ag Silver 107.8682	48 Cd Cadmium 112.411	49 In Indium 114.818	50 Sn Tin 118.710	51 Sb Antimony 121.757	52 Te Tellurium 127.6	53 I Iodine 126.905	54 Xe Xenon 131.29	55 Cs Cesium 132.90545	56 Ba Barium 137.327	57-71 Lanthanoids	72 Hf Hafnium 178.49	73 Ta Tantalum 180.94788	74 W Tungsten 183.84	75 Re Rhenium 186.207	76 Os Osmium 190.23	77 Ir Iridium 192.222	78 Pt Platinum 195.084	79 Au Gold 196.96657	80 Hg Mercury 200.59	81 Tl Thallium 204.3833	82 Pb Lead 207.2	83 Bi Bismuth 208.9804	84 Po Polonium 209	85 At Astatine 210	86 Rn Radon 222	87 Fr Francium 223	88 Ra Radium 226	89-103 Actinoids	104 Rf Rutherfordium 261	105 Db Dubnium 262	106 Sg Seaborgium 266	107 Bh Bohrium 264	108 Hs Hassium 277	109 Mt Meitnerium 268	110 Ds Darmstadtium 271	111 Rg Roentgenium 272	112 Cn Copernicium 285	113 Nh Nihonium 284	114 Fl Flerovium 289	115 Mc Moscovium 288	116 Lv Livermorium 293	117 Ts Tennessine 294	118 Og Oganesson 294
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Program

Thursday January 22 rd , 2026	
14:30-14:45	Workshop opening and presentation
	Presentations
14:45 - 15:15	"Rare earth ions in luminescent materials and phosphors" <u>S. Ruggieri</u> , F. Piccinelli, University of Verona, Italy
15:15– 15:45	"Design and Synthesis of Multifunctional Ionic Liquids for Selective" Separation of the Rare Earth Elements <u>S. Gadžurić</u> , University of Novi Sad, Serbia
15:45 – 16:00	"Recovery of REEs via solid phase extraction with natural zeolite" <u>J. A. Ricardo García</u> , University of Udine, Italy
16:00 – 16:15	"Leaching protocols for REEs recovery from permanent magnets: principles and applications" <u>Y. Valdés Arencibia</u> , University of La Habana, Cuba
16.15 - 16.45	"Recovery of critical raw materials from leachates of mines wastes via thermal-desorption" <u>R. Boada</u> , I. H. Valido, J. Senye, J. Gispert, S. Matencio, D. Morillo, E. Ortega, L. Díazc, M. Faccini, M. Valiente Universitat Autònoma de Barcelona, LEITAT Technological Center, Spain Leitat Chile
16.45 - 17.15	Coffee break
17:15 - 17:45	"Solid-state fermentation as an innovative technology for the valorisation of organic wastes." <u>J. Font y Pomarol</u> , Universitat Autònoma de Barcelona & AERIS technologies ambientales, Spain
17:45 - 18:15	"FREECOVER and SLCA: Driving Sustainable Innovation in Rare Earth Elements Recycling." <u>L. Piccinetti</u> , Sustainable Innovation Technology Services Ltd, Ireland
18:15-18:30	Conclusions
19:30	Science café "The Hidden Metals of the Green Transition—Can We Recycle Them Better?" at the CAU de la Vila , Bar at Vila Universitària - UAB



List of Participating Institutions

	Partner	Short name	Role	Sector
 UNIVERSITÀ DEGLI STUDI DI UDINE	Università degli Studi di Udine	UNIUD	Beneficiary	AC
	University of Novi Sad Faculty of Sciences	UNSPMF	Beneficiary	AC
	Institut za Nuklearne Nauke Vinča Institut od nacionalnog značaja za Republiku Srbiju, Univerzitet u Beogradu	VINS	Beneficiary	AC
	Universitat Autònoma de Barcelona	UAB	Beneficiary	AC
	Univerza v Ljubljani	UL	Beneficiary	AC
	AERIS Tecnologías Ambientales SL	AERIS	Beneficiary	SME
	Sustainable Innovation Technology Services Limited	SITES	Beneficiary	SME
	Ad Harbi Doo Sarajevo	ADHARBI	Beneficiary	SME
	Università degli Studi di Verona	UNIVR	Beneficiary	AC
	Universidad de La Habana	UH	Associated Partner	AC