

173 ANIVERSARIO
IGME
1849 - 2022



CSIC
CONSEJO SUPERIOR DE INVESTIGACIONES CIENTÍFICAS

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INSTITUTO GEOLÓGICO Y MINERO DE ESPAÑA



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1st Scientific-Technical Conference of the Geological and Mining Institute of Spain- National Center (IGME, CSIC)

July 12-13, 2022

IGME headquarters in Tres Cantos, Assembly Hall
C/ La Calera, 1. Tres Cantos – Madrid
(Enabled online access)

DETAILED PROGRAM

EXTENDED PROGRAM

Tuesday, July 12, 2022

Online Access:

<https://igme.webex.com/igme-es/j.php?MTID=m82212b012c3ad9b51b1f106dab5cb6b7>

09:00	09:30	Live	173rd Anniversary of IGME
09:30	10:00	Live	The volcanic eruption of La Palma in 2021: the role of IGME in the emergency and post-disaster recovery. Inés Galindo. Head of the Canary Islands Unit and adviser to PEVOLCA.
10:00	10:15	Live	Scientific objectives of IGME. Luis Somoza Losada. Deputy Director of Research at IGME
10:15	10:30	Live	Scientific-Technical Services of IGME. María Teresa López López. Deputy Director of the Scientific and Technical Services of IGME
10:30	11:00		Coffee Break
11:00	11:05	Online	General lines and presentation of the Research Groups belonging to the Department of Water and Global Change. David Pulido, director of the Department of Water and Global Change
11:05	11:20	Online	The Research Group water resources and related ecosystems in the framework of climate and global change (REACT). David Pulido, coordinator of the ANALYSIS OF IMPACTS AND ADAPTATION TO CLIMATE AND/OR GLOBAL CHANGE IN WATER RESOURCES AND ASSOCIATED ECOSYSTEMS (IMPAREC) research group.
11:20	11:25	Online	Current international projects in the Duero and Miño-Sil basins. África De la Hera Portillo.
11:25	11:30	Live	Pan-European map of groundwater resources, and harmonized characterization of karst aquifers. Project RESOURCE. Juan de Dios Gómez Gómez.
11:30	11:35	Live	Identification, delineation and data of Hydrogeological Areas for groundwater resources mathematical modelling in national River Basin Districts. Project Encomienda DGA (2019-2022). José Manuel Murillo.
11:35	11:40	Online	Innovative tools for the integrated management of groundwater in a context of increasing scarcity of water resources: Interreg Sudoe AQUIFER Project. José Luis García Aróstegui.
11:40	11:45	Online	Hydrogeological processes and geological settings over Europe controlling dissolved geogenic and anthropogenic elements in groundwater of relevance to human health and the status of the dependent ecosystem. Juan Grima Olmedo.
11:45	12:00	Live	Responding to the challenges of Water and Global Warming: Environmental Hydrogeology and Global Change Research Group (HYGLO-Lab). Juan José Durán Valsero, coordinator of the ENVIRONMENTAL HYDROGEOLOGY AND GLOBAL CHANGE (HYGLO-Lab) research group.
12:00	12:05	Online	Hydrogeology and geomorphology of high relief karst systems: Sierra de las Nieves (Málaga) and Sierra de Tendeñera (Huesca). Eulogio Pardo Igúzquiza.
12:05	12:10	Online	Water Sowing and Harvesting: an ancient Nature-Based Solution for Water Management. Sergio Martos Rosillo.
12:10	12:15	Online	Environmental isotopes contribution to the characterization of the flow pattern of a large plain hydrogeological system. Javier Gustavo Heredia Díaz.

12:15	12:20	Online	A methodology for simulating perched conditions in multilayer aquifer systems with 2D variably saturated flow. Javier Gustavo Heredia Díaz.
12:20	12:25	Online	Hydrogeological research of karstic lakes in the center of the Iberian Peninsula: two study cases. Raquel Morales.
12:25	12:30	Live	Computing tools to support the interpretation and management of hydrogeological variables. Luis Moreno.
12:30	12:35	Online	Assessment of climate change impact in mountain areas of special environmental value. Luis Javier Lámbán.
12:35	12:50	Live	Research Group on Applied Hydrogeology and Shallow Geothermal Energy (GIHAGS): general information and research lines. Miguel Mejías, coordinator of the APPLIED HYDROGEOLOGY AND SHALLOW GEOTHERMAL (GIHAGS) research group.
12:50	12:55	Live	Hydrogeological aspects determining the appearance of a collapse in Undiano (Navarra). Mónica Meléndez Asensio.
12:55	13:00	Live	Groundwater User Communities (CUAS) advice on the improvement of hydrogeological knowledge. Carlos Camuñas Palencia.
13:00	13:05	Live	The SAGE4CAN project: The use of shallow geothermal energy from the Canary Islands. Alejandro García Gil.
13:05	13:10	Online	Design and operation of a quantitative control network in a complex river basin district: Application to the Segura river basin district. Jorge Hornero Díaz.
13:10	13:15	Live	The essential work of IGME linked to the strategic role of groundwater in urban supply. Tomás Peinado Parra.
13:15	13:20	Live	Eventual effect on groundwater in the hydrographic demarcation of La Palma due to the eruption of the Cumbre Vieja volcano. Jorge Jiménez Sánchez.
13:20	13:25	Live	Video "studying the groundwater after the eruption of the Cumbre Vieja Volcano". Jorge Jiménez Sánchez.
13:25	15:30	Comida	Lunch break
15:30	15:35	Live	Geology and subsurface Department. Ruth Soto, director of the Department of Geology and Subsoil.
15:35	15:50	Live	Geological mapping as a tool for scientific research. Alejandro Robador, coordinator of the GEOLOGICAL, GEOMORPHOLOGICAL CARTOGRAPHY AND 4D GEOLOGY OF MOUNTAIN RANGE AND BASINS (CARTO) research group.
15:50	16:05	Online	Tectonic Processes and GeoResources Lab. Antonio Pedrera Parias, coordinator of the TECTONIC PROCESSES AND GEOLOGICAL RESOURCES research group.
16:05	16:10	Live	Growth and origin of the Iberian plateau: A multidisciplinary approach (coordinated project PLATIBERIA PID2020-114854GB-C21, PID2020-114854GB-C22). Julien Babault.
16:10	16:25	Live	Subsurface Geophysics and Geology (GEOFSUB). Fernando Bohoyo, coordinator of the GEOPHYSICAL AND GEOLOGICAL SUBSOIL (GEOFSUB) research group.
16:25	16:30	Online	IMAGYN the Pyrenean Crust. Concepción Ayala Galán.
16:30	16:35	Live	Passive seismic methods: a cost-effective tool for subsurface characterization. Beatriz Benjumea Moreno.
16:35	16:50	Live	Geochemistry and Lithosphere Geodynamics group. Pablo Valverde-Vaquero, coordinator of the Geochemistry and Lithosphere Geodynamics (GEOLITHOS) research group.
16:50	17:05	Live	Research on Marine Geology Resources and Extreme Environments at IGME. Francisco Javier González, coordinator of the GEOLOGY APPLIED TO MARINE RESOURCES AND EXTREME ENVIRONMENTS (GEOMAR) research group.
17:05	17:10	Live	Speciation and distribution of Critical Raw Materials in European seabed mineral deposits: MINDeSEA project results. Egidio Marino.

17:10	17:15	Live	Ferromanganese Crust and Phosphorites Pan-European Predictivity Cartography. MINDeSEA project results. Ana Belén Lobato-Otero.
17:15	17:20	Live	Marine Geological Atlas of Spain. Ana Belén Lobato-Otero.
17:20	17:25	Live	The EMODnet-Geology project: a Pan-European initiative to facilitate access to marine geological data and maps. Teresa Medialdea.
17:25	17:30	Live	Mineral microbial precipitation of seafloor fluids at the submarine Tagoro Volcano hydrothermal system (El Hierro, Spain). Blanca Rincón Tomás.
17:30	17:35	Live	Enrichment of thorium and rare earth elements in an acid rock drainage: The case study of the Bierzo mining area (León, Spain). Esther Santofimia.
17:35	17:40	Live	Composition and evolution of trace and rare earth elements in an acidic river basin (Tinto-Odiel). Paula Adánez Sanjuán.
17:40	17:45	Live	Exergy and thermoeconomic assessment of the national recovery capacity of secondary resources essential for the ecological transition (RESET). Paula Adánez Sanjuán.
17:45	17:50	Live	High-resolution geochemical characterization with the multi-sensor core logger in sediment cores in the Bransfield Strait (Antarctica): Preliminary results. Wai Long Ng Cutipa.

Wednesday, July 13, 2022

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09:00	09:05	Live	Geological Resources for the Ecological Transition: Challenges and Opportunities in the IGME National center. José Francisco Mediato Arribas, director of the Department of Resources for the Ecological Transition.
09:05	09:20	Live	Mining Waste and Environmental Geochemistry: Research at the Service of Sustainable Mining, the Environment and the Circular Economy. Javier Sánchez España coordinator of the MINING WASTE AND ENVIRONMENTAL GEOCHEMISTRY research group (P.A. Julio César Arranz González).
09:20	09:25	Live	Mining waste characterization about recycling and rehabilitation processes. Julio César Arranz González.
09:25	09:40	Live	Mineral and Thermal Waters. María del Mar Corral Lledó, coordinator of the MINERAL AND THERMAL WATERS Research Group.
09:40	09:45	Live	Contribution to the knowledge of hydromineral resources in Andalusia. María Elena Galindo Rodríguez.
09:45	10:00	Live	Economic Geology of Mineral Resources. Susana María Timón Sánchez, coordinator of the ECONOMIC GEOLOGY OF MINERAL RESOURCES (GECOMIN) research group.
10:00	10:05	Live	Outlook on Spanish Nb-Ta mineralization and exploration potential (FRAME project's WP6). Susana María Timón Sánchez.
10:05	10:10	Online	The Importance of Spanish Data (BDMIN & PANORAMA MINERO) in the European Raw Materials Knowledge Base (EURMKB). Pedro Delgado Arenas.
10:10	10:15	Live	New hydrometallurgical treatment technology alternatives for refractory gold ores and primary polymetallic sulphides. Santiago del Barrio Martín.
10:15	10:20	Online	Historic quarries associated with the architectural heritage in Andalusia. Jorge Fernández Suárez.
10:20	10:25	Live	Strategic raw materials for the energy and digital transition in Spain. Teresa Sánchez-García.
10:25	10:30	Live	Sustainable energy harvesting systems based on innovative mine waste recycling. Ester Boixereu i Vila.
10:30	10:35	Live	Geochemical sampling for mapping and exploration in Western Ossa Morena Zona (Huelva and Sevilla). Iván Martín Méndez.
10:35	10:50	Live	The GeoEnergy Group. José Francisco Mediato Arribas, coordinator of the GEOENERGY research group.
10:50	10:55	Online	Shallow geothermal potential mapping in Spain. A crucial pending task with society and a great challenge as geological service. Cristina de Santiago.
10:55	11:00	Live	Laboratory Experiments on Early-Phase Supercritical CO₂-Brine-Rock Interactions. Applications in Carbon Capture and Storage Projects. Edgar Berrezueta Alvarado.
11:00	11:30		Coffee Break
11:30	11:35	Live	STRATEGY CCUS: Strategic planning of regions and territories in Europe for low-carbon energy and industry through CCUS. Paula Fernández-Canteli.
11:35	11:40	Live	pilotSTRATEGY: Scaling up CO₂ storage with pilot studies in regions with promising geological resources. Paula Fernández-Canteli.
11:40	11:45	Live	Hystories: Geological storage of hydrogen. Paula Fernández-Canteli.

11:45	11:50	Online	Geothermal resources evaluation: Using O&G exploration data to evaluate low and médium enthalpy resources from deep sedimentary reservoirs. Celestino García de la Noceda.
11:50	11:55	Online	High enthalpy resources in the Canary Islands. Celestino García de la Noceda.
11:55	12:00	Online	InSAR and paleostrain data acquisition and processing in the Hontomín CO2 storage plant (Northern Spain). SENSE Project. Adrià Ramos Ordoño.
12:00	12:15	Live	Heritage and Geodiversity (GEO-HERITAGE) Research Team at IGME: challenges and main lines of action. Juana Vegas Salamanca, coordinator of the GEODIVERSITY AND GEOLOGICAL HERITAGE research group
12:15	12:20	Live	Geological Heritage inventory of La Rioja (Spain). A small territory with great geological diversity. Ángel Salazar Rincón.
12:20	12:25	Live	International activity towards the conservation of geological heritage and heritage stone. Enrique Díaz Martínez.
12:25	12:30	Live	RESCUe Project: Cultural Heritage vulnerability in a changing and directional climate. Javier Martínez Martínez.
12:30	12:35	Live	Department of Geological Risks and Climate Change. Rosa María Mateos Ruiz, director of the Department of Geological Risks and Climate Change.
12:35	12:50	Live	Research Group on Earth Observation, Geological Risks and Climate Change (OBTIER). Rosa María Mateos Ruiz, coordinator of the EARTH OBSERVATION, GEOLOGICAL RISKS AND CLIMATE CHANGE (OBTIER) research group.
12:50	12:55	Online	Palomares Fault: Geomorphological exploration and mapping, microtopographic analysis and classical trenching survey (NSOURCES PROJECT). Júlia Molins Vigatà.
12:55	13:00	Live	Integration of data acquired using SfM orthoimagery correlation techniques and satellite InSAR techniques for the calculation of 3D displacements in densely vegetated unstable slopes. Juan López Vinielles.
13:00	13:05	Online	Geological applications of the PRISMA hyperspectral mission. Canary Islands scenario. Jorge Buzzi Marcos
13:05	13:10	Live	Seismogenic characterization of active faults in Colombia for seismic hazard assessment of the city of Bogotá: Formal agreement between the Colombian Geological Survey and IGME. Julian García Mayordomo.
13:10	13:25	Live	Geological Extreme Events: analysis and mitigation. Andrés Díez Herrero, Coordinator of the EXTREME GEOLOGICAL EVENTS AND HERITAGE (EGEP) Research Group.
13:25	15:25	Comida	Lunch break
15:25	13:40	Online	Research Group on Sedimentary Record of Climatic Changes. Juan Cruz Larrasoña, coordinador del G.I. coordinator of the CLIMATE CHANGE SEDIMENTARY RECORD (RESCLIM) research group.
15:40	15:55	Live	Geominero Museum: past, present and... the future? Ana Rodrigo Sanz, director of the GEOMINERO MUSEUM.
15:55	16:10	Live	The Geological repository of CN IGME. Maria del Pilar Mata Campo, head of the GEOLOGICAL REPOSITORY Area.
16:10	16:15	Live	Non-destructive equipment for analysis of cores: hyperspectral reflectance spectrometer and modular core scanning platform. Maria del Pilar Mata Campo.
16:15	16:20	Online	Classification and review of boreholes and documentation of the Andalusian regional community by the CN IGME core repository. Clemente Muñoz.
16:20	16:35	Online	The General Laboratories of the Geological and Mining Institute of Spain, CSIC. Ana Gimeno García, head of the IGME GENERAL LABORATORIES Area.

16:35	16:50	Live	Geological Information System Division. José Román Hernández Manchado, head of GEOLOGICAL INFORMATION SYSTEMS Area.
16:50	16:55	Online	IGME's Information Systems contribution to the European Geological Data Infrastructure (EGDI). Margarita Sanabria Pabón.
16:55	17:00	Online	EGDI Data Search. A web application to support geoscientific information discovery and access in Europe: Sistemas de Información Geológica. Ángel Prieto Martín.
17:00	17:05	Live	SILAB IGME's laboratory information system and new applications for IGME's services management: Geoscientific Information Systems and Institutional Databases. Roberto Alonso Riol.
17:05	17:10	Online	GESTEC, evolution and integration with IGAE tools: Geoscientific Information Systems and Institutional Databases. Cristina Mayans López.
17:10	17:25	Live	IGME's UAVs in La Palma volcano: STA (IGME's Aerial Works Service). Carlos Lorenzo Carnicero, REMOTE EARTH OBSERVATION SERVICE Technician.
17:25	17:40	Live	UTE-PLANAGEO Project: national geology plan of Angola. José Luis García-Lobón.
17:40	17:45	Online	Remote sensing applied to litho-structural and regolith mapping of the SW of Angola (PLANAGEO Project). Juan Carlos Gumiel Gutierrez.
17:45	17:50	Online	Geological mapping and geochronology of Southern Angola. Enrique Merino Martínez.
17:50	17:55	Online	Geographical Information System (GIS) and data base of Planageo Project. María del Carmen Fera Martín.
17:55	18:00	Live	Gravimetric approach to the outstanding Kunene Complex (SW Angola): dimensions from modelling. María del Carmen Rey Moral.
18:00	18:05	Online	Tectonostratigraphy of Benguela and Namibe sedimentary basins. Manuela Chamizo Borreguero.
18:05	18:10	Online	Mineral resources and geochemical exploration in PLANAGEO (Angola). Iván Martín Méndez.
18:10	18:15	Online	Rocks and industrial minerals map of Angola (CARMINA). Jorge Fernández Suárez.
18:15	18:20	Online	Hydrogeological potential of the Kalahari basin in Angola. Raquel Martín Banda.