



## Geodinámica

**Áreas de conocimiento:** Geodinámica externa, Geodinámica interna

**Director:** José Miguel Azañón Hernández

**Secretario:** Manuel López Chicano

**Página web:** <http://www.ugr.es/~geodina/>

**Profesorado:** CU: 12, PTU: 5, PTEU: 0, PDI Contratado y Otros:4.

### Tesis leídas

- Procesos hidrodinámicos en la zona de descarga de los acuíferos costeros.

Doctorando: Juan Pedro Sánchez Úbeda.

Directores: María Luisa Calvache Quesada y Manuel López Chicano.

Fecha de lectura: 3 de julio de 2017.

- Análisis de la peligrosidad frente a los movimientos de ladera en la Cuenca de Loja (Ecuador).

Doctorando: John Soto Luzuriaga.

Directores: José Miguel Azañón Hernández y Clemente Irigaray Fernández.

Fecha de lectura: 30 de abril de 2018.

### Grupos de Investigación.

RNM376 DINÁMICA DE ORÓGENOS Y CUENCAS

- Responsable: JUAN IGNACIO SOTO HERMOSO

RNM148 GEOLOGIA ESTRUCTURAL Y TECTONICA

- Responsable: JOSÉ MIGUEL AZAÑÓN HERNANDEZ

RNM369 GEOLOGÍA SEDIMENTARIA Y AGUAS SUBTERRÁNEAS

- Responsable: MARÍA LUISA CALVACHE QUESADA

RNM126 GRUPO DE INVESTIGACION DE RECURSOS HIDRICOS

- Responsable: JOSE JAVIER CRUZ SAN JULIÁN

RNM122 RSGIS -TELEDETECCIÓN ESPACIAL, SIG Y GEOESTADÍSTICA-

- Responsable: MARIO CHICA OLMO

RNM215 TECTONICA Y GEOLOGIA MARINA

- Responsable: MARÍA DEL CARMEN COMAS MINONDO

### Publicaciones en revistas

- 2018 Artículo: Appraising timing response of paleoenvironmental proxies to the Bond cycle in the western Mediterranean over the last 20 kyr, Climate Dynamics, 50, , 2925-2934

EULOGIO PARDO IGUZQUIZA

- 2018 Artículo: Smectite formation upon lime stabilization of expansive marls, Applied Clay Science, 158, , 29-38

JOSÉ MIGUEL AZAÑÓN HERNANDEZ

- 2018 Artículo: Identification of leakage and potential areas for internal erosion combining ERT and IP techniques at the Negratín Dam left abutment (Granada, southern Spain), Engineering Geology, , , - JESUS GALINDO ZALDIVAR

- 2018 Artículo: Highlighting the importance of transitional ventilation regimes in the management of Mediterranean show caves (Nerja-Pintada system, southern Spain), Science of the Total Environment, 631-632, , 1268-1278

JOSE BENAVENTE HERRERA

- 2017 Artículo: Testing the Avalonian affinity of the South Portuguese Zone and the Neoproterozoic evolution of SW Iberia through detrital zircon populations, Gondwana Research, 42, , 177-192

ANTONIO AZOR PEREZ

DAVID JESUS MARTINEZ POYATOS

JOSÉ FERNANDO SIMANCAS CABRERA

- 2017 Artículo: Sr-Nd-Pb isotopic systematics of crustal rocks from the western Betics (S. Spain): Implications for crustal recycling in the lithospheric mantle beneath the westernmost Mediterranean, Lithos, 276, , 45-61 GUILLERMO BOOTH REA

- 2017 Artículo: Latest extension of the Laujar fault in a convergence setting (Sierra Nevada, Betic Cordillera), Journal of Geodynamics, 104, , 15-26

JESUS GALINDO ZALDIVAR

JOSÉ MIGUEL AZAÑÓN HERNANDEZ

PATRICIA RUANO ROCA

- 2017 Artículo: Superposition of tectonic structures leading elongated intramontane basin: the Alhabia basin (Internal Zones, Betic Cordillera), International Journal of Earth Sciences, 106, , 2461-2471

JESUS GALINDO ZALDIVAR

- 2017 Artículo: Effects of lime treatments on marls, Applied Clay Science, 135, , 611-619

JOSÉ MIGUEL AZAÑÓN HERNANDEZ



- 2017 Artículo: A MULTI-METHOD APPROACH FOR THE CHARACTERIZATION OF LANDSLIDES IN AN INTRAMONTANE BASIN IN THE ANDES (LOJA, ECUADOR), *Landslides, FIRST ONLINE*, , 1-19  
JOSÉ MIGUEL AZAÑÓN HERNANDEZ
- 2017 Artículo: The Padul normal fault activity constrained by GPS data: Brittle extension orthogonal to folding in the central Betic Cordillera, *Tectonophysics*, 712-713, , 64-71  
JESUS GALINDO ZALDIVAR
- 2017 Artículo: Cambios en la calidad del agua subterránea debidos a la explotación intensiva del acuífero carbonático de la Sierra de Humilladero (Málaga, España), *Geogaceta*, 62, , 1-5  
ANTONIO PEDRERA PARIAS
- 2017 Artículo: Decoding recent mud-volcano activity in the westernmost Mediterranean: Evidence from sediment/porewater data and geochemical modeling, *Geophysical Research Abstracts*, 19, , 11175-  
MARÍA DEL CARMEN COMAS MINONDO
- 2017 Artículo en prensa: A multi-method approach for the characterization of landslides in an intramontane basin in the Andes (Loja, Ecuador), *Landslides*, , , -  
JOSÉ MIGUEL AZAÑÓN HERNANDEZ
- 2017 Artículo: Integration of multi-criteria and nearest neighbour analysis with kernel density functions for improving sinkhole susceptibility models: the case study of Enemonzo (NE Italy), *International Journal of Speleology*, 46, , 191-204  
JOSE VICENTE PÉREZ PEÑA
- 2017 Artículo en prensa: Flow reversals in groundwater-lake interactions: A multi-tracer study using water stable isotopes and temperature, *Limnologica*, , , -  
CARLOS DUQUE
- 2017 Artículo: Deformation style and controlling geodynamic processes at the eastern Guadalquivir foreland basin (S Spain), *Tectonics*, 36, , 1072-1089  
ANTONIO PEDRERA PARIAS
- 2017 Artículo: Pore pressure and stress regime in a thick extensional basin with active shale diapirism (Western Mediterranean), *AAPG Bulletin*, 101, 2, 233-264  
JUAN IGNACIO SOTO HERMOSO
- 2017 Artículo: Factors determining subsidence in urbanized floodplains: evidence from MT-InSAR in Seville (southern Spain), *Earth Surface Processes and Landforms*, 42, , 2484-2497  
ANTONIO PEDRERA PARIAS
- JESUS GALINDO ZALDIVAR
- 2017 Artículo: Brittle-ductile analogue modelling of piedmont arcs: The influence of pushing-from-behind in gravity-driven models , *Bollettino di geofisica teorica ed applicata (Testo stampato)*, 58, 1, 1-15  
ANA CRESPO BLANC
- JUAN CARLOS BALANYÁ ROURE
- 2017 Artículo: Tectonic and oceanographic control of sedimentary patterns in a small oceanic basin: Dove Basin (Scotia Sea, Antarctica) , *Basin Research*, 29, , 255-276  
JESUS GALINDO ZALDIVAR
- 2017 Artículo: Evaluation of the SBAS InSAR service of the European space Agency's Geohazard Exploitation Platform (GEP), *Remote Sensing*, 9, , -  
ANTONIO JABALOY SANCHEZ
- JOSÉ MIGUEL AZAÑÓN HERNANDEZ
- JOSE VICENTE PÉREZ PEÑA
- PATRICIA RUANO ROCA
- 2017 Artículo: Influence of diapirs on the development of non-cylindrical arcuate fold-and-thrust belts: Results from analogue models of progressive arcs, *Geogaceta*, 62, , 19-22  
ANA CRESPO BLANC
- JUAN CARLOS BALANYÁ ROURE
- 2017 Artículo: Age of the Scan Basin (Scotia Sea), *Oceanology*, 57, , 328-336  
JESUS GALINDO ZALDIVAR
- 2017 Artículo: Dorsale Reguibat et Massif des Oulad Dlim, l'avancée des connaissances, *Géologues*, 194,, , 37-46  
FRANCISCO GONZALEZ LODEIRO

#### Libros (con ISBN)

- 2017 Origen, evolución y nuevos hallazgos de la Gruta de las Maravillas (Aracena): Universidad Internacional de Andalucía, Huelva, 2017, 978-84-7993-320-3  
ANTONIO AZOR PEREZ
- WENCESLAO MARTÍN ROSALES
- MANUEL LÓPEZ CHICANO
- PATRICIA RUANO ROCA
- JESUS GALINDO ZALDIVAR
- 2017 Permo-Triassic Salt Provinces of Europe, North Africa and the Atlantic Margins: *Tectonics and*



Hydrocarbon Potential: Elsevier, AMSTERDAM , HOLANDA, 2017, 978-0-12-809417-4  
JUAN IGNACIO SOTO HERMOSO

#### Capítulos de libros (con ISBN)

- 2017 Titulo Capítulo: Identification of Vadose Karst Voids and Ventilation Patterns Coupling Hydrochemical and Geophysical Methods (Maro Spring, Near Nerja, Southern Spain), Titulo Libro: EuroKarst 2016, Neuchâtel: Springer Link, , 2017, 978-3-319-45465-8  
JESUS GALINDO ZALDIVAR
- JOSE BENAVENTE HERRERA
- 2017 Titulo Capítulo: Multidisciplinary Hydrogeological Study of a Folded Karst Aquifer Under Intensive Exploitation: The Bedmar-Jódar Aquifer (Southern Spain), Titulo Libro: EuroKarst 2016, Neuchâtel: Springer Link, , 2017, 978-3-319-45465-8  
ANTONIO PEDRERA PARIAS
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- 2017 Titulo Capítulo: The Ionian fold-and-thrust belt in central and southern Albania: a petroleum province with Triassic evaporites, Titulo Libro: Permo-Triassic Salt Provinces of Europe, North Africa and the Atlantic Margins: Tectonics and Hydrocarbon Potential: Elsevier, , 2017,  
JUAN IGNACIO SOTO HERMOSO
- 2017 Titulo Capítulo: Allochthonous Triassic and Salt Tectonic Processes in the Betic-Rif Orogenic Arc, Titulo Libro: Permo-Triassic Salt Provinces of Europe, North Africa and the Atlantic Margins: Tectonics and Hydrocarbon Potential: Elsevier, , 2017,  
JUAN IGNACIO SOTO HERMOSO
- 2017 Titulo Capítulo: Petroleum systems and play types associated with Permottiassic salt, Titulo Libro: Permo-Triassic Salt Provinces of Europe, North Africa and the Atlantic Margins: Tectonics and Hydrocarbon Potential: Elsevier, , 2017,  
JUAN IGNACIO SOTO HERMOSO
- 2017 Titulo Capítulo: Permo-Triassic basins and tectonics in Europe, North Africa and the Atlantic Margins: A synthesis, Titulo Libro: Permo-Triassic Salt Provinces of Europe, North Africa and the Atlantic Margins: Tectonics and Hydrocarbon Potential: Elsevier, , 2017,  
JUAN IGNACIO SOTO HERMOSO

#### Contribuciones en congresos

- 2017 Comunicación en congreso: Decoding recent mud-volcano activity in the westernmost Mediterranean: Evidence from sediment/porewater data and geochemical modeling, European Geosciences Union General Assembly 2017, 23/04/2017, AUSTRIA, AUSTRIA, VIENA, Congreso  
MARÍA DEL CARMEN COMAS MINONDO
- 2017 Poster en Congreso: Oxygen fugacity and chemical potentials as determinant factors in constraining the metamorphic evolution of subducted rodingites and enclosing ultramafic rocks., European Geoscience Union, General Assembly, 2017, 23/04/2017, Viena (Austria), Congreso  
ANTONIO JABALOY SANCHEZ
- 2017 Sesión plenaria en Congreso: Geochronological and petrological evidence for the architecture of the Oulad Dlim Massif, The First West African Craton and Margins International Workshop, 24/04/2017, DAKHLA-MAROC, Congreso  
FRANCISCO GONZALEZ LODEIRO
- 2017 Ponencia en Congreso: Microtextural, mineralogical and thermobarometric characterization of metagabbronorites, charnockites and amphibolites from the Oulad Dlim Massif, The First West African Craton and Margins International Workshop, 24/04/2017, DAKHLA-MAROC, Congreso  
FRANCISCO GONZALEZ LODEIRO
- 2017 Ponencia en Congreso: The Gareg Granites: first evidence for an Archean core in the Oulad Dlim Massif, The First West African Craton and Margins International Workshop, 24/04/2017, DAKHLA-MAROC, Congreso  
FRANCISCO GONZALEZ LODEIRO
- 2017 Poster en Congreso: Lower Bashkirian conodonts from the Nevado-Filábride complex (Betic Cordilleras, Spain): tectonic and palaeogeographic implications, European Geosciences Union General Assembly 2017, 23/04/2017, Viena (Austria), Congreso  
ANTONIO JABALOY SANCHEZ
- 2017 Comunicación en congreso: Événement tectonique précoce enregistrée par des microstructures dans les grenats des micaschistes des Sébtiades (Rif interne, Maroc) et des Alpujarrides (Betiques, Espagne), 10ème édition du colloque International : Magmatisme, Métamorphisme et Minéralisations Associées à 3MA10, 11/05/2017, MEKNÈS, MARRUECOS, Congreso  
DOMINGO AERDEN
- 2017 Comunicación en congreso: Oblique basin inversion and strain partitioning in back-arc context: example from the Moroccan Alboran Margin (Western Mediterranean), European Geosciences Union General



Assembly 2017, 23/04/2017, Austria / Vienna, Congreso

JESUS GALINDO ZALDIVAR

- 2017 Ponencia en Congreso: Geochronological constraints on the exhumation and emplacement of subcontinental lithospheric mantle peridotites in the westernmost Mediterranean, EGU General Assembly, 23/04/2017, AUSTRIA, VIENA, Congreso

GUILLERMO BOOTH REA

- 2017 Poster en Congreso: Decoding recent mud-volcano activity in the westernmost Mediterranean: Evidence from sediment/porewater data and geochemical modeling, General Assembly of the European Geosciences Union, 23/04/2017, Viena, Congreso

MARÍA DEL CARMEN COMAS MINONDO

- 2017 Ponencia en Congreso: CLAY MINERAL TRANSFORMATION AND FLUID SOURCES AT MUD VOLCANOES IN THE ALBORAN BASIN (WESTERN MEDITERRANEAN), 16h International Clay Conference, 17/07/2017, Granada (España), Congreso

MARÍA DEL CARMEN COMAS MINONDO

- 2017 Poster en Congreso: Structural interpretation of the Nadaleen Trend, Yukon, Association for Mineral Exploration Roundup, 23/01/2017, BRITISH COLUMBIA - VANCOUVER; CANADA, Congreso

CRISTINA ACCOTTO

- 2017 Comunicación en congreso: The Alboran volcanic arc archipelago isolated the Mediterranean during the Messinian salinity crisis forming the land bridge for biota dispersal across the western Mediterranean, EGU General Assembly 2017, 23/04/2017, AUSTRIA, AUSTRIA, VIENA, Congreso

GUILLERMO BOOTH REA

- 2017 Comunicación en congreso: Cuantificación de flujos verticales mediante flowmeter en sondeos del acuífero detrítico Motril-Salobreña, 62ª Sesión Científica de la Sociedad Geológica de España, 26/05/2017, Guadalupe, Cáceres, Congreso

MARÍA LUISA CALVACHE QUESADA

MANUEL LÓPEZ CHICANO

- 2017 Comunicación en congreso: Multidisciplinary study of the low-grade metamorphism in the Pulo do Lobo metasedimentary belt (SW Iberian Variscides): X-ray diffraction, RSCM and chlorite thermometry from compositional maps, XVI International Clay Conference, 17/07/2017, Granada, Congreso

DAVID JESUS MARTINEZ POYATOS

JOSÉ FERNANDO SIMANCAS CABRERA

ANTONIO AZOR PEREZ

- 2017 Comunicación en congreso: MULTIDISCIPLINARY STUDY OF THE LOW-GRADE METAMORPHISM IN THE PULO DO LOBO METASEDIMENTARY BELT (SW IBERIAN VARISCIDES): X-RAY DIFFRACTION, RSCM AND CHLORITE THERMOMETRY FROM COMPOSITIONAL MAPS, XVI International Clay Conference, 17/07/2017, Granada, Congreso

JOSÉ FERNANDO SIMANCAS CABRERA

ANTONIO AZOR PEREZ

- 2017 Comunicación en congreso: Ediacaran to Cambrian U-Pb ages of granite pebbles in the Lower Devonian conglomerate of Imouzzer Kandar (Northwestern Middle Atlas, Morocco), The First West African Craton and Margins International Workshop, 24/04/2017, DAKHLA-MAROC, Congreso

JOSÉ FERNANDO SIMANCAS CABRERA

DAVID JESUS MARTINEZ POYATOS

ANTONIO AZOR PEREZ

FRANCISCO GONZALEZ LODERO