

Dr. David Jesús MARTÍNEZ POYATOS (abbreviated CV)

Born in Torreperogil (Jaén, Spain) in August 1969.

Position: Lecturer at the Department of Geodynamics of the University of Granada (Spain) since 2003.

Previous academic positions: Associate professor at the Department of Environmental Sciences of the University Pablo de Olavide (Sevilla) during the period 1999-2000. Assistant professor at the Department of Geodynamics of the University of Granada in the period 2000-2003.



Teaching experience: Introductory Geology, Geological Mapping, Structural Geology, Tectonics, Lithospheric Processes, Regional Geology, Hydrochemistry.

Pre-doctoral formation: Graduated in Geological Sciences by the University of Granada in 1992. Ph.D. Thesis: Structure of the southern border of the Central Iberian Zone and its relationships with the contact between the Central Iberian and Ossa-Morena Zones (Variscan Belt, SW Spain), presented at the University of Granada in 1997.

Post-doctoral formation: 2-year research stage at the Geologisches Institut (ETH-Zurich) in 1998-1999, studying the strain and the crystallographic preferred orientation of quartz in naturally deformed rocks.

Research fields of interest: Structural geology, tectonics, regional geology of the Variscan Belt, crustal structure (combined geological and geophysical studies).

Participation in research projects: 19 projects (research leader in two of them) since 1993 financed by the Spanish Education and Science, Innovation, Economy and Competitiveness Ministry, the Spanish Agency for the International Cooperation and the Regional Government of the Junta de Andalucía. These projects have covered different objectives related to the regional geology, tectonometamorphic evolution and crustal geophysical sounding of different sectors of the Variscan Belt in the southwestern Iberian Massif and the Moroccan Meseta, and the Pan-African orogen in southern Morocco.

Experience in I+D and education management:

Head of the research group: Structural Geology and Tectonics, RNM 148 (Junta de Andalucía). Dec-2010 / act.

Research leader of the project: Pre-orogenic palaeogeography, variscan evolution and recent reactivations in the SW Iberian Massif (CGL2011-24101). 75.000 €. Jan-2012 / Dec-2015.

Research leader of the project: The making of Pangea: Variscan terrane accretion in southern Iberia and northern Morocco (CGL2015-71692-P). 78.400 €. Jan-2016 / Dec- 2019.

Member of the proficient commission for evaluation of research projects, Earth Sciences (BTE). General Direction of Scientific and Technical Research, Economy and Competitiveness Ministry. 2012.

Coordinator of the postgraduate M.Sc. on Geology. University of Granada. Oct-2010 / Sep-2013.

Coordinator of the commission to create, verify (ANECA) and launch the postgraduate M.Sc. on Geology Applied to Mineral and Energetic Resources. University of Granada. Oct-2013 / Sep-2014.

Supervisor of the Ph.D. Thesis: Terranes affinity and Variscan transpressional evolution of Rheic-related units in SW Iberia, by Irene Pérez Cáceres. Mar-2017.

Some relevant publications:

- Azor A., González Lodeiro F., Martínez Poyatos D., Simancas J.F. (1994). Regional significance of kilometric-scale NE-vergent recumbent folds associated with E-to SE-directed shear on the southern border of the Central Iberian Zone (Hornachos-Oliva region. Variscan belt, Iberian Peninsula). *Geologische Rundschau*, 83: 377-387, doi: 10.1007/BF00210552.
- Martínez Poyatos D., Azor A., González Lodeiro F., Simancas J.F. (1995). Timing of the Variscan structures on both sides of the Ossa-Morena / Central Iberian contact (southwest Iberian Massif). *Comptes Rendus, Academie des Sciences de Paris*, 321, 609-615.
- Simancas J.F., Azor A., Martínez Poyatos D., González Lodeiro F., Caro L. (1997). Accommodation of fault displacements by granite deformation: an example from the southwestern Iberian Massif. *Comptes Rendus, Academie des Sciences de Paris*, 324, 245-252.
- Azor A., Simancas J.F., Expósito I., González Lodeiro F., Martínez Poyatos D. (1997). Deformation of garnets in a low-grade shear zone. *Journal of Structural Geology*, 19: 1137-1148, doi: 10.1016/S0191-8141(97)00040-0.
- Martínez Poyatos D., Simancas J.F., Azor A., González Lodeiro F. (1998). Evolution of a Carboniferous piggy-back basin in the southern Central Iberian Zone (Variscan Belt, SW Spain). *Bulletin de la Societé Geologique de France*, 169: 573-578.
- Simancas J.F., Martínez Poyatos D., Expósito I., Azor A., González Lodeiro F. (2001). The structure of a major suture in the SW Iberian Massif: the Ossa-Morena / Central Iberian contact. *Tectonophysics*, 332: 295-308, doi:10.1016/S0040-1951(00)00262-6.
- Martínez Poyatos D., Nieto F., Azor A., Simancas J.F. (2001). Relationships between very low-grade metamorphism and tectonic deformation: examples from the southern Central Iberian Zone (Iberian Massif, Variscan Belt). *Journal of the Geological Society of London*, 158: 953-968, doi:10.1144/0016-764900-206.
- Simancas J.F., González Lodeiro F., Expósito Ramos I., Azor A., Martínez Poyatos D. (2002). Opposite subduction polarities connected by transform faults in the Iberian Massif and western European Variscides. In: *Variscan-Appalachian dynamics: The building of the late Paleozoic basement* (Martínez Catalán J.R., Hatcher R.D., Arenas R., Díaz García F., Eds). *Geological Society of America, Special Paper 364*: 253-262, doi: 10.1130/0-8137-2364-7.253.
- Simancas J.F., Carbonell R., González Lodeiro F., Pérez Estaún A., Juhlin C., Ayarza P., Kashubin A., Azor A., Martínez Poyatos D., Almodóvar G.R., Pascual E., Sáez R., Expósito I. (2003). Crustal structure of the transpressional Variscan orogen of SW Iberia: SW Iberia deep seismic reflection profile (IBERSEIS). *Tectonics*, 22: 1062, doi: 10.1029/2002TC001479.
- Simancas J.F., Expósito I., Azor A., Martínez Poyatos D., González Lodeiro F. (2004). From the Cadomian orogenesis to the Early Paleozoic Variscan rifting in Southwest Iberia. *Journal of Iberian Geology*, 30, 53-71.
- Simancas J.F., Carbonell R., González Lodeiro F., Pérez Estaún A., Juhlin C., Ayarza P., Azor A., Martínez Poyatos D., Almodóvar G.R., Pascual E., Sáez R., Kashubin A., Alonso F., Álvarez Marrón J., Bohoyo F., Castillo S., Donaire T., Expósito I., Flecha I., Galadí E., Galindo Zaldívar J., González F., González Cuadra P., Macías I., Martí D., Martín A., Martín Parra L.M., Nieto J.M., Palm H., Ruano P., Ruiz M., Toscano M. (2004). The Seismic Crustal Structure of the Ossa-Morena Zone and its geological interpretation. *Journal of Iberian Geology*, 30, 133-142.
- Martínez Catalán J.R., Martínez Poyatos D., Bea F. (coords.) (2004). Cap. 2.4: La Zona Centroibérica, 68-133. *Geología de España* (Vera J.A. ed.). SGE-IGME, Madrid.
- Simancas J.F., Tahiri A., Azor A., Gonzalez Lodeiro F., Martínez Poyatos D., El Hadi H. (2005). The tectonic frame of the Variscan-Alleghanian Orogen in Southern Europe and Northern

- Africa. *Tectonophysics*, 398: 181-198, doi:10.1016/j.tecto.2005.02.006. Awarded by Elsevier: "*Top-50 most cited articles*" published in *Tectonophysics* 2005-2010.
- El Hadi H., Tahiri A., Simancas J.F., González Lodeiro F., Azor A., Martínez Poyatos D. (2006). Un exemple de volcanisme calco-alcalin de type orogénique mis en place en contexte de rifting (Cambrien de l'oued Rhebar, Meseta occidentale, Maroc). *Comptes Rendus, Geoscience*, 338, 229-236, doi: 10.1016/j.crte.2005.12.006.
- El Hadi H., Simancas J.F., Tahiri A., González Lodeiro F., Azor A., Martínez Poyatos D. (2006). Comparative review of the Variscan granitoids of Morocco and Iberia: proposal of a broad zonation. *Geodinamica Acta*, 19: 103-116, doi: 10.3166/ga.19.103-116.
- Martín Parra L.M., González Lodeiro F., Martínez Poyatos D., Matas J. (2006). The Puente Génave-Castelo de Vide shear zone (southern Central Iberian Zone, Iberian Massif): geometry, kinematics and regional implications. *Bulletin de la Société Géologique de France*, 177: 191-202, doi: 10.2113/gssgfbull.177.4.191.
- Simancas J.F., Carbonell R., González Lodeiro F., Pérez Estaún A., Juhlin C., Ayarza P., Kashubin A., Azor A., Martínez Poyatos D., Sáez R., Almodóvar G.R., Pascual E., Flecha I., Martí D. (2006). Transpressional Collision Tectonics and Mantle Plume dynamics: the Variscides of southwestern Iberia. In: *European Lithosphere Dynamics* (Gee D.G. & Stephenson R.A., Eds). Geological Society of London, Memoir 32: 345-354, doi: 10.1144/GSL.MEM.2006.032.01.21.
- Tahiri A., Simancas J.F., Azor A., Galindo Zaldívar J., González Lodeiro F., El Hadi H., Martínez Poyatos D., Ruiz Constán A. (2007). Emplacement of ellipsoid-shaped (diapiric?) granite: Structural and gravimetric analysis of the Oulmès granite (Variscan Meseta, Morocco). *Journal of African Earth Sciences*, 48: 301-313, doi: 10.1016/j.jafrearsci.2007.04.005.
- Azor A., Rubatto D., Simancas J.F., González Lodeiro F., Martínez Poyatos D., Martín Parra L.M., Matas J. (2008). Rheic Ocean ophiolitic remnants in southern Iberia questioned by SHRIMP U-Pb zircon ages on the Beja-Acebuches amphibolites. *Tectonics*, 27: TC5006, doi: 10.1029/2008TC002306.
- Palomeras I., Carbonell R., Flecha I., Simancas J.F., Ayarza P., Matas J., Martínez Poyatos D., Azor A., González Lodeiro F., Pérez Estaún A. (2009). The Nature of the Lithosphere Across the Variscan Orogen of SW-Iberia: Dense Wide-Angle Seismic Reflection Data. *Journal of Geophysical Research, Solid Earth*, 114, doi: 10.1029/2007JB005050.
- Simancas J.F., Azor A., Martínez Poyatos D., Tahiri A., El Hadi H., González Lodeiro F., Pérez Estaún A., Carbonell R. (2009). Tectonic relationships of Southwest Iberia with the allochthons of Northwest Iberia and the Moroccan Variscides. *Comptes rendus – Geoscience*, 341: 103-113, doi: 10.1016/j.crte.2008.11.003.
- Azor A., Rubatto D., Marchesi C., Simancas J.F., González Lodeiro F., Martínez Poyatos D., Martín Parra L.M., Matas J. (2009). A Reply to the comment by C. Pin and J. Rodríguez on "Rheic Ocean ophiolitic remnants in southern Iberia questioned by SHRIMP U-Pb zircon ages on the Beja-Acebuches amphibolites". *Tectonics*, 28: TC5014, doi: 10.1029/2009TC002527.
- Tahiri A., Montero P., El Hadi H., Martínez Poyatos D., Azor A., Bea F., Simancas J.F., González Lodeiro F. (2010). Geochronological data on the Rabat-Tiflet granitoids: their bearing on the tectonics of the Moroccan Variscides. *Journal of African Earth Sciences*, 57, 1-13, doi: 10.1016/j.jafrearsci.2009.07.005.
- El Hadi H., Simancas J.F., Martínez Poyatos D., Azor A., Tahiri A., Montero P., Fanning C.M., Bea F., González Lodeiro F. (2010). Structural and geochronological constraints on the evolution of the Bou Azzer Neoproterozoic ophiolite (Anti-Atlas, Morocco). *Precambrian Research*, 182, 1-14, doi: 10.1016/j.precamres.2010.06.011.
- Simancas J.F., Azor A., Martínez Poyatos D., Tahiri A., El Hadi H., González Lodeiro F., Pérez Estaún A., Carbonell R. (2010). A reply to the comment by A. Michard et al. on "Tectonic

- relationships of Southwest Iberia with the allochthons of Northwest Iberia and the Moroccan Variscides". *Comptes rendus – Geoscience*, 342, 175-177, doi: 10.1016/j.crte.2010.01.007.
- Palomeras I., Carbonell R., Ayarza P., Fernández M., Simancas J.F., Martínez Poyatos D., González Lodeiro F., Pérez Estaún A. (2011). Geophysical model of the lithosphere across the Variscan Belt of SW-Iberia: Multidisciplinary assessment. *Tectonophysics*, 508, 42-51 doi: 10.1016/j.tecto.2010.07.010.
- Pous J., Martínez Poyatos D., Heise W., Monteiro Santos F., Galindo Zaldívar J., Ibarra P., Pedrera A., Ruiz Constán A., Anahnah F., Gonçalves R., Mateus A. (2011). Constraints on the crustal structure of the internal Variscan Belt in SW Europe: a magnetotelluric transect along the eastern part of Central Iberian Zone (Iberian Massif). *Journal of Geophysical Research, Solid Earth*, 116, B02103, 1-20, doi: 10.1029/2010JB007538.
- El Hadi H., Tahiri A., Simancas J.F., González Lodeiro F., Azor A., Martínez Poyatos D. (2011). Geoheritage in Morocco: The Neoproterozoic Ophiolite of Bou Azzer (Central Anti-Atlas). *Geoheritage*, 3, 89-96, doi: 10.1007/s12371-011-0032-2.
- Ponce C., Simancas J.F., Azor A., Martínez Poyatos D., Booth-Rea G., Expósito I. (2012). Metamorphism and kinematics of the early deformation in the Variscan suture of SW Iberia. *Journal of Metamorphic Geology*, 30, 625-638, doi: 10.1111/j.1525-1314.2012.00988.x.
- Talavera C., Montero P., Martínez Poyatos D., Williams I.S. (2012). Ediacaran to Lower Ordovician age for rocks ascribed to the Schist-Graywacke Complex (Iberian Massif, Spain): Evidence from detrital zircon SHRIMP U-Pb geochronology. *Gondwana Research*, 22, 928-942, doi: 10.1016/j.gr.2012.03.008.
- Martínez Poyatos D., Carbonell R., Palomeras I., Simancas J.F., Ayarza P., Martí D., Azor A., Jabaloy A., González Cuadra P., Tejero J., Martín Parra L.M., Matas J., González Lodeiro F., Pérez Estaún A., García Lobón J.L., Mansilla L. (2012). Imaging the crustal structure of the Central Iberian Zone (Variscan Belt): The ALCUDIA deep seismic reflection transect. *Tectonics*, 31, 1-21, doi:10.1029/2011TC002995.
- Simancas J.F., Ayarza P., Azor A., Carbonell R., Martínez Poyatos D., Pérez Estaún A., González Lodeiro F. (2013). A seismic geotraverse across the Iberian Variscides: orogenic shortening, collisional magmatism and orocline development. *Tectonics*, 32, 417-432, doi: 10.1002/tect.20035.
- Ehsan S., Carbonell R., Ayarza P., Martí D., Pérez-Estaún A., Martínez Poyatos D., Simancas J.F., Azor A., Mansilla L. (2014). Crustal Deformation Styles Along the Reprocessed Deep Seismic Reflection Transect of the Central Iberian Zone (Iberian Peninsula). *Tectonophysics*, 621, 159-174, doi: 10.1016/j.tecto.2014.02.014.
- Ehsan S., Carbonell R., Ayarza P., Martí D., Martínez Poyatos D., Simancas J.F., Azor A., Ayala C., Torné M., Pérez-Estaún A. (2015). Lithospheric Velocity Model across the southern Central Iberian Zone (Variscan Iberian Massif): the ALCUDIA Wide-Angle Seismic Reflection Transect. *Tectonics*, 34, 535-554, doi: 10.1002/2014TC003661.
- Talavera C., Martínez Poyatos D., González Lodeiro F. (2015). SHRIMP U-Pb geochronological constraints on the timing of the intra-Alcudian (Cadomian) angular unconformity in the Central Iberian Zone (Iberian Massif, Spain). *International Journal of Earth Sciences*, 104, 1739-1757, doi: 10.1007/s00531-015-1171-5.
- Ehsan S., Carbonell R., Ayarza P., Martí D., Martínez Poyatos D., Pérez-Estaún A. (2015). The Structure and Nature of the Moho Beneath Central Iberia. *Tectonophysics*, 663, 275-289, doi: 10.1016/j.tecto.2015.08.011.
- Pérez-Cáceres I., Martínez Poyatos D., Simancas J.F., Azor A. (2015). The elusive nature of the Rheic Ocean suture in SW Iberia. *Tectonics*, 34, 2429-2450, doi: 10.1002/2015TC003947.
- Simancas J.F., Azor A., Martínez Poyatos D., Expósito I., Pérez-Cáceres I., González Lodeiro F. (2016). Comment on "The Late Devonian Variscan suture of the Iberian Massif: a correlation of high-pressure belts in NW and SW Iberia" by R. Díez Fernández and R. Arenas. *Tectonophysics*, 666, 281-284, doi: 10.1016/j.tecto.2015.07.040 .

- Matas J., Martín Parra L.M., Martínez Poyatos D. (in press). Hoja y memoria de Pozoblanco (69) del Mapa Geológico de España a escala 1:200.000. IGME, Madrid.
- Martín Parra L.M., Matas J., Roldán F.J., Martín-Serrano A., González Lodeiro F., Martínez Poyatos D. (in press). Hoja y memoria de Linares (70) del Mapa Geológico de España a escala 1:200.000. IGME, Madrid.
- Pérez-Cáceres I., Simancas J.F., Martínez Poyatos D., Azor A., González Lodeiro F. (2016). Oblique collision and deformation partitioning in the SW Iberian Variscides. *Solid Earth*, 7, 857-872, doi: 10.5194/se-7-857-2016.
- Pérez-Cáceres I., Martínez Poyatos D., Simancas J.F., Azor A. (2017). 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, doi: 10.1016/j.gr.2016.10.010.
- Accotto C., Martínez Poyatos D., Azor A., Talavera C., Evans N., Jabaloy Sánchez A., Azdimousa A., Tahiri A., El Hadi H. (2019). Mixed and recycled detrital zircons in the Paleozoic rocks of the Eastern Moroccan Meseta: paleogeographic inferences. *Lithos*, 338-339, 73-86, doi: 10.1016/j.lithos.2019.04.011.
- Pereira M.F., Martínez Poyatos D., Pérez-Cáceres I., Gama C., Azor A. (2019). Comment on “Stratigraphy of the Northern Pulo do Lobo Domain, SW Iberia Variscides: A palynological contribution” by Zélia Pereira et al. *Geobios*, 55, 103-106, doi: 10.1016/j.geobios.2019.06.003.
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