

Corporate CV

Frederic O. Escosa

Exploration Geologist

PhD (High Hons), MSc, BSc

PROFESSIONAL PROFILE

Structural geologist with specific interest in salt tectonics, contractional and extensional settings and focused on hydrocarbon exploration. Experience in geological mapping, well data analysis, 2D seismic reflection interpretation and cross-section construction and 2D restoration. Competent in communicating and a good team player, he has been involved in several research and industry teams: working as a researcher and consultant geologist in the Geomodels Research Institute; collaborating with the Institute of Tectonic Studies at the UTEP; and performing seismic interpretation and structural assessment in the Moroccan Atlas during an internship with Total E&P and the University of Cergy-Pontoise (Paris).

LANGUAGES

English, Spanish, Basic French, Catalan.

EDUCATION

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| 2019 | PhD in Earth Sciences
University of Barcelona (High Hons. Cum Laude)
<i>Thesis project: Extensional Development and Contractional Reactivation of Salt Walls: Examples from the Southeastern Paradox Basin (SW Colorado) and the Eastern Prebetic Zone (SE Spain)</i> |
| 2013 | MSc in Reservoir Geology
University of Barcelona
<i>Thesis project: The structure of the Neogene basins of Begur and Roses: relationships between the Neogene extensional structure and the Pyrenean contractional deformation</i> |
| 2012 | BSc in Geology
University of Barcelona
<i>Dissertation topic: "Inversion of extensional systems with one and two décollement levels based on analogue models"</i> |
| 2011 | Professional degree on music specializing in Saxophone
Professional Music Conservatory |

EMPLOYMENT

2019-today	Exploration Geologist at Terractiva Geological consultancy and training for O&G Exploration
2019-2019	Total E&P, Pau M2 internship performing seismic interpretation in northeast onshore Morocco and assisting the MENA (Middle East and North Africa) team in operational issues related to the structural interpretation of the area.
2017-2018	Geomodels Research Institute, Universitat de Barcelona Consultant geologist in the project "Seismic Characterization of Spanish nuclear power plant emplacements Cofrentes Nuclear Power Plant" (Iberdrola Ingeniería y Construcción).
2015-2017	Universitat de Barcelona Teaching assistant in Geological Cartography II, an obligatory subject taught for the bachelor's degree in Geology at the Universitat de Barcelona.
2010-2010	Catalan Water Agency Internship member responsible of the management of a geotechnical information database.

FELLOWSHIP AND GRANTS

2014 – 2017	APIF-UB (Trainee research and teaching staff grant): three years pre-doctoral contract for the development of the Ph.D. at the Universitat de Barcelona. Supervised by Profs. Eduard Roca (Universitat de Barcelona), Katherine A. Giles (University of Texas at El Paso) and Mark G. Rowan (External Consultant).
2012 – 2013	Repsol Exploration grant: development of the master's degree and the master's thesis. Supervised by Dr. Oscar Fernandez (Repsol Exploration), Dr. Oriol Ferrer and Prof. Eduard Roca (Universitat de Barcelona).
2012 – 2013	University department internship: for the realization of the bachelor's degree project supervised by Prof. Josep Anton Muñoz de la Fuente and Dr. Oriol Ferrer Garcia.

COMPUTER SOFTWARE EXPERTISE

Geological Modelling	Midland Valley Blue Marble Paradigm Schlumberger	Move, FieldMove and FieldMove Clino Global Mapper GOCAD 2006-2014 Petrel Suite
Seismic Interpretation	IHS Schlumberger	The Kingdom Suite Petrel 2013-2015
GIS:	Microstation	
Graphical:	Corel Draw, Canvas, Adobe Illustrator and Photoshop	
Microsoft Office:	Word, Excel, PowerPoint, Access	
Operating Systems:	Windows, Linux, Mac OS	

TEACHING EXPERIENCE

Teaching assistant in Geological Cartography II, an obligatory subject taught for the bachelor's degree in Geology at the Universitat de Barcelona.

FIELD EXPERIENCE

2014 – 2018	Geological mapping in salt-bearing fold and thrust belts: Eastern Prebetic Zone (SE Spain).
2016	Magnetotelluric acquisition campaign in the Eastern Prebetic Zone (SE Spain).
2015 – 2016	Geological mapping in vertical salt tectonics: the Gypsum Valley diapir, SE Paradox Basin (SW Colorado, USA).
2015	Structural assessment and geological mapping in contractional salt tectonics: Sopeira and Sant Gervàs subbasins (southern Pyrenees).

SELECTED PUBLICATIONS

Gutiérrez, F., Sevil, J., Silva, P. G., Roca, E., & **Escosa, F.** (2019). Geomorphic and stratigraphic evidence of Quaternary diapiric activity enhanced by fluvial incision. Navarrés salt wall and graben system, SE Spain. *Geomorphology*, 342, 176–195. doi:10.1016/j.geomorph.2019.06.002.

Escosa, F.O., Rowan, M.G., Giles, K.A., Deatrick, K.T., Mast, A.M., Langford, R.P., Hearon IV, T.E., Roca, E., 2018. Lateral terminations of salt walls and megaflaps: An example from Gypsum Valley Diapir, Paradox Basin, Colorado, USA. *Basin Research*, 31, 191–212. doi:10.1111/bre.12316.

Escosa, F.O., Roca, E., and Ferrer, O., 2018. Testing thin-skinned inversion of a pre-rift salt-bearing passive margin, Eastern Prebetic Zone (SE Iberia). *Journal of Structural Geology*, 109, 55–73. doi:10.1016/j.jsg.2018.01.004.

Roma, M., Ferrer, O., Roca, E., Pla, O., **Escosa, F.O.**, and Butillé, M., 2018. Formation and inversion of salt-detached ramp-syncline basins. Results from analog modeling and application to the Columbrets Basin (Western Mediterranean). *Tectonophysics*, 745, 214–228. doi: 10.1016/j.tecto.2018.08.012.

Escosa, F.O., Ferrer, O., and Roca, E., 2018. Geology of the Eastern Prebetic Zone at the Jumilla Region (SE Iberia). *Journal of Maps*, 14:2, 77–86. doi: 10.1080/17445647.2018.1433562.

SELECTED CONFERENCE ABSTRACTS

Escosa, F.O., Roca, E., Ferrer, O., Roma, M., Górriz, E., 2018. Subsalt extensional structure controls Mesozoic salt tectonics and the Betic inversion. Conference paper. AAPG/GTW Alpine Folded Belts and Extensional Basins, Granada.

Górriz, E., Marcuello, A., **Escosa, F.O.**, Queralt, P., Martí, A., Ledo, J. and Roca, E., 2016. A magnetotelluric study in La Rosa Diapir (Murcia, Spain). Conference poster. Near Surface Geoscience, 2016. 22nd European Meeting of Environmental and Engineering Geophysics (EAGE).

Escosa, F.O., Roma, M., Roca, E., Butillé, M. And Ferrer, O., 2016. The Mesozoic structure of the central part of the south-Iberian passive margin and its influence in the Cenozoic contractional deformation: comparison between the eastern Prebetic Zone (Betic Cordillera) and the Columbrets Basin (southwest Valencia Trough). Conference paper. AAPG/SEG's International Conference and Exhibition, Barcelona.