

Curriculum Vitae

Personal information

First name / Surname **RUBIO MELENDI, DAVID**
Address Biedes s/n, 33539, Piloña (Asturias - Spain)
Telephone +34 690 049 014
E-mails david@hydrogeophysicsndt.com
drmeleni@gmail.com
drmeleni@hotmail.com
Nationality Spanish
Date of birth 05/10/1987

Occupational field **Physicist**

Work experience

Dates January 2012 - Present
Occupation or position held **NDT and geophysics researcher**
Main activities and responsibilities GPR and other geophysics techniques, numerical modelling, signal processing and field work.
Employer Hydro-geophysics and NDT Modelling Unit
Department of Mining Exploration and Prospection – University of Oviedo

Dates February 2009 – April 2009
Occupation or position held **NDT and geophysics researcher**
Main activities and responsibilities Impact echo and wave propagation, signal processing and field work.
Employer Hydro-geophysics and NDT Modelling Unit
Department of Mining Exploration and Prospection – University of Oviedo

Dates October 2005 – May 2011
Occupation or position held **Private tutor in physics and mathematics**
Main activities and responsibilities Private lessons to students from high school and undergraduate.
Employer Self-employment (non demonstrable).

Education and training

Date 2011
Title of qualification awarded **Licentiate (B.Sc.), Physics**
Principal subjects / occupational skills Covered
Specializing in electronics, automation and signal processing.

Name and type of organisation providing education and training

University of Oviedo (Faculty of Science). Student grant from 2005 to 2008 (Fundación para el desarrollo de la formación en las comarcas mineras del carbón)

Date

2014

Title of qualification awarded

Master, Signal Theory and Communications

Principal subjects / occupational skills covered

Signal processing.

Name and type of organisation providing education and training

University of Vigo.

Personal skills and competences

Mother tongue

Spanish

Other language(s)

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
B1	Independent user	B1	Independent user	A2	Basic user	A2	Basic user	B1	Independent user

Self-assessment
European level (*)

(*) [Common European Framework of Reference for Languages](#)

English

Social skills and competences

Committed and responsible to working.
Well organized.
Ability to work in multidisciplinary and multicultural teams.

Technical skills and competences

- Course "El nuevo misterio de la física cuántica ya tiene aplicaciones: una introducción a la Teoría Cuántica de la información"
[University of Oviedo / 2009]
- Course "Presente y futuro de la ingeniería ambiental"
[University of Oviedo / 2010]
- Course "Cálculo, visualización gráfica y programación de menús con MatLab"
[University of Oviedo / 2010]
- Course "Diseño de robots programables multifuncionales"
[University of Oviedo / 2011]
- Course "Estadística para la investigación (Nivel Avanzado)"
[University of Oviedo / 2015]
- Course "Programming for Everybody (Python)"
[University of Michigan via COURSERA / 2015]
- Course "Digital Signal Processing"
[Polytechnic Federal School of Lausanne via COURSERA / 2015]
- Course "The Arduino Platform and C Programming"
[University of California Irvine via COURSERA / 2016]
- Course "Fundamentals of GIS"
[University of California Davis via COURSERA / 2016]

Computer skills and competences

- Work experience with Microsoft Office tools (Word, Excell, Access, PowerPoint, etc.)
- Work experience with AUTOCAD
- Work experience with Origin
- Work experience with ArcGIS
- Skills of MATLAB (advanced level)
- Skills of C++, specific in MICROCHIP PIC microcontrollers and ARDUINO
- Skills of Python programing
- Skills of MPLAB in circuit design and assembly programming
- Skills of ReflexWin

Driving licence

B

Additional information

Publication: Rubio Melendi, D., Flor-Blanco, G., Fernández Álvarez, JP., Flor, G. (2012). "Estudio GPR de la estructura interna del campo dunar de Xagó, costa norte española". Proceedings of the 7ª Asamblea hispano portuguesa de geodesia y geofísica. ISBN 978-84-941323-1-5.

Publication: Flor-Blanco, G., Rubio Melendi, D., Flor, G., Fernández Álvarez, JP. (2012). "Estructura interna e interpretación de la evolución del campo dunar eólico de Xagó (costa central de Asturias, NO de España)". Proceedings of the VII Symposium on the Atlantic Iberian Margin. ISBN: 978-989-20-3448-5

Publication: Rubio Melendi, D., Flor-Blanco, G., Fernández Álvarez, JP., Flor, G. (2013). "Guía de aplicación del georradar (GPR) a la geomorfología costera. Ejemplo de aplicación al campo dunar de Xagó (Asturias, costa norte española)". Proceedings of the VII Jornadas de Geomorfología Litoral. Special issue GEO-TEMAS. Sociedad Geológica de España. ISSN : 1576-5172

Publication: González Quirós, A., Rubio Melendi, D. y Fernández Álvarez, JP. (2014). "Modelización y caracterización hidrogravimétrica de un acuífero no confinado con anisotropía horizontal". Proceedings of the II Congreso Ibérico de las Aguas Subterráneas, CIAS2014Valencia.

Publication: Flor-Blanco, G., Rubio Melendi, D., Flor, G., Fernández Álvarez, JP. (2016) "Holocene evolution of the Xagó dune field (Asturias, NW Spain) reconstructed by means of morphological mapping and ground penetrating radar surveys". Geo-Marine Letters (2016) 36: 35. doi:10.1007/s00367-015-0427-1

Publication: Fernández Álvarez, JP., Rubio Melendi, D., Martínez Velasco, A., Pringle, JK., Aguilera, H. D. (2016) "Discovery of a mass grave from the Spanish Civil War using Ground Penetrating Radar and forensic archaeology". Forensic Science International. Available online 14 June 2016, ISSN 0379-0738, <http://dx.doi.org/10.1016/j.forsciint.2016.05.040>.

Publication: Fernández Álvarez, JP., González Quirós, A., Rubio Melendi, D. (2016) "Assessment of the value of microgravity to estimate the principal directions of the anisotropic transmissivity of aquifers from pumping tests: A study using a Hough transform based automatic algorithm, Journal of Applied Geophysics, Volume 134, November 2016, Pages 172-182, ISSN 0926-9851, <http://dx.doi.org/10.1016/j.jappgeo.2016.09.015>.

Talk: "Estudio GPR de la estructura interna del campo dunar de Xagó, costa norte española". 7ª Asamblea hispano portuguesa de geodesia y geofísica. (2012)

Talk: "Guía de aplicación del georradar (GPR) a la geomorfología costera. Ejemplo de aplicación al campo dunar de Xagó (Asturias, costa norte española)". VII Jornadas de Geomorfología Litoral. (2013)

Reviewer: 15th Annual Conference of the International Association for Mathematical Geosciences. (2013)