#### Currículum Vitae

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### A brief summary:

Before finishing my Mining Engineering degree, I have been working in the Rock Mechanics Laboratory of the University of Vigo under the supervision of Leandro Alejano, Ph.D. Since then, I have been involved in many consultancy and R+D projects about Rock Mechanics. I have presented in congresses or symposia more than a dozen of papers related to consultancy as well as to R+D works. I collaborated in the organization of the Eurock 2014 Regional Symposium of the ISRM, held in Vigo, Spain. After defending my Ph.D. thesis, I have been hired in the Catholic University of the North (Antofagasta, Chile) as full professor for teaching and research purposes on the field of rock mechanics. I am member of the Spanish National Group of the ISRM since 2012.

#### Education

2015 - Ph.D. in Environmental Technology by the University of Vigo.

2012 - M.Sc. in Environmental Technology by the University of Vigo

2011 - Mining Engineer by the University of Vigo

# List of publications:

# JCR Indexed Journals:

- 1. Arzúa J., Alejano L.R. 2013. *Dilation in granite during servo-controlled triaxial strength tests*. Int. J. Rock Mech. Min. Sci. 61:43-56.
- 2. Arzúa J., Alejano L.R., Walton G. 2014. *Strength and dilation of jointed granite specimens in servo-controlled triaxial tests*. Int. J. Rock Mech. Min. Sci. 69:93-104.
- 3. Walton G., Arzúa J., Alejano L.R., Diederichs M.S. 2015. *A laboratory-testing-based study on the strength, deformability and dilatancy of carbonate rocks at low confinement*. Rock Mech. Rock Eng. 48(3):941-958.
- 4. Alejano L.R., Carranza-Torres C., Giani G.P., Arzúa J. 2015. Study of the stability against toppling of rock blocks with rounded edges based on analytical and experimental approaches. Eng. Geol. 195:172-184.
- 5. Alejano L.R., Arzúa J., Castro-Filgueira U., Malan F. *Strapping of pillars with cables to enhance pillar stability*. J. South. Afr. Inst. Min. Metall. Accepted after minor review.
- 6. Alejano L.R., Arzúa J., Bozorgzadeh N., Harrison J.P. *Triaxial strength and deformability of intact and increasingly jointed granite samples*. Int. J. Rock Mech. Min. Sci. Waiting for response after answer to reviewers.
- 7. Walton G., Alejano L.R., Arzúa J., Markley T. *Crack damage parameters and dilatancy of artificially jointed granite samples under triaxial compression*. Rock Mech. Rock Eng. Waiting for reviewing.
- 8. Alejano L.R., Quiñones J., Arzúa J., García-Bastante F., Mas Ivars D., Walton G. *Analysis of size effect on the geomechanical parameters of intact granite samples under unconfined conditions*. Acta Geotech. Waiting for reviewing.

### Non-JCR Indexed Journals:

1. Walton G., Diederichs M.S., Alejano L.R., Arzúa J. 2014. *Verification of a laboratory-based dilation model for in situ conditions using continuum models.* J. Rock Mech Geotech. Eng. 6(6):522-534.

