

Joan Verdú Arnal

Personal data

- Age: 37
- Birth date: February 6th 1974.

Official degrees

- April 2003: PhD thesis at Universitat of Lleida (Spain): 'Flood Analysis and modelling of a mediterranean mountainous basin (Isábena River, Spanish Pyrenees)'. Maximum qualification ('*cum laude*').
- 2000: Agronomic Engineer, specialised in Environmental Management, at the University of Lleida (Spain). Bachelor's thesis, in cooperation with German Spacial Agency (DLR), 'Updating boreal vegetation mapping of Sibiria using radar satellite images' (qualified as *excellent*).
- September 1998: Forest Engineer, specialised in Environmental Management, at the University of Lleida (Spain). Bachelor's thesis granted by the Catalan Technological Forest Institute (CTFC): 'Erosion dynamics and modelling at the Salada River, Pyrenees'. Maximum qualification.

Awards

- *First National Award of Forest Engineering studies*, academic year 1997-98, by the Spanish Ministry of Education and Science.

Professional experience

- Working since january 2004 for the Catalan Water Agency, as Engineer in the River Management and Planning.
 - Associate professor, part-time, academic year 2005-2006 (4 months), Environment and Soil Science Department, University of Lleida. Teaching 'Hidrology and soil conservation'
 - Teacher of a 12h- course: 'Introduction to hydrological modelling with', may 2003, at Civil Engineering Association, Barcelona.
 - Doctoral Fellowship at the Department of Soil and Environmental Sciences of the University of Lleida, for 4 years (1999- 2002).
 - Fluvial Environment Planning of several catalan watershed: Tordera, Ter, Llobregat, Muga, Francoli (2006-2008), including hydraulics, morphodynamics and environmental issues.
 - Engineering project: 'River bank restoration, Castellbó River (Pyrenees)', funded by DARP (Catalan Autonomous Government), commissioned by the Catalan Forest Engineer Association (2001).
 - Flooding risk management plans for several catalan villages: Manlleu, Montesquiú, Sant Quirze de Besora, Torelló, Roda de Ter, Lliçà de Munt, Lliçà de Vall, Matadepera, La Pobla de Lillet and Cubelles, commissioned by
-

Diputació de Barcelona and the University of Lleida (2000).

**Scientific
meetings**

- Remote Sensing in the 21st Century: Economic and Environmental Applications. EARSeL Symposium. Valladolid (Esp) May 31st -June 2nd 1999
 - VI Spanish Geomorphology Society Meeting. Madrid, September 18-19 2000. *Oral Communication: Measuring and modelling erosion processes at the Ribera Salada (Catalonia)*
 - IX National Remote Sensing Meeting. Lleida (Spain). Sept 19-21st 2001. *Oral Communication: Boreal vegetation mapping with radar satellite imagery.*
 - MITCH (Mitigation of Climate induced natural Hazards) Workhop. Barcelona (Esp). June 10-12 2002. *Poster: Emergency local plans in case of flooding (PAM-H). A pilot programme in Catalonia (Spain).*
 - New Zealand Hydrological Society Symposium 2002. Blenheim (NZ). Dec 2-5th 2002
 - Braided Rivers. Univerity of Birmingham, April 7-9th 2003. *Poster: Estimation grain size distribution of a gravel riverbed at reach scale from aerial ortophotos, geostatistics and digital image processing (Isabena River, Spain)*
 - International Conference on River/Catchment Dynamics: Natural Processes and Human Impacts. Catalan Technologic Forest Institute May 16-19th 2004. *Poster: Estimation grain size distribution of a gravel riverbed at reach scale from aerial ortophotos, geostatistics and digital image processing (Isabena River, Spain)*
 - IV CONGRESO IBÉRICO SOBRE GESTIÓN Y PLANIFICACIÓN DEL AGUA. Ciencia, técnica y ciudadanía: claves para una gestión sostenible del agua. Fundación Nueva Cultura del Agua. Tortosa, 8-12 december 2004
 - II Congreso de restauración de ríos y humedales. Fundación Nueva Cultura del Agua. Tarragona, january 23-25th 2006. *Poster presentation*
 - **XXXII IAHR Congress.** 01-06 July 2007. Venice, Italy. *Poster presentation*
 - International Workshop on Sediment Management Options for Regulated Rivers. Tortosa, 26-28 th May 2008.
 - Complex flows, turbulence, morphodynamics and ecology in rivers. Delft, 25-29 august 2008.
 - Seminar Ecological River Restoration in Southern European Countries. Madrid, 14 th November 2008.
 - Jornadas Técnicas de Restauración Fluvial y Asamblea Constituyente del CIREF (Centro Ibérico de Restauración de Ríos) (Barcelona, june 3-4 th 2009)
-

Carles riba 6, 1ºBª
43007 Tarragona (Spain)

- Round Table: How sediment management is included in the 1st generation of RBMPs, SEDNET (European Sediment Network) , Hamburg October 6-7th 2009

Minor degrees

- *Advanced Study Course on River Basin Modelling*. University of Birmingham, Oct 7-18th 2002.
- Graduate course “Tropical soils conservation”, 45 hours, Universidad Agraria de La Habana (Cuba), Nov 1998.

Research stays

- Oct- Dec 2002: National Institute of Water and Atmospheric Research (Nova Zelanda), 2D hydraulic modelling.
- June- August 2001: Hydrosystems Lab, Civil Eng Departament University of Illinois (USA), 2D hydraulic modelling.
- Dec 2000: Hydrographic Studies Center (CEDEX), Madrid, hydraulic modelling with SIGPLANA.
- Oct- Dec 1999: Germal Spacial Agency (DLR), european research project SIBERIA.

Papers

- Verdú, J.M., Batalla, R.J., Martínez-Casasnovas, J.A., 2006. *Estudio hidrológico de la cuenca del Isábena (Pirineos, España). I: Variabilidad de la precipitación*. Ingeniería del agua, ISSN 1134-2196, Vol. 13, Nº. 4, 2006, pp. 321-330
 - Verdú, J.M., Batalla, R.J., Martínez-Casasnovas, J.A., 2006. *Estudio hidrológico de la cuenca del Isábena (Pirineos, España). II: Respuesta hidrológica*. Ingeniería del agua, ISSN 1134-2196, Vol. 13, Nº. 4, 2006, pp. 331-344
 - Verdú, J.M., Batalla, R.J., Martínez-Casasnovas, J.A., 2005. *High-resolution grain-size characterisation of gravel bars using imagery analysis and geo-statistics*. Geomorphology, 72 (1-4): 73-93
 - Verdú, J.M., Martínez-Casasnovas, J.A., García, N, 2002. *Respuesta hidrológica de la cuenca del río Isábena (Huesca) a los cambios en la vegetación y los usos del suelo en la década de 1990*. Revista del Instituto de Estudios Altoaragoneses.
 - Verdú, J.M., Martínez-Casasnovas, J.A., 2001. *Aplicación de imágenes radar a la cartografía de vegetación en zonas boreales*. Revista Nacional de Teledetección, 16: 37-40.
 - Verdú, J.M., Batalla, R.J., Poch, R.Mª, 2000. *Dinámica erosiva y aplicabilidad de modelos físicos de erosión en una cuenca de montaña mediterránea (Ribera Salada, cuenca del Segre)*. Pirineos, 155: 37-57.
-