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(a) Professional Preparation

Universidad Politécnica Madrid	*Madrid, Spain*	*Agricultural Engineer*	*B.Sc./M.S. 1989*
North Carolina St. University	*Raleigh, NC*	*Biological & Agricultural Engineer*	*Ph.D. 1993*

(b) Appointments

2011-pres Professor, Agricultural & Biological Engineering, University of Florida
2010-2011 Professor in Residence, *CEMAGREF* (now I*rstea*), Lyon, France
2006-2011 Associate Professor, Agricultural & Biological Engineering, University of Florida
2001-2006 Assistant Professor, Agricultural & Biological Engineering, University of Florida,
2000-2001 Tenured Researcher, Canary Islands Agricultural Research Institute, Spain.
1993-2000 Engineering Researcher, Canary Islands Agricultural Research Institute, Spain.
1994-2001Adjunct Professor, University of La Laguna, Spain.

(c) Specialization

Water quality and hydrological modeling; water conservation, surface contaminant transport through vegetation. Complex natural human coupled systems analysis; environmental modeling system integration; global sensitivity and uncertainty of environmental models.

(d) Publications

(i) Impact (Google Scholar, http://goo.gl/8OMS7s): citations= 4200+, h-index= 35, i-index= 95

(ii) Sample Products (*Graduate student chair; **Postdoc mentored).

- Carluer, N., C. Lauvernet, D. Noll and R. Muñoz-Carpena. 2017. Defining context-specific scenarios to design vegetated buffer zones in order to limit pesticides transfer by surface runoff. *Sci. Total Env* 575(1):701–712. doi:10.1016/j.scitotenv.2016.09.105
- Rodea-Palomares, I**, M. González-Pleiter, S. Gonzalo, R. Rosal, F. Leganés, M. Casellas, R. Muñoz-Carpena, F. Fernandez-Piñas. 2016. Hidden drivers of low-dose pharmaceutical pollutant mixtures revealed by the novel GSA-QHTS screening method. *Science Adv.* (AAAS) 2(9):e1601272. doi: 10.1126/sciadv.1601272.
- Campo-Bescós**, M.A., R. Muñoz-Carpena, G.A. Kiker, B.W. Bodah, J.L Ullman. 2015. Improved watering or buffering? Runoff and sediment pollution control from furrow irrigated fields in arid environments. *Agric., Ecosyst. Environ*. 205(1):90–101. doi:10.1016/j.agee.2015.03.010
- Linhoss*, A.C., R. Muñoz-Carpena G. Kiker and P. Wolski. 2015. Reducing uncertainty based on model fitness: Application to a reservoir model. *Water SA* 41(1):105-114. doi:10.4314/wsa.v41i1.13
- Shrivastava*, V., W.D. Graham, R. Muñoz-Carpena and R. Maxwell. 2014. Insights on geologic and vegetative controls over hydrologic behavior of a large complex basin - Global Sensitivity Analysis of an Integrated Parallel Hydrologic Model. *J. of Hydrology* 519(B):2238–2257.
- Chu-Agor**, M.L., J.A. Guzman, R. Muñoz-Carpena, G.A. Kiker, I. Linkov. 2014. A simplified approach for simulating changes in beach habitat due to the combine effects of long-term sea level rise, storm erosion, and nourishment. *Env. Model. & Software* 52:111-120.
- Ritter, A. and R. Muñoz-Carpena. 2013. Predictive ability of hydrological models: objective assessment of goodness-of-fit with statistical significance. *J. of Hydrology* 480(1):33-45.

- Chu-Agor**, M.L., R. Muñoz-Carpena, G. A. Kiker, M. Aiello-Lammens, R. Akçakaya, M. Convertino, I. Linkov. 2012. Simulating the fate of Florida Snowy Plovers with sea-level rise: exploring potential population management outcomes with a global uncertainty and sensitivity analysis perspective. *Ecol. Modelling* 224(1):33-47. doi:10.1016/j.ecolmodel.2011.10.021.
- Kaplan*, D.A. and Muñoz-Carpena, R. 2011. Complementary effects of surface water and groundwater on soil moisture dynamics in a degraded coastal floodplain forest. *J. of Hydrology* 398(3-4):221-234. doi:10.1016/j.jhydrol.2010.12.019.
- Chu-Agor**, M.L., R. Muñoz-Carpena, G. Kiker, A. Emanuelsson and I. Linkov. 2011. Exploring sea level rise vulnerability of coastal habitats through global sensitivity and uncertainty analysis. *Env. Model. & Software* 26(5):593-604. doi:10.1016/j.envsoft.2010.12.003.

(e) Awards and Honors

2017 UF/IFAS High Impact Research Publication Award. *Science Adv.* doi: 10.1126/sciadv.1601272
2016 UF Postdoc Mentoring Award, UF Office of Postdoctoral Affairs.
2016 FL-ASABE Distinguished Achievement Award (Amer. Soc. of Agric. & Biological Engineers)
2015 Royal Academy of Engineers of Spain, Foreign Member (http://raing.es)
2015 Fellow of the ASABE (American Society of Agricultural and Biological Engineers)
2015 ASABE ADS/Hancor Soil Water Engineering National Award.
2013 UF Water Institute Faculty Fellow (http://waterinstitute.ufl.edu/people/facultyfellows.html)
2013 National Postdoctoral Association (NPA) Mentoring Award, https://goo.gl/PVBh1y
2013 EWRI-ASCE Best Paper Award, *J. Irr. and Drain. Eng.*
2011 UF Research Foundation Professor
2010 Junior Faculty Award of Merit Gamma Sigma Delta, Honor Society of Agriculture
2009 FL-ASABE Special Recognition Award (American Society of Agric. & Biological Engineers)
2008 UF/IFAS LEAD Diploma
2008 UF/IFAS International Achievement Award
2008 Teacher's College Diploma, College of Agriculture and Life Sciences (CALS)
2003 Certificate of Appreciation, USDA-Foreign Agricultural Service
1999 Paper of ASAE Award, Hydrology Mini-Symposium.

(f) Other Synergistic Activities:

1. *Journal and Book Editor*: Editor-in-Chief, Elsevier's *Journal of Hydrology Regional Studies*; Associate Editor, 2004-2010 *Transactions of ASABE* and *Applied Engineering in Agriculture*; Associate editor for 3 special issues of peer-reviewed journals (*Vadose Zone Journal*, *Trans. of ASABE*, *Physics and Chemistry of the Earth, Part B*); Co-editor of CRC/Lewis book with 53 international contributors
2. *NSF Funded Student development*: NSF GRF doctoral advisor, Ms. N. Nelson (started Fall 2012); NSF-REU Program, Summer 2012, faculty mentor for Wen Yang; Advisory Board 2009-2012, NSF-Innov. through Institutional Integration (I3); 2007-2011 NSF IGERT doctoral advisor, A.C. Linhoss
3. *Federal Projects Panelist*: NSF, USDA/ARS, USDA/NRI; USDA/ARS.
4. *Research Advisory Board Membership*: 2009-2012, UF Water Institute (campus wide); 2002- , Spanish Unsaturated Studies group ZNS, Spain; 2012-2014, UF/IFAS Dean of Research; UF/IFAS International Programs; 2008-, High Performance Computing Center, University of Florida (Campus wide); Ext. Advisory Board, 2015-2018, Instit. for Earth System Research (IISTA), Spain
5. *Scientific and Professional Societies*: American Society of Agricultural and Biological Engineers (ASABE), Fellow ASABE, 2015-, Member Engineer, 1993-, Chair Natural Resources and Environmental Systems Division NRES-02, NRES-21 Hydrology Chair, 2008-2009, Member, SW-5,

Publications Review Committee, 2004-; Member, American Geophysical Union (AGU), 1993-.