

# CURRICULUM VITAE

**Name:** José Orihuela Calatayud.

**Degrees:** Licenciado en Ciencias (Sección de Matemáticas), Facultad de Ciencias de la Universidad de Murcia, Junio 1980. Doctor en Ciencias (Sección de Matemáticas), Universidad de Murcia, Mayo 1984, Sobresaliente cum laude (Director: Dr. M. Valdivia).

**Positions:** Catedrático de Análisis Matemático UMU (Murcia University) (April 1991- today). Académico correspondiente de la Real Academia de Ciencias Exactas, Físicas y Naturales (January 2005- today). Académico numerario de la Academia de Ciencias de la Región de Murcia (June 2001- today). Visiting Fellow Brasenose College, Oxford University, (2001-2002).

**Professional activities:** FPI Grant holder (1981-82). Prof. Titular of Murcia University (1982-91). Temporary Lecturer, University College London (1996). Visiting Professor, Mathematical Institute, University of Oxford (2001-02). Editor of *Serdica Mathematical Journal*, Sciences Academy of Bulgaria (1999-2011). Scientific Committee RACSAM *Revista Real Academia de Ciencias Exactas, Físicas y Naturales, Ser. A Mat.* (2005-today). Vicerrector de Planificación de las enseñanzas, Murcia University (1992-94). Vicerrector de Profesorado, Murcia University (1992-94). President of Sectorial Estudiantes CRUE (2016-2018). Member of Consejo Superior Estadística (2016-18). Rector of Murcia University (2014-2018).

**Research and development teams:** I have been the head (main researcher) of the research team of Functional Analysis in Murcia University since 1992. Beginning in 1986, I have been involved with 15 different research projects with our Ministry of Education, each one of them of three years, with the Functional Analysis research group in Murcia University, as well as with the research group of Prof. Manuel Valdivia in Valencia University. I have been the head for 5 projects with the CARM (Murcia), for two *Acciones Integradas* with Great Britain and two projects more with *Bulgaria and our Ministry of Foreign Affairs*. I have been involved in a project of *Capital Humano y Movilidad* from the European Union (UE) with the universities of Paris VI, Mons, Lancaster, Murcia and University College London.

## Publications:

1. *Aproximant for the dipole moment in diatomic molecules* *Anales de Química RSEQ* 72 (1982) 135–139, (with A. Requena, J. A. Losana and F. Tomás.)
2. *Sobre la categoría semiconvexa de hiperplanos y productos de espacios de Baire* *Rev. Real Acad. Ciencias Exac. Fis. Nat. Madrid* 82 (1988) 425-438.
3. *Sobre espacios semi-Suslin y espacios con red de tipo C* *Collectanea Math.*36 (1986) 447–452.
4. *On the equivalence of weak and Schauder bases* *Archiv der Mathematik* 46 (1986) 447–452.
5. *Metrizability of precompact subsets in (LF) spaces* *Proc. Royal Soc. Edimburgo* 103A (1986) 293–299, (with B. Cascales.)
6. *Pointwise compactness in spaces of continuous functions* *J. London Math. Soc.* 36 (1987) 143–152.
7. *On compactness in locally convex spaces* *Math. Zeitschrift* 195 (1987) 365–381, (with B. Cascales.)
8. *On pointwise and weak compactness in spaces of withtinuous functions* *Bull. Soc. Math. Belgique* 40 (1988) 331–352, ( with B. Cascales.)
9. *Countably determined locally convex spaces* *Portugalia Mathematica* 48 (1991) 75–89, ( with B. Cascales.)
10. *A sequential property of set valued maps* *J. Math. Anal. Applic.* 156 (1991) 86–100, ( with B. Cascales.)
11. *Projective generators and resolutions of identity in Banach spaces* *Rev. Mat. Univ. Comp. de Madrid* 2 (1989) 179–199, ( with M. Valdivia.)
12. *Every Radon- Nikodym Corson compact space is Eberlein compact* *Studia Math.* 98 (1991) 157–174, ( with W. Schachermayer and M. Valdivia.)
13. *On weakly Lindelof Banach spaces* *Progress in Functional Analysis*. Ed. por K. Biersted, J. Bonet, J. Horvath y M. Maestre *Math. Studies Vol170*, North Holland (1992) 279–291.

14. *Sigma-fragmentability of multivalued maps and selection theorems* J. Functional Analysis 117 (1993) 243–247, ( with J. E. Jayne, A. Pallares and G. Vera.)
15. *On a generic factorization theorem* Mathematika 45 (1995) 56–66, ( with P. Kenderov.)
16. *Locally uniformly rotund renorming and fragmentability* Proc. London Math. Soc. 75 (1997) 619–640, ( with A. Moltó and S. Troyanski.)
17. *Weakly uniformly rotund Banach spaces* Comm. Math. Univ. Carolinae 39 (1998) 749–753, ( with A. Moltó, V. Montesinos and S. Troyanski.)
18. *On weakly locally uniformly rotund Banach spaces* J. Functional Analysis 163 (1999) 252–271, ( with A. Moltó, S. Troyanski and M. Valdivia.)
19. *Kadec and Krein Milman properties* C. R. Acad. Sci. Paris 331 (2000) 459–464, ( with A. Moltó, S. Troyanski and M. Valdivia.)
20. *MLUR and a decomposition method for renorming* Quarterly. J. Math. Oxford 52 (2001) 181–193 ( with A. Moltó, S. Troyanski and M. Valdivia.)
21. *Banach spaces and Topology I* Encyclopedia of General Topology 2003 Elsevier Science B.V. Editores J.I. Nagata, J.E. Vaughan and K.P. Hart, ( with B. Cascales, I. Namioka and M. Raja.)
22. *Banach spaces and Topology II* Encyclopedia of General Topology 2003 Elsevier Science B.V. Editores J.I. Nagata, J.E. Vaughan and K.P. Hart, ( with B. Cascales, I. Namioka and M. Raja.)
23. *The Lindelöf property in Banach spaces* Studia Mathematica 154(2)(2003) 165–192, ( with B. Cascales and I. Namioka.)
24. *Kuratowski's index of non compactness and renorming in Banach spaces* Journal of convex Analysis 11 (2) (2004) 477–494, ( with F. Garcia, L. Oncina and S. Troyanski.)
25. *Network characterization of Gul'ko compact spaces and their relatives* Journal Mathematical Analysis and Applications 297 (2004) 791–811 ( with F. Garcia and L. Oncina.)
26. *Spaces of functions with countably many discontinuities* Israel Journal Math. 158 (2017) 19–39, (with R. Haydon and A. Moltó.)
27. *Strictly convex renormings* J. London Math. Soc. 75(3) (2007) 647–658, (with A. Moltó, S. Troyanski and V. Zizler.)
28. *Continuity properties up to a countable partition* RACSAM, Revista de la Real Academia de Ciencias Exactas, Físicas y Naturales, Seria A: Matemáticas 100 (2006) 279–294, 647–658, (with A. Moltó, S. Troyanski and M. Valdivia.)
29. *Topological open problems in the geometry of Banach spaces* Extracta Mathematicae 22(2) (2007) 197–213.
30. *James boundaries and  $\sigma$ -fragmented selectors.* Studia Math. 188(2) 97–122, (with B. Cascales and M. Muñoz.)
31. *On locally uniformly rotund renormings in  $C(K)$  spaces* Canadian Journal Mathematics 62(3) 595–613, (with A. Moltó and S. Troyanski.)
32. *LUR renormings through Deville's Master Lemma* RACSAM Revista Real Academia Ciencias Serie A Mat. 103(1) (2009) 75–85.
33. *Deville's Master Lemma and Stone's discreteness in Renorming Theory* Journal Convex Analysis 16 (2009) 954–972, (with S. Troyanski.)
34. *A Nonlinear Transfer Technique for Renorming* Lecture Notes In Mathematics 1951 (2009) Springer, Berlin, (with A. Moltó, S. Troyanski and M. Valdivia.)
35. *Boundaries of Asplund spaces* Journal Functional Analysis 259 (2010) 1346–1368, (with B. Cascales, V. Fonf and S. Troyanski.)
36. *Domination by second countable spaces and Lindelöf- $\Sigma$  property* Topology and its Applications 158(2) (2011) 204–214, (with B. Cascales and V. Tkachuck.)

37. *The interplay between measure theory, topology, and functional analysis* Journal of Mathematical Analysis and Applications, Editor. 350(2) (2009) (with B. Cascales, G. Godefroy and R. Phelps.)
38. *Open problems in infinite dimensional Geometry and Topology* RACSAM, Revista Real Academia de Ciencias, Ser A Mat. Editor 104(2) (2010) (with B. Cascales.)
39. *Strictly convex norms and topology* Proc. London Math. Soc 104(3) (2012) 197–222, (with R. Smith and S. Troyanski.)
40. *A coercive James’s weak compactness theorem and nonlinear variational problems* Nonlinear Analysis: Theory, Methods and Applications (75) (2012) 598–611, (with M. Ruiz Galán.)
41. *Lebesgue property for convex risk measures on Orlicz spaces* Mathematics and Financial Economics 6 (2012) 15–35 Springer (with M. Ruiz Galán.)
42. *The number of  $K$ -determination of topological spaces* RACSAM, Revista Real Academia de Ciencias, Ser A Mat. 106(2) (2012) 341–357, (with B. Cascales and M. Muñoz.)
43. *Análisis funcional*, book. Electrolibris (2012), (with B. Cascales, J.M. Mira and M. Raja.)
44. *Análisis funcional*, E-book with solutions to problems. Electrolibris (2012), (with B. Cascales, J.M. Mira and M. Raja.)
45. *On  $T_p$  locally uniformly rotund norms* Set Valued and Variational Analysis 21(4) (2013) 691–709.
46. *Compactness, Optimality, and Risk* Computational and Analytical Mathematics, Springer Proceedings in Mathematics and Statistics, Springer New York (2013) 161–218, (with B. Cascales and M. Ruiz Galán.)
47. *A biased view of topology as a tool in functional analysis* Recent Progress in General Topology III Atlantis Press (2014) 93–164 (with B Cascales.)
48. *Weakly Metrizable Spheres and Renormings of Banach Spaces* Quarterly Journal of Mathematics 67(1) 15–27 (2016) 15–27, (S. Ferrari and M. Raja.)
49. *Metrization theory and the Kadec property* Banach Journal of Mathematical Analysis 102(2) (2016) 281–306, (with S. Ferrari, L. Oncina and M. Raja.)
50. *Plasticity of the unit ball of a strictly convex Banach space* RACSAM. Revista Real Academia de Ciencias Exactas, Físicas y Naturales 110(2) (2016) 723–727, (with B. Cascales, V. Kadets and E. Wingler.)
51. *One-sided James’ Compactness Theorem* Journal of Mathematical Analysis and Applications 445(2) (2017) 1267–1283, (with B. Cascales and A. Pérez Hernández.)
52. *Stability in locally  $L^0$ -convex modules and a conditional version of James’ compactness theorem* Journal of Mathematical Analysis and Applications 452(2) (2017) 1101–1127, (with J.M. Zapata.)
53. *Compact convex sets that admit a lower semicontinuous strictly convex function* Journal of Convex Analysis 24(3) (2017) 987–998 (with L.C. García Lirola and M. Raja.)
54. *Conic James’ Compactness Theorem* Journal of Convex Analysis 25(4) (2018) 1335–1344.

**Visiting positions:** Joannes Kepler Universitat de Lin, Austria (1 month, 1986), University College London (1 month 1991- three months 1995), University of Bordeaux (1 month 1998) Mathematical Institute Universidad de Oxford (10 meses 2001–2002).

**Research Congress:** I have being lecturing in 35 conferences as invited speaker in places as Oberwolfach, Cambridge, Oxford, Praga (Academia de Ciencias y Universidad), Sofia, Madrid (Complutense), Linz, Lieja, Badajoz, Campinas, Valencia (Politécnica y Literaria), Atenas, Paris VI, Jerusalem, Cáceres, Viena, Kent, New York (City College), CIEM Castro Urdiales-Santander and Alhucemas. I also have more than 20 invited conferences in university research seminars as: Complutense de Madrid, Johannes Kepler de Linz, Oldenburg, Trier, University College London, University Paris VI, Charles University- Praga, Burdeos, Valencia, Oxford, York, Granada, Alicante and the Sciences Academies of Prague and Sofia.

**Direction of doctoral thesis:** I have been director of seven doctoral thesis.

**Congress Commitees** Workshop in Banach spaces I, II and III, 1995, 1999 and 2006. Scientific committee for the Symposium Interplay between Topology and Analysis, Masee 2003, Bulgaria. i-MATH Jornadas

sobre Matemática de los Mercados Financieros, 2010. Integration, Vector Measures and Related Topics, 2011.

**Quality index:** Almost all publications presented here has been cited by other authors in specialized research papers. Some of them has been used in the development of new doctoral thesis not directed by myself (at least nine thesis). Others has been developed by different authors in books going from basic text in Functional Analysis to specialized monographies (more than ten books). Most of the items in the CV are published in ISI journals and some of them as invited for the editors. Many of them has been presented in meetings and schools as invited speaker. Let me adjoint here a web page taken from Google-Scholar with a summary of our indexes:



## José Orihuela

Universidad de Murcia  
Análisis Matemático  
Probabilidad y Estadística  
Finanzas cuantitativas

	All	Since 2013
Citations	975	381
h-index	17	10
i10-index	27	10

TITLE	CITED BY	YEAR
<a href="#">On compactness in locally convex spaces</a> B Cascales, J Orihuela Mathematische Zeitschrift 195 (3), 365-381	110	1987
<a href="#">Pointwise compactness in spaces of continuous functions</a> J Orihuela Journal of the London Mathematical Society 2 (1), 143-152	68	1987
<a href="#"><math>\sigma</math>-fragmentability of multivalued maps and selection theorems</a> JE Jayne, J Orihuela, AJ Pallares, G Vera Journal of functional analysis 117 (2), 243-273	58	1993
<a href="#">A nonlinear transfer technique for renorming</a> A Moltó, J Orihuela, S Troyanski, M Valdivia Springer	52	2009
<a href="#">Locally uniformly rotund renorming and fragmentability</a> A Moltó, J Orihuela, S Troyanski Proceedings of the London Mathematical Society 75 (3), 619-640	51	1997
<a href="#">On weakly locally uniformly rotund Banach spaces</a> A Moltó, J Orihuela, S Troyanski, M Valdivia Journal of functional analysis 163 (2), 252-271	49	1999
<a href="#">Every Radon-Nikodym Corson compact space is Eberlein compact</a> J Orihuela, W Schachermayer, M Valdivia Studia mathematica 98 (2), 157-174	49	1991
<a href="#">On weakly Lindelöf Banach spaces</a> J Orihuela North-Holland Mathematics Studies 170, 279-291	36	1992
<a href="#">The Lindelöf property in Banach spaces</a> B Cascales, I Namioka, J Orihuela Studia Mathematica 2 (154), 165-192	34	2003
<a href="#">Projective generators and resolutions of identity in Banach spaces</a> J Orihuela, M Valdivia Rev. Mat. Univ. Complut. Madrid 2, 179-199	34	1989
<a href="#">Lebesgue property for convex risk measures on Orlicz spaces</a> J Orihuela, MR Galán Mathematics and Financial Economics 6 (1), 15-35	32	2012