

# Dr. Francisco J. Huera-Huarte

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## CONTACT INFORMATION

Department of Mechanical Engineering  
[UNIVERSITAT ROVIRA I VIRGILI](#)  
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43007 Tarragona, SPAIN

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<http://labfsi.com/>

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## RESEARCH INTERESTS

Fluid-structure interactions (FSI), Flow-Induced Vibrations (FIV). Aero/hydro-elasticity.  
Fluid mechanics of bluff bodies, wakes and vortex flows.  
Fluid mechanics of flying and swimming, bio-inspired design.  
Renewable energy. Cross-flow turbines / Vertical Axis Wind Turbines.  
Optical Measurement techniques for solid and fluid dynamics.

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## EDUCATION

**PhD in Aeronautics** **07/2006**  
**DIC** (Diploma of Imperial College) **01/2007**  
PhD supervisor: Prof. Peter W. Bearman  
[Department of Aeronautics](#)  
[IMPERIAL COLLEGE LONDON, UK](#)

**Ingeniero Industrial (5 years degree)** **02/2003**  
Final Grade: 7.85/10. Thesis Grade: A with Honours 10/10  
[Escola Tècnica Superior Enginyeria Industrial de Barcelona \(ETSEIB\)](#)  
[TECHNICAL UNIVERSITY OF CATALONIA \(UPC\)](#), Spain

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## RESEARCH HIGHLIGHTS

- "**Agustín de Betancourt y Molina 2014**" Young Investigator Award, Real Academia de Ing.
- "**Isabel P. Trabal 2015**" Young Investigator Award, Fund. Caja Ingenieros.
- **Top 2% ranking of scientists (2019&2020)**. Among the top 100000 across all fields ([PLOS pub.](#))
- Over 1.3 M€ in competitive funding as Principal Investigator.
- **Associate Editor:** JFS (since 2019), ASME Open Journal of Eng. (since 2022) and ASME JOMAE (2019-2020)
- **40 publications** in top journals (24 as first author, 8 of which as single author).
- Over **2115 citations**, h-index 18.
- Over 65 presentations in International Conferences (2 plenary invited talks).
- 1 European Patent.
- Overall **co-Organizer and co-Chair of ASME OMAE 2018** (>1250 attendees)
- Organizer of a Symposia at EuroMech Fluid Mechanics Conference EFMC12, Vienna, Austria.

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PRESENT  
POSITIONS

- Head of the Undergraduate Program in Mechanical Engineering** since 05/2019  
Department of Mechanical Engineering  
UNIVERSITAT ROVIRA I VIRGILI (URV)
- Coordinator at URV Inter-University PhD Progr. Fluid Mechanics** since 09/2013  
(Doctoral programme involving 6 Spanish Universities.  
General Coordinator: Prof. Martinez-Bazán at Universidad Jaén)  
UNIVERSITAT ROVIRA I VIRGILI (URV)
- Associate Professor (Prof. Titular Universidad)** since 08/2011  
Department of Mechanical Engineering  
UNIVERSITAT ROVIRA I VIRGILI (URV)
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RESEARCH,  
TEACHING &  
PROFESSIONAL  
EXPERIENCE

- Visiting Associate in Aerospace** 07/2018 - 08/2018  
Graduate Aerospace Laboratories, GALCIT  
CALIFORNIA INSTITUTE OF TECHNOLOGY, CALTECH (Host: Prof. M. Gharib)
- Visiting Scholar** 08/2016 - 08/2016  
Department of Mechanical and Industrial Engineering  
UNIVERSITY OF MASSACHUSETTS, UMass Amherst (Host: Prof. Y. Modarres-Sadeghi)
- Visiting Associate in Aerospace** 05/2015 - 07/2015  
Graduate Aerospace Laboratories, GALCIT  
CALIFORNIA INSTITUTE OF TECHNOLOGY, CALTECH (Host: Prof. M. Gharib)
- Guest Faculty** 03/2015 - 04/2015  
Université Paris 7 - Diderot & PMMH CNRS, Paris  
(Hosts: Profs. B. Thiria & R. Godoy-Diana)
- Visiting Associate in Aerospace** 04/2014 - 07/2014  
Graduate Aerospace Laboratories, GALCIT  
CALIFORNIA INSTITUTE OF TECHNOLOGY, CALTECH (Host: Prof. M. Gharib)
- Assistant Professor** 01/2011 - 07/2011  
Department of Mechanical Engineering  
UNIVERSITAT ROVIRA I VIRGILI (URV)
- EC Marie Curie IOF Postdoctoral Research Fellow** 01/2010 - 12/2010  
Dept. Mechanical Engineering  
UNIVERSITAT ROVIRA I VIRGILI (URV)
- EC Marie Curie IOF Postdoctoral Research Fellow** 08/2008 - 12/2009  
Graduate Aerospace Laboratories, GALCIT  
CALIFORNIA INSTITUTE OF TECHNOLOGY, CALTECH (Host: Prof. Mory Gharib)
- Visiting researcher** 04/2009  
William B. Morgan Large Cavitation Channel (LCC)  
NAVAL SURFACE WARFARE CENTER, CARDEROCK DIVISION, US NAVY

**Assistant Professor** 09/2006 - 07/2008  
 Department of Mechanical Engineering  
 UNIVERSITAT ROVIRA I VIRGILI (URV)

**Visiting researcher** 09/2007  
 Department of Aeronautics  
 IMPERIAL COLLEGE LONDON, UK

**Postdoctoral Researcher** 05/2006 - 08/2006  
 Department of Fluid Mechanics, ETSEIB  
 UNIVERSITAT POLITÈCNICA DE CATALUNYA UPC)

**PhD researcher** 05/2003  
 Delft Hydraulics Water Laboratories, The Netherlands

**PhD student and Teaching assistant** 03/2003 - 04/2006  
 Department of Aeronautics  
 IMPERIAL COLLEGE LONDON, UK

**Project Manager & Research engineer** 01/2001 - 02/2003  
 Systems and Components department  
 IDIADA AUTOMOTIVE TECHNOLOGY, Spain

FELLOWSHIPS &  
 AWARDS

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**Top 2% ranking of scientists** 2019&2020  
 Among the top 100000 across all fields. (PLOS publication)

**Prize “Isabel de P. Trabal” 2015, Fundación Caja de Ingenieros** 12/2015  
 Young Investigator Award (<40 years old) given by the Foundation of the Spanish Association of Mechanical Engineers. More than 260 applicants in 2015.

**Prize “Agustin de Betancourt y Molina”, Real Academia de Ingeniería** 11/2014  
 Award for the best Young Researcher in Engineering (<40 years old). All disciplines in engineering in Spain. With the mention: “Por su brillante carrera académica en la que destacan sus aportaciones a campos tales como el diseño bio-inspirado y la biomecánica, la velocimetría por imagen de partículas 3D basada en desenfoque (DDPIV) y sus contribuciones al campo de la interacción fluido-estructura.”

**EC Marie Curie IOF Postdoctoral Research Fellow** 08/2008 - 12/2010  
 Only 11 IOF grants were awarded by the Engineering and Physical Sciences Panel in 2007.

**National Agency for University Quality (ANECA) accreditations**  
 Catedrático Universidad (2021), Prof. Titular Universidad (2010), Prof. Contratado Doctor (2010), Prof. Ayudante Doctor (11/2006)

**Catalan Agency for University Quality (AQU) habilitations**  
 Prof. Agregado (2010), Prof. Lector (2006)

**Ministerio de Ciencia y Tecnología** 07/2006  
 Juan de la Cierva Postdoctoral Research Fellowship (Candidate number 1 for the Mechanical, Naval and Aerospace panel)

**Britain’s Top Younger Engineers Competition, finalist** 12/2005  
 Poster presentations for British Members of the Parliament (MPs) at the House of Commons.

**Engineering and Physical Sciences Research Council (EPSRC)** 03/2003 - 03/2006  
PhD studentship, Department of Aeronautics, Imperial College London, UK

**1st Prize Col.legi Enginyers Industrials de Catalunya** 05/2004  
Best Final Year Thesis in 2003 (All engineering schools in Catalonia)

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PROFESSIONAL  
SERVICE &  
CONFERENCE  
ORGANIZATION

**Organizer & Founding Committee member**  
[1st Spanish Fluid Mechanics Conference \(SFMC22\)](#), Cádiz, Spain 06/2022

**Symposium Chair and Organizer** (with Megan Leftwitch, George Washington U.)  
Biomechanics of swimming and flying and bioinspired propulsion  
EuroMech Fluid Mechanics Conference EFMC12, 2018, Austria 09/2018

**Conference co-Chair** (with A. Souto-Iglesias, UPM and R. Guanche, IH Cantabria)  
[37th ASME International Conference on Ocean, Offshore and Arctic Engineering OMAE2018 in Madrid, Spain](#) 06/2018

**co-Chair and co-Organizer** (with J. Rosell-Llompарт, URV)  
2017 Workshop in Fluid Mechanics, Tarragona, Spain 07/2017

**Topic Organizer: VIV Physics and Suppression**  
34th, 35th and 36th ASME OMAE International Conference  
OMAE2015(Norway), OMAE2016 (South Korea) and OMAE2017(Canada) 2015 to 2017

**Editorial Board:**  
[Journal of Fluids and Structures](#) since 2019  
[ASME Open Journal of Eng.](#) since 2021  
[ASME Journal Offshore Mechanics and Arctic Engineering](#) 2018 - 2020

**Reviewer for top Journals:**  
Journal of Fluids and Structures, Journal of Fluid Mechanics, Physical Review Fluids, Physical Review E, Journal of Sound and Vibration, Physics of Fluids, Applied Energy, Scientific Reports Nature, Journal Marine Science and Technology, Fluid Dynamics Research, Marine Structures, Journal of Wind engineering and Industrial Aerodynamics, Ocean Engineering, Experimental Thermal and Fluid Science, Journal of Fluids Engineering, Journal of Vibration and Acoustics, Experiments in Fluids, ...

**Evaluator for Spanish National Calls:**  
Ministerio Economía y Competitividad (MINECO) 2017  
Evaluation expert and committee member for Ramon y Cajal and Juan de la Cierva grants.

Ministerio Economía y Competitividad (MINECO) 2010 and 2016  
Evaluation expert and committee member for research proposals and grants: Plan Nacional I+D+I

Agencia Nacional de Evaluación y Prospectiva (ANEP) since 2010  
Evaluation expert for research proposals and grants: Plan Nacional I+D+I; Infraestructuras científico-tecnológicas cofinanciadas FEDER

**External consultant:**  
European Wind Energy Association (EWEA) 2011 - 2013  
Offshore Wind Industry Advisory Group (OWIG), Task Force "Deep Offshore & new foundations".

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COMPETITIVE  
FUNDING AS  
PRINCIPAL  
INVESTIGATOR  
(over 1.3 M€  
since 2006)

<b>Ministerio de Economía y Competitividad</b> Plan Nacional I+D+I, Proyectos de Excelencia Number of researchers: 1 Funding $\simeq$ 60000€. Reference: PGC2018-097766-B-I00	<b>01/2019 - 12/2021</b>
<b>AGAUR</b> Excellence Research Groups (Grupo Reconocido y financiado) Number of researchers: 1 Funding $\simeq$ 20000€. Reference:2017-SGR-1263	<b>01/2017 - 12/2019</b>
<b>Ministerio de Economía y Competitividad</b> Plan Nacional I+D+I, Proyectos de Excelencia Number of researchers: 1 Funding $\simeq$ 131000€. Reference: DPI2015-71645-P	<b>01/2016 - 12/2018</b>
<b>Ministerio de Economía y Competitividad</b> PhD grant for hiring 1 student (Formación Personal Investigador - FPI) Plan Nacional I+D+I Funding $\simeq$ 70000€.	<b>01/2017 - 12/2019</b>
<b>Ministerio de Economía y Competitividad</b> Plan Nacional I+D+I, Proyectos de Investigación Fundamental no Orientada Number of researchers: 3 Funding $\simeq$ 145000€. Reference: DPI2012-37904	<b>01/2013 - 12/2015</b>
<b>Ministerio de Economía y Competitividad</b> PhD grant for hiring 1 student (Formación Personal Investigador - FPI) Plan Nacional I+D+I Funding $\simeq$ 68000€.	<b>01/2014 - 12/2017</b>
<b>Ministerio de Ciencia e Innovación</b> Proyectos de infraestructuras científico-tecnológica cofinanciadas (FEDER 2010) Number of researchers: 1 Funding $\simeq$ 142000€. Reference: UNRV10-4E-1138	<b>01/2012</b>
<b>Ministerio de Ciencia e Innovación</b> Plan Nacional I+D+I, Proyectos de Investigación Fundamental no Orientada (tipo A) Number of researchers: 3 Funding $\simeq$ 290000€. Reference: DPI2012-37904	<b>01/2010 - 12/2012</b>
<b>Ministerio de Ciencia e Innovación</b> PhD grant for hiring 1 student (Formación Personal Investigador - FPI) Plan Nacional I+D+I Funding $\simeq$ 65000€.	<b>10/2010 - 09/2014</b>
<b>European Commission</b>	<b>12/2007</b>

Marie Curie International Outgoing Fellowship (IOF)  
Number of researchers: 1  
Funding  $\simeq$ 182000€ .  
Reference: IOF-219429

**Universitat Rovira i Virgili** **2007-2008**  
Programa ACCES: Funding  $\simeq$ 3000€, AIRE: Funding  $\simeq$ 6000€ .  
Number of researchers: 1

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PROJECTS FOR  
COMPANIES AS  
PRINCIPAL  
INVESTIGATOR  
(over 150 k€  
since 2010)

<b>IKEA</b>	<b>2017-2022</b>
Remote wind monitoring and alert system for distribution warehouses.	
<b>IDIADA Automotive Technology, SA</b>	<b>2019-2021</b>
Aerodynamics of a commercial vehicle using DPIV.	
<b>ASICS</b>	<b>2019</b>
Experimental characterisation of sports equipment.	
<b>ASICS</b>	<b>2018</b>
Experimental characterisation of sports equipment.	
<b>Essity</b>	<b>2018</b>
Computational mechanics (structural dynamics and modal)of industrial machinery.	
<b>IDIADA Automotive Technology, SA</b>	<b>2013</b>
Large area DPIV measurements of the internal aerodynamics of a commercial vehicle cabin.	
<b>Institut de Recerca en Energia de Catalunya (IREC)</b>	<b>2012</b>
Wave tank measurements of the dynamic response of an offshore wind turbine spar buoy system.	
<b>Institut de Recerca en Energia de Catalunya (IREC)</b>	<b>2011</b>
Modal analysis of the tendons of a generic TLP for supporting a floating wind turbine.	
<b>Institut de Recerca en Energia de Catalunya (IREC)</b>	<b>2010</b>
Future challenges for deep waters floating wind turbines.	

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INDEXED  
PUBLICATIONS  
(h-index 18  
citations  $\approx$ 2115)

1. **F.J. Huera-Huarte** (2020) Vortex-induced vibrations of a low mass-damping rigid circular cylinder with forced periodic rotations. **Physical Review Fluids** 5 (12), 124701. [[doi.org/10.1103/PhysRevFluids.5.124701](https://doi.org/10.1103/PhysRevFluids.5.124701)]
2. S. Satheesh, **F.J. Huera-Huarte**(2020) *Passive drag reduction in cross-flow rigid plates near the free surface*. **Applied Ocean Research**, 101, 102253. [[doi.org/10.1016/j.apor.2020.102253](https://doi.org/10.1016/j.apor.2020.102253)]
3. S. Satheesh, H. R. Díaz-Ojeda, L. M. González, **F.J. Huera-Huarte**(2020) *Hydrodynamic Forces on a Cylinder With a Flexible Splitter Plate Near the Free Surface*. **ASME J. OMAE**, 142(6), 061202. [[doi.org/10.1115/1.4047199](https://doi.org/10.1115/1.4047199)]
4. **F.J. Huera-Huarte**, M Gharib (2019) *Role of the near-tip region of a fin in fish propulsion*. **Physical Review Fluids**, 4(6), 063103. [[doi.org/10.1103/PhysRevFluids.4.063103](https://doi.org/10.1103/PhysRevFluids.4.063103)]
5. HR Díaz-Ojeda, **F.J. Huera-Huarte**, LM González (2019) *Hydrodynamics of a rigid stationary flat plate in cross-flow near the free surface*. **Physics of Fluids**, 31(10), 102108.

[doi.org/10.1063/1.5111525]

6. S. Satheesh, **F.J. Huera-Huarte**. (2019) *On the drag reconfiguration of plates near the free surface*. **Physics of Fluids**, 31 (6), 067106. [doi.org/10.1063/1.5094845]
7. HR Díaz-Ojeda, LM González, **F.J. Huera-Huarte**. (2019) *On the influence of the free surface on a stationary circular cylinder with a flexible splitter plate in laminar regime*. **J Fluid Struct**, 87, 102–123. [doi.org/10.1016/j.jfluidstructs.2019.03.009]
8. **F.J. Huera-Huarte**, JI Jiménez-González. (2019) *Effect of diameter ratio on the flow-induced vibrations of two rigidly coupled circular cylinders in tandem*. **J Fluid Struct**, in press. [doi.org/10.1016/j.jfluidstructs.2019.04.006]
9. S. Satheesh, **F.J. Huera-Huarte**. (2019) *Effect of free surface on a flat plate translating normal to the flow*. **Ocean Eng.**, 171, 458–468. [doi.org/10.1016/j.oceaneng.2018.11.015]
10. **F.J. Huera-Huarte**. (2018) *Dynamics and excitation in a low mass-damping cylinder in cross-flow with side-by-side interference*. **J Fluid Mech.**, 850, 370–400. [doi.org/10.1017/jfm.2018.469]
11. M.Somoano, **F.J.Huera-Huarte**. (2018) *The dead band in the performance of cross-flow turbines: Effects of Reynolds number and blade pitch*. **Energy Convers. Manag.**, 172, 277–284. [doi.org/10.1016/j.enconman.2018.06.087]
12. **F.J. Huera-Huarte**. (2018) *Propulsive performance of a pair of pitching foils in staggered configurations*. **J Fluid Struct**, 81, 1–13. [doi.org/10.1016/j.jfluidstructs.2018.04.024]
13. M.Somoano, **F.J.Huera-Huarte**. (2018) *The effect of blade pitch on the flow dynamics inside the rotor of a three-straight-bladed cross-flow turbine*. **Proc. Inst. Mech. Eng. M.** [doi.org/10.1177/1475090218792331]
14. J.I. Jiménez-González, **F.J. Huera-Huarte**. (2018) *Vortex-induced vibrations of a circular cylinder with a pair of control rods of varying size*. **J Sound Vibration**, 431, 163–176. [doi.org/10.1016/j.jsv.2018.06.002]
15. **F.J. Huera-Huarte**. (2018) *On the impulse produced by chord-wise flexible pitching foils in a quiescent fluid*. **ASME J Fluids Eng.**, 104 (4), 041206. [ doi: 10.1115/1.4038168]
16. M.Somoano, **F.J.Huera-Huarte**. (2017) *Flow dynamics inside the rotor of a three straight bladed cross-flow turbine*. **Applied Ocean Research**, 69, 138–147. [doi.org/10.1016/j.apor.2017.10.007]
17. J.I. Jiménez-González, **F.J. Huera-Huarte**. (2017) *Experimental sensitivity of vortex-induced vibrations to localized wake perturbations*. **J Fluid Struct**, 74, 53–63. [doi:10.1016/j.jfluidstructs.2017.07.010]
18. **F.J. Huera-Huarte**. (2017) *Suppression of vortex-induced vibration in low mass-damping circular cylinders using wire meshes*. **Marine Struct**, 55, 200–213. [doi:10.1016/j.marstruc.2017.05.008]
19. **F.J. Huera-Huarte**, M. Gharib. (2017) *On the effects of tip deflection in flapping propulsion*. **J Fluid Struct**, 71,217–233.[doi:10.1016/j.jfluidstructs.2017.04.003]
20. **F.J. Huera-Huarte**, Z.A. Bangash, L.M. González. *Multi-mode vortex and wake-induced vibrations of a flexible cylinder in a tandem arrangement*. **J Fluid Struct**, 66, 571-588. [doi:10.1016/j.jfluidstructs.2016.07.019]
21. **F.J. Huera-Huarte**. (2016) (Invited contribution) *Aquatic flapping propulsion: Review and recent developments*. **DYNA**, 91 (5), 560-565. [doi:10.6036/7870]
22. Z.A. Bangash, **F.J. Huera-Huarte**. (2015) *On the flow around the node to anti-node transition of a flexible cylinder undergoing vortex induced vibrations*. **Physics of Fluids**, 27, 065112. [doi:10.1063/1.4922816]

23. R. Fernandez-Prats, V. Raspa, B. Thiria, **F.J. Huera-Huarte**, R. Godoy-Diana. (2015) *Large-amplitude undulatory swimming close to a wall*. **Bioinspiration & Biomimetics**, 10,016003 [doi:10.1088/1748-3190/10/1/016003]
24. **F.J. Huera-Huarte**. (2014) *On splitter plate coverage for suppression of vortex-induced vibrations of flexible cylinders*. **Applied Ocean Research**, 48, 244-249 [doi:10.1016/j.apor.2014.09.002]
25. **F.J. Huera-Huarte**, Z.A. Bangash, L.M. González. (2014) *Towing tank experiments of the vortex-induced vibrations of a low mass ratio long flexible cylinder*. **J Fluid Struct**, 48, 81-92. [doi:10.1016/j.jfluidstructs.2014.02.006]
26. **F.J. Huera-Huarte**. (2014) *An optical instrument based on defocusing for dynamic response model testing in water or wind tunnels*. **Ocean Eng.**, 79, 92-100. [doi:10.1016/j.oceaneng.2014.01.002]
27. **F.J. Huera-Huarte**. (2013) *Some observations on the flow physics of paddle racquets*. **J Sports Eng. Tech.**, 228(1), 40-48. [doi:10.1177/1754337113499324]
28. **F.J. Huera-Huarte**, L.M. González. (2012) *Numerical prediction of the modal response of flexible cylinders in cross-flow with a current dependent form of damping*. **J Mar Sci Tech.**, 18 (3), 370-380. [doi:10.1007/s00773-013-0214-5]
29. **F.J. Huera-Huarte**, D. Jeon, M. Gharib. (2011) *Experimental investigation of water slamming loads on panels*. **Ocean Eng.**, 38, (11-12), 1347-1355. [doi:10.1016/j.oceaneng.2011.06.004]
30. **F.J. Huera-Huarte**, M. Gharib. (2011) *Vortex and wake-induced vibrations of a tandem arrangement of two flexible circular cylinders with far wake interference*. **J Fluid Struct**, 27 (5-6), 824-828. [doi:10.1016/j.jfluidstructs.2011.02.006]
31. **F.J. Huera-Huarte**, M. Gharib. (2011) *Flow-induced vibrations and wake interference of a side-by-side arrangement of two flexible circular cylinders*. **J Fluid Struct**, 27(3) 354-366. [doi:10.1016/j.jfluidstructs.2011.01.001]
32. **F.J. Huera-Huarte**, P.W. Bearman. (2010) *Vortex and wake-induced vibrations of a tandem arrangement of two flexible circular cylinders with near wake interference*. **J Fluid Struct**, 27(2) 193-211. [doi:10.1016/j.jfluidstructs.2010.11.004]
33. **F.J. Huera-Huarte**, P.W. Bearman. (2010) *DPIV in the wake of a tandem arrangement of two high aspect ratio and low mass ratio circular cylinders in cross-flow*. **J Visual-Japan**, 13-3, 195-202. [doi:10.1007/s12650-010-0024-3]
34. **F.J. Huera-Huarte**, A. Vernet. (2010) *Vortex modes in the wake of an oscillating long flexible cylinder combining POD and Fuzzy Clustering*. **Exp Fluids**, 48-6, 999-1013. [doi:10.1007/s00348-009-0786-3]
35. **F.J. Huera-Huarte**, P.W. Bearman. (2009) *Wake structures and vortex-induced vibrations of a long flexible cylinder - Part 2: Drag coefficients and vortex modes*. **J Fluid Struct**, 25, 991-1006. [doi:10.1016/j.jfluidstructs.2009.03.006]
36. **F.J. Huera-Huarte**, P.W. Bearman. (2009) *Wake structures and vortex-induced vibrations of a long flexible cylinder - Part 1: Dynamic response*. **J Fluid Struct**, 25, 969-990. [doi:10.1016/j.jfluidstructs.2009.03.007]
37. **F.J. Huera-Huarte**, P.W. Bearman, J.R. Chaplin. (2006) *On the Force Distribution along the Axis of a Flexible Circular Cylinder Undergoing Multi-mode Vortex-Induced Vibrations*. **J Fluid Struct**, 22, 897-903. [doi:10.1016/j.jfluidstructs.2006.04.014]
38. J.R. Chaplin, P.W. Bearman, Y. Cheng, E. Fontaine, J.M.R. Graham, K. Herfjord, **F.J. Huera-Huarte**, M. Isherwood, K. Lambrakos, C.M. Larsen, J.R. Meneghini, G. Moe, R.J. Pattenden, M.S. Triantafyllou, R.H.J. Willden. (2005) *Blind predictions of laboratory measurements of Vortex Induced Vibrations of a tension riser*. **J Fluid Struct**, 21, 25-40. [doi:10.1016/j.jfluidstructs.2005.05.016]



39. J.R. Chaplin, P.W. Bearman, **F.J. Huera-Huarte**, R.J. Pattenden. (2005) *Laboratory measurements of vortex-induced vibrations of a vertical tension riser in a stepped current*. **J Fluid Struct**, 21, 3-24. [[doi:10.1016/j.jfluidstructs.2005.04.010](https://doi.org/10.1016/j.jfluidstructs.2005.04.010)]
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PATENTS

1. **F.J. Huera-Huarte**. *DEVICE FOR PASSIVE SUPPRESSION OF VORTEX-INDUCED VIBRATIONS (VIV) IN STRUCTURES*. European Patent: EP17382302.2
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CONFERENCES  
(INDEXED AND PEER  
REVIEWED)

1. **F.J. Huera-Huarte**, J.I. Jimenez-Gonzalez. *Flow-induced vibrations of two rigidly coupled circular cylinders in tandem*. IUTAM Conference on Bluff Body Wakes and Vortex-Induced Vibrations, **BBVIV7**, 2018, Carry-le-Rouet, France.
2. M. Somoano, **F.J. Huera-Huarte**. *The effect of blade pitch and Reynolds number on the performance of cross-flow turbines*. Proceedings of ASME 37th International Conference on Ocean, Offshore and Arctic Engineering, **ASME OMAE**, 2018, Madrid, Spain.
3. S. Satheesh, C. Haeck, **F.J. Huera-Huarte**. *Effect of free surface on the drag forces on a flat plate translating normal to the flow*. Proceedings of ASME 37th International Conference on Ocean, Offshore and Arctic Engineering, **ASME OMAE**, 2018, Madrid, Spain.
4. H. Diaz-Ojeda, L.M. González, **F.J. Huera-Huarte**. *Fluid-structure simulations involving free surface*. Proceedings of ASME 37th International Conference on Ocean, Offshore and Arctic Engineering, **ASME OMAE**, 2018, Madrid, Spain.
5. **F.J. Huera-Huarte**, J.I. Jimenez-Gonzalez. *Vortex-induced vibrations of a cylinder with a control rod in its wake*. Proceedings of ASME 36th International Conference on Ocean, Offshore and Arctic Engineering, **ASME OMAE**, 2017, Trondheim, Norway.
6. L.M. Gonzalez-Gutiérrez, A. Rodriguez, C. Garrido, **F.J. Huera-Huarte** J. C. Suarez *CFD Simulations on the Vortex-Induced Vibrations of a Flexible Cylinder with Wake Interference*. Proceedings of ASME 34th International Conference on Ocean, Offshore and Arctic Engineering, **ASME OMAE**, 2015, St John's, Newfoundland and Labrador, Canada.
7. **F.J. Huera-Huarte**, X. Cort, E. Aramburu et al., *DPIV Measurements of the HVAC Aerodynamics Inside a Passenger Car*. **SAE Technical Paper** 2014-36-0214, 2014. [[doi:10.4271/2014-36-0214](https://doi.org/10.4271/2014-36-0214)]
8. R. Fernandez-Prats, **F.J. Huera-Huarte**. *Hydrodynamic forces and DPIV in a pitching foil*. Proceedings of ASME 4th Joint US-European Fluids Engineering Summer Meeting **FEDSM2014**, 2014, Chicago, USA
9. **F.J. Huera-Huarte**, Z.A. Bangash, L.M. Gonzalez. *Towing tank experiments on the vortex-induced vibrations of a long flexible cylinder with wake interference*. Proceedings of ASME 33th International Conference on Ocean, Offshore and Arctic Engineering, **ASME OMAE**, 2014, San Francisco, CA, USA.
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