

Resumé

Surname: Blasco-Gimenez
Birth date: 29-4-1969

Name: Ramon

Current employment

Position: Associate Professor
Universidad Politécnica de Valencia – Technical University of Valencia
Instituto de Automática e Informática Industrial – Institute of Control and Industrial Informatics
Depto. de Ingeniería de Sistemas y Automática – Dept. of Systems Engineering and Control
Address: Edificio 8G – AI2
Camino de Vera, s/n
46022 Valencia - Spain

Phone: +34 96 387 9792.

Fax: +34 96 387 9816

Email address: r.blasco@ieee.org

Areas of expertise (UNESCO Codes): **3311.02, 3311.14, 3311.01, 3311.05, 3304.12, 3304.17, 3322.05**

Research Interests

Automatic Control, Control of Power Electronic Systems and Electric Drives, Real Time Control Systems, Fault Diagnosis, Wind Energy Generation Systems

Education

1988-1992 Bachelor of Engineering. School of Industrial Engineering. Universidad Politecnica de Valencia. Spain.
Final year project carried out at the Dept. of Electrical and Electronic Eng. University of Nottingham (UK). Rank 1/35

1992-1996 Doctor of Philosophy. Dept. of Electrical and Electronic Eng. University of Nottingham (UK). Thesis title
"New High Performance Sensorless Vector Control of Induction Motor Drives". Supervisors Prof. G.M. Asher and Prof. M. Sumner.

Previous positions

Position	Institution	Dates
Senior Lecturer	Dept. of Systems Engineering and Control. Univ. Pol. de Valencia	2000-2008
Lecturer	Dept. of Systems Engineering and Control. Univ. Pol. de Valencia	1996-2000
Research Assistant	Dept. of Electrical and Electronic Eng. University of Nottingham (UK)	1992-1995
R+D Engineer	Control y Verificación, S.A. (now part of Control Techniques-Emerson)	1988-1991

Languages (B = basic, G = good, C = Correct)

Language	Speak	Read	Write
Spanish (mother tongue)	C	C	C
English	C	C	C
Valencian / Catalan	C	C	C
French	B	C	B
Chinese (Mandarin)	B	B	B

Competitive R & D projects

Control of large off-shore wind farms connected via multiterminal HVDC links

(Ref. ACOMP/2013/116) Valencian Government Agency of Science and Technology. 1/1/2013-31/12/2013. PI: Dr. Ramón Blasco Giménez

Control of large off-shore wind farms connected via multidrop HVDC links using uncontrolled rectifiers

(Ref. FPA/2013/A/012) Valencian Government Agency of Science and Technology. 1/1/2013-31/12/2013. PI: Dr. Ramón Blasco Giménez

Multiterminal HVDC links for the control of off-shore wind farms

(Ref. ACOMP/2012/253) Valencian Government Agency of Science and Technology 1/1/2012-31/12/2012. PI: Dr. Ramón Blasco Giménez

Control of large off-shore wind farms connected via multidrop HVDC links using uncontrolled rectifiers

Ref.: (DPI2010-16714) Spanish Ministry of Education and Innovation. 1/1/2011 - 31/12/2013
PI: Dr. Ramón Blasco Giménez

Advanced control of off-shore wind farms based on synchronous generators

Ref.: (DPI2007-64730) Spanish Ministry of Education and Innovation and European Commission. 1/10/2007 – 31/12/2010. PI: Dr. Ramón Blasco Giménez

Fault diagnosis in Hybrid Systems

Ref.: (DPI2003-03691) Spanish Ministry of Education. 01/12/2003 – 01/12/2006. PI: Dr. Francisco Morant Anglada

Model based fault diagnosis of industrial systems

Ref. Spanish Agency for International Cooperation – Spanish Foreign Affairs Ministry. 01/01/2002 – 01/01/2004. PI: Francisco Morant Anglada

Control of variable speed wind-diesel generator systems based on Doubly Fed Induction Generators

Fondecyt no 1010942. Chilean Government. 2001 – 2004. PI: Dr. Ruben Peña

Industrial Automation Group Research Grant (Grant to Outstanding research groups)

Ref. Valencian Government Agency of Science and Technology. 01/01/2003 - 01/01/2004 PI Prof. Pedro Albertos

Fault diagnosed based on discrete event systems

Ref.: DPI2000-1322. Spanish Ministry of Science and Technology. 28-12-2000 – 27-12-2003. PI: Dr. Francisco Morant Anglada

Sensorless vector control of induction machines for electrical generation systems

Fondecyt nº 1000979. Chilean Government. 2000-2002. PI: Dr. Roberto Cárdenas

FRIENDS Project (Flexible and Reliable Intelligent Energy Distribution Systems)

Generalitat Valenciana. Valencian Local Government. 1999-2000. PI: Dr. Carlos Roldán

Control strategies for squirrel cage induction generators with PWM converters

Fondecyt no 1980688. Chilean Government. 1998 -2001. PI: Dr. Ruben Peña

Electric power stabilization and energy control using a flywheel and a vector controlled induction machine. Studied application: wind power systems

Fondecyt no 1980689. Chilean Government. 1998 -2000. PI: Dr. Roberto Cárdenas

Incentive to international cooperation

Fondecyt nº 7980077. Chilean Government. 1997 -2000. PI: Dr. Rubén Peña

Sensorless Vector Control of Induction Motor Drives

Ref.: GR/H/75428. Engineering and Physical Science Research Council, United Kingdom. Nov 1992 -Nov 1995. PI: Prof. G. M. Asher

Industry Funded R & D

Diagnosis, maintenance and operation of deep water off-shore wind farms

Ingeteam Service, S.A. / Acciona Wind Power. 2007 – 2010. PI: Dr. Francisco Morant

Wind power generation. Grid integration of distributed generation. Ref. IMCOGEDIS II

Iberdrola Distribución, S.A.U. / Ibernova, S.A.U.. 27/06/2002 – 27/06/2003. PI: Dr. Ramón Blasco

Improvement of supply quality in distribution networks. Ref. ASECALON II

Iberdrola. 2000 –2001. PI: Dr. Carlos Álvarez

Improvement of supply quality in distribution networks. Ref. ASECALON

Iberdrola. 1999 –2000. PI: Dr. Carlos Álvarez

Wind power generation. Grid integration of distributed generation. Ref. IMCOGEDIS II

Iberdrola, S.A. / UPV. 1999 –2000. PI: Dr. Ramón Blasco

Journal Papers and Book Chapters

LCC-HVDC Connection of Off-shore Wind Farms with Reduced Filter Banks

R. Blasco-Gimenez, N Aparicio, S. Añó-Villalba, and S. Bernal-Perez,
IEEE Transactions on Industrial Electronics, 2012, doi. 10.1109/TIE.2012.2227906.

Efficiency and Fault-Ride-Through Performance of a Diode-Rectifier and VSC-Inverter based HVDC Link for Off-shore Wind Farms

S. Bernal-Perez, S. Añó-Villalba, R. Blasco-Gimenez and J. Rodríguez- D'Derlée
IEEE Transactions on Industrial Electronics, 2012, doi: 10.1109/TIE.2012.2222855.

Connection of Large Off-Shore Wind Farms Using Diode Based HVDC Links, en Wind Energy Conversion Systems. Technology and trends

R. Blasco-Gimenez, S. Añó-Villalba, J. Rodríguez-D'Derlée, S. Bernal-Perez and F. Morant
Springer-Verlag, 2012. ISBN 978-1-4471-2200-5

Mathematical Models Based on Transfer Functions to Estimate Tissue Temperature During RF Cardiac Ablation in Real Time

Jose Alba-Martinez, Macarena Trujillo, Ramon Blasco-Gimenez, and Enrique Berjano,
The Open Biomedical Engineering Journal, vol. 6, pp. 16–22, 2012. doi:
10.2174/1874230001206010016

Diode Based HVDC Link for the Connection of Large Off-shore Wind Farms

R. Blasco-Gimenez, S. Añó-Villalba, J. Rodríguez-D'Derlée, S. Bernal-Perez and F. Morant, IEEE
Transactions on Energy Conversion, Volume 26 , Issue 2, 2011, doi: 10.1109/TEC.2011.2114886

Could it be advantageous to tune the temperature controller during radiofrequency ablation? A feasibility study using theoretical models

Alba Martínez, Jose; Trujillo, Macarena; Blasco-Giménez, Ramón; Berjano, Enrique J, International
Journal of Hyperthermia, 2011, vol. 27, pp.539-548. doi: 10.3109/02656736.2011.586665.

Distributed Voltage and Frequency Control of Offshore Wind Farms Connected With a Diode-Based HVdc Link

R. Blasco-Gimenez, S. Añó-Villalba, J. Rodríguez-D'Derlée, F. Morant, and S. Bernal-Perez, IEEE
Transactions on Power Electronics, vol. 25, nº. 12, pp. 3095-3105, 2010. Special section on
Microgrids.

Black-box modeling to estimate tissue temperature during radiofrequency catheter cardiac ablation: feasibility study on an agar phantom model

R. Blasco-Gimenez, J. L. Lequerica, M. Herrero, F. Hornero, and E. J. Berjano, Physiological
Measurement, vol. 31, nº. 4, pp. 581-594, 2010.

Control of Off-Shore DFIG-based Windfarm Grid with Line-Commutated HVDC Connection

S. V. Bozhko, R. Blasco-Giménez, R. Li, J. C. Clare and G. M. Asher. IEEE Transactions on Energy Conversion. Special Issue on Wind Power, Vol. 22, No. 1, pp. 71-78, 2007

Centralized Modular Diagnosis and the Phenomenon of Coupling

E.García; A.Correcher; F.Morant; E.Quiles; R.Blasco. Discrete Event Dynamic Systems Theory and Applications. Vol. 16 pp. 311 - 326, 2006

Modular Fault Diagnosis Based on Discrete Event Systems

E.García; A. Correcher; F. Morant; E.Quiles; R.Blasco. Discrete Event Dynamic Systems Theory and Applications. Vol. 15, pp. 237-256, 2005.

Control Strategies For Power Smoothing using a Flywheel Driven by a Sensorless Vector-Controlled Induction Machine Operating in a Wide Speed Range

R. Cárdenas; R. Pena; G. M. Asher; J Clare; R. Blasco-Giménez. IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS. Vol. 51, pp: 603 - 614, 2004

IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS BEST PAPER AWARD 2005

Active Compensation in Distribution Systems using STATCOM: Implementation and Modelling

A. Domijan; J Alamar; A. Montenegro; R. Blasco; C. Alvarez. IASTED. International Journal of Power and Energy Systems Design. Vol. 24 pp: 132-140 , 2004.

Dynamic Performance Limitations for MRAS Based Sensorless Induction Motor Drives. Part 1: Stability Analysis of the Closed Loop System

Blasco-Gimenez, R., Asher, G.M., Sumner, M., y Bradley, K.J. IEE Proceedings in Electric Power Applications. Vol. 143, No.2 pp: 113-122 1996

Dynamic Performance Limitations for MRAS Based Sensorless Induction Motor Drives. Part 2: On-line parameter tuning and dynamic performance studies

Blasco-Gimenez, R., Asher, G.M., Sumner, M., y Bradley, K.J. IEE Proceedings in Electric Power Applications. Vol. 143, No.2 pp: 123-134 1996

The Performance of the FFT-Rotor Slot Harmonic Speed Detector for Sensorless Induction Motor Drives

Blasco-Gimenez, R., Asher, G.M., Sumner, M., y Bradley, K.J. IEE Proceedings in Electric Power Applications. Vol. 143, No.3 pp: 258-268 1996

More than 60 papers published in peer reviewed international conferences, with more than 600 cites to published journal papers and conferences (Google Scholar)

OTHER

IEEE Transactions on Industrial Electronics Best Paper Award 2005.

Teaching:

- **Advanced Control Techniques.**
- **Control of motor drives.**

General Chair of the 11th International Conference on Modelling and Simulation of Electric Machines, Converters and Systems, Electrimacs 2014.

Reviewer of many ISI/JCR journals (IEEE Transactions on Industrial Electronics, IEEE Transactions on Power Electronics, IEEE Transactions on Industry Applications, IEEE Transactions on Sustainable Energy, IEEE Transactions on Power Systems, IEEE Transactions on Power Delivery, IEEE Transactions on Energy Conversion, IEEE Transactions on Fuzzy Systems, IET Transactions on Renewable Energy, Control Engineering Practice, European Power Electronics and Drives Journal (EPE Journal), Medical and Biological Engineering and Computing.

Expert reviewer to the Spanish Agency of Evaluation and Prospective (ANEP).

Expert reviewer to the Chilean Government Council of Science and Technology (Conicyt).

Senior Member of the IEEE. Member of the IET and Chartered Engineer (UK). Registered professional Engineer (Spain).

Member of the IEEE Industrial Electronics Society Renewable Energy Committee.

Member of the Editorial board of the International Journal of Renewable Energy Research

Departmental Registrar 2005-2010. Member of the Academic Committee of the Univ. Polit. Of Valencia
BSc degree in Industrial Electronics and Control, MSc degree in Industrial Sensors and
MSc degree in Mechatronics.

Co-author of the white book "Guidelines for the adaption of Industry Related Engineering degrees to the European Bologna Process", coordinated by the Spanish Ministry of Education.

Visiting scholar at the University of Nottingham (United Kingdom) in 2005.

Visiting scholar at the Universidad de Punta Arenas (Chile) in 1998, 1999 and 2000.

Visiting scholar at the National Cheng Kung University (Taiwan) 2011

Visiting Adjunct Professor at the National Taiwan University of Science and Technology (Taiwan) 2012, 2013