

**DEPARTAMENTO DE**  
**INGENIERIA ELECTRICA**

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### **Actividades de investigación**

#### **Tesis Doctorales**

- Aportaciones al diagnóstico de transformadores de potencia mediante el análisis de compuestos furánicos en el aceite  
*Autor:* URQUIZA, D.J.  
*Director/Codirectores:* BURGOS, J. C.; GARCIA DE, M.B.  
*Universidad:* UNIVERSIDAD CARLOS III DE MADRID  
*Año:* 2017
- Classification and Localization of Electromagnetic and Ultrasonic Pulsed Emitters  
*Autor:* FRESNO, J.M.  
*Director/Codirectores:* ROBLES, G.  
*Universidad:* UNIVERSIDAD CARLOS III DE MADRID  
*Año:* 2017
- Hydropower Sheduling in Basins with Heavy Ecological and Human Restrictions  
*Autor:* HERMIDA, M.G.  
*Director/Codirectores:* CASTRONUOVO, E.D.  
*Universidad:* UNIVERSIDAD CARLOS III DE MADRID  
*Año:* 2017

### **Publicaciones y actividades de difusión de resultados**

#### **Publicaciones en revistas científicas internacionales**

- ARNALTES, S.; RODRIGUEZ, J. L.; MONTILLA, M.E.  
Control of Variable Speed Wind Turbines with Doubly Fed Asynchronous Generators for Stand-Alone Applications, *Energies*, Vol. 11, Núm. 1, 2017, pp. 1-16, SUIZA.
- AYON, X.I.; G.J.K.; HAYES, B.P.; USAOLA, J.; PRODANOVIC, M.  
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- AYON, X.I.; MORENO, M.A.; USAOLA, J.  
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Modeling and Control of LCC Rectifiers for Offshore Wind Farms Connected by HVDC Links, *IEEE TRANSACTIONS ON ENERGY CONVERSION*, Vol. 32, Núm. 4, 2017, pp. 1284-1296, ESTADOS UNIDOS DE AMERICA.
- CASTAÑO, S.P.; GAUCHIA, L.; SERRANO, D.; SANZ, J.  
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- FRESNO, J.M.; ARDILLA, J.A.; MARTINEZ-TARIFA, J. M.; ROBLES, G.  
Partial Discharges and Noise Separation using Spectral Power Ratios and Genetic Algorithms, *IEEE TRANSACTIONS ON DIELECTRICS AND ELECTRICAL INSULATION*, Vol. 24, Núm. 1, 2017, pp. 31-38, ESTADOS UNIDOS DE AMERICA.
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- GARCIA DE, M.B.; GARCIA, T.; PRIMO, V.A.; BURGOS, J. C.; URQUIZA, D.J.  
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## Colaboraciones en obras colectivas

- CASTRONUOVO, E.D.  
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## Propiedad Industrial/intelectual

- *Inventores*: AMARIS, H.E.; ALONSO, M.  
Procedimiento para estimar las pérdidas de energía por fraude en una red eléctrica de baja tensión  
*Tipo*: PATENTE  
*Titular*: UNIVERSIDAD CARLOS III DE MADRID  
*Número Solicitud*: **P201731131**  
*Fecha Solicitud*: 20/09/2017  
*Países*: ESPAÑA
- *Inventores*: ARNALTES, S.; RODRIGUEZ, J. L.; CARDIEL, M.A.  
Método para el control distribuido de la frecuencia en un parque eólico offshore  
*Tipo*: PATENTE  
*Titular*: UNIVERSIDAD CARLOS III DE MADRID  
*Número Solicitud*: **P201731257**  
*Fecha Solicitud*: 25/10/2017  
*Países*: ESPAÑA
- *Inventores*: RODRIGUEZ, J. L.; ARNALTES, S.  
Método y sistema para controlar un conjunto de parques eólicos conectados en serie a un enlace de corriente continua a alta tensión  
*Tipo*: PATENTE  
*Titular*: UNIVERSIDAD CARLOS III DE MADRID  
*Número Registro*: **ES2620972**  
*Fecha Solicitud*: 16/02/2017

*Fecha Concesión:* 18/12/2017  
*Países:* ESPAÑA