Doctoral theses of Electrical Research and Technology (TEP-152)

Coordinator: Dr. Francisco Jurado Melguizo (fjurado [arroba] ujaen [punto] es)

Banner con una imágen de maquinaria del grupo de investigación de y Tecnología Eléctrica.

The 'Electrical Research and Technology' reseach group is engaged in researching electrical systems and renewable energies. Specifically, it researches and works on the optimal location of power stations based on harnessing agricultural and forestry residues, analysis of distributed electricity generation, design of power generation systems based on microturbines and fuel cells, as well as studying the stability of electrical systems.

This group has the following doctoral theses:

Mejoras al dimensionamiento óptimo de sistemas híbridos con energías renovables

- Doctoral student: Juan Carlos Lata García
- Doctoral advisors: Francisco Jurado Melguizo and Luis Fernández Ramírez
- University: Jaen, Faculty / School: EPS Linares
- Date: March, 2019

Performance analysis of combined wind farm based on SCIG and DFIG with FACTS devices during abnormal conditions

- Doctoral student: Ahmed Mohammed Rashad
- Doctoral advisors: Francisco Jurado Melguizo and Salah Kamel
- University: Aswan, Egypt, Faculty / School: Aswan Faculty of Engineering
- Date: July, 2018

Optimal load flow analysis of power systems including FACTS controllers using advanced optimization techniques

- Doctoral student: Mohamed Ebeed Hussein
- Doctoral advisors: Francisco Jurado Melguizo and Salah Kamel
- University: Aswan, Egypt, Faculty / School: Aswan Faculty of Engineering
- Date: March, 2018

Protección diferencial de transformadores de potencia mediante técnicas basadas en la transformada wavelet

- Doctoral student: Carlos Luis Sánchez Martos
- Doctoral advisors: Francisco Jurado Melguizo and Manuel Gómez González
- University: Jaen, Faculty / School: EPS Jaen.
- Date: September, 2017

Gasification applied to the valorization of olive grove and olive mill residues

- Doctoral student: Bárbara de Mena Pardo
- Doctoral advisors: David Vera Candeas and Francisco Jurado Melguizo
- University: Jaen, Faculty / School: EPS Linares. Internacional thesis.
- Date: April, 2017

Wind power generation with energy storage systems

- Doctoral student: Raúl Sarrias Mena
- Doctoral advisors: Francisco Jurado Melguizo and Luis Fernández Ramírez
- University: Cádiz, Faculty / School: EPS Algeciras. Internacional thesis.
- Date: December, 2016

Diseño y control de convertidores CC/CC aplicados a sistemas híbridos de generación distribuida

- Doctoral student: Juan Carlos López Rodríguez
- Doctoral advisors: Manuel Ortega Armenteros and Francisco Jurado Melguizo
- University: Jaen, Faculty / School: EPS Linares.
- Date: May, 2014

Modelado eficiente de controladores FACTS en el flujo de cargas de Newton-Raphson utilizando la técnica de potencia e inyección de corriente

- Doctoral student: Salah Kamel
- Doctoral advisors: Francisco Jurado Melguizo
- University: Jaen, Faculty / School: EPS Linares. Internacional thesis.
- Date: January, 2014

Contribución al desarrollo tecnológico de la protección de generadores fotovoltaicos en condiciones de falta

- Doctoral student: Óscar García García
- Doctoral advisors: Jesús de la Casa Hernández and Francisco Jurado Melguizo
- University: Jaen
- Faculty / School: EPS Jaen
- Date: November, 2013

Dimensionamiento, modelado y control de los componentes de un sistema híbrido de generación eléctrica basado en energías renovables e hidrógeno

- Doctoral student: Manuel Jesús Castañeda Balbuena
- Doctoral advisors: Francisco Jurado Melguizo and Luis Fernández Ramírez
- University: Cadiz, Faculty / School: EPS Algeciras
- Date: October, 2013

Estimación de los parámetros de la máquina de inducción mediante técnicas metaheurísticas

- Doctoral student: Ignacio Pérez Guerrero
- Doctoral advisors: Francisco Jurado Melguizo and Manuel Gómez González
- University: Jaen, Faculty / School: EPS Jaen
- Date: May, 2013

Generación eléctrica distribuida y aprovechamiento de los residuos de la industria del olivar

- Doctoral student: David Vera Candeas
- Doctoral advisors: Francisco Jurado Melguizo
- University: Jaen, Faculty / School: EPS Linares. Internacional thesis.
- Date: April, 2013

Viabilidad de la integración de una planta de gasificación de biomasa

- Doctoral student: José Antonio La Cal Herrera
- Doctoral advisors: Francisco Jurado Melguizo and Blas Ogayar Fernández
- University: Jaen, Faculty / School: EPS Jaen
- Date: March, 2013

Comparación de esquemas de control aplicados a un sistema híbrido integrando convertidores corriente continua/ corriente continua

- Doctoral student: Juan Pérez Torreglosa
- Doctoral advisor: Francisco Jurado Melguizo
- University: Jaen, Faculty / School: EPS Linares. International thesis.
- Date: December, 2012

Aplicación de flujos de carga probabilistas en sistemas fotovoltaicos

- Doctoral student: Francisco Javier Ruiz Rodríguez
- Doctoral advisors: Francisco Jurado Melguizo and Jesús de la Casa Hernández
- University: Jaen, Faculty / School: EPS Jaen
- Date: September, 2012