

**Name**

Anna Pinnarelli

Role

Researcher

Short CV

In the course of her research activity she has participated in various National research projects of which the most recent and significant are: PON01_ 01840; PON 01_02582; PON a3_00370; PON04a2_00146; PON 005_2.

As expert for electrical system research (art. 11 D.M. March 8, 2006) was a member of the Evaluation Committee for the verification of the achievement of the final results and of the consistency, relevance and admissibility of several projects in the contest of the Electrical System Research. It worked for the assessment to finance the Research Project for National calls PRIN 2012, FIRB 2013 SIR 2014.

In the activity of technology transfer, in July of 2007, she founded with other proponents, professors of the University of Calabria, the Academic Spin Off "Crete Energie Speciali srl".

Teaching Activity

Professor of

- Advanced Electrical Systems, Module 1: Smart Grids and distribution and utilization of electricity;
- Advanced Electrical Systems Module 2: Static Energy conversion systems.

Master of *Energy Engineering* - Electrical and Energy Industrial Systems.

Selected Publications

- ✓ D. Menniti, Pinnarelli A, N. Sorrentino, G. Belli (2014). A local market model involving prosumers taking into account distribution network congestions in Smart Cities. INTERNATIONAL REVIEW OF ELECTRICAL ENGINEERING, ISSN: 1827-6660, doi: 10.1109/AUPEC.2014.6966536
- ✓ G.Barone, G.Brusco, A.Burgio, D.Menniti, Pinnarelli A, N.Sorrentino (2014). A power management and control strategy with grid-ancillary services for a microgrid based on DC Bus. INTERNATIONAL REVIEW OF ELECTRICAL ENGINEERING, vol. 9, p. 792-802, ISSN: 1827-6660, doi: dx.doi.org/10.15866/iree.v9i4.2038
- ✓ Burgio, D. Menniti, N. Sorrentino, Pinnarelli A, G. Brusco (2014). An active resonance damper which avoids the estimation of the line characteristic impedance. ELECTRIC POWER SYSTEMS RESEARCH, vol. 107, p. 16-20, ISSN: 0378-7796, doi: 10.1016/j.epsr.2013.09.003
- ✓ G. Brusco, A. Burgio, D. Menniti, Pinnarelli A, N. Sorrentino (2014). Energy Management System for an Energy District with demand response availability. IEEE TRANSACTIONS ON SMART GRID, vol. 5, ISSN: 1949-3053, doi: 10.1109/TSG.2014.2318894

- ✓ PINNARELLI A, D. MENNITI, N. SORRENTINO, A. BURGIO, G. BRUSCO (2013). Improving Super Grid Performances Using Multifunctional FACTS Controller. INTERNATIONAL REVIEW ON MODELLING AND SIMULATIONS, vol. 6 N. 2, p. 535-542, ISSN: 1974-9821

Research lines

- Integrated solution for optimal dispatching of generating power with the structural safety taking into account the presence of FACTS devices in the context of the liberalised electricity market;
- The stabilization of electric power systems by means of decentralized adaptive control techniques using of fuzzy logic;
- The analysis of electrical systems in non-sinusoidal conditions and in electronic engineering equipment by parallel and distributed computing systems;
- Active filter
- Modeling and control of FACTS devices for the power flow control in the transmission and distribution electrical system;
- Dynamics and Control of Electric Power Systems;
- Automatic generation control;
- The frequency and active power control;
- Innovative Systems for voltage regulation in the distribution systems;
- Integration of renewable energy plants in power grid;
- Simulation model of liberalised electricity markets;
- Optimal and distributed power flow in the contest of Smart-grid and micro-grid.