

**Name**

Daniele Menniti

Role

Professore Associato

Short CV

Daniele Menniti (1958) received the degree in Electrical Engineering from the University of Calabria, Cosenza / Italy, and the Ph.D. degree in Electrical Engineering from the University of Naples, Naples/Italy, in 1984 and 1989, respectively. He is associate professor at the Department of Management Energetic and Mechanical of the University of Calabria, Italy. His research interests concern electric power system analysis, real-time control and automation. He has experiences also in harmonic pollution in distribution network. Actually he is engaged in Artificial Intelligence in power system operation and in decentralised control for power system stabilization. Moreover, he currently participates to national and international research projects, as Responsible of research group in Electrical Systems for Energy.

Teaching Activities

Professor of Electrical Systems and Industrial Electrical Systems - Bachelor's Degree in Mechanical Engineering / Bachelor's Degree in Chemical Engineering; Professor of Electrical Systems for Energy - Master in Energetic Engineering

Selected Publications

A Burgio, D Menniti, Sorrentino N, A Pinnarelli, 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

G. Brusco, A. Burgio, D. Menniti, Pinnarelli A, Sorrentino N (2014). Energy Management System for an Energy District with demand response availability. *IEEE TRANSACTIONS ON SMART GRID*, vol. 5, ISSN: 1949-3053

Menniti D, Burgio A, Sorrentino N, Pinnarelli A (2011). Implementation of the shunt harmonic voltages compensation approach. *ELECTRIC POWER SYSTEMS RESEARCH*, vol. 81, p. 798-804, ISSN: 0378-7796

Casavola A, Franze G, Menniti D, Sorrentino N (2011). Voltage regulation in distribution networks in the presence of distributed generation: A voltage set-point reconfiguration approach. *ELECTRIC POWER SYSTEMS RESEARCH*, vol. 81, p. 25-34, ISSN: 0378-7796

Menniti D, Scordino N, Sorrentino N (2010). Secure and economic management of a power system in the presence of wind generation. *ELECTRIC POWER SYSTEMS RESEARCH*, vol. 80, p. 1375-1383, ISSN: 0378-7796

Menniti D, Costanzo F, Scordino N, Sorrentino N (2009). Purchase-Bidding Strategies of an Energy Coalition with Demand-Response Capabilities. *IEEE TRANSACTIONS ON POWER SYSTEMS*, vol. 24, p. 1241-1255, ISSN: 0885-8950

Research Lines

- analysis of the static security of electric power systems also through the use of innovative approaches based on recognition techniques and neural networks;
- Integrated solution of optimal dispatching of generating power with the structural safety, through approaches based on non-differentiable optimization algorithms and parallel computing techniques, in light of the liberalization of the electricity market;
- Distributed control systems and application of microelectronics, computer and telecommunication systems for the management of Electrical Distribution in the presence of distributed generation (photovoltaic, wind, etc);
- Numerical techniques for the analysis of power quality problems and adoption of active filtering systems even in the presence of production of energy from a photovoltaic source;
- Stabilisation of Electrical Power Systems through innovative control techniques and power electronic systems (Flexible AC Transmission System);
- Support models of the operators decisions of the Electrical Energy Market (producers, consumers, the network operator).
- Integration of renewable energy plants (wind and photovoltaic) in distribution/transmission network in the Smartgrid environment