

Pr. Seddik Bacha



Biography

Seddik Bacha is currently full professor within Grenoble Alpes University in charge of Electric Engineering, power Electronics, mathematics and control lectures for various undergraduate courses. His main research interests are modeling, control and simulation of energy systems and Supergrids/microgrids architectures and controls. He had supervised in this field more than 60 PhD defended thesis, published one book related to power electronics modeling and control and another one on Electric Vehicle to Grid management issues. He has published nearly 500 journals and conferences papers in his area of expertise. He has been the Power System Group Manager (around 70 people) inside the G2Elab Laboratory during from 2000 to 2012 and Director Deputy of the National Group GDR SEEDS from 2012 to the end of 2017. Currently he is Program Scientific Director within the SuperGrid Institute in Lyon and President of its Scientific Council.

Plenary Title:

“HVDC systems a key role for a Renewable Energy grid integration”

ABSTRACT

The keynote aims to decline the major issues related to large-scale integration of renewable electricity generation. Among the major problems one can note the grid capability to host and to address this energy from the production units to the consumption poles. The power system has to face insufficient transmission capability, inertia reduction, and stability margins mitigation. The HVDC is not a new idea, but it can provide some interesting answers to these challenges thanks to new architectures, power electronics interfaces and new control schemes. The keynote will list the locks and how they can be addressed by HVDC solutions. Finally, the underlying scientific issues will be discussed.