ABB proudly presents the first awardee of the ABB research award in Honor of Hubertus von Gruenberg, Dr. Jef Beerten. He received his PhD in electrical engineering from the University of Leuven (KU Leuven), Belgium, in 2013 for his thesis “Modeling and Control of DC Grids.”

Dr. Jef Beerten was born in Belgium in 1985 and is an outstanding young scientist with an exceptional career. He received a M.Sc. degree in electrical engineering in 2008 from KU Leuven. In 2011, he was a visiting researcher at the Royal Institute of Technology (KTH), Stockholm, Sweden, for three months.

From April 2014 to March 2015, he was a visiting postdoctoral researcher at the Norwegian University of Science and Technology (NTNU), Trondheim, Norway. Currently, he is a postdoctoral researcher with KU Leuven and the European institute, EnergyVille. His research interests include future power system dynamics, modeling and control. In total, he is the author and co-author of more than 50 publications including 15 international journal articles and 25 conference articles.

His expertise in the field of power has been already extensively been acknowledged. He obtained his PhD degree summa cum laude with congratulations of the Board of Examiners (at most five percent of the PhDs receive this grade). He is the winner of two international PhD thesis awards, both the Royal Belgian Society of Electrical Engineers (KBVE/SRBE) Robert Sinave Award and the Prix Paul Caseau from the Institut de France – EDF (Électricité de France) Foundation and more recently won one of the four “best-of-the-best” conference paper awards at the 2015 IEEE PES (Power & Energy Society) General Meeting out of 1600 submissions. Furthermore, he was a guest editor of the journal of the IET (Institution of Engineering and Technology) Generation, Transmission and Distribution and is a regular reviewer of various international journals. In both 2014 and 2015 he was acknowledged as one of 50 exceptional reviewers for the IEEE Transactions on Power Delivery. He chaired a panel session on HVDC grids at the IEEE ENERGYCON 2014, served as session chair and technical committee member at different international conferences and was invited to present at various international conferences, universities and businesses. He was also a course instructor for two international EES UETP (Electric Energy Systems - University Enterprise Training Partnership) PhD courses. He also served as the local organizing chair of IEEE ENERGYCON 2016 held in Leuven.

Dr. Jef Beerten is an active member of both the Institute of Electrical and Electronics Engineers (IEEE) and the International Council on Large Electric Systems (CIGRE). Within CIGRE, he acts as the convener of WG B4.64 (Impact of AC System Characteristics on the Performance of HVDC schemes) and secretary for WG B4.58 (Devices for Load Flow Control and Methodologies for Direct Voltage Control in a Meshed HVDC Grid). Within the IEEE, he is an active member of the IEEE PES HVDC & FACTS subcommittee and a contributing member to the IEEE Working Group on Energy, within the IEEE European Public Policy Initiative.
Dr. Jef Beerten has been working in the research group of Prof. Dr. Ronnie Belmans of KU Leuven for eight years and has become one of the core members of the team. He turned his master thesis into a Science Citation Index (SCI) journal paper – already showing his dedication to quality.

He also received a series of highly sought-after fellowships from the Research Foundation Flanders, which only bestows grants upon approximately one in five applicants.

Beerten’s PhD adviser Prof. Dr. Ronnie Belmans holds him in very high regard both as a person and a scientist: “Of course his academic achievements speak for themselves. He is very diligent and detailed in his work, and will not stop before he has solved the problem completely. He has also increasingly become the ‘go-to guy’ for all matters related to detailed dynamic analyses of power systems. His eagerness for collaboration within the group and with international partners is exemplary.”

Jef Beerten has been fascinated by power systems and integrating renewable energy sources for quite some time. “The power industry is in my view one of the most challenging businesses to be in at the moment. New technologies are being introduced everywhere in the system and the changes are happening at a pace that was unimaginable only a few decades ago.”

“The new technology challenges the way we have been looking at our power system in the past in terms of modeling, controlling and operating the system. It reminds us that we have to embrace these changes by challenging existing paradigms, by daring to rethink basic principles and by thinking outside of the box.”

“High voltage DC grids are a truly electrifying topic. My fascination with and intense personal commitment to researching them has been a huge motivator for me for many years now.”

Jef Beerten is also very active outside the laboratory — his extracurricular pursuits include music, languages, and Belgian beer. He has an extensive knowledge of rock music and attends concerts on a regular basis — a hobby which he happens to share with his Ph.D. adviser, Prof. Dr. Ronnie Belmans. They’ve run into each other on several occasions, for instance at concerts by Bruce Springsteen and Roger Waters of Pink Floyd. He speaks eight languages fluently and is still learning new ones. He has an encyclopedic knowledge of Belgian beers and has even begun brewing his own. Prof. Dr. Ronnie Belmans remarks, “I hope I will be allowed to be one of the tasters, as I am pretty sure this too will be done to perfection, as is everything Jef sets out to accomplish.”