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Staffan Norrga

Staffan Norrga was born in Lidingö, Sweden, in 1968. He received the M.Sc. degree in applied physics from Linköping Institute of Technology, Linköping, Sweden, in 1993 and the Ph.D. degree in electrical engineering from the Royal Institute of Technology (KTH), Stockholm, Sweden, in 2005. Between 1994 and 2011, he worked as a Development Engineer at ABB in Västerås, Sweden, in various power-electronics-related areas such as railway traction systems and converters for HVDC power transmission systems. In 2000, he returned to academia to engage in research on new power electronic converters employing soft switching and medium frequency transformers, at the Department of Electric Machines and Power Electronics of the Royal Institute of Technology. He currently holds a position as Associate Professor at the same institution. His research interests include new converter topologies for power transmission applications and grid integration of renewable energy sources. He is the inventor or co-inventor of 11 granted patents and 14 patents pending and has authored or co-authored more than 35 scientific papers published at international conferences or in journals.

Education	2000 - 2005	Royal Institute of Technology	Stockholm
	Ph. D. in power electronics		
	<ul style="list-style-type: none">■ Doctoral project focused on new converter topologies■ Exam in June 2005■ Thesis title: <i>On Soft-Switching Isolated AC/DC Converters without Auxiliary Circuit</i>		
	1993 - 1994	Stockholm University	Stockholm
	Courses in business administration		
	<ul style="list-style-type: none">■ Basic and intermediate course (tot. eq. to 60 ECTS) completed		
	1988 - 1993	Linköping University	Linköping
	Master of Science within applied physics and electrical engineering		
	<ul style="list-style-type: none">■ Main curriculum: applied physics■ Diploma work in automatic control		
Professional Experience	2005 - current time	Royal Institute of Technology	Stockholm
	Researcher, later Associate Professor		
	<ul style="list-style-type: none">■ Dept. of Electrical Energy Conversion■ Teaching, supervision of graduate students, own research.		
	1997 - 2011	ABB Corporate Research	Västerås
	Scientist, later Principal Scientist		
	<ul style="list-style-type: none">■ Electric power systems group■ Tasks related to strategic development of power electronic systems for power transmission applications (HVDC, FACTS etc.).		

	<p>1994 - 1997 Adtranz Sweden AB Västerås</p> <p>Development engineer</p> <ul style="list-style-type: none"> ■ Electrical division ■ Tasks mainly related to system issues concerning power electronics for railway vehicles, EMC issues as well as modelling and simulation.
	<p>May - Nov 1994 Catella Generics AB Stockholm</p> <p>Engineer in measurement technology</p> <ul style="list-style-type: none"> ■ Tasks mainly related to battery technology for electric vehicles.
Publications, patents	<p>Author or co-author of 8 papers published in international scientific journals subjected to peer review, and 32 papers published at international scientific conferences.</p> <p>Inventor or co-inventor of 11 granted patents and 14 patents pending</p>
Other assignments	<p>I am currently reviewer for the following journals:</p> <p><i>IEEE Transactions on Power Electronics, approx. 6 assignments/yr</i></p> <p><i>IEEE Transactions on Industrial Electronics, approx. 6 assignments/yr</i></p> <p><i>IET Power Electronics, approx. 4 assignments/yr</i></p> <p>Invited speaker at a plenary session at the EPE ECCE 2011 conference (the prime event for power electronics in Europe) in Birmingham with the title: "VSC HVDC- Past, Present and Future"</p> <p>At the same conference also I organized and gave a tutorial on HVDC entitled: "Power Electronics for High Voltage Direct Current (HVDC) Applications"</p> <p>Invited speaker at the ECPE Workshop on Advanced Multilevel Converters in Västerås, Sweden 2010 and gave a presentation entitled: "HVDC technology with multilevel converters"</p> <p>Organized and gave a tutorial at the 2008 39th IEEE Power Electronic Specialists Conference in Rhodes, Greece entitled: "Voltage Source Converters in Transmission Applications"</p> <p>Member of the Program council for SiC Power Center, which is a joint initiative of Energimyndigheten and Vinnova for promoting industrially driven research into Silicon Carbide Power Semiconductor Technology. The purpose of the program council is to evaluate project applications and decide which projects to approve. A total of 21 MSEK will be distributed over four years.</p>
Language skills	<p>Swedish: native tongue</p> <p>English: fluent, spoken as well as written</p> <p>German: reasonably well</p> <p>Russian: reasonably well</p>
Software tool knowledge etc.	<p>I have a working knowledge of the programming languages FORTRAN, Pascal and Matlab as well as the simulation tools PSCAD, Simplorer, Saber, PSpice och Simulink.</p>