

Dr. ing. Jeffrey Prinzie received his M.Sc. degree and PhD degree from KU Leuven in 2013 and 2017 respectively. The subject of his Master Thesis was a 50 GSa/s clock generator for subsampling RF receivers and UWB systems. He worked as a PhD researcher in the field of radiation tolerant integrated circuits with the ADVISE research group. His main interest goes to time-based mixed-signal and RF integrated circuits, especially PLLs, TDCs and high-speed complex digital systems on chip. He gained experience in the design and experimental testing of these circuits in nuclear facilities. During his PhD, he was part of the CERN micro-electronics research group in which he was collaborating on a TDC SoC and high speed multi-gigabit transceiver. His current research focuses on highly digital integrated circuits, digitally assisted analog- and RF integrated systems and time accurate circuits for high-energy physics, space and nuclear energy applications. Currently, he is working as a post-doctoral researcher at KU Leuven and visiting researcher in industry at Mediatek wireless (United Kingdom) on ultra-fast locking digital RF-frequency synthesizers for 5G mobile systems and is chair of the IEEE BeNeLux Young-Professionals organization. He enjoys research on integrated circuits, electronics reliability aspects and teaching analog and digital design techniques to the new generation of young engineers.

Prof. dr. ir. Valentijn De Smedt was born in Lubbeek, Belgium, in 1984. He received the M.Sc. degree in electrical engineering from the Katholieke Universiteit Leuven in 2007. The subject of his Master thesis was the design of an accurate integrated frequency reference. From 2007 to 2014 he was working as a research assistant at the MICAS laboratories of the Katholieke Universiteit Leuven towards a PhD degree on the design of ultra-low-power time-based building blocks for wireless sensor networks, which he received in April 2014. At KU Leuven, he was involved in and has set up several extra-curricular educational projects, some of them in co-operation with the IEEE Student Branch of Leuven. Between February 2014 and July 2017 he was employed at MinDCet as a Senior Design Engineer. At MinDCet he was responsible for the IP development of ultra-high voltage (1 kV) high-power integrated power converters and motor drivers. Apart from this, he was responsible for the further development of the MaDMix and MaDCap inductor and capacitor measurement system. From September 2016 to October 2017 he was part-time post-doctoral researcher at the KU Leuven technology campus in Geel. Since November 2017 he is appointed as assistant professor in the ADVISE research group. The focus of his research is on radiation-tolerant control systems for power and sensing applications.

He has been vice-chair technical activities of the IEEE student branch of Leuven between 2009 and 2013 and chaired the IEEE Student Branch and GOLD congress 2010 (SBC2010). Between 2011 and 2015, he was IEEE Benelux GOLD (Young Professionals) chair and co-chair of the IEEE SSCS Benelux chapter. Since 2015 he is treasurer of the IEEE Benelux Young Professionals and Membership Development Officer in the IEEE Benelux ExCom. In November 2017 he founded the IEEE Benelux NPSS chapter, which he currently chairs. Since 2009 he is a guest lecturer at ACE Group-T on UWB standards and Zigbee.