

## Highlights for 2020

As we conclude 2020, we look back on a year that turned out very different than expected. The COVID-19 pandemic forced the center to come up with new ways to minimize the time spend in the lab and to work remotely, including remote measurements. Thanks to a proactive QDev faculty and the excellent contribution of the NBI Head of Technical Support, the center was successful in a very fast implementation of safe guidelines allowing the experimentalists to partly work from the lab.

In general, while a lot of work could be transferred successfully to an online mode of operation via zoom meetings and remote measurement control, the daily supervision and interaction between theory and experiment have naturally suffered. This may have resulted in a somewhat lower rate generation of new ideas, while the conclusion of research activities and processing them into publications has still been at a high in 2020.

Highlights include a number of papers in high-profile journals, including Nature, Nature Physics, Nature Communications, Physical Review Letters, Nano letters and Science. Work in QDev was also recognized with the prestigious award the H.C

Ørsted Gold Medal in physics awarded to Charles M. Marcus. The award was given in connection with the 200th anniversary of H.C. Ørsted's discovery of electromagnetism and was handed by Her Majesty the Queen (Fig. 1). Charles Marcus received the gold medal for his significant contribution to quantum electronics research and his persistent dissemination efforts around the world to spread knowledge of physics.



*Fig. 1: H.C Ørsted Gold medal in physics awarded to Prof. Marcus*

The researchers at QDev have had a fruitful year when it comes to attaching external funding: Karsten Flensberg, Charlie Marcus, Ferdinand Kuemmeth and Martin Leijnse started the ERC Synergy grant NONLOCAL; Mark Rudner the EU project ConQuER; Ferdinand Kuemmeth the EU flagship QLSI and the industrial postdoc together with the company QDevil funded by Innovation Fund Denmark. In addition, we have also been successful with securing funding for upcoming projects in 2021. Among these are grants from the Novo Nordisk Foundation, The Carlsberg Foundation, and the Villum Foundation.

During 2020 special focus has been on dissemination to both high school teachers and students and students in the primary school. Getting young people interested and excited about science is an important part of ensuring tomorrows talent. Our hope is that our initiatives have lighted a spark in several young students wanting them to pursuit a career within science.