

VÄISÄLÄ PRIZE

Goëry Genty

ONE OF THE VÄISÄLÄ PRIZES awarded by the Academy in 2019 went to Professor Goëry Genty.

Goëry Genty received his doctorate in 2004 from Helsinki University of Technology – now part of the Aalto University – and has carried out valuable theoretical, numerical and experimental research in ultrafast photonics. He is currently professor of optics at the University of Tampere and head of its Ultrafast Photonics Research Group, which has already become an internationally recognized pioneer in laser dynamics and its applications in fields such as real-time characterization techniques, nonlinear phenomena and image correlation.

“The fact that I ended up in Finland was a matter of pure chance. I got to know a number of people who had been exchange students in Finland and it struck me as an exotic and attractive place. I studied in Paris at first but then came to what is now the Aalto University to continue my studies.”

“I became interested in light at an early stage. In fact my home town of Bordeaux is a notable centre for research into optics and for businesses based on that research, so that I suppose my interest in the topic comes from there.”

In 2011 the International Union of Applied Physics (IUPAP) awarded Genty its Young Scientist Prize “for outstanding contributions in pulse propagation and ultrafast dynamics in nonlinear optical fibres”, and in 2017 he was made a fellow of the Optical Society of America “for pioneering research in the study of supercontinuum generation and nonlinear instabilities”.

“Tampere has a long tradition of research into optics and photonics, and my own group has now been working for ten years. One exciting thing is how quickly basic research into light can meet up with suitable application opportunities. What we discover in the field of theoretical research soon leads to significant strides forward in the use of new technologies.”

Goëry Genty's research group has become an internationally recognized pioneer in laser dynamics and its applications



"Tampere also has numerous firms that concentrate on optics and have their own research facilities, so that there is close and very fruitful interaction between basic research and applications. Both Finland and Tampere have a significant role to play in photonic and optical research world-wide."

From this year onwards Professor Genty will be leading a national "flagship" programme of multidisciplinary research and innovation in photonics financed by the Academy of Finland and involving more than 50 professors and 400 researchers from the University of Tampere, the Aalto University, the University of Eastern Finland and the Technical Research Centre of Finland.

"This will indeed be a huge project, and it will keep me in Finland for some

time, as it is due to last for eight years and is so well resourced that we have excellent chances of achieving some significant breakthroughs."

"Photonics and optics offer new opportunities in many fields, starting out from medicine and information technology and ending up with energy generation. One good example is the structure of solar cells; given what we now know about light, it is possible to increase the efficiency of these cells considerably."

Professor Genty is an author of more than 100 research papers and has given some 130 invited lectures. He has also written a large number of intensively quoted review articles for journals such as *Nature* and *Reviews of Modern Physics*, and is an editor for *Optics Letters* and *Nature Scientific Reports*.

Väisälä Prize is awarded annually to 1–3 already distinguished scientists in the active parts of their careers.