3 New Tenured Professors

ICFO Professors Gerasimos Konstantatos, Frank Koppens and Melike Lakadamyali awarded tenure

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ICFO?s Board of Trustees, following the advice of the corresponding ad-hoc committees, has awarded tenure with full honors to Professors Gerasimos Konstantatos, Frank Koppens and Melike Lakadamyali based on the remarkable progress achieved during their tenure-track periods. All three of these group leaders joined ICFO through the Nest Program, endowed by the Cellex Foundation Barcelona to support outstandingly talented and creative young group leaders.

Prof Gerasimos Konstantatos, leader of the *Functional Optoelectronic Nanomaterials* research group: Gerasimos received his Ph.D in Electrical and Computer Engineering from University of Toronto, Toronto, ON, Canada, in 2008 where some of his achievements include the first demonstration of a plastic solar cell sensitized to harness the infrared solar spectrum as well as the first solution-processed quantum dot photodetector whose sensitivity competes with

the single-crystalline high-cost counterparts. After a short 8-month stay at University of Toronto as a research associate he moved to ICFO in Sept 2009 to establish his own group. At ICFO, his research group focuses on novel functional nanomaterials, nanostructures and devices for optoelectronics and renewable energy applications. The main pillars of his research lie in developing high efficiency low cost solar cell materials based on solution processed environmentally friendly and Earth abundant nanomaterials as well as the design and development of novel architectural platforms. To achieve this, his group aims at tailoring the optoelectronic properties of materials from the atomic to the suprananocrystalline level. The second pillar consists on the development of hybrid 2-dimensional and 0-dimensional semiconductors for optoelectronic applications ranging from high sensitivity photodetection to high efficiency light emission.

Prof. Frank Koppens, leader of the *Nano-Optoelectronics* research group: Frank received his Ph.D. degree from the University of Technology in Delft (Kavli Institute of Nanoscience)where he accomplished the realization of coherent control of a single electron spin in a semiconductor quantum dot, and the experimental study of single spin coherence times. Previous to joining ICFO, he was an IQSE fellow at Harvard University, working on the coupling of single photon emitters to surface plasmons in metallic nano-structures and integrating these with nanoscale electronic devices. At ICFO, his research group focuses on the research and development of novel opto-electronic materials and devices with applications for sensing, photodetection, infrared imaging, power conversion and nano-scale light processing and switching. Frank is co-leading the Opto-electronics work package of the Graphene Flagship.

Prof. Melike Lakadamyali, leader of the *Advanced Fluorescence Imaging and Biophysics* research group: Melike received her Ph.D. degree from Harvard University where her main achievements included developing real-time imaging and single particle tracking techniques for studying influenza virus infection inside living cells. Before joining ICFO, she was a postdoctoral fellow at Harvard University's Center for Brain Science, employing super-resolution fluorescence imaging techniques to map neuronal wiring in the brain. Her research group at ICFO develops fluorescence imaging techniques with high spatiotemporal resolution and uses these techniques to study fundamental questions in cell biology. Their aim is to elucidate the inner workings of the cell and the molecular mechanisms that lead to various diseases. In particular, in the recent years her research has focused on three biological problems: (i) active transport of vesicles inside the cell, (ii) molecular organization of synapses in neurons, and (iii) organization of chromatin inside the nucleus. Quantitative super-resolution microscopy has given important insights in all three cases, of note, the

discovery of a novel organization of the smallest units of chromatin.

Prof. Frank Koppens

Prof. Melike Lakadamyali