

## 【Vol. 2】 Report from Kiyohiko Kawai

Dear readers,

This is the second report from IMEC. I would like to start by telling you about the house moving. At the end of April, I got an E-mail from the real-estate agency that I should move out in three days! It happened so sudden... While it was a weekend, one of my colleague at IMEC helped me to find a new house and I made an appointment to go and see the house candidate on the next morning. The owner kindly allowed us to stay there for the rest of our time here in Belgium. Usually, it is quite difficult to make such kind of short-time contract here in Belgium. The new owner is really nice, helpful, and very kind to our family. We moved our stuffs into the new house, and cleaned the previous house within 48 hours. It was a nightmare... We are now enjoying our new life in the city center of Leuven.



Miniaturized sensor devices able to analyze biological samples of small quantity are very attractive in a wide range of fields such as medicine, biology, and food industry. The photonic waveguides designed here in IMEC offers us a mean of miniaturization for on-chip sensing applications. The evanescent field generated on the photonic waveguides allows for sensitive detection while minimizing background fluorescence, which should also enable the single-molecule level fluorescence measurement. These days, I am busily working on the fluorescence observation on the chip.

Belgium locates at the center of West Europe, and it is convenient to travel around the Europe. So far, I have visited Luxemburg, Netherlands, Norway, Germany, Croatia, and Bosnia and Herzegovina. Especially, I enjoyed my visit to Munich to meet professor Philip Tinnefeld at Ludwig-Maximilians-Universität München, who is one of the top scientist in my research filed. I gave an invited talk there and it was a great experience for me. I am planning to visit several more country around the Europe before going back to Japan.

