

Bridge Fellowship: **SASAKI Isabelle**

Professor Tsuyoshi Kawai from NAIST was my host Professor.

At first, I visited NAIST where I presented some of my results in a seminar in Pr Kawai's team. We wish to continue the collaboration between the two teams as proposed in the project. Recently, in the team "Molecules for Optics", we have demonstrated the NO photorelease of ruthenium nitrosyl complexes. Moreover this property can also be observed by two-photon absorption. In that particular case, the terpyridine ruthenium complexes associated with a fluorene unit were investigated and after irradiation at 810 nm (within the therapeutic window), NO release was evidenced thanks to the Griess reagent and to EPR with a radical trap. To deal with Pr. Kawai's expertise, including a dithienylethene between the terpyridine and the fluorene units would be a starting point. In fact, dithienylethene derivatives are one of the most intensively studied photochromic materials, which can switch a molecule between a non-conjugated "open" form to a conjugated "closed" form by irradiation with specific wavelength of light and in some cases by two-photon absorption. These complexes should be interesting in switching luminescence, controlling electron transfer and consequently NO release. In fact the choice of the most appropriate dithienylethene derivatives will be guided by Pr. Kawai's expertise and knowledge of this type of molecules.

I attended the meeting at the French Embassy for the proposition of a LIA including among many Japanese laboratories, NAIST, and 4 laboratories in France (Lille, Toulouse, Paris and Nantes).

I had the opportunity to join the 26th IUPAC conference in Osaka and gave an oral communication and I met many researchers in my field of interest.

I left to Okinawa where I met Neil Calder who showed me around OIST. He organized a meeting with French students (PhD and post-doctoral fellows) who explained me some of their research subjects. One of them concerning silver nanoparticles could be of interest for a researcher in Laplace laboratory (Toulouse). Immediately after, I contacted the researcher and she will visit OIST next August after her participation in a congress at Sendai. I hope this will start a new collaboration with a team in Toulouse and a team in OIST.

I visited also Pr Naoko Hosokoshi at Osaka Prefecture University (OPU). A MoU between OPU and University Paul Sabatier (UPS, Toulouse III) will end in October of this year. We have decided to extend this agreement for 5 more years because common projects between LCC and Toulouse are settled.

Finally, I gave a presentation at Okayama University (OU) and met researchers from this university. Dr B. Chenevier is in charge of the international relationships and we have a plan to set up a cooperation agreement between Okayama University and UPS (Toulouse III). Pr. Suzuki from (OU) will visit Laboratoire de Chimie de Coordination (LCC, Toulouse) next July. He will give a talk and will meet the vice-president of the International Affairs of UPS.

At Tokyo, I visited the JSPS's headquarters and in particular I met Mr. Kato. Then I went to the Maison Franco-Japonaise and discussed with Mr Codognet, CNRS delegate. Finally, I could meet Mr Maleval, scientific consultant and Mr Codina, Head of the "Engineering, Energy, Environment" unit at the French Embassy. The French Ambassador will come to UPS next June.