

CNRS Chemistry Lecture Tour

Hiroshi Kageyama (Kyoto University)

I was honored with the title of Ambassador by CNRS Chemistry in France and visited universities and research institutes in France from January 19 to February 1, 2025. The visited locations were ICMCB at the University of Bordeaux, Sorbonne University, Caen CRISMAT, the University of Lille, and Amiens LRCS. <https://www.inc.cnrs.fr/fr/cnrsinfo/cnrs-chemistry-welcomes-hiroshi-kageyama-ambassador-chemical-sciences>

At ICMCB (Institute de Chimie de la Matière Condensée de Bordeaux) from January 20 to 22, I had the opportunity to meet with many researchers, including Director Cyril Aymonier, Dr. Jean-Marc Bassat, Dr. Laurence



Croguennec, Dr.

Sophie Tencé, Prof. Mona Treguer-Delapierre, and Dr. Alain Demourgues. Given the ample time available, I was able to visit six research units, discuss potential collaborative research under ASPIRE, and explore student exchange opportunities. I am pleased to see that my former colleague, Prof. Cedric Tassel was doing well. I delivered a seminar on mixed-anion compounds, incorporating many new topics since I had also given a seminar there last year.



At Sorbonne University on January 23, I visited for the first time in 18 years since 2007. A symposium, including my lecture, was held in the morning. Deputy Director of CNRS Chemistry, Dr. Sophie Guillaume, attended and hosted a ceremony where I



received a certificate of recognition. In the afternoon, Prof. Andrea Gauzzi and Dr. Arnaud Perez guided me through both physics and chemistry research facilities, and we engaged in discussions on our research. Dr. David Portehault, who kindly arranged the visit, was unable to meet me due to scheduling conflicts, so I instead invited him to the meeting in Lille. As Sorbonne University is conducting excellent research in nanomaterials using solution techniques, I believe there is potential for attractive collaborative research on mixed-anion compounds, even though it is not included in the ASPIRE application.



<https://materiaux.sorbonne-universite.fr/en/news-imat/visit-hiroshi-kageyama-ambassador-cnrs-chimie>

At CRISMAT in Caen on January 24, I had dinner the previous evening with former director Antoine Maignan and my friend Dr. Valerie Pralong. On the day of my visit, Director Wilfrid Prellier gave me a tour of the institute. It was my first visit since 2007, when I stayed at the University of Rennes, and I saw that a new



research facility had been built in recent years. My mentor in solid-state chemistry, Dr. Bernard Raveau, was not present, but I was delighted to receive an email from him later. I was once again impressed by their outstanding electron microscopy facilities, and I see possibilities for future collaborative research.

At the University of Lille from January 27 to 29, I was hosted by Dr. Olivier Mentré, where we held a joint final symposium for the Core-to-Core program and a kickoff meeting for ASPIRE. Details of this event are covered in a separate article. Unfortunately, I fell ill during the first half of my stay, but Dr. Angel Arevalo-Lopez kindly took me to a hospital and provided great assistance.

<https://c2c-mixed-anion.sciencesconf.org>



At my final destination, LRCS (Laboratoire de Réactivité et Chimie des Solides) in Amiens on January 30, Director Christian Masquelier guided me through the institute, and after my lecture, I had discussions with him and Dr. Jean-Noël Chotard. The institute specializes in battery research and is remarkably well-equipped. I also learned that Kevyn Gallegos-Moncayo, who interned in my lab for six months in 2020, is now pursuing his PhD there. Since they are also conducting research on mixed-anion batteries, I look forward to possible collaborations in the future.



<https://www.lrcs.u-picardie.fr/en/news-seminars/invited-seminar-prof-hiroshi-kageyama/>

On the same day, I had dinner with CNRS Chemistry Director Jacques Maddaluno and Vice Director Sophie Guillaume. We discussed my longstanding collaboration with France, which began in Rennes in 2005, as well as projects like Core-to-Core and ASPIRE. Jacques kindly expressed their willingness to support our future



endeavors.

Since my visit was under the invitation of CNRS Chemistry, each research institution gave me a warm welcome, and the newly launched ASPIRE initiative, alongside mixed-anion research, attracted significant interest, making this a highly timely and productive visit.