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It is difficult to say what is impossible, for the dream of yesterday is the hope of today and the reality of tomorrow.

Takashi Yamamoto

"Would you be interested in appearing in our research bulletin, the *Kyurizukai*?" This was the question I found in my email inbox at the end of March 2024, completely out of the blue. I spent some time wondering what to do, but ultimately, I thought that it would be a good opportunity, so I said yes. Looking at the overview of what was expected, there were no obvious hurdles with the "Research Introduction" or the "Interview" portions of the *Kyurizukai*. The "ON hours, OFF hours" and "My Favorite Books" sections looked like they would take a little time, but my impression was that the "Column" (what I am trying to work on at this very moment!) might present a challenge. I was told that the topic could be open-ended, so I have decided to write on "the significance of looking back" and "what I hope to research in the future."

If you read through my interview, you can see that I was asked a pretty thorough

range of questions (and I certainly talked quite a bit). Thanks to this line of questions, I was able to remember how I felt about chemistry and what I was thinking about during different stages of my life, whether as a student, postdoctoral researcher, or faculty member. It was especially poignant to think about my career trajectory as a researcher and how much this was influenced by my time at the Tokyo Institute of Technology under Professor Iyoda and my exposure to electrochemistry and electrochemical synthesis at the University of Mainz with Professor Waldvogel. It made me realize how important it can be to take a moment on a regular basis to remember those times and how far I have come.

Now I would like to expand briefly on my future research plans which I touched on at the end of my "research introduction."

While my research used to focus on

"controlling the optical properties of inorganic nanomaterials through their magnetic properties," through the various people and places I've encountered, my research has turned to "electro-organic synthesis with diamond electrodes." Now that I have accumulated a decent amount of expertise in electrochemical synthesis, I am thinking about ways that I might integrate my current work with topics that I used to research. While I am still only in the conceptualization stage, my core idea is to see whether it is possible to make "spin/space" electrochemical material transformations (electrochemical synthesis) by precisely aligning the "spin" of magnetic materials with the spatial properties of coordination compounds.

My ultimate goal is to use the rest of my career as a researcher to pioneer a new "science of electrodes" by drawing from the whole of my experiences.

* The title is a quote from the American rocket scientist Dr. Robert H. Goddard. It is one of my favorite quotes. I learned it from a rocket engineer when I was studying abroad in the U.S.

理 工 学 Information

The 25th Annual Science and Technology Exhibition, KEIO TECHNO-MALL 2024 The Origin of *Jitsugaku* and Building Bridges to Future Generations

The KEIO TECHNO-MALL is an event that showcases research findings from Keio University's Faculty and Graduate School of Science and Technology. It also serves as a platform to facilitate technology transfer, joint research, and other collaborations between industry, government, and academia. Keio University will be making an appearance again this year at the Tokyo International Forum which will be taking place on Friday, December 13, 2024.

This year, in addition to representatives from Shonan Fujisawa Campus (SFC) and the Office for Open Innovation, Keio will also be sending people to present on behalf of the Keio University Hospital. This group of talented individuals will show the incredible discoveries that Keio University makes possible through its diverse organizational structure and how working together as a consolidated whole creates a path forward for the greater Keio community.

We will be posting information for potential attendees at the link below near the end of October. We look forward to seeing you there.



<https://www.kll.keio.ac.jp/ktm/>

Editor's postscript

Every time Associate Professor Yamamoto—a self-described "free spirit"—would make a quick stop at our office, he would always get a laugh out of our staff before leaving. Incredibly openhearted and good-humored, he also revealed another side of his personality and his more serious approach to everything he is involved in as we delved into his research and private life. Getting a chance to home in on a researcher's personal nuance and humanity is the main draw of the *New Kyurizukai*. I feel like we accomplished this in our 41st issue and hope our readers feel the same. (Fuhito Sugihara)

Cover of current issue : With his electro-organic synthesis equipment.
Hair design by taro (RE:-ORGANIC & DETOX-)

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