President's Address at the 2025 Autumn Saitama University Entrance Ceremony

Ladies and gentlemen, newly admitted students of Saitama University Graduate School, it is my great honor and deepest pleasure to extend to you my warmest congratulations on your admission today. This autumn, we are privileged to welcome 34 students to the Master's Program and 30 students to the Doctoral Program, among whom 57 are international students.

It is with profound joy that the faculty and staff of Saitama University welcome you, who have gathered here in verdant Ōkubo from across Japan and around the world, determined to further your academic pursuits beyond your undergraduate and prior graduate studies. I also wish to extend my heartfelt congratulations to your families and all those who have supported you on this path.

In the coming two or three years, you will devote yourselves to advanced research, acquire diverse methods and techniques, and steadily refine your expertise while achieving your academic goals. Each step you take along this path will, in time, contribute to a great leap forward. Please always keep this truth in your hearts.

Today, as you begin in earnest your journey into the enterprise of research as graduate students, I would like to share with you some reflections drawn from my own experience of academic life—on what research is and on the path through which one grows as a researcher.

Many of you have already engaged in research during your undergraduate or master's studies. Have you not, at times, felt lost or uncertain about how to proceed, especially when venturing into uncharted territory? The deeper one enters the unknown, the greater the sense of uncertainty becomes, for research is not a matter of following a map already drawn.

In his memoir *Tabibito* (*The Traveler*), Dr. Hideki Yukawa, who was awarded the Nobel Prize in Physics in 1949 for his meson theory, wrote:

"Those who explore the unknown are travelers without a map. A map comes into being only as the result of exploration. The destination is not yet known. Naturally, there is no straight path that leads there. One must often take detours, and at times cut open new paths, in order to finally arrive at the goal, which is never easy."

Indeed, a researcher is a traveler who sets foot where no one has walked before, drawing the map by his or her own hand.

Of course, such a journey cannot be undertaken by one's own strength alone from the very beginning. Looking back in history, Sir Isaac Newton wrote, "If I have seen further than others, it is by standing upon the shoulders of giants." Research begins by learning from the accumulated wisdom of our predecessors and mentors. Yet, as Newton himself demonstrated in establishing new fields of inquiry, it is also essential to transcend what one has learned, pose questions of one's own, and cultivate originality through persistent ingenuity.

This path of growth is well expressed in the traditional Japanese concept of Shu-Ha-Ri(守·破·離).

- Shu (寸) means to observe and faithfully preserve established forms.
- *Ha* (破) means to break away, innovating beyond what has been received.
- Ri (離) means to depart, finding one's own way and advancing independently.

This principle signifies not only the mastery of skills but also the maturation of one's spirit as a human being.

The stages of *Shu–Ha–Ri* closely resemble the progression of a researcher's development. In the stage of *Shu*, one diligently learns the knowledge and methods accumulated by predecessors, establishing firm foundations through careful study of the literature, attentive pursuit of prior research, and dialogue with one's mentors. Crucially, this requires not merely imitating the teacher's ways, but continually asking, "Why is this method chosen?" and "Why does this conclusion follow?"

In the stage of *Ha*, one builds upon this foundation, re-examines established approaches, and introduces fresh perspectives of one's own. Past achievements are respected, yet they are not allowed to confine the imagination. With courage, one ventures to open new horizons.

Finally, in the stage of *Ri*, one departs from the tutelage of mentors and the framework of existing theories, posing original questions and employing methods uniquely one's own. It is here that one advances into domains never before seen, establishing and cultivating a distinctive field of research. Only at this stage may one truly be called a full-fledged researcher.

Throughout all three stages, what is indispensable is a critical spirit and independent thought: never accepting facts or information unexamined, but scrutinizing them with one's own mind and reconstructing them anew.

By walking this path of *Shu–Ha–Ri*, researchers achieve genuine growth. The road before you may not be easy. You may at times experience confusion or setbacks. Yet these are not obstacles to be avoided, but essential stages through which you will mature as researchers and advanced professionals. If you keep your aspirations alive, maintain a flexible perspective, and persevere with determination, the way forward will surely open before you.

It is my sincere hope that each of you, by walking the path of *Shu–Ha–Ri*, will draw your own map and, here at Saitama University, lay the foundations to become pioneering researchers and highly skilled professionals who will help shape the future.

Once again, I extend to you my warmest congratulations on your admission.

September 25, 2025 Takafumi Sakai President, Saitama University