Institute for Materials Research (IMR), Tohoku University, has been contributing to the development of materials science and engineering, which is one of the most important mainstays for science and technology. Our institute has been committed to meeting various social demands by pursuing further science and developing practical materials. In all the missions in our materials science fields, we continue to seek optimal structural metallic materials as basic materials that support our daily lives in modern society and in future.

In developing metallic materials, there is a complemental relationship between compositional optimizing to control "constituent phases & their phase stability" and applying various processes. Therefore, we consider that fundamental research on both alloy and process designs is indispensable for fabricating excellent structural metallic materials.

In light of the above, on the basis of melting, casting solidification, plastic working, and powder metallurgy, etc., it is desirable for the relevant research division to engage in research that contributes to the enhancement and creation of new structural metallic materials that contribute to society and in building a new academic research field, while incorporating conventional concepts of thermomechanical processing, additive manufacturing and other new processing technologies.