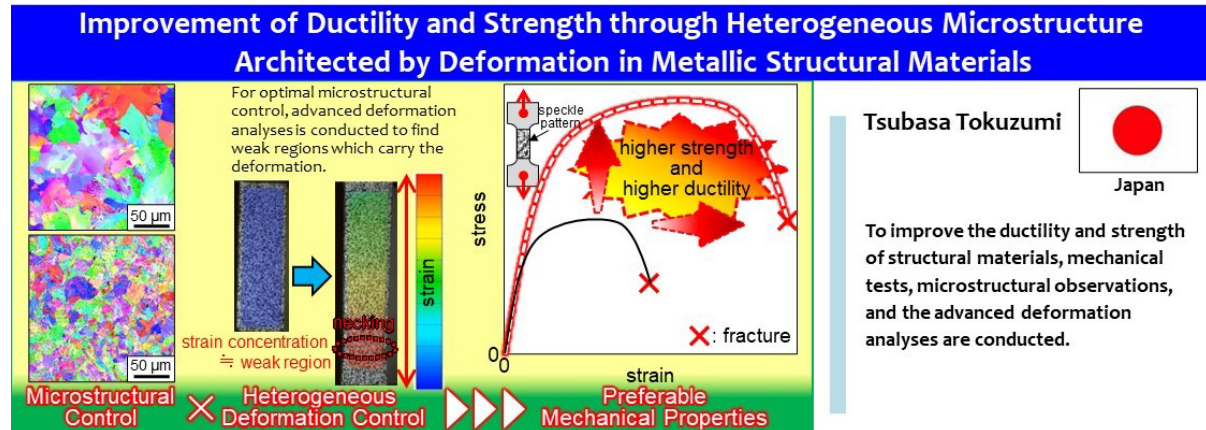


<Research Topics>

Improvement of Ductility and Strength through Heterogeneous Microstructure Architected by Deformation in Metallic Structural Materials

ICYS Research Fellow Dr. Tsubasa TOKUZUMI



■ Research

The goal of my research is to develop optimal microstructural control techniques to improve the ductility and strength of structural metallic materials. Material design that combines high ductility and high strength is the goal of many researchers. In my research, I plan to perform advanced deformation analyses in addition to mechanical testing and electron microscopy to observe heterogeneous deformation microstructures. Note that, my original research will seek to achieve this goal by trying to combine our knowledges of metallurgy with our knowledges of mechanical engineering. Please look for my paper to be published in the future.

■ Comments

I am very pleased to begin spending my daily research activities as a member of the ICYS Research Fellows within NIMS. Before I joined ICYS in April 2024, I was a PhD student at Kyushu University. The research environment provided to ICYS Research Fellows is of very high quality. Therefore, I intend to make the most of the ICYS environment as a step toward my future successes as a non-tenured researcher at NIMS.

■ Link

<https://www.nims.go.jp/icys/research/>
<https://researchmap.jp/Tokuzumi Tsubasa>