

# Mixing Silver into Cerium Oxides – Road to Material Barista –

Department of Materials Science

Instructors: Prof. Hitoshi Takamura,

○Assist. Prof. Akihito Ishii (aihiro.ishii.a4@tohoku.ac.jp, 022-795-3939)

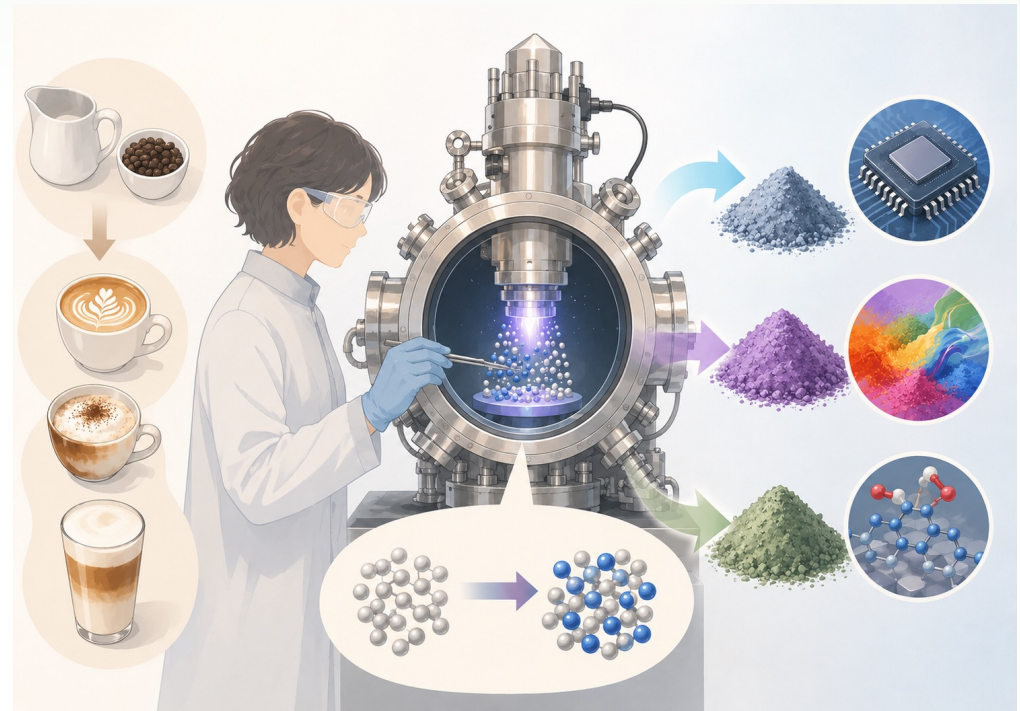
Capacity: 1~4 people

Schedule: Every Friday, 16:40-18:10 (Oct. 9 start)

Location: Aobayama campus, Department of Materials Science and Engineering,  
Education and Research Building, Room 410

Just as a coffee barista creates a wide variety of drinks from only coffee and milk, a materials barista (researcher) creates materials with a wide range of functions from the limited set of elements in the periodic table.

In this program, you will use a cutting-edge thin-film fabrication system operating under high vacuum to control the mixing of elements at the atomic level. By changing how silver and cerium oxide are mixed, you will discover how the same ingredients can be transformed into materials for very different applications, such as semiconductors, pigments, and catalysts.



Group website: <https://ceram.material.tohoku.ac.jp>