# Organometallic Precursors for Semiconductor Applications

## Technology Overview

- New organometallic compounds suitable for CVD, ALD processes for semiconductor fabrication with nano scale patterns
- No suitable Cu, Co, Sn, and Mo sources for electronic industry at the present → KRICT key technology can be applied as CVD/ALD precursors in the state of art nanoelectronics.

## Core Technologies

- Molecular design & synthesis of metal precursors with desired properties
- Process technology for the thin film fabrication
- Evaluation and characterization technologies for the film quality control

## Application Area and Advantages

- Semiconductor process – logic chips
- DRAM application – capacitor/contact plug
- V-NAND/non-volatile memories

## Accomplishments

- Successful technology transfers of 5 precursors to Korean companies
- Successful commercialization of Ru & Ni precursors
- Strong IP-portfolios with more than 100 patents
- Looking for licensing & collaborative research opportunities