NAKAMURA LAB.

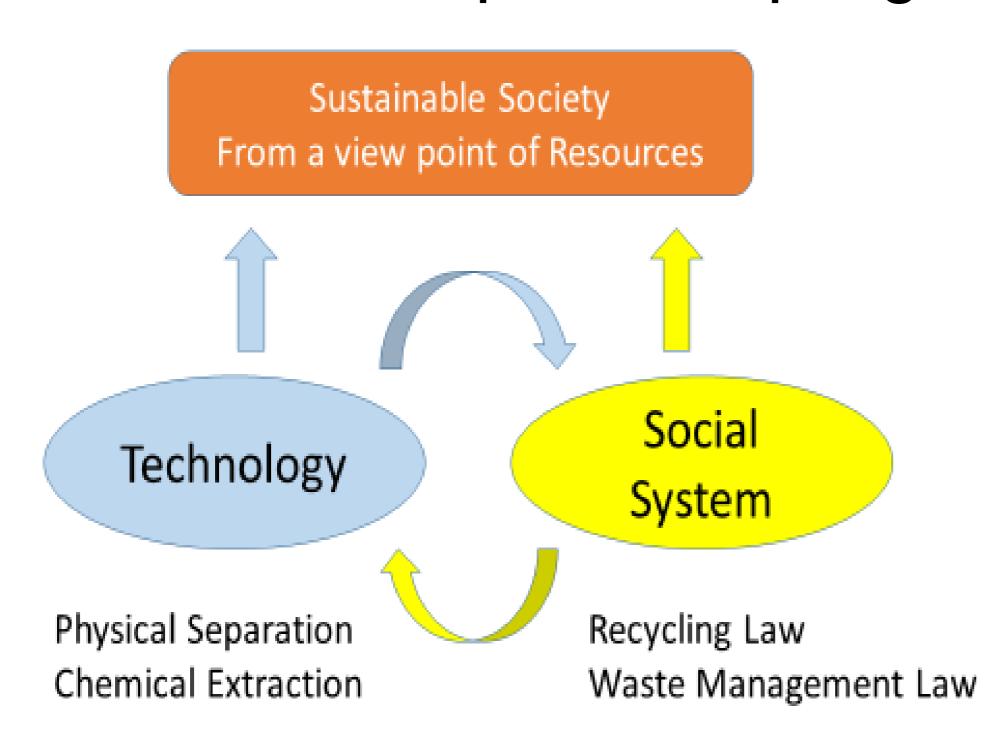
-Establishment of Sustainable Society from Coupling Technology and Social system-

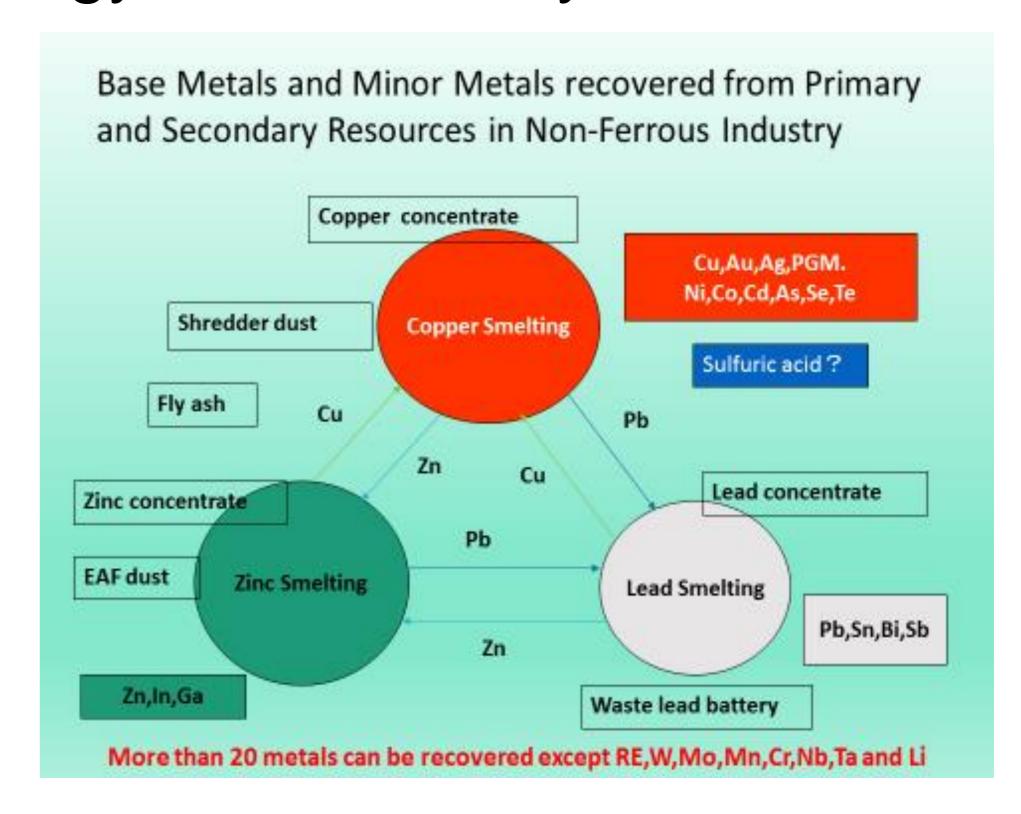
Endowed Research Unit for Non-ferrous Metal Resource Recovery Engineering

Metallurgy and Recycling System for Metal Resource Circulation

Coupling Technology and social system for Sustainable Society

Concept of Coupling Technology and Social system





Target: to develop the process technologies and social systems for metal recycling, waste detoxification and energy recovery based on the non-ferrous smelting industries

Current Topics

- Thermal and hydro processing for metal recycling and waste treatment (Chemical Thermodynamics)
- ✓ Waste treatments and energy recovery based on the non-ferrous metal smelting
- ✓ Field stock recycling of waste plastics containing brominated flame retardants
- ✓ Development of smart collection system for and Electrical Disintegration method using High Voltage Electric Pulse for E-Scrap

Smart Collection system of E-scrap from ELV

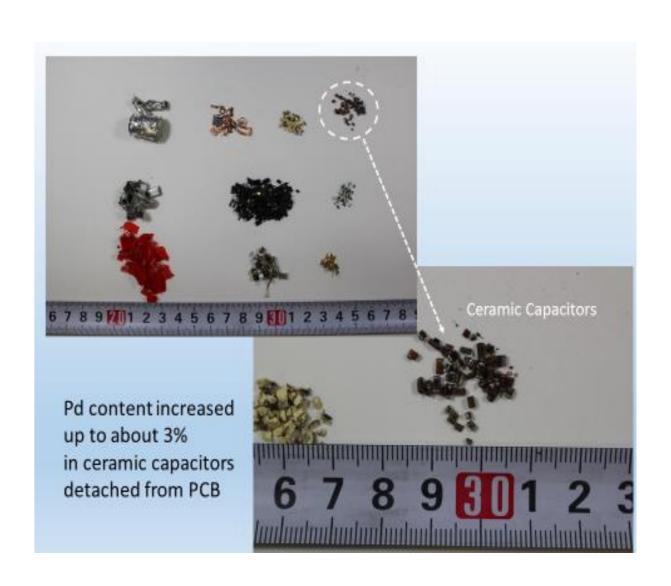
Establishment of Collection points for E-scrap From ELV with Japan ELV Association

Pre-treatments of E-scrap with recyclers to enrich valuable metals like precious metals

Perfect recovery of valuable metals and stabilization
Of harmful substances in non-ferrous smelters



Apparatus of electrical disintegration method using electric pulse



Various electric parts obtained from ELV E-scrap using electrical disintegration method