Synthesis of high performance nanomaterials under low energy and resource consumption conditions

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Starting Date: October 4th (Tuesday) 16: 30

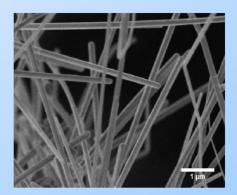
Place: Fourth Lecture Room of Ecollab, Graduate School of Environmental Studies (A55).

Although various synthesis methods of nanomaterials have been developed, most of them have high environmental loads. The method should be "green" for sustainable societies. In this class, you can learn how to synthesize the high performance nanomaterials under the low energy/resource consumption conditions.

You will synthesize Cu nanowires based on an aqueous chemical reduction and confirm their morphologies using an electronic microscope. Finally you will fabricate transparent conductive films using the obtained Cu nanowires and evaluate their performances.











Synthesis of Cu nanowires

Morphology evaluation

Performance evaluation