

## Microwave Processing of Nanomaterials

Kun-Hong Lee<sup>†</sup>

Department of Chemical Engineering, Pohang University of Science and Technology  
(Ce20047@postech.ac.kr<sup>†</sup>)

Carbon nanotubes (CNTs) were synthesized on the polymeric substrates by irradiating microwaves, and the electron field emission was confirmed from the tips of CNTs when an electric field was applied. CNT synthesis time was in the order of seconds. The focus of this presentation lies on the development of the logic-based ideas, not on the results. Various nanomaterials (such as Cr nanowires, Si nanowires, TiO<sub>2</sub> nanostructures, hematite nanostructures, and SiC nanostructures) were also synthesized using the same technique.