

NANOTECHNOLOGY AND THE STATUS OF KOREA ADVANCED NANO FAB CENTER

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The R&D in nanoscience and nanotechnology is becoming highly interdisciplinary and increasingly depends on the availability of centralized facilities and equipments. The equipments required to fabricate nanodevices are typically so much expensive for a single institution that several centralized nanofabrication facilities are established in Korea. Korea Advanced Nano Fab Center (KANC), located in Suwon Gyeonggi-do, is one of the national nanofabrication facilities. In this presentation, the mission of KANC as well as facilities and equipments are introduced.

Nano Device Process Fab (2,215m ²)	Litho/Pattern Line (661m ²)	<ul style="list-style-type: none"> • Nano scale Patterning Equipment Set-up – EBL, NIL, FIB, Stepper, Aligner, etc.
	Full Process Line (430m ²)	<ul style="list-style-type: none"> • Optoelectronic Device Fabrication (6") Service & Support – Implantor, ICP/RIE, CVD/PVD, etc.
	Nano R&D Line (1,124m ²)	<ul style="list-style-type: none"> • New Nano Structure/Device R&D Support (2/4", piece wafers) – Epi, Dry/Wet Equipment, etc.
Test & Measurement Fab (397m ²)		<ul style="list-style-type: none"> • Nano material/Device Characterization – SPM, AFM, SEM, XRF, CL, PL, etc.
Equipment Development Fab (331m ²)		<ul style="list-style-type: none"> • New Nano-scale Process & Characterization System Development
Package Manufacturing Fab. (150 m ²)		<ul style="list-style-type: none"> • Eutectic and Ag-epoxy technology • Electronic and optical device ass'y & test • Pilot and mass production line

Figure 1. KANC Fab facilities.