

International Partnership for Fuel Cell
Renaissance Hotel , Seoul
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Fuel Cell Activities in LG Chem. Ltd

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 **LG Chem** / Research Park



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Overview of LG Chem. Business



2005



Annual revenue : US \$ 11 Bil



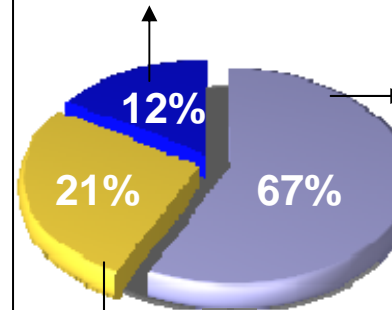
Employees : 14,700



7 plants (domestic),
29 subsidiaries (worldwide)

IT & Electronic Materials

- Li-ion Battery, Li-Polymer Battery
- Polarizer, Photosensitive Materials
- OLED Materials, PCB Materials
- PDP Filter, Phosphor, Toner



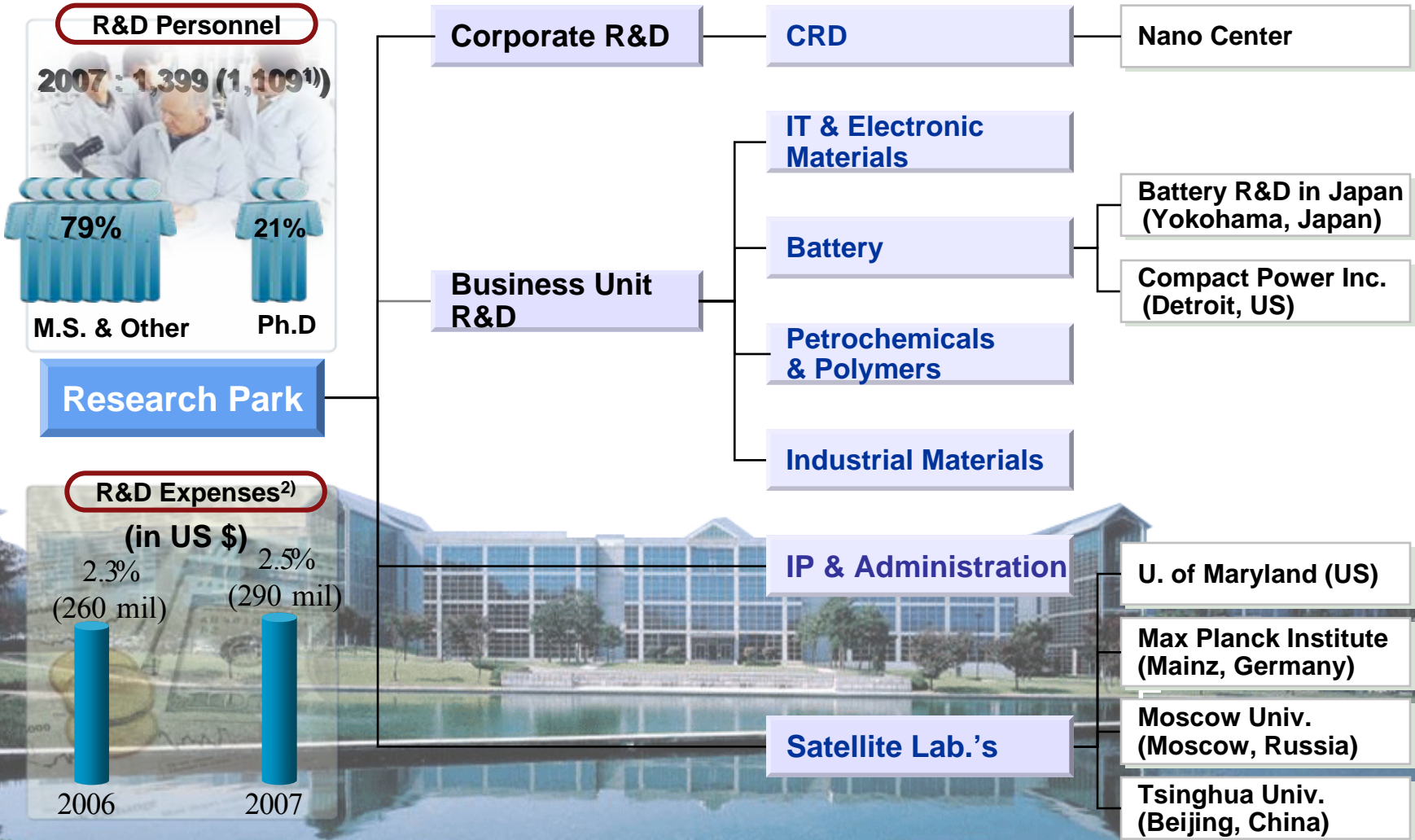
Chemicals & Polymers

- ABS/PS Resins
- PVC Resins, Plasticizers
- PE, PP, Acrylics
- Engineering Plastics
- Specialty Polymers

Industrial Materials

- Building Materials
- Interior & Decorative Materials
- Advertising & Safety Materials
- Automotive Components

Overview of LG Chem. R&D



1) R&D Staffs in Research Park

2) R&D Expenses of LG Chem

Future Growth Engine

Technology Platform

- ▣ Organic Synthesis
- ▣ Polymer Synthesis
- ▣ Polymer Processing
- ▣ Coating
- ▣ Adhesion & Adhesives
- ▣ Optical Design
- ▣ Catalysis
- ▣ Characterization

Future Growth Engine Domain

Display Materials

Clean Energy

Solar Cell

Fuel Cell

LG Chem. Activities in Fuel Cell

➤ DMFC pack for notebook computer application



MEA (Membrane Electrode Assembly)

- SNU, KAIST : catalyst
- Hanyang U. & KRICT : Membrane
- Jin-Woo Eng. : GDL, Electrode.
- LG Chem : MEA Fabrication

KIST : Methanol supply system

Nexcon : DC/DC converter & BMS

Ajoo U. : Methanol sensor

LG Chem : BOP (Balance of Plant)

Stack

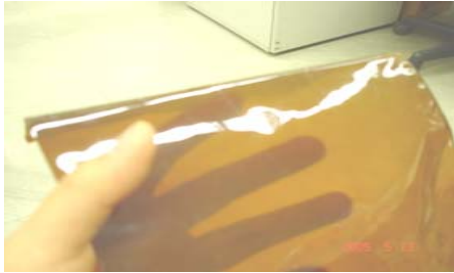
- LG Micron : Bipolar plate
- KIER : Stack

LG Chem : System

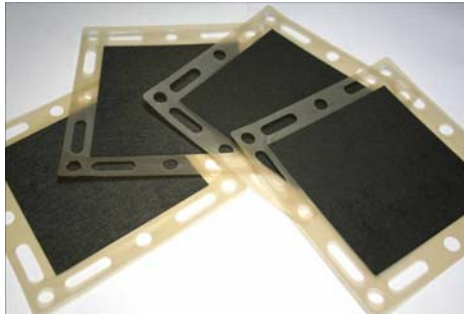
- Control logic
- Electronic part
- System integration

LG Chem. Activities in Fuel Cell

- *Development of Proprietary Hydrocarbon Membrane for PEMFC & DMFC*



- *Development of PEMFC & DMFC MEA (Membrane Electrode Assembly)*



- *Co-work with System Developers (eg. LG Electronics, Hyundai Motor Co.)*

LG Chem. Research Park

- Total Area 3,600,000ft²
- Floor Area 2,100,000ft²

