

Pirelli Labs

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Milan, May 2004

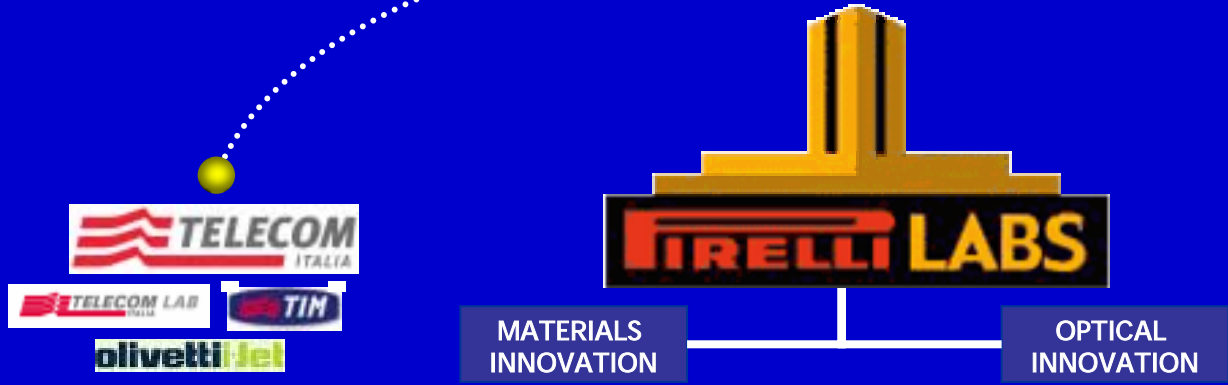


The Group's Innovation Engine

World Class Labs
(MIT, Lomosov Academy, PoliMI)

Industrial Partners
(Camtech, Alcatel)

Domestic Labs
(CORIMAV, CORECOM)

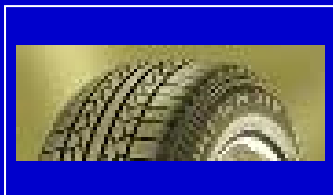


MATERIALS INNOVATION

OPTICAL INNOVATION

- Materials & Processes
- Recycling
- Sensors & Monitoring
- Fuel Cells

- Broadband Access Systems
- Photonic Components, Modules & Systems



MATERIALS INNOVATION: Main Research Activities

LONG TERM (Blue Sky)

- ◆ HTS Basic Studies
- ◆ Innovative Transmission Methods
- ◆ Condensed Matter Physics
- ◆ Bioelectromagnetism

MEDIUM TERM

- ◆ Nanocomposites
- ◆ Fuel Cells
- ◆ Hydrogen Storage
- ◆ Distributed Sensors Network

SHORT TERM

- ◆ Energy Cables
- ◆ Telecom Cables
- ◆ Tyres
- ◆ Telecom Italia
- ◆ Environment (tyres recycling)

OPTICAL INNOVATION: Main Research Activities

LONG TERM (Blue Sky)

- ◆ Advanced Silicon Photonics
 - Silicon Laser
 - Silicon Modulator
- ◆ Large Scale Integrated Optical Circuits
- ◆ 3D Video-Communication

MEDIUM TERM

- ◆ Integrated Transceivers for FTTH
- ◆ Telecom and Datacom Optoelectronic Modules
- ◆ Optical Flexible Metro Access Solution
- ◆ WiFi – WiMax – 3G Radio over Fiber
- ◆ Advanced Home Networking Solutions

SHORT TERM

- ◆ Tunable Laser
- ◆ Tunable Optical Add/Drop Multiplexer
- ◆ Optical Metro Access System
- ◆ 3G Radio over Fiber Solution
- ◆ Home networking equipment
 - Residential Gateway
 - WiFi and Power Line Modules
 - Set Top Box