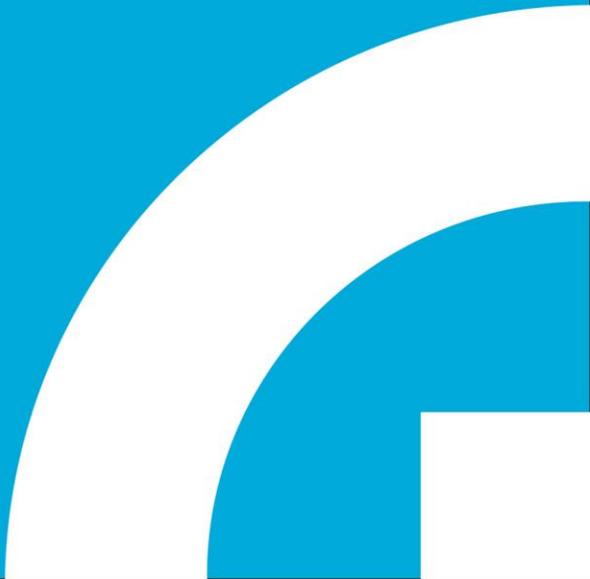


# 工業技術研究院

Industrial Technology  
Research Institute

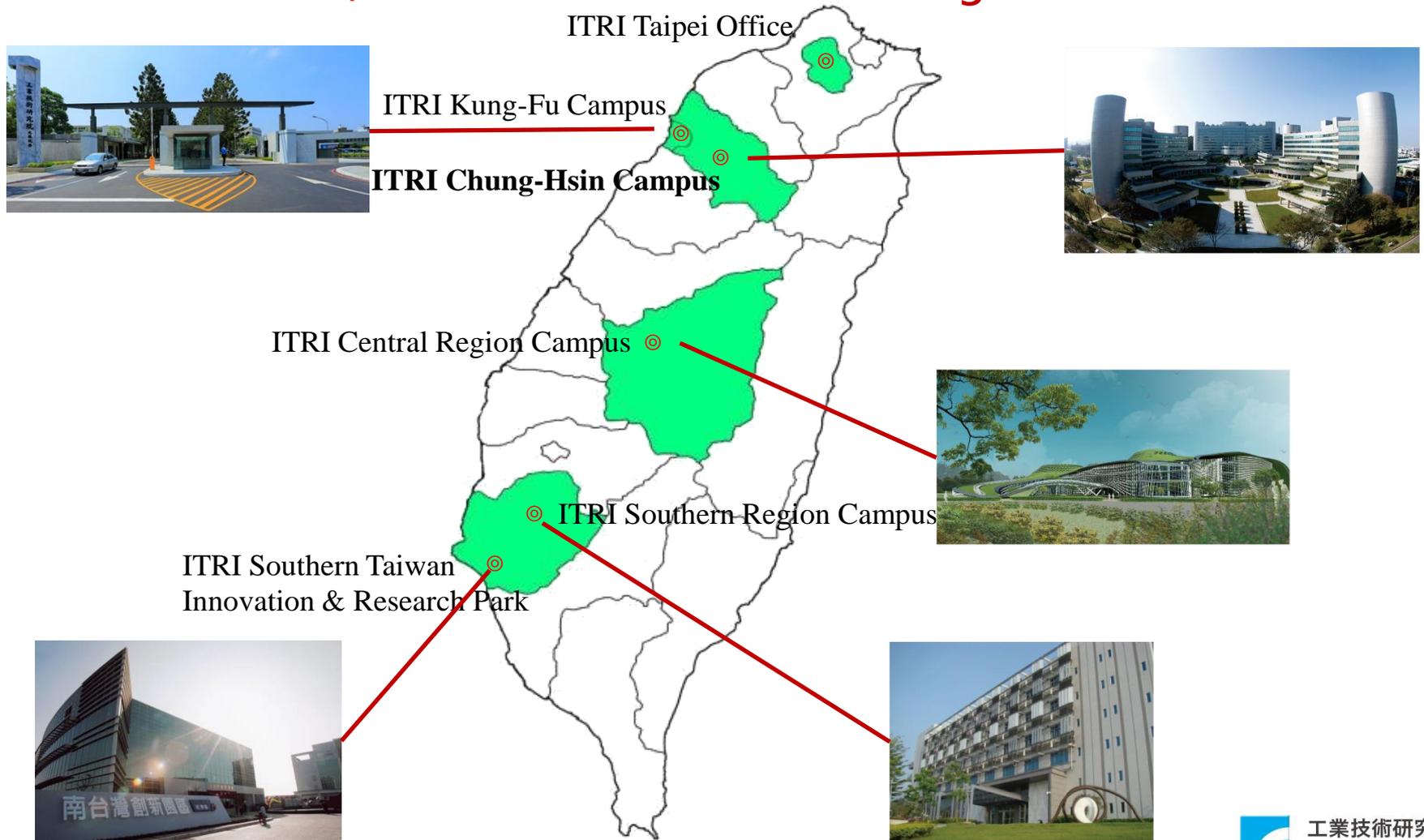
## Information and Communications Research Laboratories Overview

Oct. 2016



# Industrial Technology Research Institute (ITRI)

Founded in 1973, ITRI is a national research organization.



# ITRI at a Glance



## Total Staff : 5,853人

Ph.D. : 1,393

Master : 3,252

Bachelor : 1,208

Alumni : 23,892

## Total Patents

24,683

## Spin-offs (~2015)

114

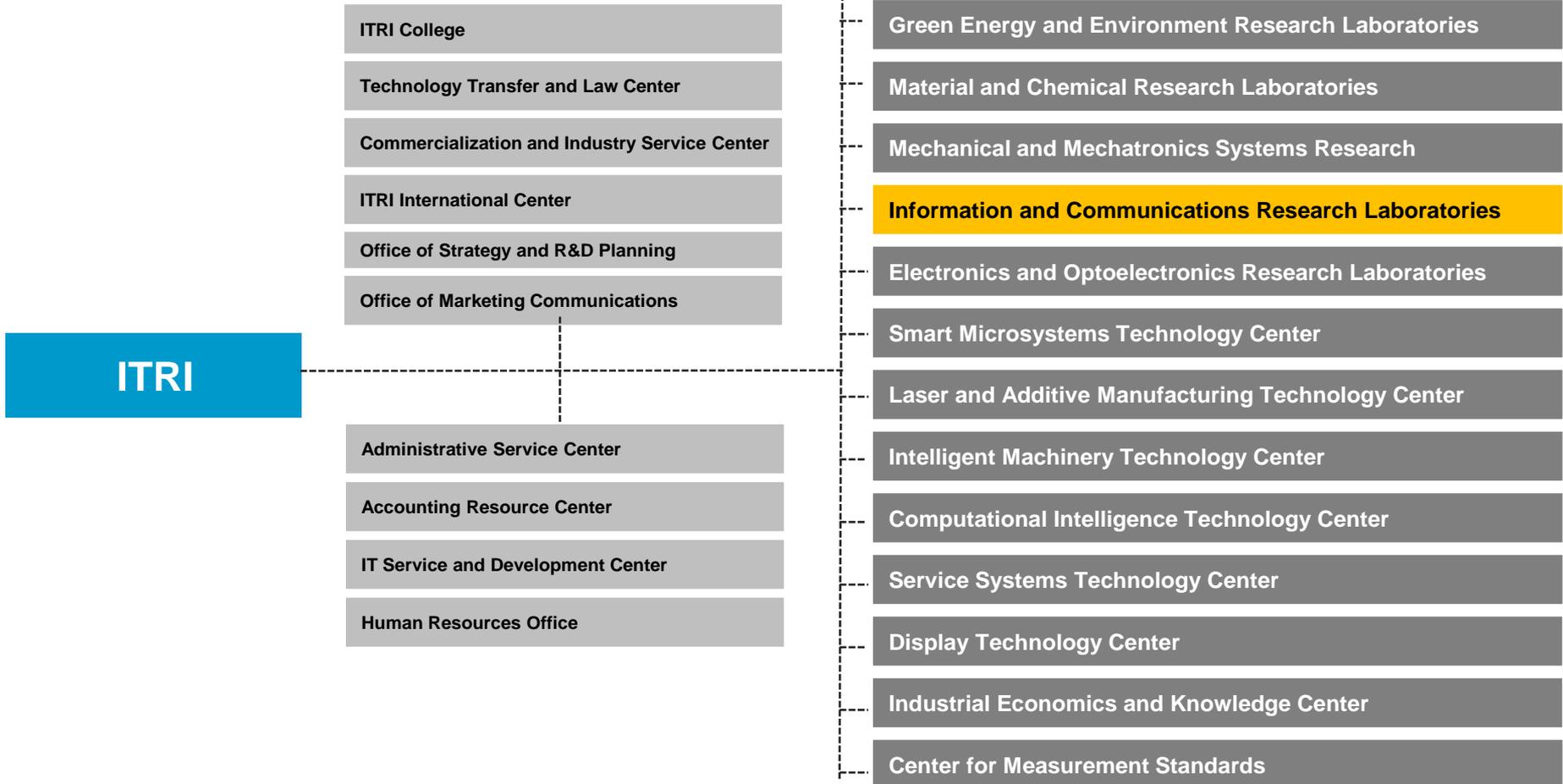
## Industry Services (2015)

Service Case : 18,351

Tech. Transfer Case : 642

July 5, 2016

# ITRI Organization

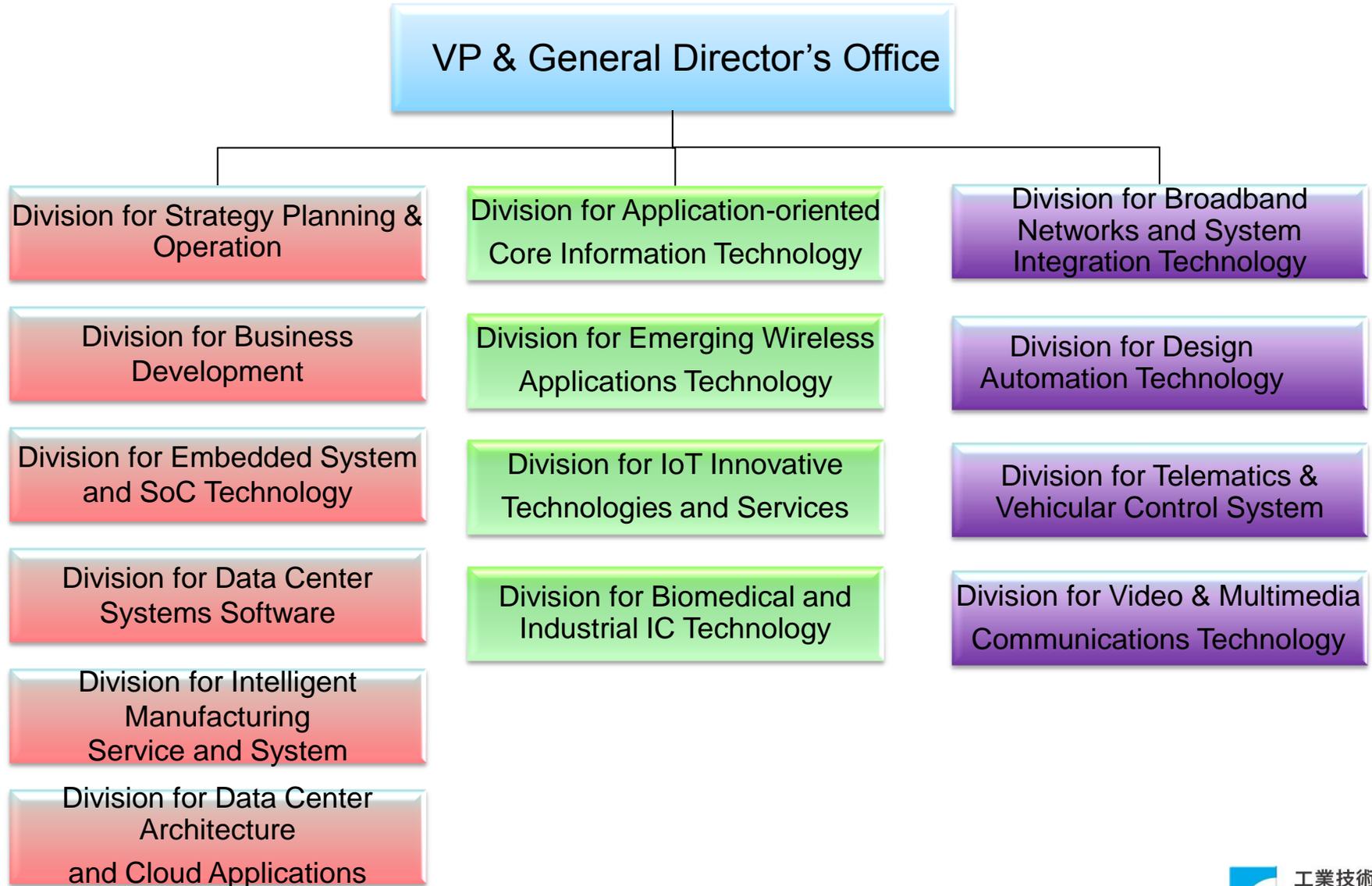


## History



- **1973** Electronics Industry Research Center Founded
- **1979** Electronics Industry Research Center restructured into Electronics Research & Service Organization (ERSO)
- **1990** Institute of Computer and Communication Industry (CCL) founded
- **2000** IC Design Team from ERSO and CCL formed SoC Technology Center (STC)
- **2006** CCL renamed Information and Communications Research Institute (ICRI)
- **2009** Cloud Computing Research Center for Mobile Applications (CCMA) founded
- **2010** STC merged with ICRI
- **2013** Computational intelligence research team of ICRI formed Computational Intelligence Technology Center
- **2015** CCMA merged with ICRI

# Organization



# R&D Focused Areas

- **Wireless Communications:**
  - Reconfigurable 5G Implementation Platform
  - Cloud-based Ultra Dense Network
  - Visible Light Communication
- **Smartphone Systems Software:**
  - Introspective User Interest Profiling
  - Crony System Workflow
  - Programmatic App Control
  - Context-Aware Virtual Phone Invocation
  - Unified Smartphone/Laptop
- **Cloud Systems:**
  - Network Function Virtualization
  - Software Orchestrated Flash Array
- **Next-Generation Vehicles:**
  - Energy Storage Management
  - Reconfigurable Array of Inexpensive Batteries Architecture
  - Tele-Operated Vehicle
  - Enterprise Application of Drones
  - Remotely Operated Autonomous Drones

# Global Partners



# Business Models

## Industrial Technology R&D

- *Funding mainly from Ministry of Economy Affairs (MOEA) – Organization Technology Development Programs*

## Technology Transfer

- *Fastest route to commercialization of ICT products & solutions by incarnating Award-winning innovations*

## Value-added Design Service & Consulting

- *A new level of partnership by delegating design works to ITRI's high-quality R&D talent pools*

## Technological Planning

- *Strategic Alliance via jointly developing long-term product and tech. roadmaps, marketing collaborations*

## New Venture Planning

- *Spin-off/Spin-in planning and execution*

# New Research Topics

- **Cybersecurity:**

- A comprehensive environment for penetration test input creation and execution
- Secure execution platform for IoT device

- **Deep Neural Network:**

- Training data collection and annotation
- An integrated development environment for DNN training

- **Financial Technology:**

- MyNetWorth: Unification of e-banking apps
- MySpendingBook: electronic e-invoices and credit card bills
- Investment advice robot



**ITRI**  
Industrial Technology  
Research Institute

**Shu-Chin Wu** Division Director

Human Resources Development Division  
Human Resources Office

Rm. 315, Bldg. 51, 195, Sec. 4, Chung Hsing Rd.,  
Chutung, Hsinchu, 31040, Taiwan, R.O.C.  
Tel : +886 3 591 4413  
Fax : +886 3 583 5818  
E-mail : amywu@itri.org.tw

[www.itri.org.tw](http://www.itri.org.tw)

# THANK YOU!

**Website : <http://www.itri.org.tw/chi/icl/>**

**FB : <https://www.facebook.com/ITRI.ICL>**

