

Ministry of Economy, Trade and Industry
Grant for the development of shared facilities for the promotion of local industry, FY 2009

Fiber Innovation Incubator Facility at Shinshu University— Service Industry



May 13, 2010
Shinshu University Faculty of Textile Science & Technology

Fiber Innovation Incubator facility (FII facility)

(Facility development for the creation of local industry) (Shinshu University)

Business Contents

Fusion of “core technologies of processing materials and assembly industries concentrated in the greater Ueda region” and “technological achievements based on fundamental research projects at the Faculty of Textile Science & Technology, Shinshu University”

* The greater Ueda region: Ueda City, Tomi City, Aoki Village, Nagawa-machi, and Sakaki-machi

● Construction of FII facility (at Ueda campus of Shinshu University)

Total floor space : 4808m²

(Steel frame construction, six stories above ground)

Space for rent : 2404 m²

Number of tenants : 29 companies

6 th floor	Space for rent to private companies (rental factory)
5 th floor	
4 th floor	
3 th floor	Space for business-academia collaboration projects (rental factory) Space for shared equipment (testing and evaluation equipment)
2 th floor	Space for human resources development (human development facilities) Space for shared equipment (pilot line)
1 th floor	

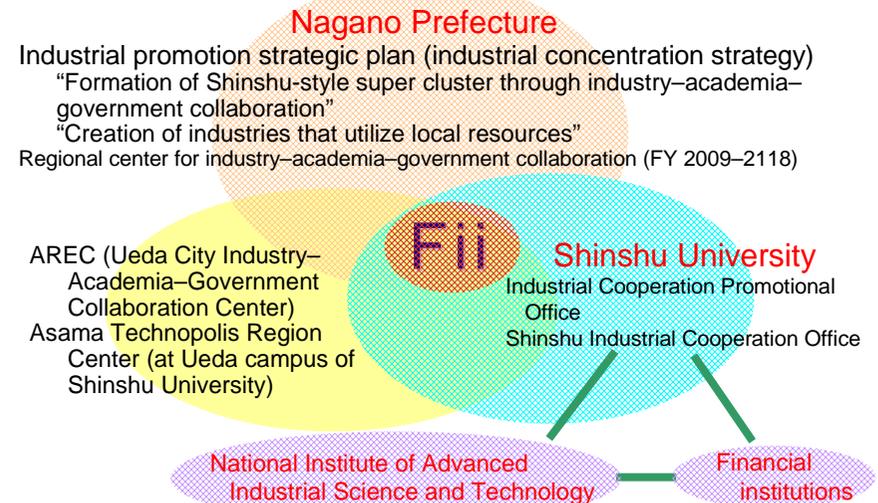
Business Purpose

- Development of new core technologies through the collaboration of private companies
 - Creation of new core technologies for manufacturing light-weight, flexible, and sophisticated products
- Creation/development of new markets using the pilot line (collaborative development zone with private companies)
 - Overcoming the “valley of death”
- Enhancement of product development capabilities through standardization
 - Enhancement of product engineering capabilities of local companies
- Paradigm shift to more advanced technologies with the information hub system
 - Fusion of traditional technologies in the greater Ueda region and cutting-edge technologies of Shinshu University
- Technological diversification/enhancement through regional and international collaborations
 - Enhancement of technological capabilities of local industries with diversified technology and cross-industry association
- Development and supply of human resources
 - Tradition of local craftsmanship, supplying human resources to local companies

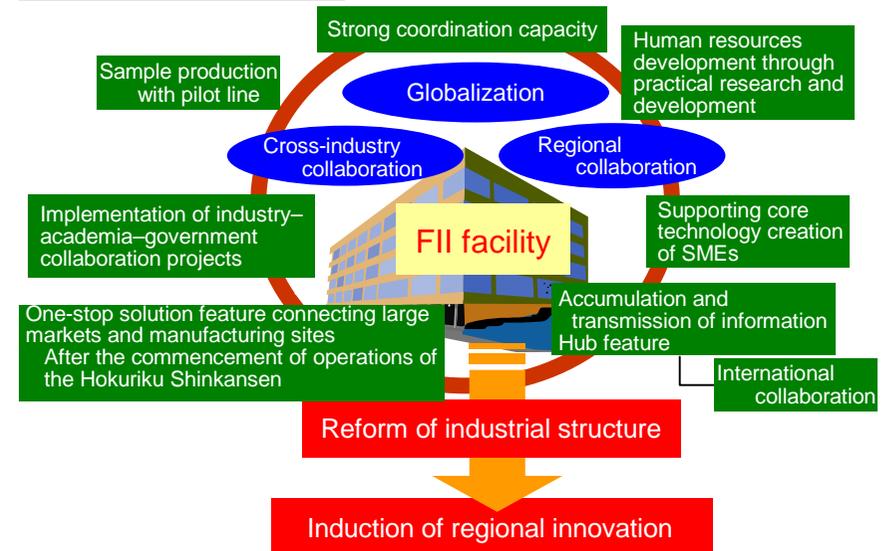
Business Results

- Reform of industrial structures in the greater Ueda region
 - Promotion of strategic industrial planning
- ➔
- Building new industries and revitalization
 - Inducing regional innovations

Collaborative organizations



Business image



Programs of the FII Organization An Overview of Initiatives

(1) Construction of a pilot line (a baton exchange zone for joint development with private businesses)

- Installation of devices (new)
- Transfer of existing devices
- Restoration of existing devices
- Shared use of large-scale machinery
- Establishing international standards
- Promotion of local industries

(2) Development of practical and talented human resources

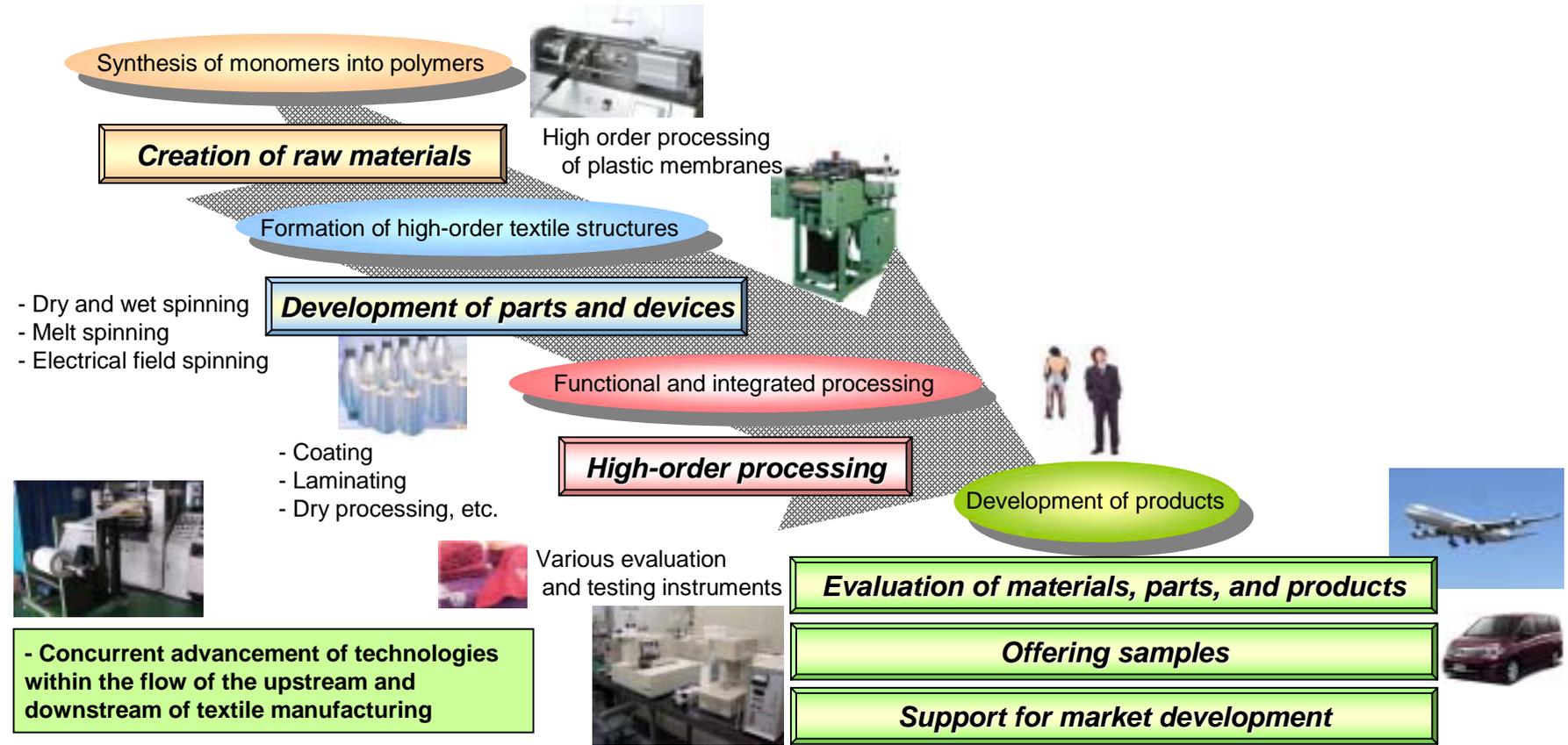
- Nurturing graduate students and young researchers
- Internship system
- Joint and collaborative studies with private businesses
- Linking with a (program)
- Human resource development program with government-academic-private collaboration

(3) Creation of an informational hub function

- Construction of an international network in the fiber field
- Establishment of an informational hub
- Information analysis
- Collection and transmission of information
- Coordination
- Cooperation with other educational and research institutes (National Institute of Advanced Industrial Science and Technology, public testing and research institutes)
- Collaborative efforts among the government, academic and private sectors



Functions of the Pilot Line Facility

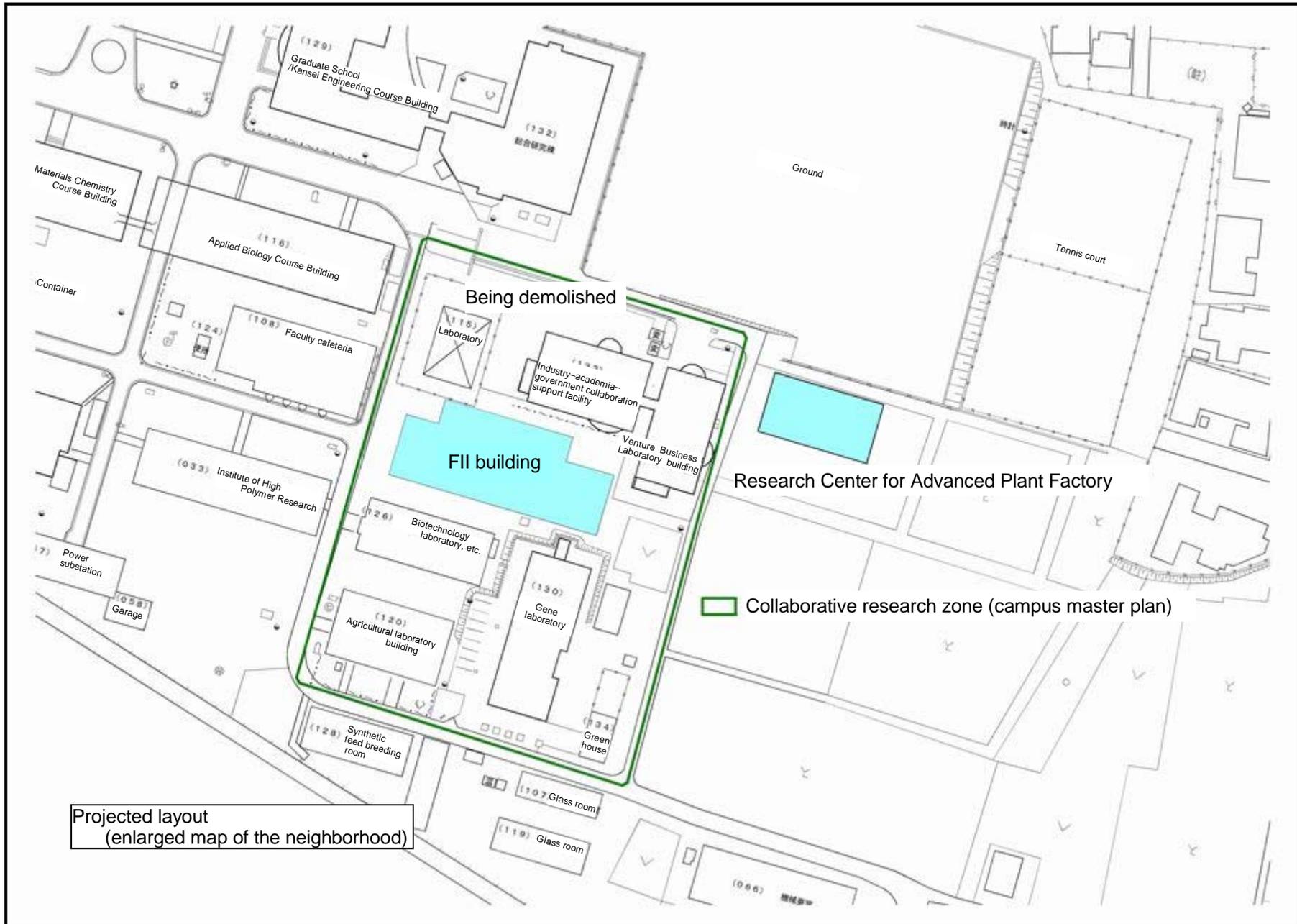


- **Consistent production of prototypes**, including raw materials, spinning, thread making, weaving, high-order processing, and finished products
- **Nurturing young engineers and researchers with talent in development** through collaboration with businesses (internship system)
- **One-stop-solution** feature for fiber development issues
- **Evaluation and standardization** of materials and products
- **Information transmission hub functionality** (such as marketing)
- Creation of local community based innovations through **utilization of rental spaces of private corporations**



Fiber Innovation Incubator Facility at Shinshu University (FII facility)

Projected prediction path



Projected layout
(enlarged map of the neighborhood)

Being demolished

FII building

Research Center for Advanced Plant Factory

Collaborative research zone (campus master plan)