



THE HONG KONG 香港紡織及成衣研發中心
RESEARCH INSTITUTE OF TEXTILES AND APPAREL

The Hong Kong Research Institute of Textiles & Apparel

Contact of R & D Centre:

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Background

- Innovation and Technology Fund started in Nov 1999
- Government's adoption of new strategy
- Textiles and Apparel selected as a focus area
- PolyU to host R&D centre in 2006



Business Model

Industry

Research Institutes



Public Sector

ITC

Focus Areas

- New materials and textiles and apparel products
- Advanced textiles and clothing production technologies
- Innovative design and evaluation technologies
- Enhanced industrial systems and infrastructure



	New Materials	New Machinery	New Testing machinery/ methodology	Enterprise Knowledge/ systems
Sustainability	recycleable/ renewable/ clean/ tracability			
Reduce Cost of labor/ Material	efficient/ defect reduction/ transparency			
The HK Industry Advantage	high value add/ high performance/ fast turn/ low volumes/			
HK Society Advantage	job creation/ pollution reduction/ supply chain advantages			



Project Title: Wearable Electronics for Better Quality Community Care of the Elderly (ITP/011/12TP)

Objective:

To develop an apparel based tracking system to enhance the community care of the elderly.

A robust and user friendly software system will be developed to support care giver in the use of the system.

HKRITA is the lead center in this multi-disciplined collaborative project with LSCM & ASTRI.



Contact of PI:

Dr. Tao HUA

Institute of Textiles and Clothing Department, HKPolyU.

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Project Title: O-Blanket-Phototherapy Device for Neonatal Jaundice (ITT/013/11TT)

Objective:

To produce a safe, and soft blanket made of polymer optical fiber (POF) for the care of neonatal jaundice patients by the use of sustained phototherapy.

To reduce caregiver workload while improving quality of care given.



Contact of PI:

Prof. Xiao-ming Tao

Institute of Textiles and Clothing Department, HKPolyU

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Project Title: Medical Textiles for eczema patients (ITT/009/11TT)

Objective:

To produce next to skin apparel and covering for eczema patients that reduce irritation, enhance comfort, and accelerate recovery. Textiles developed features irritation free, soft touch, and high breathability



Woven eczema pajama for Children



Knitted eczema garments for babies

Contact of PI:

Prof. John Xin

Institute of Textiles and Clothing Department, HKPolyU

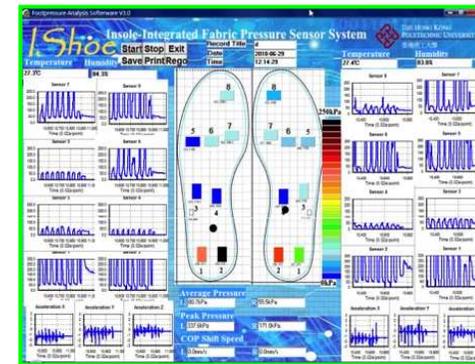
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Project Title: Monitoring Patients with Diabetic Foot Syndrome by Intelligent Footwear System (ITT/002/11TT)

Objective:

To produce an intelligent footwear system to support the monitoring of conditions (plantar pressure, temperature and moisture etc.) during normal daily activities of patients with diabetic foot syndrome.



Contact of PI:

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Project Title: Commercialization of Smart Pressure Monitored Suits (SPMS) for Managing Hypertrophic Scar (ITT/012/11TT)

Objective:

To develop the SPMS for managing hypertrophic scar for patients and shorten the recovery period of patient than current treatment.

Contact of PI:
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Before treatment



With SPMS



After treatment



Project Title: Development of Intelligent Impact Protectors Based on 3D Auxetic Fabrics (GHP/063/09TP)

Objective:

To develop intelligent impact protectors for patient and elderly that are fabric based. Features include lightweight, breathability, flexibility, comfortable, and enhance performance.



Contact of PI:

Dr. Hong HU

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Project Title: Artificial Muscle and Skin for Rehabilitation (ITP/006/10TP)

Objective:

To develop intelligent protectors for patient and elderly that are fabric based. Features include lightweight, breathability, flexibility, comfortable, adhesiveness and enhance performance: preventing shoulder subluxation, hypertrophic scar, etc. for patient.



Contact of PI:

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Project Title: Adult Bibs for Elderly Care Home (ITT/007/11TT)

Objective:

To improve the functionality of bibs uses in community elderly care. This includes improved performance, durability, and ease of wash and care. This is achieved by enhanced weaving and finishing technologies.



Contact of PI:

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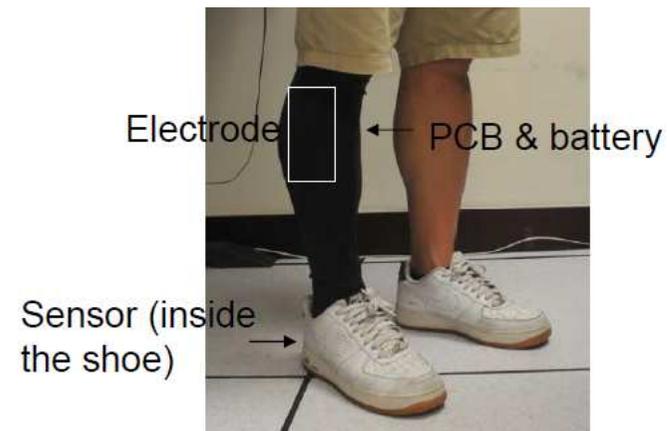
Email: tchuip@inet.polyu.edu.hk



Project Title: Development of sprain-free sport shoe: prototype version (ITT/002/12TT)

Objective:

To develop an anti-sprain device embedded in leggings. A user friendly, flexible and easy to set up system to reduce activity based injuries.



Contact of PI:

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