

## CORPORATE PROFILE



## **COVER RATIONALE**

The future of our world depends upon how we treat the environment. Long-term success is only possible if we respect Mother Nature and its most intricate ecological processes.

## YOUR PARTNER IN INNOVATION

SIRIM Berhad is a wholly-owned company of the Malaysian Government under the Ministry of Finance Incorporated. With over forty years of experience and expertise as the government's mandated machinery for research and technology development, SIRIM is also the national champion of quality.

SIRIM has always played a major role in the development of the country's private sector. We focus on discovering and developing new technologies to help businesses compete better through quality and innovation. By tapping into our expertise and knowledge base, small and medium businesses collaborate with our scientists everyday in their quest for improvement in the manufacturing, technology and services sectors.

Together with our industry partners, SIRIM Berhad has enabled Malaysian products and services to receive due recognition in quality and innovativeness worldwide. By continuously reinventing the way we do things, we ensure that we remain market-driven, flexible, cost-effective, and responsive to our clients.

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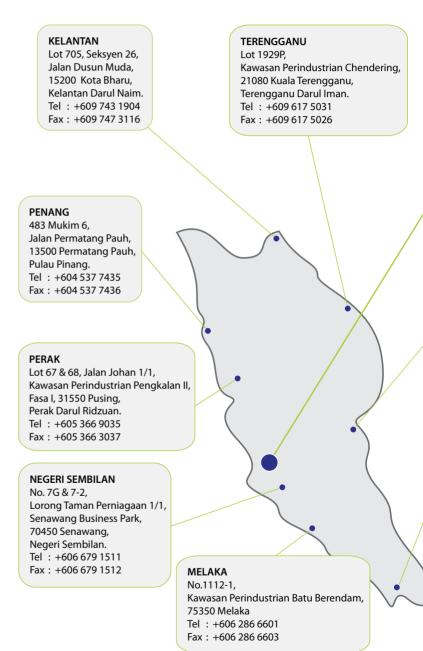


## **GET IN TOUCH WITH US**

Our Marketing & Business Development office at our headquarters is a one-stop shop for all your business needs.

Through our network of regional offices across 11 states nationwide, we are ready to serve your business no matter where it is.

Our state offices also house incubation facilities in specialised areas.



### CORPORATE HEADQUARTERS MARKETING AND SALES CENTRE

No. 1, Persiaran Dato' Menteri, Tel Seksyen 2, Peti Surat 7035, 40911 Shah Alam,

Selangor Darul Ehsan, MALAYSIA.

Tel : +603 5544 6000 : +603 5510 8095 Fax

: +603 5544 5823 Fax : +603 5519 4055

### **CUSTOMER SERVICE CENTRE**

Toll Free: 1 300 88 7035 Fax : +603 5544 6694 : web@sirim.my e-mail

#### SABAH

Lot 1, Fasa 1, Zon Perdagangan, (KKIP), Jalan Timur,

88450 Menggatal, Sabah.

Tel: +6088 497 082 Fax: +6088 496 357

### **PAHANG**

Jalan Pintasan Kuantan-

- Kuala Terengganu,

Kawasan Perindustrian Gebeng,

Pahang Darul Makmur. Tel: +609 583 6336 Fax: +609 583 6767

#### **SARAWAK**

Lot 802.

Taman Perindustrian Demak Laut, Jln Bako, Peti Surat 3292,

93764 Kuching, Sarawak.

Tel: +6082 439 052 Fax: +6082 439 060

26100 Kuantan,

### **JOHOR**

No.3, Jalan Teknologi 5, Taman Teknologi Johor, 81400 Senai, Johor Darul Takzim.

Tel: +607 599 0033 Fax: +607 599 8366

## OFF-CAMPUS FACILITIES

	Advanced Materials Research Centre	Lot 34, Jalan Hi-Tech 2/3 Kulim Hi-Tech Park, 09000 Kulim, Kedah	Tel: +604 401 7101 Fax: +604 403 3225
	National Metrology Laboratory	Lot PT. 4803, Bandar Baru Salak Tinggi 43900 Sepang, Selangor	Tel: +603 8778 1600 Fax: +603 8778 1661
	National Centre for Machinery and Tooling Technology (Managed by the Engineering Consulting Centre)	No. 1A, Persiaran Zuhrah Kaw. Perindustrian Rasa, 44200 Hulu Selangor, Selangor	Tel:+603 6063 6000 Fax:+603 6063 6163
	Advanced Automation and RFID Centre	Lot PT 5285, Off Lebuhraya Puchong - Sg. Besi, 57000 Bukit Jalil, Kuala Lumpur	Tel: +603 8992 6043 Fax: +603 8992 6190
	SIRIM Incubation Centre (Sepang)	Lot PT. 4803, Bandar Baru Salak Tinggi, 43900 Sepang, Selangor.	Tel: +603 8775 7202 Fax: +603 8775 7230
	SIRIM Incubation Centre (Shah Alam)	Lot 10-20, Kawasan MIEL, Fasa 2 Jalan Beremban 15/12, 40000 Shah Alam, Selangor	Tel: +603 5515 2202 Fax: +603 5510 2727

## A GLOBAL INSTITUTION

SIRIM is recognised the world over as a global research and standards development organisation.

We are one of the nine founding members of the Global Research Alliance (GRA), a cooperation of leading knowledge-intensive technology organisations from nine countries in four continents. The alliance has a combined strength of more than 50000 scientists and technologists committed to developing global knowledge networks for industry and industrial sectors to enhance their competitiveness.

SIRIM is also the secretariat of the World Association of Industrial and Technological Organisations (WAITRO), an independent association of industrial research organisations founded under the auspices of the United Nations. It currently has 160 members in 80 countries.



As the national standards development agency, SIRIM plays an active role in international standards development. We coordinate the country's participation in international standardisation activities, where Malaysia is a participating member in over 80 ISO Technical Committees and Subcommittees.

SIRIM's National Metrology Laboratory is a full member of the Metre Convention, the Asia Pacific Metrology Programme (APMP), the Asia Pacific Legal Metrology Program (APLMF) and the ASEAN Consultative Committee on Standards and Quality (ACCSQ). SIRIM is also a signatory to the International Committee of Weights and Measures Mutual Recognition Arrangement (CIPM-MRA).

SIRIM also acts as the local inspection agency for over 20 foreign certification bodies with regards to conformity assessment for Malaysian exports.

## **SUSTAINABLE INDUSTRIAL DEVELOPMENT**

SIRIM takes a synergistic approach to industrial development that considers the environment at every point within the commercialisation value chain:

 Research and Technology Development: Generating innovative products that are both commercially and environmentally viable

• **Design and Engineering**: Machining, manufacturing and automation consultancy

• Standards and Quality: Ensuring that these products comply to global quality standards



## WE SERVE YOUR INDUSTRY

Our business methodologies are engineered to ensure fast, affordable and quality delivery across all of our services. We possess the know-how and experience necessary to help you see your idea through from inception to commercialisation.

Service	Areas of Expertise		
Research & Technology Development	Researching and developing industrially-viable technologies across five key areas: advanced materials, nanotechnology, biotechnology, environmental technology and renewable energy. The work may be contracted directly to us, or we can undertake it as a joint project with your organisation. We also undertake research as a strategic goal in the interests of the country.		
Design and Engineering Consultancy and Services	End-to-end design and engineering solutions including prototyping, fabrication, plant automation and packaging and inventory management. Our automotive centre also provides total solutions in automotive component technologies through R&D and testing, design and homologation services.		
Standards and Quality Research and Management	Supporting industrial development through standardisation and developing new standards to support product innovation. Our technical experts and consultants help businesses including SMEs become global companies and provide them the edge they need to compete in a global economy.		
Technology Transfer Hub	Developing future technopreneurs within high-technology incubators designed to leverage our scientific and technical expertise. Our highly-trained consultants offer a host of business services covering intellectual property management, technoeconomic analysis, commercialisation management, technology venture and nurturing and technology needs assessment.		



Advancing science.

Powering innovation.

## WITH OVER FORTY YEARS

of experience in R&D, SIRIM is one of the most recognised industrial research and technology development institutions in the world. Our experts have identified five technology focus areas that will be the primary catalysts of tomorrow's society and industry, and we have established research and development Centres of Excellence for each of them, all fully equipped with advanced facilities:

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•	Industrial Nanotechnology Research Centre	pg. 14
	Environmental Technology Research Centre	pg. 15
	Renewable Energy Research Centre	pg. 16
•	Industrial Biotechnology Research Centre	pg. 17

## **ADVANCED MATERIALS RESEARCH**

The Advanced Materials Research Centre (AMREC) in Kulim, Kedah is Malaysia's nucleus of development on advanced materials technology. Every day, SIRIM's scientists discover new and exciting ways to exploit local commodities in higher value added applications. They also investigate

the use of alternative new materials to reduce material consumption and cost while looking for environmentally-friendly substitutes for safer and more comfortable living environments.

SIRIM's advanced materials research covers five key areas:



## BIOMATERIALS FOR MEDICAL APPLICATIONS

Our work in biomaterials revolves around designing biologically-compatible materials to be used in both hard and soft tissue organ replacement therapy.

#### **ADVANCED POLYMERS AND COMPOSITES**

Much of our research is in high performance materials produced from continuous fibers for higher performance. Many of these advanced composites are lightweight and yet have astounding properties of toughness and strength.

### PHOTONIC AND ELECTRONIC MATERIALS

We can develop, fabricate and test composite photonic materials for use in semiconductors, dielectrics and polymers. This includes electromagnetic optics and guided wave optics, lasers, photodetectors and waveguide interconnects as well as thermoelectric materials.

### STRUCTURAL MATERIALS FOR STRUCTURAL AND ENGINEERING APPLICATIONS

We research and develop friction and hard materials, light alloys, high energy magnetic materials and advanced ceramics.

#### FI FCTROCHEMICAL MATERIALS

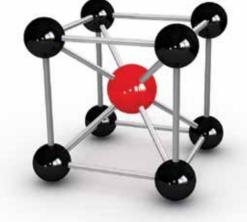
Some electrochemical materials have unusual mechanical and physical properties. These are useful for applications in batteries, fuel cells and integrated circuit devices.



## INDUSTRIAL NANOTECHNOLOGY

New industrial applications of nanoscale materials are being discovered every day around the world as it moves rapidly forward toward an era of nanomanufacturing systems.

SIRIM's expertise within this area covers nanomaterials such as carbon nanotubes, titanium dioxide (TiO<sub>2</sub>) and nanometals. Our nanotechnologists have already met with several successes in developing nanocatalysts and nanostructured coatings, with a focus on energy and medical applications.



### **ENERGY APPLICATIONS AND RESEARCH**

A lot of scientific evidence suggests that nanomaterials hold much potential in energy applications such as microbatteries, energy-saving devices and renewable energy technologies. Our researchers are exploring ways of using such nanoproducts in local products.

### MEDICAL APPLICATIONS AND RESEARCH

A lot of our work is geared towards improving lives through innovative medical research. To this end, our researchers are developing several nanotechnologies for improved drug delivery, organ replacement and imaging applications within the medical field.

## **ENVIRONMENTAL TECHNOLOGY**

Environmental technologies offer a new management process for minimising the ecological impacts of economic production while enhancing the competitiveness of firms. One of SIRIM's primary responsibilities is to help businesses adopt environmentally-friendly technologies and practices by finding ways to reduce carbon emissions.

Our scientists are constantly looking for ways to enhance the environmental performance of products, processes and systems. We work hand-in-hand with the Renewable Energy Research Centre to develop renewable energy sources and recyclables as feedstock materials for use in biomass boilers.

## ENVIRONMENTAL MANAGEMENT TECHNOLOGY

We are very experienced at conducting environmental and chemical safety evaluation and profiling. Our ecodesigns use integrated treatment technologies of air, water and soil based on biomediation physicochemical systems and advanced oxidation processes.

### **GREEN LABEL SCHEMES DEVELOPMENT**

With so many "green" product claims in the market, consumers are sometimes confused by their claims and some have doubts about their validity. SIRIM aims to help consumers by establishing an authoritative, independent and publicly acceptable green label scheme that identifies products that are more environmentally preferable than other similar products. Green label schemes also encourage the purchase of "greener" products/services with improved recyclability, reduced packaging and greater durability.

#### **WASTE MANAGEMENT**

We can find comprehensive solutions for reducing, reusing or recycling production waste in a manner that is both environmentally acceptable and more profitable to businesses.



## **RENEWABLE ENERGY RESEARCH**

SIRIM researchers can help businesses develop viable renewable energy technologies that take advantage of the country's rich, natural resources in solar, water and biomass waste. For example: Malaysia gets up to eight hours of sunlight everyday, which may be harnessed for solar energy, and the country's strong agricultural sector generates tonnes of waste that can be converted into biomass feedstock.

Our research revolves around:

### RENEWABLE ENERGY AND APPLICATIONS

We are actively researching and developing renewable energy technologies and applications across solar, wind, biomass and hydro energy sources.

### **ENERGY EFFICIENT PROCESSES & SYSTEMS**

We provide process engineering consultancy services for cleaner production and Good Manufacturing Practices (GMP) in line with renewable energy goals and energy efficiency targets. We also have a suite of services that addresses the growing need for mandatory and voluntary reporting of greenhouse gas emissions.



## INDUSTRIAL BIOTECHNOLOGY

SIRIM has a long, proud history of helping businesses successfully harness Malaysia's rich natural biodiversity. Our experienced biotechnologists can assist entrepreneurs to develop products that are biologically safe for both the environment and society.

## BIOPROCESS TECHNOLOGY AND PROCESS ENGINEERING

SIRIM is very involved in researching and developing useful products that take advantage of natural biological processes. We combine living organisms with nutrients under specific optimal conditions to make industrial bioproducts, biomedical devices and biosensors. We can also help design and develop pilot plants for biotechnological, biochemical and chemical processes.

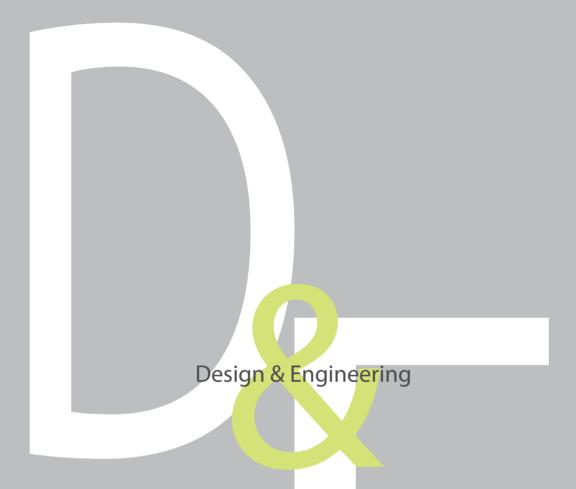
### **BIOCOMPATIBILITY AND BIOSAFETY**

Our team of scientists have the capabilities and tools to evaluate the biological and ecological safety of products, processes and systems.



#### **DERMACOSMETICS**

We conduct natural product research for bioactive metabolites, biochemicals, cosmeceuticals and nutraceuticals. Our services include extraction, standardisation, profiling, identification of actives, biological activities studies, *invitro* and *invivo* product efficacy studies, product formulation and delivery technology.



Realising ideas.

Commercialising dreams.

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## SIRIM'S UNIQUE BLEND OF

experience and skills give our engineers the insight to apply cuttingedge technologies across all engineering disciplines. This includes the design and development of machine prototypes, scaling-up pilot plants and technical consultancy. Our expertise covers a broad spectrum of applications such as electronics, industrial automation and robotics and computer-aided design, manufacturing and engineering technologies:

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## PRODUCT DESIGN AND ENGINEERING

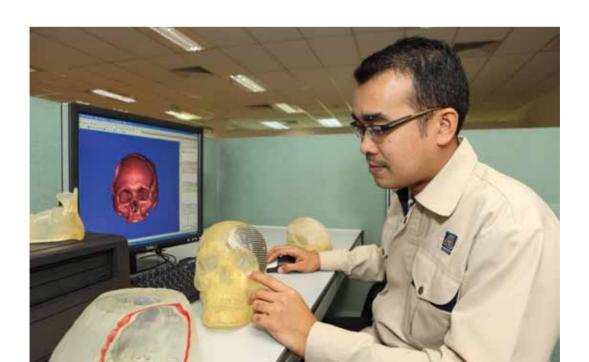
Our design and engineering centre offers end-to-end product development solutions through CAD/ CAM/CAE modeling and application, rapid prototyping, fabrication and packaging design services. Through carefully designed engineering systems and expert consultancy, we can take an idea from inception to realisation.

### PRODUCT DESIGN AND ENGINEERING

We can design and engineer innovative products that are both aesthetically pleasing and functionally sound. We can accelerate your product's time to market while helping you achieve synergy among the product's features, materials and cost.

### PROTOTYPING AND FABRICATION

Our technical personnel use foundry and casting technologies, tooling and moulds and dies to create functional prototypes of products as final proof-of-concepts. These prototypes most closely resemble what the final product will look and feel like.



### **PACKAGING DESIGN**

Our team of professionals can design the final packaging of a product, including the cushioning and handling features for overseas export. We can also develop inventory management and security printing solutions with RFID technologies and applications.

#### PLANT ENGINEERING

Our experts can design production plants including the machinery, wiring, sanitation, plumbing and safety requirements. In collaboration with our Advanced Automation Centre, we can also advise you on your options for industrial automation, production systems and robotics technology.

## **SECURITY PRINTING**

We can apply the latest overt and covert security features and technologies to the product's printing and security needs. Our expertise covers security ink and security paper, tamper evident material and bar codes.



## **ENGINEERING CONSULTING**

SIRIM's engineers and technical personnel offer end-to-end engineering services in the area of design, prototyping and fabrication of machinery and equipment.

We have the necessary know-how in joining technologies, foundry and casting technologies and tooling, moulds and dies to serve all industries. We are also qualified testing engineers in the fields of non-destructive testing and failure investigation.

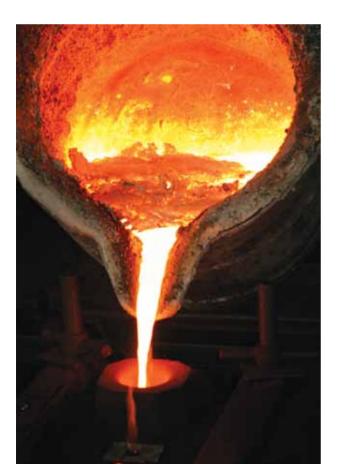
## FOUNDRY TECHNOLOGY AND ENGINEERING SERVICES

SIRIM's technologists can develop sand casts, die casts and investment casts for metal products. This includes designing production processes, surface finishing, precision machining and product re-design.

## TOOLING TECHNOLOGY AND ENGINEERING SERVICES

Our engineers can design the production tools that businesses need including plastic injection moulds, press dies and die casting dies. We can also design soft steel tooling for plastic and sheet metal parts.

In addition, our engineers can design machining jigs and fixtures. This includes Computer Numerical Controlled (CNC) precision machinery technologies and fabrication technologies such as laser cutting, turret punching and press brake bending.



#### JOINING AND INSPECTION SERVICES

SIRIM's engineering centre is the only test facility in the region that is accredited by the American Welding Society.

Our internationally-certified technical personnel possess the necessary training and qualifications to provide sound third party inspection and verification services for Department of Health & Safety (DOSH) regulations.

We offer failure investigation services as well as a full suite of Non-Destructive Testing (NDT) services including Phase Array UT (PAUT), TOFD, Computer Radiography Testing (CRT), Alternate Current Field Measurement (ACFM), Ultrasonic Testing Flaw Detection (UTFD), Digital Ultrasonic Corrosion B-Scanning, Remote Field Eddy Current (RFET) and Infrared Thermography.

Our engineers also provide engineering consulting services on both metal and non-metal welding technology as well as other joining technologies such as adhesive bonding mechanical joining, diffusion bonding, hardfacing and resurfacing.

#### **CONSULTING SERVICES**

Our engineers adopt industry best practices to maximise production while protecting the structural integrity of assets within the energy sector.

Our consulting services include advanced computer-based engineering analysis to assess complex systems under operating conditions, remnant life assessment through the study of material degradation, detailed damage mechanism assessment and condition-based monitoring to ensure that any deterioration is rectified in a controlled manner.



## **ADVANCED AUTOMATION AND RFID CENTRE**

Over the years, SIRIM has helped thousands of businesses develop the machines and processes they need to manufacture and produce their products. Through our dedicated RFID Centre, we can also help design and develop inventory management and electronic security identification applications for use within industries.



## MACHINERY AND AUTOMATION SYSTEMS DESIGN

Our engineers regularly help companies adopt industrial automation systems for their businesses, whether for specific processes or for the whole manufacturing value chain: from product design to distribution. We act as independent consultants and systems integrators and can advise you on all your automation options.

We can also customise robotics and machinery solutions to fit your unique requirements. Our award-winning engineering teams will design and program the intelligent systems and controllers required for managing your processes and equipment.

#### **RFID CENTRE**

Radio-Frequency Identification (RFID) has become the world's preferred way of identifying and keeping track of inventory and people.

SIRIM's researchers can help design RFID solutions for inventory management and security applications. We also have the facilities necessary for performance and conformance testing.

## **AUTOMOTIVE ENGINEERING**

SIRIM's unparalleled experience in the heavy industry gives us an enviable advantage when it comes to automotive engineering. We have the tools and expertise necessary to design advanced automotive systems as well as specific parts and components.

We can also help ensure that these automotive products meet the regulatory standards of the international automotive industry.

## AUTOMOTIVE COMPONENTS, PARTS AND SYSTEMS DEVELOPMENT

Our automotive engineers can design and develop specific automotive components and parts as well as complete automotive systems. We also offer consultancy services from initial design to final blueprint.

### **TESTING AND HOMOLOGATION**

One of our goals is to help the automotive industry achieve the industrial standards it needs in order to compete internationally. Our team of automotive engineers has the expertise and skills necessary to ensure that automotive parts and components meet regulatory requirements both locally and abroad.





Enabling compliance.

Driving competitiveness.

## AS WORLD MARKETS

become more competitive, consumers will inevitably become more discerning. Standards and quality are thus major considerations in strategic business development in both the private and public sectors.

As the national champion of quality, SIRIM possesses the right mix of both international and local qualifications required to offer a wide range of standards management and research services. Our quality and enterprise development services are designed to enable standards compliance and help your business demonstrate its commitment to quality practices, thereby giving your organisation the edge it needs to compete in a global economy:

Measurement and Calibration Services

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• Standards Research and Management

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Quality and Enterprise Management

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## **MEASUREMENT AND CALIBRATION SERVICES**

SIRIM is empowered by the National Measurement System Act 2007 to be the National Measurement Standards Laboratory and the country's Custodian of Weights and Measures. As such, the SIRIM National Metrology Lab is the keeper of Malaysia's Primary Physical Standards of Measurement.

SIRIM's National Metrology Laboratory (NML) is also entrusted with the critical role of providing metrological support to the national measurement infrastructure. It is a member of the Metre Convention, Asia

Pacific Metrology Programme, Asia Pacific Legal Metrology Forum and International Organisation of Legal Metrology.

The NML is also a signatory of the global Mutual Recognition Agreement (MRA) on National Measurement Standards and Calibration Certificates issued by National Metrology Institutes, which allows us to establish the national measurement standards.

Our measurement and calibration services cover the needs of all industries. In addition, we offer technical advisory services for industrial calibration and proficiency as well as training.



#### **ELECTRICAL**

All electrical metrological requirements including voltage, current, magnetics, photometry, vibration, impedance, power and energy and acoustics.

#### **MECHANICAL**

Mechanical metrology requirements such as mass, dimension, angle, force and pressure.

#### FI OW

Metrology and calibration of instruments related to the flow of liquid or gases including fuel dispensers, water dispensers, air speed devices and Natural Gas Vehicle (NGV) master meters.

#### **CHEMISTRY**

Chemical metrology including the production of ethanol standards, pH buffer solutions, chemical analysis using NMR Spectrometer and the calibration of gas monitors.

#### **THERMOPHYSICAL**

The metrology of thermophysical properties such as temperature, resistance, density, viscosity and humidity.

#### TECHNICAL ADVISORY SERVICES

Besides managing the legal metrology services required under the National Measurement System Act 2007, we also serve as a one-stop centre for industrial calibration and proficiency testing services. In addition, we provide training and consultancy services related to metrology.



## STANDARDS RESEARCH AND MANAGEMENT

With our world-class facilities and expertise, we can help your business adopt internationally recognised industrial standards in order to distance yourself from the competition. We also have the necessary tools and skills to develop new standards to support product innovation across all major industries.

Our standards management capabilities extend to all fields including electronics and mechanics, radio communications, fire protection, electromagnetic compatibility, chemicals and civil engineering.

## WTO/TBT INQUIRY POINT AND TECHNICAL ADVISORY SERVICES

Because technical regulations and product standards vary from country to country, the World Trade Organisation (WTO) established the Agreement on Technical Barriers to Trade (TBT) to ensure that these



regulations and procedures do not create unnecessary obstacles to world trade.

SIRIM is the main inquiry point for WTO/ TBT inquiries in Malaysia and we can provide you with the technical assistance and advice your business needs to overcome these technical barriers.

## NATIONAL STANDARDS INFRASTRUCTURE MANAGEMENT

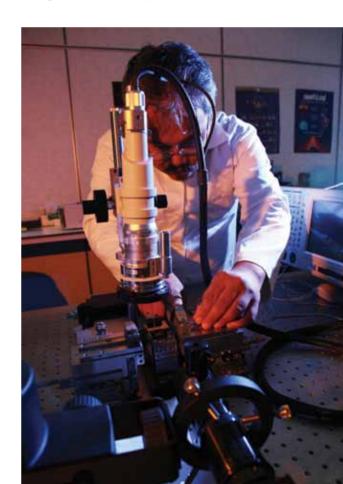
As the national standards development agency, SIRIM is tasked with overseeing the National Standards Infrastructure on behalf of the Department of Standards Malaysia. Newly published Malaysian Standards (MS) are available for purchase through the MS Online system or at our head office. We are also a distributor for major foreign and international standards.

SIRIM is also tasked with managing the country's participation in international standards development activities, thus protecting the nation's interests in world trade and commerce

## STANDARDS RESEARCH AND CONSULTING

Over the years, we have developed thousands of standards to support the country's industrial development both locally and abroad. We also protect consumers and society by benchmarking product specifications against acceptable standards and ensuring that they comply to industry regulations.

By leveraging our capabilities and technical expertise, you can be assured that your product specifications are equivalent to the acceptable standards that global markets require.



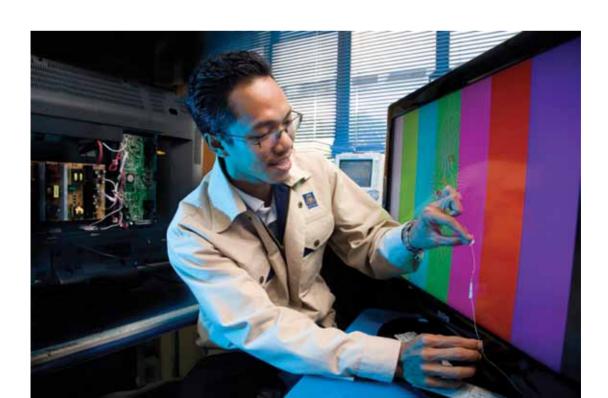
## **QUALITY AND ENTERPRISE MANAGEMENT**

SIRIM has helped thousands of organisations to make quality a company wide culture, and we are recognised the world over for our stringent standards and expertise. We can facilitate your journey through total quality management practices as well as advise you how to best manage your entrepreneurship and brand value.

#### **OUALITY SERVICES**

SIRIM is very experienced at assisting organisations in implementing quality management practices. Our experts can provide your people the training they need when adopting quality tools and techniques such as Total Quality Management (TQM), QC Tools, Kaizen, Six Sigma and Benchmarking.

We also offer a suite of soft skills training services addressing creativity and innovation, leadership, purchasing and negotiation, sales and communications.



## ENTREPRENEURSHIP AND INNOVATION CONSULTING

We have long served as an agency for implementing the national vision for small-and-medium sized industries as a whole. We assist the government's efforts in nurturing innovative entrepreneurs and can turn SMEs into global companies.

Our team of experts work hard at developing the capacity of local SMEs by helping them take their visions from inception to realisation. Our consultants have the training and expertise to ensure that your business complies to international standards and practices.

We can also guide your organisation towards establishing quality management processes and enable it to stay competitive in the global marketplace.

#### ENTERPRISE AND BRANDING CONSULTING

Our consultants have the business acumen and know-how to help you create your brand, including its rationale and message. We can devise a long-term strategy for developing and sustaining your brand in both local and international markets.



**Technology Transfer Hub** 

Nurturing talent.

Fostering success.

## SINCE ITS INCEPTION

over forty years ago as the mandated government vehicle for technology transfer, SIRIM has played a key role in facilitating the process of transferring technological innovation from research and development to the market.

With our vast experience, SIRIM can devise systematic methodologies to help our customers exploit their technological capabilities, identify and quantify market opportunities for them and quickly turn them into technology-driven business ventures.

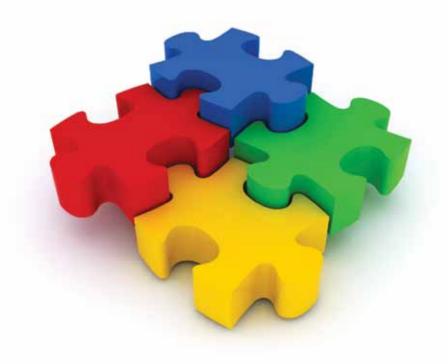


## **DRIVING TECHNOLOGY VENTURES**

Many investors do not feel comfortable with technological issues. On the other hand, most scientists have little experience in finance and business management. This risky combination can result in poorly developed technology ventures that fail to support their founding ideas.

SIRIM promotes entrepreneurship by helping new businesses become successful. The vision of this programme is to make Malaysia technologically competitive by properly commercialising the results of its research and development activities and other innovative efforts.

Our Technology Transfer Hub is designed to assist budding technopreneurs develop new technology-based firms. The incubation programme effectively links talent, technology, capital and know-how in order to accelerate R&D and innovation. We also provide practical advice on managing your intellectual property and technology lifecycles.





## INTELLECTUAL PROPERTY MANAGEMENT AND SERVICES

Our consultants can negotiate and develop mix-and-match IP agreements for your products. This includes evaluating IPs and performing due dillegence exercises to ensure their compatibility to your requirements.

We also offer IP agency services such as the drafting and filing of patents, trademarks, industrial designs, utility innovations and copyrights. We can also help you with IP licensing and develop spin-off products from your ideas.

### **TECHNOLOGY INCUBATION**

Our technology incubators and consultants have seen hundreds of technopreneurs through their initial phase of development. We have the experience and expertise to help you develop your technological ideas and franchises and provide you with a strong foundation upon which to grow.

Our incubation centres are strategically located in our regional offices nationwide. Among others, we offer technology incubation facilities in spin casting, investment casting, ceramics and cosmetics and natural products.

## **OUR NATIONAL AGENDA**

Back in 1964, Malaysia was fast moving from being an agricultural economy into an industrialised nation. To sustain the country's astonishing pace of development, the government needed to adopt the principles of standardisation. Thus, the Standards Institution of Malaysia (SIM) was born.



In 1974, SIM was merged with the National Institute for Scientific and Industrial Research (NISIR) to form the Standards and Industrial Research Institute of Malaysia (SIRIM). The synergy that resulted from the merger provided the country with a solid foundation for its future economic development. SIRIM was better equipped to expand its scope of operations in line with the rapid advancement of industrialisation in Malaysia.

SIRIM has since become a pillar in the national industrial development agenda, enabling international trade and managing the country's standards infrastructure. The organisation has undergone several changes in response to rapidly changing market needs, including being corporatised as SIRIM Berhad under the Companies Act on 1 September 1996.

SIRIM has been entrusted with six national R&D initiatives that take advantage of our multidisciplinary expertise as well as the industrial standards that form the basis of our research. The six initiatives are:

## TO PROMOTE A CLEANER ENVIRONMENT FOR SOCIETY

We promote environmental health through the use of innovative technology, eco-friendly materials and the application of environmentally-

friendly business practices. The goal is to achieve a clean environment for society as well as to develop environmentally sound industries for the country.

## TO FIND AFFORDABLE AND SUSTAINABLE ENERGY ALTERNATIVES

We develop and promote sustainable, clean energy and renewable energy alternatives. The objectives of this drive are to improve energy efficiency and to provide rural populations with better and more reliable energy resources.

## TO BOOST LOCAL MANUFACTURING CAPABILITIES

We make the Malaysian manufacturing industry more technologically competent, resilient and cost efficient. SIRIM achieves this by addressing the key challenges facing the manufacturing sector such as the lack of R&D capabilities, poor technical and engineering design capabilities and inferior industrial machinery and equipment.

## TO HARNESS AND PRESERVE NATURAL RESOURCES

SIRIM promotes the use of innovative technologies to sustain and add value to natural resources. The objective is to create viable indigenous products and processes from local natural resources

and enhance the sustainability of natural resources through technology.

## TO CREATE VIBRANT HEALTHCARE APPLICATIONS

We develop and infuse innovative technology and skills in preventive treatment and curative medical applications. The objective is to add value to traditional complementary medicine by ensuring conformance to international standards and to exploit advanced technologies for early warning and treatment systems of diseases.

## TO ENHANCE PUBLIC AND INDUSTRIAL SAFETY AND SECURITY

SIRIM is also charged with developing innovative and cutting edge technologies to prevent disasters and crimes. It addresses some of the key issues surrounding national security such as smuggling, forgery, vandalism, piracy and contraband trafficking.



## **OUR SUBSIDIARIES**

## SIRIM QAS International Sdn. Bhd.

A wholly-owned subsidiary company of SIRIM Berhad, SIRIM QAS International is part of the value chain in SIRIM's standards and quality activities. The company is Malaysia's leading certification, inspection and testing body and offers conformity assessment services for commercial purposes and to support government regulatory enforcement.

SIRIM QAS International's suite of services include:

### **CERTIFICATION SERVICES**

We can certify products according to Malaysian Standards, International Standards or foreign national standards. We offer certifications according to globally-recognised management systems including ISO 9001, ISO 14001 and OHSAS 18001.

#### INSPECTION SERVICES

We provide inspection services on behalf of 20 foreign certification bodies to facilitate Malaysian exports to other countries. We also offer Engineering Inspection services, including mandatory and independent third-party inspections, verifications and endorsement services.

#### **TESTING SERVICES**

We have the necessary facilities for testing products against national and international standards as well as to government specifications and regulations. Our testing services cover mechanical, electrotechnical and chemical products, construction and building materials, radio frequency and electromagnetic compatibility, fire engineering and communications equipment.

## SIRIM Training Services Sdn. Bhd.

Originally established under SIRIM's Technology Transfer Division to upgrade the technological skills and capabilities of local industries, SIRIM Training Services Sdn Bhd was incorporated as a whollyowned subsidiary of SIRIM Berhad in 1997. Today, the company is a leading quality, technology and management training house.

The training programmes offered by SIRIM Training Services include:

### **QUALITY TRAINING**

Management systems such as ISO 9001:2008 and ISO 14001:2001 as well as quality techniques and improvement tools such as Total Quality Management (TQM), Kaizen and Statistical Process Control

#### **TECHNOLOGY TRAINING**

Advanced manufacturing, advanced materials, environmental and bioprocess technology, engineering design, intellectual property, packaging design and entrepreneurship.



#### MANAGEMENT TRAINING

Soft skills courses covering leadership, purchasing, sales, communications and corporate culture.

#### **CERTIFICATE PROGRAMMES**

Nationally accredited certification programmes on ultrasonic non-destructive testing (NDT) inspection and welding.

#### **EXECUTIVE DIPLOMA PROGRAMMES**

Executive diploma programmes in production and operation management and productivity and quality management.

## **OUR VISION AND MISSION**

# **VISION**

To be among the world's best in quality and technology.

# **MISSION**

We make businesses compete better through quality and technology innovations.



### **SIRIM Berhad**

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