

NSTDA SERVICES

English Edition



National Science and Technology Development Agency
Ministry of Higher Education, Science, Research and Innovation



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National Science and Technology Development Agency

The National Science and Technology Development Agency (NSTDA) operates under the Ministry of Higher Education, Science, Research, and Innovation (MHESI). Established in 1991 under the Science and Technology Development Act B.E. 2534 (1991), NSTDA manages the Science and Technology Development Fund under the guidance of the National Science and Technology Development Board (NSTDB).

Key details regarding NSTDA's structure, mandates, operational guidelines, and contact information were officially published in the Royal Gazette, Vol. 132, Part 79, on 13 August 2015. An amendment to the organizational structure followed in the Royal Gazette, Vol. 139, Part 261, on 4 November 2022.

NSTDA is dedicated to elevating Thailand's global competitiveness by leveraging science and technology to enhance the efficiency and productivity of its agricultural and industrial sectors. This mission is executed through five national centers:

- National Center for Genetic Engineering and Biotechnology (BIOTEC)
- National Metal and Materials Technology Center (MTEC)
- National Electronics and Computer Technology Center (NECTEC)
- National Nanotechnology Center (NANOTEC)
- National Energy Technology Center (ENTEC)





National Center for Genetic Engineering and Biotechnology (BIOTEC)

BIOTEC fosters the adoption of biotechnology across industries to enhance Thailand's competitiveness, focusing on food and agriculture, pharmaceuticals and medical innovations, and environmental sustainability.

Services



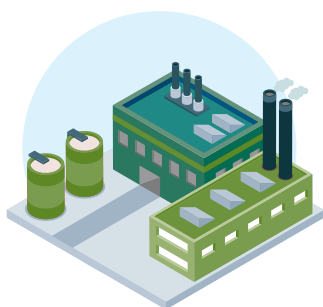
Mechanisms to Promote Bio-based Businesses

- Collaborative research, contract research, and industrial consulting services
- Technology transfer
- Technology licensing
- Business development
- Consultancy and technical services



Scientific Instrumentation and Analytical Services

- Shrimp virus diagnostic services
- Cassava starch quality analysis and cassava product testing
- Chemical analysis with mass spectroscopy, nuclear magnetic resonance (NMR), and infrared (IR) spectroscopy
- Monoclonal antibody services and agricultural diagnostic kits
- Microbial and biological material services
- Bioassay services
- Biosafety assessment



Pilot Plant Services

- National Biopharmaceutical Facility
Location: King Mongkut's University of Technology Thonburi (Bangkhunthien Campus)
- Pilot Plant for Microbial Production
Location: King Mongkut's University of Technology Thonburi
- Nuclear Polyhedrosis Virus Pilot Plant for Insect Pest Control
Location: Thailand Science Park





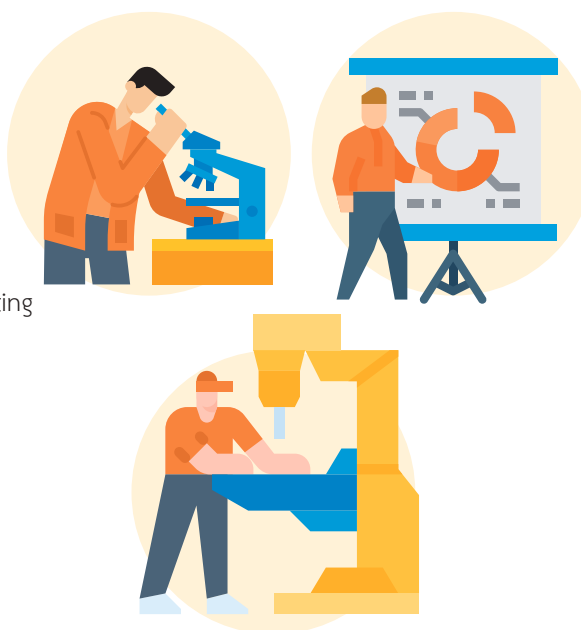
National Metal and Materials Technology Center (MTEC)

MTEC drives advancements in materials technology for both public and private sectors through its team of experts in diverse fields of materials science. The center offers specialized services in product development, property enhancement, and process optimization, delivering tailored solutions to meet industry needs.

Services

Research and Development Services

- Contract research
- Collaborative research and development
- Consulting and troubleshooting
- Technology transfer



Training and Seminar Services

- General training
- Specialized training
- Academic conferences

Technical Services

- Biodegradation testing (BDT)
- Electrical property
- Thermal property
- X-ray diffraction (XRD)
- Powder characterization (PC)
- Transmission electron microscopy (TEM)
- Scanning electron microscopy and x-ray techniques, SEM, and EDS
- Optical microscopy/ image analysis technique (OM)
- MTEC cell culture unit (MCCU)
- Vibrational spectroscopy (VSP)
- Gel permeation chromatography (GPC)
- Nuclear magnetic resonance spectroscopy (NMR)
- X-ray computed tomography (X-ray CT/XCT)





National Electronics and Computer Technology Center (NECTEC)

NECTEC is a leading R&D organization dedicated to advancing cutting-edge technologies for future development. By collaborating with partners, it cultivates an ecosystem that amplifies the impact of its innovations, ensuring equitable access to these technologies across all sectors.

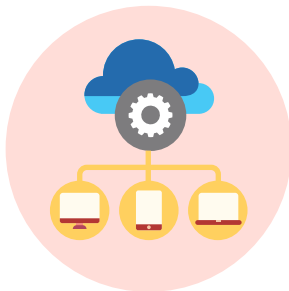


NECTEC Mark

Innovation Services

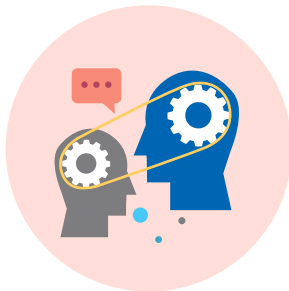
Digital Technology Evaluation and Certification Institute (DTEC)

DTEC has a vital role in the global trade system, serving as a bridge between buyers and sellers. Its primary role is to inspect products or services to ensure compliance with applicable standards.



Industrial IoT and Data Analytical Platform (IDA Platform)

The IDA Platform analyzes and integrates data to optimize production management, promoting energy conservation.



Technology Transfer

The Technology Transfer for Industry Division is responsible for initiating and maintaining collaborations with the business and industrial sectors, offering technology transfer services to industries, communities, and society at large.



Design and Engineering Support Service (DESS)

DESS provides a range of services, including engineering and material-related machinery, engineering consulting, scientific instrument data provision, and the construction of prototypes and machinery.



National Nanotechnology Center (NANOTEC)

NANOTEC advances, supports, and enhances the potential of nanotechnology while promoting awareness and disseminating knowledge to society. It facilitates technology transfer to the industrial sector and fosters public interest, understanding, and awareness of nanotechnology in Thailand.



Services

Research and Development

NANOTEC's R&D services include consulting, solution development, and support for creating nanotechnology products for commercial applications. Equipped with specialized personnel and state-of-the-art equipment, NANOTEC serves as a hub for collaboration with universities, government agencies, and the private sector, fostering technology transfer for industrial applications. The center offers opportunities for businesses to enhance their products and remain competitive through collaborative and commissioned research, technology licensing, and consulting services.



Testing Services

- The National Advanced Nano-Characterization Center (NANC) provides testing and analysis services, including research and development support and the characterization of nanomaterial properties. These services include: physical properties (size, shape, and surface properties of nanomaterials), chemical properties (chemical composition), and biological properties (e.g., antibacterial activity). Certified with ISO 9001 and ISO/IEC 17025, the center serves a wide range of industries, including textiles, plastics, food, pharmaceuticals, cosmetics, electronics, and electrical sectors.
- Performance and safety testing of nanomaterials and products
- Antibacterial efficacy testing
- Anti-aging and anti-oxidant testing



Nanoparticles and Cosmetics Production Plant

The facility offers a range of services, from small-scale production for product testing and market studies to production scale-up and industrial production, in compliance with the ASEAN GMP Cosmetic standards. It focuses on elevating product quality and ensuring safety through the following services:

- Nanoparticle production
- Production of cosmetics with nanoparticle ingredients
- Cosmetic testing and analysis, including physical and biological property evaluation and stability testing to determine product shelf-life



National Energy Technology Center (ENTEC)

Established on 9 June 2020 as NSTDA's fifth research center, ENTEC serves as a hub to drive local and international research efforts in energy technology. The center focuses on advancing research to practical applications that benefit businesses and contribute to broader societal development.

Research and Development



Renewable Energy



Energy Storage



Conventional Energy



System Integration and Energy Management



Energy Efficiency

Business Development and Technology Transfer

Both research and business development teams at ENTEC are committed to collaborate with government agencies and the private sector to leverage research and innovation, creating impactful solutions for industries, society, and communities.

Human Resource Development

ENTEC is committed to enhancing knowledge and skills through various activities, including:

- Academic conferences
- Specialized training courses
- General training courses
- Youth science activities



Goals

- ## Services

- Provide knowledge and information on agricultural technologies and innovations.
- Address challenges by offering consultations and identifying appropriate technological solutions.
- Conduct training programs and facilitate technology transfer initiatives.
- Promote learning opportunities to support the application and advancement of technologies.
- Develop skilled personnel across the value chain, nurturing a new generation of farmers and agricultural entrepreneurs.
- Build active collaborative networks among farmers, communities, public agencies, and private sector stakeholders.



Technology Portfolio

Production Technology

(crop varieties / seed production / farm management / yield)

- Rice, cassava, rubber tree, mungbean
- Others such as mushroom, strawberry and coffee

Biocontrol

- Beauveria
- NPV
- Streptomyces

Animal Technology

(rearing / feed)

- Fairy shrimp and Siamese plankton as aquaculture feed
- Shrimp
- Bee and stingless bee
- Forage cane
- Silage
- Diagnostic kits for animal diseases

Processing Technology

- Processing of agricultural produce
- Good Hygiene Practice (GHP) for food processing

Soil and Water Management

- No-turn composting
- Vermicomposting
- Compost from agricultural wastes
- Soil analysis and enrichment
- Irrigation systems

Equipment and Machinery

- Community-level rice milling machine
- Weather station
- Thailand Agriculture Mobile Information System (TAMIS)
- Photosensitive plastic film greenhouse
- Drying machine/facility for agricultural products

Partners

Government Agencies

- Ministry of Higher Education, Science, Research and Innovation
- Ministry of Agriculture and Cooperatives: Rice Department, Department of Agricultural Extension, Department of Agriculture, Agricultural Land Reform Office, and others
- Ministry of Interior: Community Development Department and Department of Local Administration

Academic Network

Universities, Office of the Non-formal and Informal Education

Financial Institutions

Bank for Agriculture and Agricultural Cooperatives

Private Companies

International Organizations

Independent Organizations

Community Learning Centers



Support for Technology and Innovation Businesses

NSTDA provides comprehensive support for research and development, serving as a solution provider for enterprises in the manufacturing and service sectors, with a particular focus on small and medium-sized enterprises (SMEs). Through its diverse range of services, NSTDA assists businesses in leveraging science and technology to enhance production processes, improve products and services, and drive innovation.

NSTDA Services

	Start-up	SMEs	Large Corporations
Consulting and Technology Transfer Services			
• Contract and Joint Research	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Technology Transfer and Licensing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Innovation and Technology Assistance Program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Sustainable Manufacturing Center	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Testing and Analytical Services			
• NSTDA Characterization and Testing Service Center	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Electrical and Electronic Products Testing Center	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Industrial Ceramic and Houseware Product Testing Center	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Toxicology and Bio Evaluation Service Center	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• NSTDA Fabrication and Engineering Service Division	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Financial Services and Tax and Promotional Measures			
• Investment Privileges Provided by the Board of Investment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Certification of Research, Development and Innovation Projects for 200% Tax Exemption	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Technology Business Certification	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Thai Innovation List	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• RDI Donations Eligible for Double Tax Deduction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
SMEs and Startups Promotion Mechanisms			
• Technology Business Incubation	<input type="radio"/>	<input type="radio"/>	
• Thailand Tech Show	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
S&T Human Resource Development and Industrial Workforce Development			
• Sirindhorn Science Home	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Career for the Future Academy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scientific Infrastructure and Innovation Hubs			
• Thailand Science Park	<input type="radio"/>	<input type="radio"/>	
• Software Park Thailand	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Food Innopolis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Food and Feed Innovation Center	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Thailand Bioresource Research Center	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• National Biobank of Thailand	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• NSTDA Supercomputer Center	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Technology and Informatics Institute for Sustainability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Thai Microelectronics Center	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Consulting and Technology Transfer Services

- Contract and Joint Research
- Technology Transfer and Licensing
- Innovation and Technology Assistance Program
- Sustainable Manufacturing Center

Contract and Joint Research

Accelerating Product and Service Development

Contract Research



- Companies engage NSTDA to conduct research, with result ownership determined by mutual agreement.
- Tailored solutions are developed to meet the specific needs of each company.



Joint Research

- Collaborative efforts.
- Each partner contributes knowledge and expertise.
- Ownership is distributed based on contributions, such as knowledge, funding, or equipment.



By collaborating with NSTDA, enterprises can leverage technology to enhance competitiveness and drive growth in the following five key areas:



Biotechnology and
Genetic Engineering



Materials
Technology



Electronics and
Computer Science



Nanotechnology



Energy
Technology

BIOTEC

02 564 6700

MTEC

02 564 6500

NECTEC

02 564 6900

NANOTEC

02 564 7100

ENTEC

02 564 6400

Technology Transfer and Licensing

Empowering Businesses with Innovation

Intellectual Property



Technology transfer
services for commercial
applications

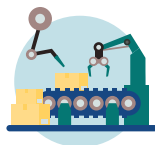


Intellectual property
consulting services

A available Technologies



Agriculture &
Aquaculture



Equipment &
Machinery



Cosmeceutical &
Medical Supplies



Health



Software &
Electronics



Future Food

Technology Licencing Office



02 564 7000 ext. 1616-1619



tlo@nstda.or.th



www.nstda.or.th/tlo

Innovation and Technology Assistance Program (ITAP)

Connecting Businesses with Science, Technology, and Innovation Experts Nationwide

1. Problem Diagnosis and Expert Guidance

*Free of charge

3. Training Sessions and Seminars

4. Connecting with Other Supporting Organizations

2. Tailored Project Design, including:

- Expert sourcing
- Project management and evaluation
- 50% financial support



Expand Business Opportunities

ITAP experts deliver effective solutions, saving time compared to self-directed problem-solving.



Maximize Returns

Enterprises can achieve up to sixfold returns on their project investments.



Reduce Costs

Partial financial support minimizes risks associated with R&D.



Project Management Support

ITAP assists with project management and monitoring to ensure success.



No IP Concerns

Projects are free from intellectual property entanglements.

Criteria for Applicants

Demonstrated commitment to advancing technological capabilities

Thai shareholding of at least 51%

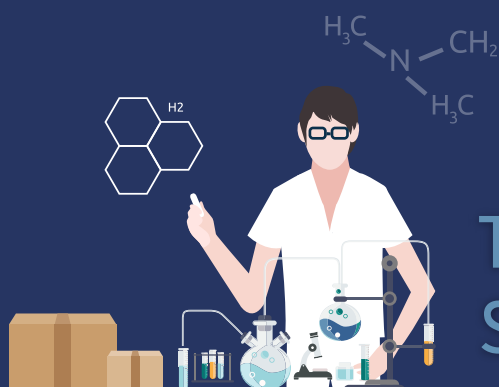
Classified as a Thai SME under the definition provided by the Office of SMEs Promotion (OSMEP)



Sustainable Manufacturing Center (SMC)

Paving the Way for Thai Industries in Industry 4.0





Testing and Analytical Services

- NSTDA Characterization and Testing Service Center
- Electrical and Electronic Products Testing Center
- Industrial Ceramic and Houseware Product Testing Center
- Toxicology and Bio Evaluation Service Center
- NSTDA Fabrication and Engineering Service Division

Testing and Analytical Services

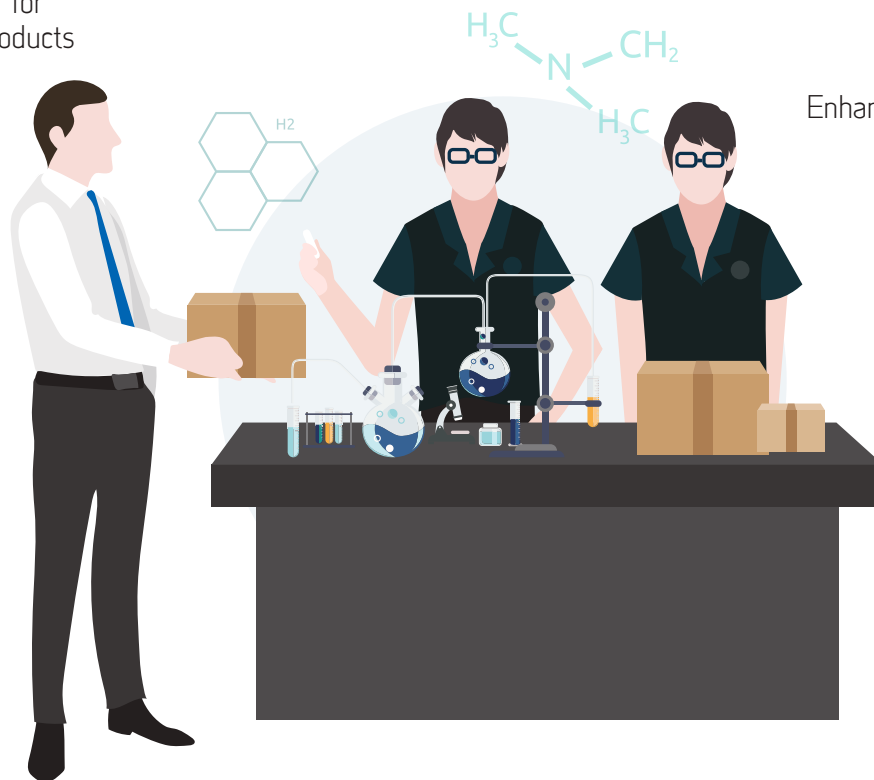
Advancing Products for the Global Market

Support R&D for
High-Quality Products

Reduce Costs of
Overseas Product
Testing

Improve Product
Quality and Safety

Enhance the Competitiveness
of Thai Industries

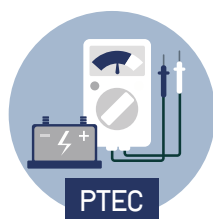


Our fully-equipped facilities are ready to support research and product development for both public and private organizations, addressing industrial challenges.



NCTC

NSTDA
Characterization
and Testing
Service Center



PTEC

Electrical and
Electronic Products
Testing Center



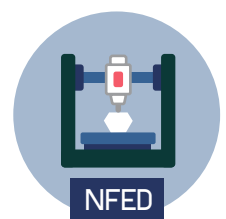
CTEC

Industrial Ceramic
and Houseware
Product Testing
Center



TBES

Toxicology and Bio
Evaluation Service
Center



NFED

NSTDA Fabrication
and Engineering
Service Division



NCTC
02 117 6850
Call Center 02 117 6850



PTEC
02 117 8600
ext. 8611-8614



CTEC
02 564 6500
ext. 4215



TBES
02 564 7000 ext.
71701-71704



NFED
02 546 7000
ext. 1800-1

NSTDA Characterization and Testing Service Center (NCTC)

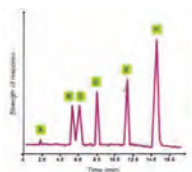
NCTC provides services in compliance with international standards, supporting research and development for both public and private organizations. It addresses challenges in the industrial sector and serves as a central hub linking with 20 scientific equipment centers across Thailand.

Services

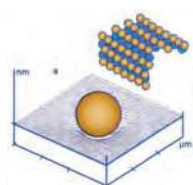
• Analytical and Testing Services



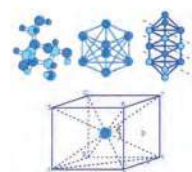
Element characterization



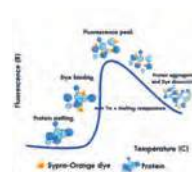
Chemical composition analysis



Microstructural surface characterization



Crystal characterization



Material physical properties testing



Enzyme activity assessment



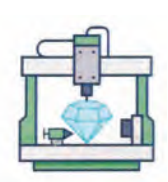
Microscopy instrument services



Sample preparation tools for chromatography



Sample preparation tools for X-ray analysis



3-D printing for complex objects

• Instrumentation and Maintenance Services

1. Equipment maintenance
2. Instrument repair
3. Custom design and development of instruments

• Support for 12 Key Industries in Thailand

1. Paper, textiles, and apparel
2. Ceramics and construction materials
3. Automotive
4. Electronics
5. Paints, coatings, and chemicals
6. Plastics and metals
7. Energy and environment
8. Cosmetics, health and medical products
9. Food and animal feed
10. Agriculture
11. Polymers, petrochemicals, and fuels
12. Biotechnology



Electrical and Electronic Products Testing Center (PTEC)

The Electromagnetic Compatibility (EMC) Testing Lab offers expert testing services for electrical and electronic products, supporting their import and export for both businesses and government agencies. All testing and calibration laboratories at PTEC are ISO/IEC 17025 certified. The center is also an ISO/IEC 17020 accredited inspection body and has established ISO/IEC 17065 product certification system in anticipation of the ASEAN Economic Community (AEC).

Services



Industrial Ceramic and Houseware Product Testing Center (CTEC)

CTEC was established through a collaboration between the National Metal and Materials Technology Center (MTEC) and Lucideon Limited from the United Kingdom. It provides comprehensive analysis and testing services for tableware, ceramic tiles for floors and walls, in compliance with both international standards and Thai Industrial Standards (TIS). The testing protocols at CTEC align with the standards of Lucideon's laboratory in the UK, offering faster and more cost-effective solutions compared to overseas testing. CTEC also offers analysis and testing services for sanitary ware, cellular lightweight concrete (CLC), faucets for sanitary ware, and shower units.

Services



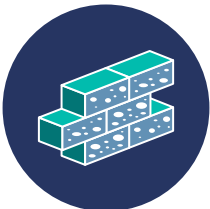
Tableware Testing Services



Tile Testing Services



Sanitaryware Testing Services



Building Materials Testing Services



Heavy Metals



Physical Tests



Consultancy

Toxicology and Bio-Evaluation Service Center (TBES)

TBES offers safety and biological efficacy testing for health products, cosmetics, herbal products, and biocompatibility testing for medical materials, utilizing internationally standardized non-animal methods.

Services



Safety Tests



Skin irritation
OECD 439



Skin corrosion
OECD 431



Eye irritation
OECD 492, OECD 492B



Cytotoxicity
In house method



Phototoxicity
OECD 432



Skin sensitization
OECD 442D, OECD 442E



Induction of intracellular ROS
DCF assay



Biocompatibility
ISO 10993-5, ISO 10993-12,
ISO 10993-23

Bioassay



Anti-oxidant activity
ABTS, DPPH, FRAP, ORAC, etc.



Others
Please contact TBES



Anti-melanogenesis
Melanin content assay
Anti-tyrosinase assay



NSTDA Fabrication and Engineering Service Division (NFED)

NFED provides comprehensive services in design, product development, and prototype fabrication, offering integrated engineering support for pilot production and low-volume manufacturing.

Services



CNC Machining



Additive Manufacturing



Electronic IoT, Programming

- CAD/CAM , CAE
- Precision part Engineering
- Sheet Metal Fabrication
- Laser Cutting

- 3D Modeling
- 3D Scan
- 3D Printing (MJF Full color / Metal / FDM / SLA)

- Circuit Design
- System Control (PLC, Microcontroller)
- Development IoT Hardware Device
- IoT Platform





Financial Services and Tax and Promotional Measures

- Investment Privileges Provided by the Board of Investment
- Certification of Research, Development and Innovation Projects for 200% Tax Exemption
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- IFs MATCH Application

Investment Privileges Provided by the Board of Investment

1. Donation to BOI-approved funds to expand BOI benefits under the Competitiveness Enhancement Measures

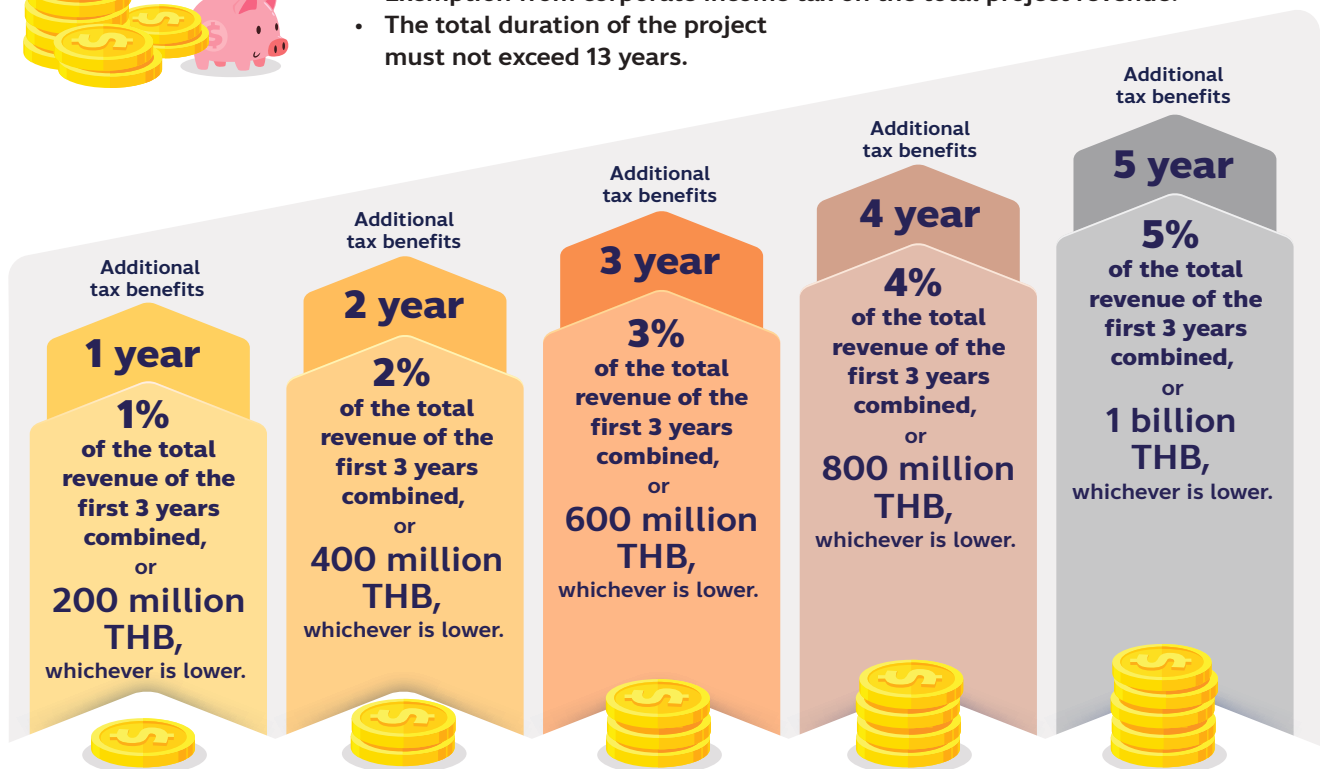
BOI-promoted businesses seeking to expand their benefits can contribute to the NSTDA Science and Technology Development Fund.

Additional benefits are provided under

Competitiveness Enhancement Measures

for investments aimed at developing technology and innovation skills:

- **An additional 200% of the donations to the NSTDA Science and Technology Development Fund.**
- Exemption from corporate income tax on the total project revenue.
- The total duration of the project must not exceed 13 years.



2. Certification of businesses utilizing advanced technology

Scope of Certification



Biotechnology



Advanced Materials



Nano Materials



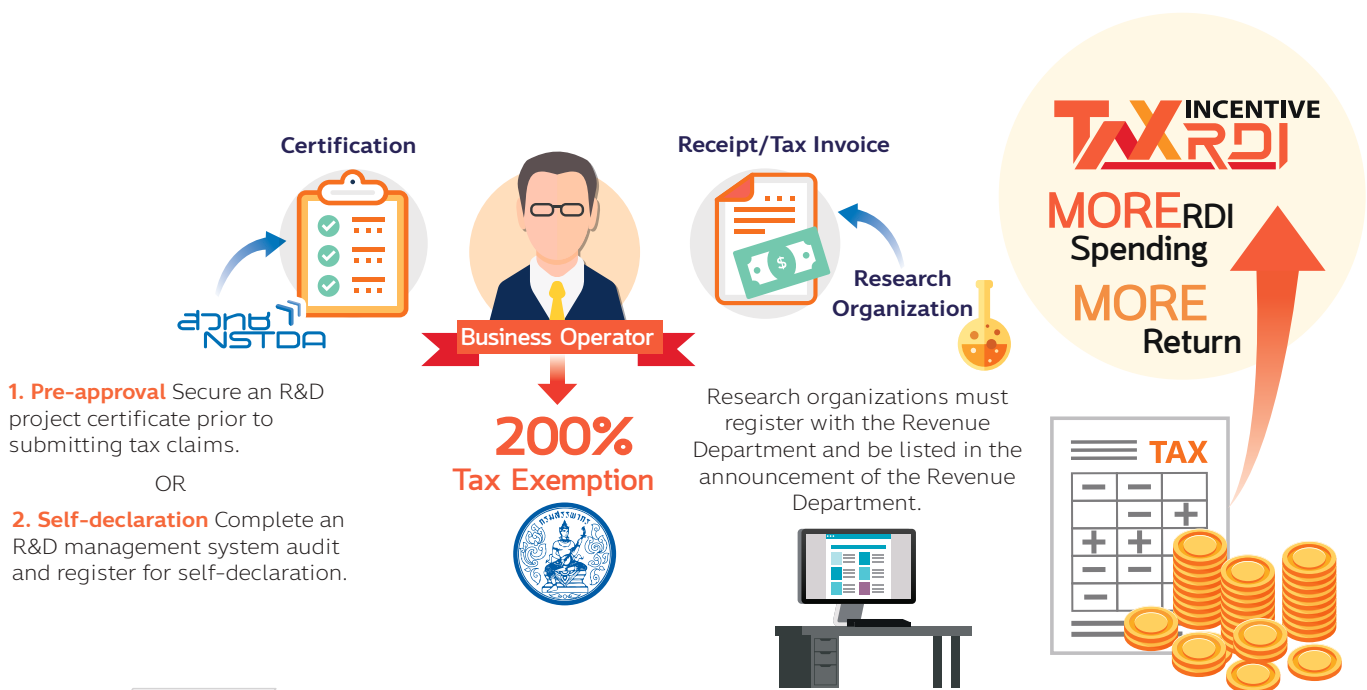
Electronic Design

A certification letter issued by NSTDA serves as a supporting document for an investment promotion application to the Board of Investment.

Certification of Research, Development and Innovation Projects

For 200% Tax Exemption

A company or partnership can deduct up to twice the actual expenses incurred for research and development, and innovation. This also applies to expenses paid for research, development and innovation (RDI) services provided by research organizations listed in the announcement of the Revenue Department (<https://www.rd.go.th/56999.html>).



Conditions and Procedures for Claiming Tax Exemption



	Pre-Approval (Certification of Individual Project)	Self-Declaration (Certification of R&D Management System)
Qualifications of Business Operators	<ul style="list-style-type: none"> Company or partnership 	<ul style="list-style-type: none"> Company or partnership previously certified through the pre-approval method
Procedures	<ul style="list-style-type: none"> Submit a request for certification of the "Research and Development Project" to NSTDA through the RDC Online system: https://www.rdconline.nstda.or.th Use the R&D project certification issued by NSTDA as a supporting document for a tax exemption application to the Revenue Department 	<ul style="list-style-type: none"> Submit an audit request for the "Research and Development Management System" and register with NSTDA Use the R&D management system certification (valid for 3 years) issued by NSTDA as a supporting document for applying for a self-declaration tax exemption to the Revenue Department
Value of Research Projects	<ul style="list-style-type: none"> No project value limit 	<ul style="list-style-type: none"> Project value not exceeding 3 million THB



Technology Business Certification

Supporting technology businesses in target industries that leverage technologies in their manufacturing and services.

New Startups



New Startups Located in Narathiwat, Pattani, and Yala (Royal Decree No. 787)

Exemption from corporate income tax for 5 accounting periods.

Venture Capitals



Venture Capitals
(Royal Decrees No. 597 and 636)

Eligible for tax exemptions on dividends and capital gains derived from the disposal of shares for 10 years.

Investors



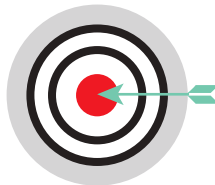
Investors
(Royal Decree No. 750)

Eligible for tax exemptions on capital gains derived from the disposal of shares for 10 years.

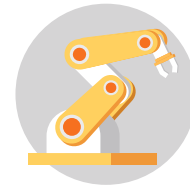
Eligibility Criteria



Registered to operate or invest within the timeframe specified in the Royal Decrees.



Engage in target industries as defined in the Royal Decrees.



Utilize technology in the production process, service provision, or product value addition, as outlined in the NSTDA announcement.

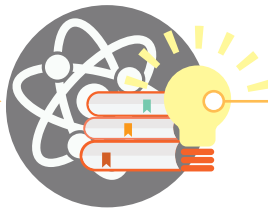
Thai Innovation List

Providing access to the government procurement program, fostering advancement through standards, and enhancing global competitiveness.



Thai Legal Entity with at least 51% Thai ownership

- Hold the rights to the innovation that is ready for production, distribution, and registration.
- Submit an application form with the required supporting documents.



NSTDA verifies qualifications.

- Product or service resulting from significant research and development conducted by Thai nationals.
- Quality and safety test results from reputable organizations.
- Compliance with legal requirements or mandatory standards (if applicable).



The Bureau of the Budget

- Verify the price of product or service that has passed the qualification review.
- Publish product or service on the Thai Innovation List.



Benefits

- Product or service is listed on the Thai Innovation List for up to 8 years.
- Government agencies can procure products or services on the Thai Innovation List through a specific method.



RDI Donations Eligible for Double Tax Deduction

Providing tax benefits to individuals and legal entities when making donations to the NSTDA Science and Technology Development Fund.



IFs MATCH Application

Providing tech entrepreneurs and investors access to a range of services, including finance, investment, tax benefits, and the Thai Innovation List.



QR Code for IFs MATCH
<https://www.nstda.or.th/r/ifs-match>



For additional information, please contact



02 564 7000 ext. 1336



SMEs and Startups Promotion Mechanisms

- Thailand Tech Show
- Technology Business Incubation

Thailand Tech Show

Advancing Research to Commercialization



Explore innovative ideas for your business at
www.thailandtechshow.com

with a participation fee of
30,000 THB



3–5 years
licensing period

30,000 THB
deductible from royalty payment



2% royalty fee
on product sales



Fees and Expenses

Fixed-Price Technology

Fees

- Disclosure Fee: 30,000 THB per technology, payable upon signing the agreement.
- Royalty Fee: 2% of the annual product sales, with the 30,000 THB participation fee deductible from the royalty payment.
- The royalty fee rate remains unchanged upon agreement renewal.

Operational Expenses

The licensee bears all expenses related to the technology transfer process, including but not limited to, researcher compensation, travel costs, materials and chemicals, equipment, and other actual expenses.

Contract Documentation

A licensing agreement is established between the intellectual property-owning organization and the technology transfer recipient organization.

Conditions for Participation in the Program

Eligibility of Licensees

- Must be a legal entity registered in Thailand, with at least 51% Thai shareholders, or an individual.
- Must demonstrate potential, readiness, and understanding of the technology, with personnel capable of receiving technology transfer in the relevant field.

Application Process

- Interested licensees may submit their applications anytime via www.thailandtechshow.com.
- The intellectual property-owning organization will evaluate applications and coordinate directly with the applicants.

Number of Licensees

- A single technology can be licensed to multiple entities.
- If significant interest arises from multiple potential licensees, the intellectual property-owning organization may limit the number of licenses at its discretion.
- For price-negotiable technologies, the number of licensees will be determined through negotiation.

Price-Negotiable Technology

Fees

- No fixed price.
- Interested parties may negotiate the payment structure, including disclosure and royalty fees, directly with the intellectual property-owning organization.

Operational Expenses

Expenses are determined based on the terms agreed upon with the intellectual property-owning organization.

Contract Documentation

A licensing agreement is established between the intellectual property-owning organization and the technology transfer recipient organization.



Licensing Period

- The licensing period ranges from 3 to 5 years, starting from the date of signing the license agreement or as mutually agreed.

Technology Transfer Methods

- The intellectual property-owning organization will transfer technology to the licensee through various methods deemed appropriate, such as training, demonstrations, study visits, documentation, and manuals.

License Termination Conditions

- Termination may occur if the technology is not utilized within 2 years from the agreement's signing date.
- Termination may also occur if no annual progress report is submitted as agreed.

Technology Business Incubation

Providing Mentorship and Training to New Tech Enterprises



Offer business mentorship and training, connecting entrepreneurs with essential resources.

Engage in activities that strengthen businesses, ensuring successful startup and sustainability.

Support the initial stage of business operations (1-2 years), enabling entrepreneurs to learn, test, refine, and confidently establish their businesses.



Pre Incubation



Ideal for aspiring entrepreneurs or those starting a business, focusing on developing a clear business plan.



Incubation



Suitable for entrepreneurs looking to improve organizational management and expand marketing channels.



Post Incubation



Designed for entrepreneurs with established businesses seeking to strengthen organizational capabilities and expand business networks for accelerated growth.

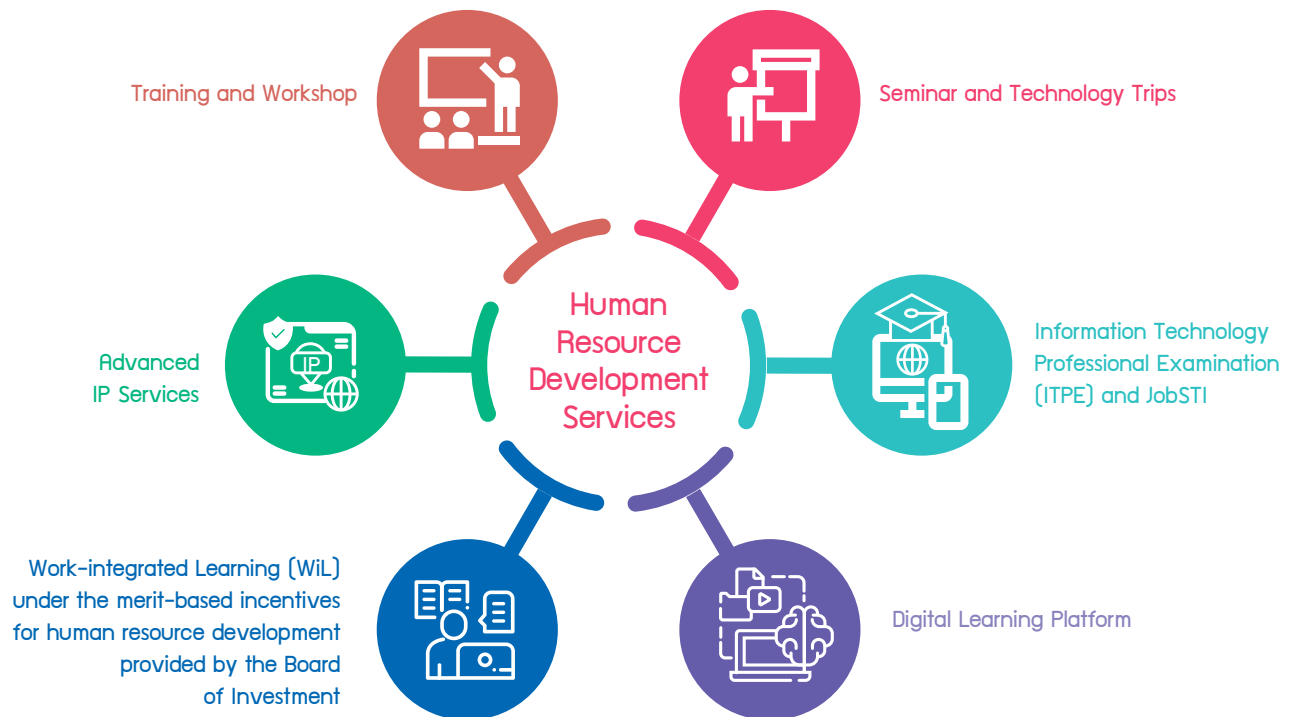




S&T Human Resource Development and Industrial Workforce Development

- Career for the Future Academy
- Sirindhorn Science Home

Career for the Future Academy (CFA)



Supporting Career of All Industries



Agriculture and Biotechnology



Digital Technology



Affluent, Medical and Wellness Tourism



Food for the Future



Medical Hub



Next-Generation Automotive



Robotics



Smart Electronics



Aviation and Logistics



Biofuel and Biochemical Industry



National Defense Industry



Human Development and Education Industry



Sirindhorn Science Home

Sirindhorn Science Home offers well-equipped facilities for hosting youth programs, science camps, academic conferences, and providing comfortable accommodation with exceptional amenities.



Meeting Rooms, Exhibition Spaces, and Activity Areas

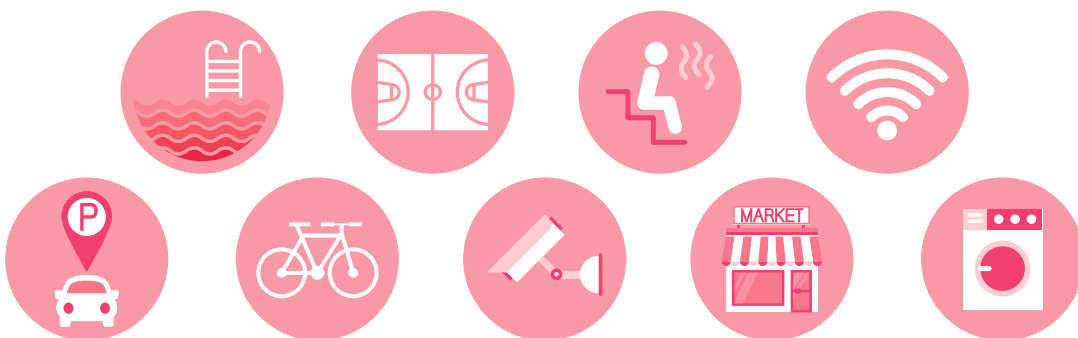
- An auditorium with a seating capacity of 300-500, including a speaker's and VIP lounge
- Lecture rooms with 50 and 90 seats



Accommodation with Air Conditioning and En-suite Bathrooms:

- 5 resort-style villas, offering 16 two-bed rooms
 - 12 two-bed rooms
 - 50 four-bed rooms
- *Expandable to 6 beds

Comprehensive Amenities



Sirindhorn Science Home



02 529 7100
ext. 77219, 77226, 77234-77236



shm-sms@nstda.or.th



www.nstda.or.th/ssh



บ้านวิทยาศาสตร์สิรินธร
(Sirindhorn Science Home)



Scientific Infrastructure and Innovation Hubs

- Thailand Science Park
- Software Park Thailand
- Food Innopolis
- Food and Feed Innovation Center
- Thailand Bioresource Research Center
- National Biobank of Thailand
- NSTDA Supercomputer Center
- Technology and Informatics Institute for Sustainability
- Thai Microelectronics Center

Thailand Science Park

Thailand Science Park is a premier research and development hub, catering to companies of all sizes and industries. Its extensive network of experts, government agencies, and academic institutions, combined with cutting-edge scientific and quality infrastructure, accelerates innovation for enterprises. As a leading incubator, it nurtures startups, facilitating the integration of emerging technologies into an innovation-driven economy.



Located on a 200-rai (80-acre) site adjacent to the Asian Institute of Technology, Thammasat University (Rangsit Campus), and Sirindhorn International Institute of Technology.

Home to the Technology Management Center, Agricultural Technology and Innovation Management Institute, and five national research centers: BIOTEC, MTEC, NECTEC, NANOTEC, and ENTEC.

Host over 90 companies, with 30% comprising international firms such as TUV SUD, ECOLAB, and Polyplastics.



Offer laboratory spaces and land for lease to enterprises and government organizations for establishing research and development centers.



Facilitate easy access to innovation networks and a wide array of solutions.



Provide comprehensive business incubation services for technology ventures.



Enterprises in Thailand Science Park receive maximum investment incentives from the Board of Investment (BOI) and the Revenue Department.

Software Park Thailand

SOFTWARE PARK
THAILAND



- 1 Enhance software development processes through the adoption of Capability Maturity Model Integration (CMMI).



- 2 Deliver specialized training and technology transfer, and comprehensive technology promotion services.



- 3 Establish business networks both domestically and internationally.



- 4 Provide state-of-the-art computer labs and meeting rooms, all equipped with advanced technology and high-speed wireless internet.



Enhance the development of human resources in software engineering.



Increase the capabilities of software enterprises and develop business models.



Promote the effective use of software across industries.



Food Innopolis

Food Innopolis – a network of government agencies, enterprises, and universities – serves as a fully-integrated, one-stop service center for the food industry, driving research, development, and innovation.



Information Services on Testing and Analysis

- Information on agencies providing specialized testing and analytical services
- Facilitate access to research tools, equipment, and services across universities, government agencies, and the private sector for food research



Information Services on Investment Promotion Benefits and Financial Support

- Investment promotion benefits from the Board of Investment
- 200% tax deduction benefits
- Information on and coordination with research funding agencies
- Low-interest loan programs



Global Collaboration

- Facilitate international research and development partnerships in food innovation
- Coordinate technology transfers, training sessions and seminars with global organizations.



Dedicated Spaces for Enterprises to Conduct Food Research

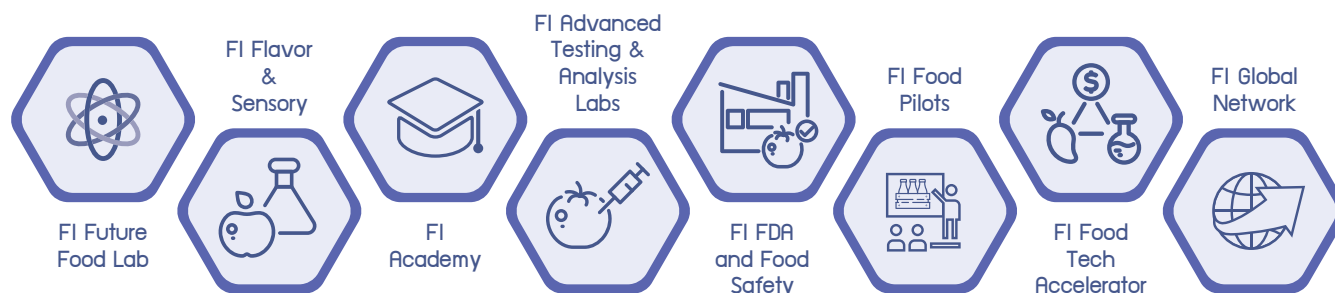


Research Support Services

- Connect enterprises with researchers from universities and government agencies for food research
- Host seminars, training, and knowledge-sharing events on cutting-edge technology and innovation

FI Special Platform

The FI Special Platform is designed to strengthen the research, development, and innovation capabilities of Thailand's food industry, addressing the unique needs of enterprises.



Food Innopolis

094 341 7111, 094 249 7333,
094 340 4333.



bd@foodinnopolis.or.th



www.foodinnopolis.or.th



foodinnopolis

Food and Feed Innovation Center



Research and Development

- Harness the potential of microorganisms and enzymes
- Integrate food quality and safety measures
- Utilize industrial waste and by products



Technology Transfer

- Production technologies
- Starter cultures
- Rapid test kits



Academic Services

- Provide specialized training
- Offer expert consultancy to address and solve industrial challenges



Development of Semi-industrial Manufacturing Processes

- Production scale-up
- Feasibility and viability studies for new products and technologies



Partnership Development and Technology Sourcing



Thailand Bioresource Research Center (TBRC)

TBRC is a fully integrated service hub for biological resources, including microorganisms, plasmids, and monoclonal antibodies, harnessing their potential for diverse industrial applications.



Biological Resources

- High-quality bioresource services supported by a standardized management system
- Deposit and storage space services
- Technical services in microbial preservation and identification
- Training on microbial preservation and identification techniques



Biological Information

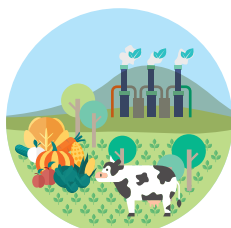
- Biological information services powered by information technology
- Training on software usage for network members



Biolaw

- Legal issues surrounding bioresource management, such as access and benefit sharing
- Consultancy services in biolaw

Industrial Applications of Bioresources



Agriculture



Food



Green Industry



Health and Medicine



National Biobank of Thailand (NBT)



NBT serves as a key infrastructure for conserving the country's biological resources. Through research and development, including gene-level analysis, NBT evaluates the potential of these resources. The biological materials stored in the biobank provide a vital foundation for driving the growth of Thailand's bioeconomy.



Plant Bank

- Plant sample deposit services
- Plant catalog



Microbe Bank

- Microbial deposit and distribution services
- BBH Search services



Data Bank

- Data storage services
- Data storage for NSTDA-funded projects
- Data storage for projects funded by external organizations
- Data retrieval services
- Search services
 - T-Rex:** Thai reference exome variant database
- Data interpretation tools
 - Thalassemia:** Thalassemia prediction tool based on hemoglobin typing
 - NIPT:** Non-invasive prenatal testing interpretation tool
 - TB:** Prediction tool for drug-resistant tuberculosis
 - SPAPA-R:** Genome-wide association study (GWAS) and population structure analysis platform to support plant breeding
 - PharmVIP:** Pharmacogenomic variant analysis and interpretation platform
- Software services
 - fastGLOBETROTTER:** An efficient haplotype-based technique to identify, date, and describe admixture events using genome-wide autosomal data



NSTDA Supercomputer Center (ThaiSC)

NSTDA Supercomputer Center
ThaiSC

ThaiSC offers state-of-the-art high-performance computing (HPC) resources to drive advancements in computational science. By supporting fields such as computer modeling, computational chemistry, bioinformatics, climate change research, artificial intelligence (AI), and big data, ThaiSC empowers the nation's research community to address large-scale national challenges.



Computational Resources Services

ThaiSC provides HPC services to facilitate computational science studies, including computer modeling, computational chemistry simulations, bioinformatics, earth science, atmospheric science, climate change science, computer-aided engineering, machine learning, AI, and data science.

Consulting Services on Computational Resource Optimization

A team of domain experts at ThaiSC offers advice on optimizing computational resources for diverse applications, such as computer modeling, computational chemistry simulations, bioinformatics, earth science, atmospheric science, climate change science, computer-aided engineering, machine learning, AI, and data science.

Knowledge Transfer on HPC System Development

ThaiSC actively fosters knowledge and awareness of HPC systems and their applications through workshops and training programs, benefiting researchers, lecturers, students, and the general public.





Technology and Informatics Institute for Sustainability (TIIS)

TIIS delivers comprehensive sustainability information services, assessment tools, and consultancy for public and private sectors. Its offerings also include data verification, audits, and training to foster sustainable practices.

Services



Information for Sustainability

Databases to support environmental impact assessment and provide policy recommendations to advance national sustainability efforts



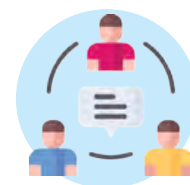
Tools for Sustainability

System and calculation tools to support sustainability assessment and facilitate sustainable production and consumption practices



Consultation for Sustainability

Specialized consultancy to promote sustainable production and services to achieve long-term sustainability goals



Knowledge Transfer for Sustainability

Training and knowledge sharing on sustainability assessment to enhance environmental performance



Thai Microelectronics Center (TMEC)



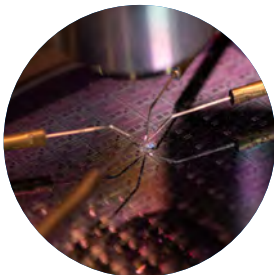
TMEC, a research unit under the National Electronics and Computer Technology Center (NECTEC), specializes in the development and fabrication of silicon sensors and electronic devices.

Services



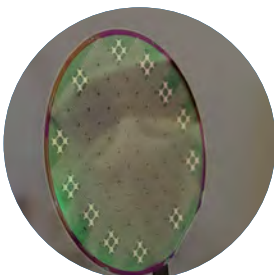
Micro/Nano Fabrication

- 6-inch wafer fabrication
- CMOS and CMOS-compatible process
- Prototyping and small-scale production
- Wafer processing: thin film, patterning, etching, etc.



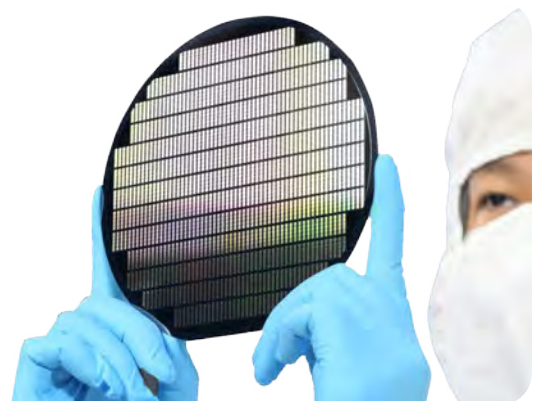
Characterization

- Material characterization
- Electrical characterization



Design Support

- Layout design
- Process integration
- Design support & service for MEMS.



Contact Us

Consulting and Technology Transfer Services

Contract and Joint Research



National Center for Genetic Engineering and Biotechnology (BIOTEC)

☎ 02 564 6700



National Metal and Materials Technology Center (MTEC)

☎ 02 564 6500



National Electronics and Computer Technology Center (NECTEC)

☎ 02 564 6900



National Nanotechnology Center (NANOTEC)

☎ 02 564 7100



National Energy Technology Center (ENTEC)

☎ 02 564 6400

Technology Transfer and Licensing

Technology Licensing Office (TLO)

📍 111 Thailand Science Park, Phahonyothin Road, Khlong Nueng, Khlong Luang, Pathum Thani 12120

☎ 02 564 7000 ext. TLO

✉ tlo@nstda.or.th

🌐 www.nstda.or.th/tlo/

Sustainable Manufacturing Center

Sustainable Manufacturing Center: SMC

☎ 02 564 6900

✉ smc-business@nectec.or.th

🌐 www.nectec.or.th/smc

📘 facebook.com/smceeci

📞 LINE smceeci

Innovation and Technology Assistance Program

Industry Innovation and Technology Assistance Program (ITAP)

📍 111 Thailand Science Park, Phahonyothin Road, Khlong Nueng, Khlong Luang, Pathum Thani 12120

☎ 02 564 7000 ext. ITAP

✉ itap@nstda.or.th

🌐 https://itap.nstda.or.th

Testing and Analytical Services

Testing and Analytical Services

NSTDA Characterization and Testing Service Center (NCTC)

📍 142 Innovation Cluster 2 (INC2) Tower C, 3rd Floor, Thailand Science Park, Phahonyothin Road, Khlong Nueng, Khlong Luang, Pathum Thani 12120

☎ 02 117 6850

✉ nctc.nstda@gmail.com

📘 LabNCTC

Industrial Ceramic and Houseware Product Testing Center (CTEC)

📍 Innovation Cluster 2 (INC2) Tower C, 7th Floor, Thailand Science Park, Phahonyothin Road, Khlong Nueng, Khlong Luang, Pathum Thani 12120

☎ 02 564 6500 ext. 4215, 02 564 7000 ext. 71960

✉ ctec@nstda.or.th

🌐 www.nstda.or.th/ctec

Electrical and Electronic Products Testing Center (PTEC)

📍 111 Thailand Science Park, Phahonyothin Road, Khlong Nueng, Khlong Luang, Pathum Thani 12120

☎ 02 117 8600 ext. 8611-8614

✉ sales@ptec.or.th

🌐 www.ptec.or.th

📘 www.facebook.com/pages/PTEC-Nstda/116568788399748

Toxicology and Bio Evaluation Service Center (TBES)

📍 111 Thailand Science Park, Phahonyothin Road, Khlong Nueng, Khlong Luang, Pathum Thani 12120

☎ 02 564 7000 ext. 71701-71704

✉ sales.tb@nstda.or.th

🌐 www.nstda-tiis.or.th

NSTDA Fabrication and Engineering Service Division: NFED

☎ 02 564 7000 ext. 1800-1

✉ nfed@nstda.or.th

Financial Services and Tax and Promotional Measures

- Investment Privileges Provided by the Board of Investment
- Certification of Research, Development and Innovation Projects for 200% Tax Exemption
- Technology Business Certification
- RDI Donations Eligible for Double Tax Deduction

Private Sector R&D Supporting Section

- 📍 111 Thailand Science Park, Phahonyothin Road, Khlong Nueng, Khlong Luang, Pathum Thani 12120
- ☎ 02 564 7000
 - Investment Privileges Provided by the Board of Investment ext. 1308, 1335
 - Certification of Research, Development and Innovation Projects for 200% Tax Exemption ext. 1308, 1344-1339
 - Technology Business Certification ext. 1308, 1334-1339
 - RDI Donations Eligible for Double Tax Deduction ext. 1308, 1334-1339
- ✉ ipd-psr@nstda.or.th
- 🌐 www.nstda.or.th/psr

Thai Innovation List

Innovation Promotion Section

- 📍 111 Thailand Science Park, Phahonyothin Road, Khlong Nueng, Khlong Luang, Pathum Thani 12120
- ☎ 02 564 7000 ext. 71387-71388, 71393-71395
- ✉ ipd-ins@nstda.or.th
- 🌐 www.nstda.or.th/innovation

IFs MATCH Application

For addition information, please contact

- ☎ 02 564 7000 ext. 1336

QR Code for IFs MATCH
<https://www.nstda.or.th/r/ifs-match>



SMEs and Startups Promotion Mechanisms

Technology Business Incubation

Business Innovation Division (BID)

- 📍 111 Thailand Science Park, Phahonyothin Road, Khlong Nueng, Khlong Luang, Pathum Thani 12120
- ☎ 02 564 7000 ext. 81489-81497
- ✉ bid@nstda.or.th
- 🌐 NstdaBID

Thailand Tech Show

- 📍 111 Thailand Science Park, Phahonyothin Road, Khlong Nueng, Khlong Luang, Pathum Thani 12120
- ☎ 02 564 8000
- ✉ contact@thailandtechshow.com
- 🌐 www.thailandtechshow.com

S&T Human Resource Development and Industrial Workforce Development

Career for the Future Academy (CFA)

- 📍 73/1 National Science and Technology Development Agency Building 6th Floor, Rama VI Rd., Phayathai, Ratchathewi, Bangkok 10400
- ☎ 02 644 8150
- ✉ cfa@nstda.or.th
- 🌐 www.career4future.com
- 🌐 career4future

Sirindhorn Science Home (SSH)





- 📍 132 Thailand Science Park, Phahonyothin Road, Khlong Nueng, Khlong Luang, Pathum Thani 12120
- ☎ 02 529 7100 ext. 77219, 77226, 77234-77236
- ✉ shm-sms@nstda.or.th
- 🌐 www.nstda.or.th/ssh
- 🌐 บ้านวิทยาศาสตร์สิรินธร (Sirindhorn Science Home)

Scientific Infrastructure and Innovation Hubs

■ Thailand Science Park (TSP)

-  111 Thailand Science Park, Phahonyothin Road, Khlong Nueng, Khlong Luang, Pathum Thani 12120
-  02 564 7222, 02 564 7200 ext. 5360, 5362-5363
-  customerrelation@sciencepark.or.th
-  www.sciencepark.or.th
-  THAILANDSCIENCEPARK




■ Software Park Thailand (SWP)

-  99/31 M. 4 Software Park Building, Changwatana Rd., Klong Klue, Pak Kred, Nonthaburi 11120
-  02 583 9992 ext. 1411, 1454
-  fms@swpark.or.th
-  www.swpark.or.th





■ FoodInnopolis

-  144 Innovation Cluster 2, Thailand Science Park, Phahonyothin Road, Khlong Nueng, Khlong Luang, Pathum Thani 12120
-  094 341 7111, 094 249 7333, 094 340 4333
-  bd@foodinnopolis.or.th
-  <http://foodinnopolis.or.th>
-  foodinnopolis





■ Food and Feed Innovation Center

-  Innovation Cluster 2, Tower B, 4th Floor, Thailand Science Park, Phahonyothin Road, Khlong Nueng, Khlong Luang, Pathum Thani 12120
-  02 117 8031
-  ffic@biotec.or.th





■ Thailand Bioresource Research Center

-  143 Innovation Cluster 2, Tower B, 8th Floor, Thailand Science Park, Phahonyothin Road, Khlong Nueng, Khlong Luang, Pathum Thani 12120
-  02 117 8000 (TBRC Office)
02 117 8001, 02 117 8003 (TBRC Services)
-  tbrcinfo@biotec.or.th (TBRC Office)
tbrcservice@biotec.or.th (TBRC Services)
-  <http://www.tbrcnetwork.org>






■ National Biobank of Thailand (NBT)

-  144 Innovation Cluster 2, Tower A, Thailand Science Park, Phahonyothin Road, Khlong Nueng, Khlong Luang, Pathum Thani 12120
-  02 564 7000 ext. 71473-71477
-  nbt.pr@nstda.or.th
-  www.nationalbiobank.in.th





■ Technology and Informatics Institute for Sustainability

-  114 Thailand Science Park, Phahonyothin Road, Khlong Nueng, Khlong Luang, Pathum Thani 12120
-  02 564 6500
-  admin-tiis@nstda.or.th
-  www.nstda-tiis.or.th

■ NSTDA Supercomputer Center

-  144 Innovation Cluster 2, Tower A (Room 301), Thailand Science Park, Phahonyothin Road, Khlong Nueng, Khlong Luang, Pathum Thani 12120
-  02 564 6900 ext. 2602, 2629
-  thaisc@nstda.or.th
-  <https://thaisc.io>
-  thaisupercomputer

■ Thai Microelectronics Center

-  51/4 M.1 Wang Takhian, Muang, Chachoengsao 24000
-  038 857 100 ext. 0
-  info-tmec@nectec.or.th
-  <http://tmec.nectec.or.th>

Map of Thailand Science Park

- | | | | |
|----|--|----|--------------------------------|
| 1 | CENTRAL OFFICE | 13 | Coworking Space |
| 2 | National Electronics and Computer Technology Center | 14 | TSP Convention Center |
| 3 | National Center of Genetic Engineering and Biotechnology | 15 | Green House 2 |
| 4 | National Metal and Materials Technology Center | 16 | BIOTEC Pilot Plant |
| 5 | NECTEC Pilot Plant | 17 | NSTDA co-op Dormitory |
| 6 | NANOTEC Pilot Plant | 18 | Sirindhorn Science Home |
| 7 | MTEC Pilot Plant | 19 | Innovation Cluster 2 |
| 8 | Sub Power Station | 20 | Thai SC |
| 9 | Green House 1 | A1 | Betagro Science Center Co.,Ltd |
| 10 | Garden of Innovation | A2 | SCG Building Materials Co.,Ltd |
| 11 | Innovation Cluster 1 | A3 | NFET - Building 1 (NFED) |
| 12 | Science Delight | A4 | NFET - Building 2 (PTEC, CTEC) |
| | | A5 | PTEC 3 |



- ☎ 02 564 7000 | Call Center 02 564 8000
- ✉ brc@nstda.or.th
- 🌐 www.nstda.or.th
- 📘 NSTDA - หน่วยงาน.
- 📞 @NSTDA
- 🐦 @NSTDATHAILAND
- 📍 National Science and Technology Development Agency
111 Thailand Science Park, Phahonyothin Road,
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