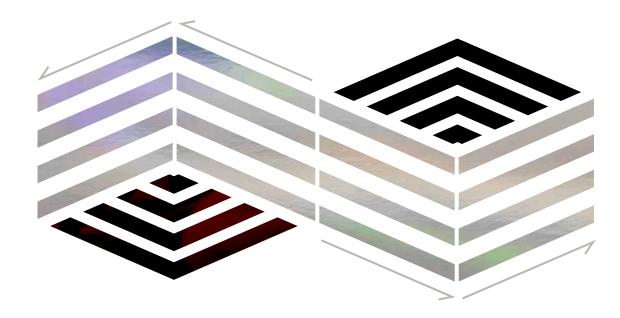
KOREA INSTITUTE OF SCIENCE AND TECHNOLOGY INFORMATION

KISTI, for your Happiness!

www.kisti.re.kr







Number of members in Association of Science and Technology Information (ASTI)

SMEs Innovation

KOREA INSTITUTE OF SCIENCE AND TECHNOLOGY INFORMATION

Resolving complex large-

supercomputing power

World-class

supercomputer

Building and servicing a

science and technology

research network

scale scientific problems using

Div. of Supercomputing is building the national supercomputing ecosystem.

We are enabling advances in high performance computing technologies and in modeling and simulations methods to tackle some of the toughest science and engineering challenges facing Korea today.

We also provide an integrated high performance computing environment to accelerate and make revolutionary advances

Supercomputing Service Center

We have successfully built and operated supercomputing infrastructure and provided supercomputing services for various users from universities, research institutes and industries.

- Building and operating advanced supercomputing infrastructure
- Joint Utilization Program
- Building and operating data-intensive computing infrastructure
- Promoting and advancing utilization of the national supercomputing infrastructure

Advanced KREONET Center

We provide domestic researchers with a constraint-free global cyber collaborative research environment through Korea Research Environment Open NETwork(KREONET), and Global Ring Network for Advanced Application Development(GLORIAD), that connects research initiatives from all over the world.

- Building and operating KREONET and provision of state-of-the-art global collaborative research environment
- Protection of science and technology information
- KREONET-based collaborative platform technology development

Supercomputing R&D Center

We seek to build a supercomputing application environment by fostering talents in computational science and engineering, big data visualization technology, clouding computing, and exascale computing R&D.

- Distributed computing technology development in connection with national supercomputing
- EDucation-research Integration through Simulation On the Net(EDISON)
- Massive application data visualization technology development for scientific
- Leading compututational science & engineering research using supercomputing power

Number of NOS

disseminations

110

Introduced

COMPAS service

Collection of National R&D

Div. of **Advanced Information** Convergence

Div. of Advanced Information Convergence builds and provides high value-adding content that converge science and technology information. It aims to enhance the efficiency of national R&D by obtaining, building and processing the information required for national research and development activities in a bid to build up national science competitiveness.

S&T Information Center

As a national science and technology information center, it plays a leading role in various projects, including operation of an electronic information joint purchasing consortium, participation in open access, and joint utilization of domestic academic information, based on which it provides a comprehensive range of science and technology information required for R&D activities.

- Building and operating NDSL(National Digital Science Library)
- KESLI(Korean Electronic Site License Initiative, Consortium for Joint Purchasing of Overseas Journals)
- Joint utilization project for domestic academic information
- KOSEN(Global Network of Korean Scientists and Engineers)

NTIS Center

The center is building and operating the National Science & Technology Information Service(NTIS) that provides a comprehensive range of national R&D information(projects, tasks, human resource, research facilities & equipment, performance, etc.) and seeks to share, utilize and disseminate research papers and outcomes generated from conducting various national R&D projects.

- NTIS(National Science & Technology Information Service)
- Joint utlization of National Research and Development Reports
- NDSL-NTIS interconnection & convergence service

Future Information Research Center

We are building an technology intelligence system to explore future technologies by creating future-oriented information analysis systems such as prospective technology exploration, technology opportunity and a competitive information analysis system and information portals.

- Future Technology Information Portal(MiriAn)
- Technology Opportunity Development(TOD)
- COMPetitive Analysis Service(COMPAS)
- ReSEAT operation

Div. of **Convergence Technology** Research

Div. of Convergence Technology Research tries to accelerate new scientific discoveries and data-based convergence research by building a nation-wide sharing system of scientific data. We also develop technologies to support disease research for resolving social issues in biomedical areas, and a decision-making support system that integrates and analyzes social and policy data with data of global environmental changes.

Scientific Data Research Center

The scientific data is being magnified as an important national resource, following data-based fourth generation R&D paradigm. The center supports innovation in science and technology by building a sharing system of scientific data and data-intensive research environment.

- Developing data-intensive core technologies and research environment

Biomedical HPC Technology Research Center

The center supports research into geriatric degenerative diseases such as dementia and predicts the spread of a new type of infectious diseases such as MERS by developing HPC and big data-based technologies dedicated to addressing social issues in an aging society and biohazards.

- Securing dementia data network analysis technology

Efficiency in research of

100% or more

Accuracy in modeling and

network expected to hit

in 2015 against global top

Error in prediction of typhoon

36-hour 200_{km in 2015}

course expected to be

simulation of dementia data

satellite image data

(against SeaDAS)

- Developing simulation-based disease prediction technology for early coping with a new type of infectious diseases

Disaster Management HPC Technology Research Center

decision-making support system that collects, produces, analyzes and exchanges environmental data of the planet in real time.

- Building and expanding a national scientific data sharing system

The center engages in research into building and utilizing the

- Decision-making support system for coping with disasters and hazards

Div. of **SMEs Innovation**

Div. of SMEs Innovation is in pursuit of future growth and sustainable development of small and medium-sized enterprises. We actively support them to enhance market competitiveness by offering a sophisticated and customized support programs.

Technology Innovation Analysis Center

The Technology Innovation Analysis Center provides a comprehensive range of support services that include discovery of emerging technologies, R&D planning, technology roadmap, global technology commercialization, and customized knowledge mentoring to small- and medium-sized enterprises with various analysis tools and infrastructures in KISTI to enter new promising markets.

- Discovery of Emerging technologies
- R&D planning and customized knowledge mentoring
- Global technology commercialization
- Supercomputing M&S(Modeling and Simulation)
- Industrial market analysis system and technology evaluation system

SMEs Support Center

The SMEs Support Center operates the Association of Science and Technology Information(ASTI), the largest domestic community for knowledge ecosystem, to encourage the dynamic evolution of knowledge interactions among industry-academic professionals for small and medium-sized enterprises.

- Association of Science and Technology Information(ASTI)
- Ongoing supports for KISTI-Family companies
- Value-Chain based Knowledge community
- ASTI-net and ASTI Band
- Customized information analysis for regional small and medium-sized enterprises

414

Number of small and

under our knowledge

nedium-sized enterprise

Number of members in

Technology Information

12,300

Number of small and

under our R&D support

823

medium-sized enterprises

Association of Science and