The Science & Technology Information Center
National Science Council, Republic of China

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I. General description:

The "Information Explosion" resulting from the proliferation of research and development is a fact of life today. According to statistics, there were nearly three millions of scientific books, periodicals and research reports published in 1968 in the United States. These materials are no doubt products of long time hard working combining with high talent and an immense amount of money, and are also, and should be used as raw materials for further researches. In order to avoid duplication and waste, the economical and effective way for a researcher to do research or for a country to develop its science and technology is to begin with searching for information on what have been done and what are being done before starting the project. From the information, one can possibly free from the risk of unnecessary investments of time, energy and money. Therefore, in advanced countries, information is regarded as important as equipment, talent and natural resources. It can be easily understood from the fact that there are so many information center, special libraries and data bases now available.

In view of the fact, the National Science Council of the Republic of China has set up its information center, namely "The Science and Technology Information Center" to provide

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information needed by local research institutions as well as industries.

The Science & Technology Information Center (STIC), known as Scientific Documentation Center (SDC) before January 1974, was established in 1973 at Nankang, Taipei, by the National Science Council with a view to stimulating the scientific and technological research and development in the Republic of China so as to satisfy the needs of a fast expanding economy. Before the inauguration of STIC, its main functions were handled by the former Scientific Documentation & Instrumentation Center located on the campus of the National Tsing Hua University. Recognizing that two such broad areas of responsibilities are too much for a single agency to handle with efficiency, the Council disbanded the organization and separated it into two independent units in March, 1973. One of the units is the STIC and the other is the Precision Instruments Development Center at the original site of SDIC.

II. Organization and functions:

As prescribed by the Executive Yuan (Cabinet), STIC is to perform the following functions and services:

1. To collect, analyse, and abstract R & D information, periodicals, official gazettes of patents, etc. in the fields of science and technology and make announcement for public use.

2. To provide technical services such as referral, translation, reproduction, etc. in accordance with the needs of local academic research institutes and science and technology institutions.

3. To cooperate with foreign and domestic science and technology institutions for the exchange of information and other related matters, etc.

4. To collect and edit data on Chinese scientists and technical experts as well as technical reports.
5. Other matters related to the R & D of science and technology information.

Based on functions prescribed by the Executive Yuan, STIC has now developed to have three divisions:

1. The First Division is a resource department which is in charge of information acquisition, collection and exchange, etc.

2. The Second Division is a processing department which is in charge of information processing, analysing and abstracting, etc.

3. The Third Division is a service and cooperation department which is in charge of information retrieval, S. D. I., personnel training and cooperative projects, etc.

The following organization chart also shows the major functions of the STIC.

STIC develops its projects with emphasis upon cost beneficial. At the end of each fiscal year, a committee convened by the Director is held to evaluate projects statistically as well as
essentially. Projects that are considered to be feasible will be continuous and strengthened in the next fiscal year and would be ceased if not.

III. Present activities:

The present activities of STIC cover the following areas:

1. Centralized acquisition of books and periodicals for local public colleges and universities.

2. To strengthen the Cooperative Organization for Scientific Libraries and Information Units in the Republic of China.

3. Computerization in processing the union catalog of science & technology periodicals in collaboration with the Electronic Data Processing Center; Directorate General of Budgeting and Accounting and Statistics of Executive Yuan.

4. To collect and edit data on Chinese scientists and technology experts in collaboration with the Ministry of Education and National Youth Commission.

5. To transfer advanced technology and publish “Science & Technology Briefs”.


7. To collect science and technology periodicals, documents, and other publications both international and domestic in scope according to the needs of industrial development as well as academic research.

8. Industrial technology assessment study.

9. To offer technical services including information referral, retrieval, photocopy, and SDI, etc.

The future programs of STIC include:

(1) the establishment of a data base,

(2) development of a science and technology information
sharing system, and

(3) development of international channels for science and technology information.

IV. Information networks:

Despite its brief history, STIC has already established a fairly extensive information network both at home and abroad. The educational and research institutes that have established close ties with STIC include the following:

**Inter-Loan Units**

National Tsing Hua University  
National Taiwan University  
National Chiao Tung University  
National Cheng Kung University  
Tung Hai University  
Catholic Fu Jen University  
College of Chinese Culture  
Tam Kang College of Arts & Sciences  
The National Central Library  
National Bureau of Standards, Ministry of Economic Affairs  
Chinese Petroleum Institute  
Kaohsiung Refinery, CPC  
Research and Training Center, CPC  
Chung-Shan Institute of Science & Technology  
Chung Cheng Institute of Technology  
Ordnance Technology Development Center  
Aero-Industry Development Center  
Industrial Technology Research Institute  
Metal Industries Research Laboratories, Industrial Technology Research Institute  
Food Industry Research and Development Institute  
Precision Instruments Development Center  
The Sixth Department, Investigation Bureau, Ministry of Justice  
National Taiwan Normal University
National Chung Hsing University
Taiwan Telecommunication Administration, Ministry of Communications

Information Suppliers

Thermophysical Properties Research Center, Indiana, U.S.A.
(Dr. Touloukian)
Simmons College, U.S.A. (Mrs. Chen)
University of California at Los Angeles, U.S.A.
Stanford University
KIST Technical Information Department, Korea
The National Technical Information Service, U.S.A.

Foreign Cooperative Units

Korea Scientific & Technological Information Center, Korea
Library & Information Center, AIT, Thailand
Commonwealth Scientific & Industrial Research Organization, Australia
The British University
Kobe University, Japan
Nanyang University, Singapore
La Trobe University, Australia
National Diet Library, Japan
The Honnold Library for the Claremont Colleges, U.S.A.
The Library of Congress, U.S.A.
MIT Science Club
University of Virginia Library, U.S.A.
Seoul National University Library, Korea
Institute for Scientific Information, U.S.A.
East Asian Library, Rutgers University, U.S.A.
Science & Engineering Library, State University of New York at Buffalo
National Library of Australia
Biblioteca National, Mexico
University of Hong Kong Library
Michigan State University
University of Chicago
Japanese Information Center of Science & Technology, Japan

In addition, STIC has formed a separate information network for industries. The component units of this network are grouped under the following categories:

**Electrical & Electronic Industries**

National Chiao Tung University
Taiwan Electric Appliance Manufacturer’s Association

**Mechanical & Metal Industries**

Metal Industries Development Center
Metal Industries Research Laboratories, Industrial Technology Research Institute

**Food Industries**

Food industry Research & Development Institute
Chinese Institute of Food Science & Technology

**Industrial Management**

The Chinese Institute of Management Science
Metal Industries Research Laboratories, Industrial Technology Research Institute
China Productivity Center
China External Trade Development Council
Center for Public & Business Administration and Education, National Chengchi University

**Chemical Industries**

Industrial Development Bureau, Ministry of Economic Affairs Union Industrial Research Laboratories, Industrial Technology Research Institute
Li Shing Petrochemical Corporation

**Textile Industries**

China Textile Testing and Research Center
Graduate School of Textile Engineering, Feng Chia College of Engineering & Business
V. Services:

STIC provides almost all kinds of information services including dissemination, referral, searching, SDI and duplication, etc., to meet the needs of our academic institutions as well as industries. Among services, the dissemination of current information in the fields of science and technology is one of the most important works of STIC. Every week, the Center publishes and sends without charge hundreds of its publications to researchers, institutes and industries concerned. From the fact that a great request for copies of articles listed on these publications, it is easily understood that they serve as good reference to readers. Following are some of the publications greatly in demand:

1. For academic research

(1) *Current Contents of Selected Scientific Periodicals*

It is published every week with eight categories covering the fields of engineering and natural sciences. Under each content, there list names of the libraries which hold the journal. From the information, readers can easily get copies of his interesting articles from the library nearby.

(2) *On-Going Research Projects*

It is published bi-monthly in two forms: Abstracts and List of Titles. Research projects listed on the serials cover major works in the fields of natural and applied sciences being done by public and private institutions within the country.

(3) *Bibliography of Scientific Research Reports Sponsored by National Science Council, Republic of China (1960–1973)*

It contains 7302 report titles and is processed systematically in the hope that it can avoid unwarranted repetition of research projects within this country.

2. Tools for information services

In order to meet the needs of information services, STIC designs research tools to serve the library profession to support
the works of all libraries in supplying information and to provide a reference source for business and professional office use in this country.

(1) *Union List of Scientific Periodicals in Libraries of the Republic of China*

(2) *National Union Catalog of Scientific and Technical Books in Libraries of the Republic of China*

(3) *List of New Books*

(4) *New Book Titles of Centralized Acquisition*

(5) *Survey of Scientific and Engineers in the Republic of China*

3. **For industrial technology development**

(1) *Science and Technology Briefs*

It is published monthly with six categories. Articles listed on the serials are selected in collaboration with industrial research and development institutes concerned from trade journals based upon the needs of local industries.

(2) *Technical Information*

It is published monthly with three categories. The contents of publication include standards, specifications, manufacturing processes, know-how and all features of new products and materials. Articles listed on the serials are mostly selected from the patent sheets issued by the Patent Office of the United States based upon the needs of local industries. STIC receives the sheets every two or three weeks through the exchange program with the U.S. Patent Office.

**LIST OF PUBLICATIONS**


Vol. 1–3, with Title Index, by SDIC, 1970. (Out of print)

II. *National Union Catalog of Scientific & Technical Books in*
Libraries of the Republic of China (up to 1969).
III. Science & Technology Abstracts. (Ceased Publication)
科学技術論文摘要
1. A monthly publication from June, 1971 to December, 1972. Including: Physics, Chemistry, Nuclear Engineering, Chemical Engineering, Food Science, Electrical Engineering, and Mechanical Engineering. Published by SDIC.
   Vol. 1, No. 1-12, with Vol. 1 Index.
   Vol. 2, No. 1-6, with Vol. 2 Index.
   Electrical and Electronics Industry:
      Vol. 1, No. 1-4. (bi-monthly)
   Mechanical and Metal Industry:
      Vol. 1, No. 1-4. (bi-monthly)
   Chemical Industry:
      Vol. 1, No. 1-4. (bi-monthly)
   Food Industry:
      Vol. 1, No. 1-5. (bi-monthly)
IV. Survey of Scientists & Engineers in the Republic of China.
科技人才資料
科學期刊聯合目錄
1st edition (up to 1968) 1970
2nd edition (up to 1972) 1974
3rd edition (up to 1973) 1975 (Computerized)
Vol. 3. Index to Science and Technical Articles in Chinese

中文報章雜誌科技論文索引（第一輯至第四輯）
中文期刊科技論文索引（第一輯）

VII. On-Going Research Projects.
進行中之研究專題報導
1. Mathematical & Natural Sciences
2. Engineering & Applied Sciences
3. Biological, Agricultural & Medical Sciences (M) July, 1975


科技簡訊
1. Electrical & Electronics Industry
2. Mechanical & Metal Industry
3. Food Industry
4. Chemical Industry
5. Management Science
6. Information Science (Ceased publication, Feb., 1975)
7. Textile Industry (July, 1975)

行政院國家科學委員會研究報告目錄

新到期刊目次選輯
1. Civil Engineering
2. Electrical & Electronic Engineering
3. Chemical Engineering & Plastics Industry
4. Mechanical & Metal Industry
5. Physics
6. Chemistry
7. Materials Science
8. Food Industry

XI. Technical Information.

技術資料

1. S. D. I.
   (1) LSI
   (2) Plastics molded
   (3) Agricultural Machinery
   (4) Oil and Vegetable Oil Industry
   (5) TV Receivers
   (6) Solar Battery
   (7) Plastic Reinforced
   (8) Solar Heater and Solar Air Conditioning System
   (9) Industrial Quality Control

2. Patents:
   (1) Electrical and Electronic Engineering
   (2) Mechanical & Metal Engineering
   (3) Chemical Industry
   (4) Textile Industry
   (5) General Appliances

3. Science and Technology Information Center-Newsletter.
   (M) May, 1975

XII. List of New Books. (B-M) July, 1975

國外新書報導

1. Natural Sciences & Mathematics
2. Engineering & Applied Sciences
3. Agricultural Sciences
4. Education, Business, Social & Management Sciences
5. Medical Sciences
6. Humanities & Belles-Lettres


統一採購新書通報