With the explosion of knowledge in the 21st century, we are deluged by a constant flood of new information on science and technology emerging from every corner of the globe. The key to success, in this vast sea of information, is to effectively retrieve and use relevant information for the support of R&D, intellectual property management, and the many processes of manufacturing.

No single person can expect to find and extract the most useful information on science and technology from the staggering amounts of information published. This is where a secondary information database comes into play. Yet to truly function as intended, a secondary database must effectively collect information, process and compile it in an easily accessible form, and offer comprehensive functionality to help users reach and analyze the information of the most use to them. Without these capabilities, a database will offer no true value.

To accomplish its mission of “promoting the progress of science and technology in Japan and the rest of the world as a portal of chemical information,” JAICI has been working as an information support center dedicated to the growth of science and technology in Japan, especially in the field of chemistry. Our services include access to STN for integrated searches of various databases, access to SciFinder (CAS) for use by researchers, maximum customer support through workshops and help desk services, and access to scientifically valuable information, such as crystal structures. We also offer retrieval and search services backed up by years of accumulated knowledge and experience.

Over the decades since its founding, JAICI has expanded its field of activities in a close partnership with the US Chemical Abstracts Service (CAS). The growing body of domestic information resources we provide as an information portal from Japan to the rest of the world now encompasses more than half of the patent and journal literature published in Japan.

We are fully committed to promoting the development of science and technology for future generations by providing vital information and truly useful services to customers from various disciplines and industries.
As the STN-Tokyo Service Center, we provide access to STN, an online tool for retrieving science and technology information from all over the world, to customers in Japan. STN, the online database service jointly operated by CAS (US) and FIZ Karlsruhe (Germany), provides information on science and technology. STN links to a wide range of databases covering various fields of science and technology including journal/patent databases, substance databases, full-text patent databases, numerical databases, and more.

STN Express / STN on the Web
STN Express is a software package with graphic capabilities and a range of functions for efficient use of STN, including structure searching. STN on the Web gives web-browser access to STN.

STN AnaVist
STN AnaVist is a powerful interactive analysis and visualization application capable of visualizing patterns and trends in research and analyzing search results from scientific literature and patents in various ways.

STN Viewer
STN Viewer is a tool to support your patent evaluation from various viewpoints. You can seamlessly access the full text of patent documents by importing the answer sets (patent) obtained through STN Express or STN on the Web into STN Viewer.

STN Easy
STN Easy gives users web access to major databases on STN not via command language, but via menu selection in Japanese. This service to search a wide range of information on journal and patent literature in science and technology, pharmaceuticals, chemicals, and so on.

We provide access to SciFinder, an information search tool indispensable for researchers who need to produce fruitful results in order to discover new phenomena and innovate new technologies. SciFinder is an online search service that allows researchers to retrieve information from disciplines such as chemistry, pharmaceuticals, biochemistry, physics, and engineering. SciFinder links users to comprehensive science information from the CAS databases, the world's largest collection of research information in science and technology. SciFinder's powerful yet flexible search interface delivers speedy and accurate results.

SciFinder

As the STN-Tokyo Service Center, we provide access to STN, an online tool for retrieving science and technology information from all over the world, to customers in Japan.

STN search results
STN Express analysis results
STN AnaVist analysis results
STN Viewer patent evaluation results

Chemical Abstracts Service
Chemical Abstracts Service (CAS), a division of the American Chemical Society (ACS), is the world's authority on chemical information. CAS databases are created and quality-controlled by experts from various disciplines and used by chemical and pharmaceutical companies, universities, governmental organizations, and patent offices around the world.

FIZ Karlsruhe
FIZ Karlsruhe, the STN Service Center in Europe, is a scientific information institution supported by the Federal Republic of Germany and Federal States. Since its establishment in 1977 as an information service provider to universities and businesses, FIZ Karlsruhe has been building and offering high-quality databases in a wide range of disciplines for the support of R&D and commercial operations internationally.

FIZ Karlsruhe

Transforming chemical information from around the world into chemical knowledge for Japan
We provide companies and universities in Japan with information on science and technology from around the world.
Obtaining CA Index Names and assigning CAS Registry Numbers to your chemical substances

Chemist Consultation — Substance Identification
We help customers to get CA Index Names in accordance with CAS nomenclature and CAS Registry Numbers required for exporting chemical substances to overseas.

Inventory Expert Service
Inventory Expert Service (IES) provides CA Index Name and CAS Registry Number applicable for Premanufacture Notification (PMN) submission to the inventory registration under the Toxic Substances Control Act (TSCA) issued by the US Environmental Protection Agency (EPA).

Registry Lookup Service
When customers request it, we have CAS staff retrieve the REGISTRY file for substances using chemical names or CAS Registry Numbers.

We help you disseminate information on your products in catalogs.

CHEMCATS (Chemical Catalogs Online) registration service
CAS independently operates CHEMCATS, a catalog database containing commercially available chemicals from all over the world. We help you register your product information in CHEMCATS for free and make the catalog information accessible via STN, STN Easy, SciFinder.

Scientific and Technical Information Network (STN)
STN is an online database service that provides global access to published research, journal literature, patents, structures, sequences, properties, and other data.

Japan Association for International Chemical Information (JAICI)
JAICI has been providing Japanese science and technology information to the CAS databases since 1982.

To expand our services and enable the more convenient and streamlined use of information, we apply our Machine Translation technology specialized in chemistry to the CAS services (English-to-Japanese and Japanese-to-English).

- **English-to-Japanese Machine Translation of titles in CAplus**
  - We translate all of the titles in CAplus in cooperation with CAS (about 8,000 titles per day).

- **Japanese-to-English Machine Translation of Kokai patent documents and Utility Models**
  - We also feed machine-translated English titles and abstracts of Japanese Kokai patent documents and Utility Models into CAplus as quick reports.

- **Japanese language support capability for CA Lexicon**
  - We have also prepared a Japanese version of the CA Lexicon data to help you search technical terms in Japanese.

Every single document is reviewed by experts to prepare complete information for the Registry file. The number of registered substances has been increasing exponentially since the 21st century.
Meeting diversified information needs

Our databases and software support researchers in science.

Fact Database & Software

Our service gives you full access to databases on crystal structure, mass spectrum, and countless other forms of chemical information.

- **Cambridge Structural Database (CSD)**
  The CSD is a global repository of validated crystal structure data for organic and metal-organic compounds. A comprehensive set of tools and derived databases facilitate diverse advanced research applications by allowing users to investigate molecular structures, intermolecular interactions, and crystal packing.

- **Inorganic Crystal Structure Database (ICSD)**
  The ICSD contains information and X-ray diffraction data on the crystal structures of elements and inorganic compounds such as minerals, ceramics, and intermetallics.

- **Metals and Alloys Crystallographic Database (CRYSTMET)**
  The CRYSTMET contains information on the crystal structures of metals such as alloys, intermetallics, and metals containing minerals.

Our software helps researchers perform crystallographic analyses and analyses in the life sciences to support research goals such as the molecular design of pharmaceuticals.

- **Protein-Ligand Docking Software (GOLD Suite)**
  A program for protein-ligand docking using a genetic algorithm.

- **Protein-Ligand Complex Search Software (Relibase+)**
  A program to search, display, and analyze crystal structures retrieved from an integrated database of PDB (Protein Data Bank) and in-house data.

- **An application for structure solution from powder diffraction data (DASH)**
  A standard software package for solving crystal structures based on powder diffraction data.

Other Databases

- **NIST Mass Spectral Database (NIST11)**
  The most reliable database of information on electron ionization mass spectra (available on CD-ROM).

- **Science of Synthesis (a reference work for methods in organic synthesis)**
  A web-based database of information on standard methods of organic synthesis.

- **Chemical Dictionaries**
  Our chemical dictionaries contain information on chemicals published in the literature (a web-based service partly available on DVD).

  - The Combined Chemical Dictionary
  - Dictionary of Natural Products
  - Dictionary of Organic Compounds
  - Dictionary of Inorganic/Organometallic Compounds
  - Dictionary of Drugs

User Support

We help our users through a variety of support services and seminars to encourage the effective use of JAICI databases and software.
IP information center (SHIPS) offers search services to support your intellectual property (IP) strategies.

In 2011 we launched a search service to support the IP strategies of customers. In our capacity as a registered search organization of the Japan Patent Office, we can perform prompt and precise research based on our accumulated knowledge in STN search and our experience and skills in CA indexing.

- **Main fields of search**
  - Pharmaceuticals
  - Organic Chemistry
  - Polymers
  - Inorganic Chemistry
  - Life Science
  - Nanotechnology
  - Biotechnology

- **Patent search service**
  Patent search is required in every phase of product development. The SHIPS search services meet your needs with a high level of scientific knowledge and experience.

- **Substance-related search service**
  Retrieve and provide information on chemicals, nucleic acids, proteins, and other substances.

- **Proxy search service**
  Retrieve information using search strategies and keywords of the customer’s choosing.

- **SDI service (Selective Dissemination of Information)**
  Periodically deliver updated information on topics a customer chooses.

Recognized as a registered search organization of the Japan Patent Office, JAICI is helping to construct an “IP-oriented nation” through its prior-art search service.

Impelled by the need to speed up the patent examination process, the Japan Patent Office is promoting outsourcing of prior-art search.

As a leading organization authorized to conduct prior-art searches in Category 30* organic compounds, JAICI is conducting prior-art search using STN for chemical structures.

In light of the profound knowledge and experience required in chemistry and organic synthesis, researchers are mostly veterans skilled in organic chemistry.

*Category 30 is one of the 39 categories applied to technology. It encompasses patents for organic compounds used for pharmaceutically, agricultural chemicals, electronic materials, and so on.
History

1968 The American Chemical Society (ACS) asks the Chemical Society of Japan (CSJ) to cooperate in the establishment of an organization for CAS data entry.

1969 The Council for Science and Technology (under the then Prime Minister’s Office) dispatches a delegation to visit CAS for a science and technology information survey.

1970 The CSJ establishes the Special Committee for Chemical Information.

1971 The CSJ and related associations decide to establish a council for chemical information.

1975 The Japan Council for International Chemical Information is established.

1976 Approved as an incorporated association jointly operated by the Ministry of Education, Science and Culture and the Prime Minister’s Office (Science and Technology Agency); renamed the Japan Association for International Chemical Information (JAICI).

1977 Signs a comprehensive cooperation agreement with CAS.

1980 Appointed as the exclusive agent for CAS in Japan; starts the CAS Online service.

1981 Starts inputting data into the CAS database.

1982 CAS for a science and technology information survey.

1983 CASIACS and FIZ Karlsruhe sign STN operation agreement.

1984 The CSJ asks the Chemical Society of Japan (CSJ) to cooperate in the establishment of an organization for CAS data entry.

1985 The STN Tokyo Service Center is transferred to the Japan Information Center for Science and Technology (now the Japan Science and Technology Agency (JST)) and signs an agency agreement with JICST.

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1991 Signs a comprehensive cooperation agreement with CAS.

1992 Starts inputting data into the CAS database.

1993 CASIACS and FIZ Karlsruhe sign STN operation agreement.

1994 Appointed as a service center for STN in Tokyo.

1995 Sign a cooperative agreement with CAS.

1996 Begins activities as a registered search organization for the Japan Patent Office.

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2011 Begins activities as a registered search organization for the Japan Patent Office.