

ASSOCIATION
BROCHURE



**Japan Association
for International Chemical Information**

Nakai-Building, 6-25-4 Honkomagome, Bunkyo-ku, Tokyo
113-0021, Japan
TEL.+81-3-5978-3608 FAX.+81-3-5978-3600
www.jaici.or.jp



Pursue Science with Information

Information is a key to opening new doors,
a resource for changing the world, and
a fuel for leading people to well-being.
For over half a century, we have supported
everyone involved in science with information.

Requisite scientific information is always available in the optimal form.
Preparing such an environment will help create
technologies that have never before existed in the world,
and will provide a shortcut to a new future.

We will not restrain the inquisitive spirit. We will accelerate R&D.
That is the reason JAICI exists, and with the hope for
a more prosperous society, that is our mission.
To that end, with the belief that pursuing science with information
will open up the future, we will continue to challenge ourselves
to innovate, and will deliver inspiration and happiness to all.

MISSION –Our Mission–

We Contribute to Advancing Science and Technology and Realizing a Prosperous Society
Through Chemical Information-Centered Solutions

VISION –Our Commitment–

To Continue to be the Ultimate Partner for all Customers Needing Scientific Information
by Providing Valid, Useful Information Solutions with Impressive Quality

VALUES –Our Principles–

Honesty

Responding Meticulously and Honestly to Our Customers

Study

Continuing Through Cumulative Diligent Study to Improve Ourselves
as Chemistry and Information Experts

Cooperation

Acting Autonomously While Valuing Teamwork

Well-being

Valuing the Health and Well-being of Ourselves,
Our Families, and Those around Us

Ethics

Complying with Laws and Social Norms,
and Acting with High Ethical Standards



PREFACE

“Information Big Bang” – in the age of information, we are deluged by ever-growing waves of updated science and technology information pouring in from every corner of the world. The key to navigating R&D and intellectual property management in this sea of information is to get the information on your side – or select and use the most relevant information precisely and efficiently – so that you can dominate the creation of new knowledge and the expansion of corporate value.

Finding the most relevant information from the astronomical amount of science and technology information is no longer something an individual can do alone. This is where the secondary information database comes to play an important role. Yet databases are worthless unless they can quickly deliver the right information to the right searcher. Databases must allow users to reach the exact information of interest, comprehensively analyze retrieved information, and collect, process, and accumulate information in easy-to-use forms.

As a central portal to scientific information with the mission of “contributing to the advancement of science and technology in Japan and the rest of the world,” JAICI has provided high-quality database services for science in Japan, especially in the fields of chemistry. In addition to providing an integrated database search tool, CAS STNext, and CAS SciFinder[®] for researchers, we deliver maximum support for users through workshops and help desk services. We also offer a variety of fact databases such as for crystal structures and mass spectra, as well as software such as for drug discovery and crystal structure analysis. Furthermore, based on our accumulated experience, we provide IP search and analysis services in the fields of medicine, chemistry, and biology, technical terms dictionary with thesaurus, and highly accurate machine translation adapted to chemical substance names.

The disruptive paradigm shift in the field of language processing technology due to the rise of large-scale foundation models is expected to make big advances in scientific information search technology and tools. The bigger such advances, the more questioned about the accuracy of the referenced databases. Bearing in mind that this is the source of the value of the various services provided by JAICI, we will continue to transform ourselves in order to provide solutions that meet the broader and more advanced needs of our customers, pursuing science with information.

A. Ichii
Akira Ichii
President of JAICI

Connect the needs of researchers and developers with science and technology information worldwide.

The Japan Association for International Chemical Information (JAICI) was established in 1971 to meet the needs of the times for the worldwide distribution of chemical technology information. Now JAICI serves as a platform for science and technology to contribute to the advancement of science and technology not only in chemistry, but in a wide range of disciplines. JAICI provides highly reliable and comprehensive information in cooperation with global information providers, including CAS in the U.S., the world's largest database provider in the field of chemistry.



Information search services on databases worldwide

Online Database Services

- CAS SciFinder®: Scientific information search tool for end-users
- CAS STNext: Scientific and technological search tool for information professionals
- CAS Scientific Patent Explorer: Patent search and analysis tool
- CAS Formulus: The world's largest collection of formulations
- CAS Analytical Methods: Search tool for analytical methods
- CAS Chemical Compliance Index: For worldwide regulatory and inventory information on substances
- FIZ PatMon: Patent monitoring services

Providing knowledge from facts

Fact Databases and Software

- CSD-Core and CSD-Materials: Tools for designing crystal structures
- CSD-Discovery and CSD-Enterprise: Tools for discovering new drug molecules
- ICSD and Phase diagram databases: Databases for inorganic materials
- CHEMnetBASE: Basic tools for researches of natural products/polymers
- NIST23 and Wiley Registry 12th: Mass spectral databases



Partners



CAS
CAS, a division of the American Chemical Society (ACS), is the world's authority on chemical information. CAS's services are used by chemical and pharmaceutical companies, universities, governmental organizations, and patent offices worldwide.



FIZ Karlsruhe
Leibniz Institute for Information Infrastructure is one of the large infrastructure institutions supported by the Federal Republic of Germany and Federal States and a member of the Leibniz Association. FIZ Karlsruhe supports scientists' R&D and business operations around the world.



CCDC (The Cambridge Crystallographic Data Centre)
CCDC supports structural chemistry by developing the Cambridge Structural Database (CSD), the world's only comprehensive knowledge base of organic crystal structures.

Information services to meet individual needs

Client Support Services

- CAS Registry Number (CAS RN®) services
- CAS Chemical Supplier Insights: Product catalog registration service
- JAICI AutoTrans/ JAICI ProTranslator: Machine translation services for technical reading/writing documents such as database outputs, patents, and journals
- JAICI Science Dictionary Pro/ JSD Web API: Dictionary services rich in technical terms with thesaurus through Web GUI and API
- Article Galaxy: Document delivery service

Search services for patents and literature in the fields of medicine, chemistry, and biology

IP Search and Analysis Services

- Patent search
 - infringement clearance
 - validity
 - novelty
 - Subject matter
 - SDI (Selective Dissemination of Information)
- matter Non-patent literature search
- Substance search
 - sequences
 - structures
 - polymers
- Registration alert setting on CAS STNext

History

- 1968 ▶ The American Chemical Society (ACS) requests 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 Prime Minister's Office) dispatches a delegation to visit CAS for a science and technology information survey.
 - ▶ CSJ establishes the Special Committee for Chemical Information.
- 1970 ▶ CSJ and related associations decide to establish a council for chemical information.
- 1971 ▶ The Japan Association for International Chemical Information (JAICI) is established with its office located in the Meiki Building (Minato-ku, Tokyo)
- 1972 ▶ The office is relocated to the Pharmaceutical Society of Japan (PSJ), Nagai Memorial Hall (Shibuya-ku, Tokyo)
- 1975 ▶ 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).

- 1976 ▶ The office is relocated to CSJ (Chiyoda-ku, Tokyo).
- 1977 ▶ Signs a comprehensive cooperation agreement with CAS.
 - ▶ Changes the Japanese name.
- 1979 ▶ The office is relocated to the Center for Academic Societies (Bunkyo-ku, Tokyo).
- 1980 ▶ Appointed as the exclusive agent for CAS in Japan; starts the CAS ONLINE service.
- 1982 ▶ Starts data entry into the CAS database.
- 1983 ▶ Signs a marketing agreement on Cambridge Structural Database (CSD) with CCDC.
- 1984 ▶ Appointed as a service center for STN in Tokyo.
- 1987 ▶ The STN Tokyo Service Center is transferred to the Japan Information Center for Science and Technology (JICST) (now the Japan Science and Technology Agency (JST)).
 - ▶ Signs an agency agreement with JICST.
- 1988 ▶ Starts distributing Inorganic Crystal Structure Database (ICSD).

- 1989 ▶ Starts distributing NIST Mass Spectral Library.
- 1993 ▶ Relocates the office to Nakai Building (Bunkyo-ku, Tokyo, the current location).
- 1997 ▶ Starts the SciFinder service in Japan.
- 2002 ▶ Starts to jointly operate the STN Tokyo Service Center with JST.
- 2005 ▶ Starts activities as a registered search organization of the Japan Patent Office.
- 2007 ▶ Starts the exclusive operation of the STN Tokyo Service Center.
- 2011 ▶ Establishes IP Information Center (SHIPS); starts search services for patents and literature.
 - ▶ Transitions to a General Incorporated Association, the Japan Association for International Chemical Information (JAICI), with authorization under a new law.
- 2017 ▶ Starts offering JAICI Science Dictionary. Starts the CAS SciFinder® service.
- 2018 ▶ Starts JAICI AutoTrans service.
- 2019 ▶ Starts distributing Wiley Registry of Mass Spectral Data.

- 2019 ▶ Starts the CAS Formulus service and the FIZ PatMon service.
- 2020 ▶ Starts distributing ACerS-NIST Phase Equilibria Diagrams and ASM Alloy Phase Diagram Database.
 - ▶ Starts JAICI ProTranslator service.
- 2021 ▶ Starts the CAS Scientific Patent Explorer service.
 - ▶ Starts offering the CAS SciFinder Discovery Platform.
 - ▶ Starts the STN IP Protection Suite.
 - ▶ Starts JAICI Science Dictionary Pro and JSD Web API service.



Online Database Services

Information search platform offering quick access to scientific and patent information worldwide

Platforms for R&D and patent search, which include information services such as CAS SciFinder[®] and CAS STNext, offer information on science, technology, and patents.

For any challenges in business and research activities, we provide the solution you need, and contribute to the development of science and technology.

We also support users in Japan through seminars and helpdesk activities.

CAS SciFinder Discovery Platform

For research and development: information retrieval tools offered under enterprise contract.

CAS SciFinder[®]

Scientific and technical information search tools for end-users

CAS SciFinder[®] provides comprehensive information not limited to journal articles and patents, but also chemical substances and reactions collected from worldwide sources. Retrosynthesis Planner, which is one of the most powerful function in CAS SciFinder[®], carries out automatic retrosynthetic analysis based on the CAS-owned information, which will lead us to accelerate the speed of chemical synthesis research.

CAS Formulus

World's largest of formulation collection

CAS Formulus is a search service specialized in formulations for the professionals like formulators.

CAS Analytical Methods

Scientific analytical methods search tools

CAS Analytical Methods is a search service specialized in scientific analytical methods for chemicals and biomolecules.

Other solutions

CAS Chemical Compliance Index

Searching for worldwide regulatory information on chemical substances

CAS Chemical Compliance Index is a tool for searching regulatory information on chemical substances created by CAS, the curator of CAS RN[®].

STN IP Protection Suite

For patent search: the comprehensive solution for patent search for all users from beginners to experts.

CAS STNext

Science and technology information search tool for info-pros

CAS STNext is an online information service, which provides wide range of science and technology information, including patents, journal articles, drugs, chemical substances, CAS Registry Number[®] (CAS RN[®]), and nucleic acid and protein sequences. Information professionals in patent offices and companies around the world utilize CAS STNext.

CAS Scientific Patent Explorer

Research and analysis tool combining patent information with chemical contents

CAS Scientific Patent Explorer is a patent search tool combining comprehensive patent information with valuable chemical substances' contents provided by CAS.

FIZ PatMon

Patent monitoring service

FIZ PatMon monitors specified changes in national or international patent families that you are focusing on, including legal status information, through user-friendly menu-driven interface.

User Support

Help desk services

Our expert staff answers technical questions from users in Japanese so that they can accurately understand and make full use of excellent features available on each service.

Training

We hold workshops to introduce the search techniques of each services. We also offer customized seminars based on customer request, such as introductory sessions for new users, advanced training sessions etc.

Supporting documentations delivered through website, etc.

We provide technical documentations and update information of all services in Japanese through JAICI website and newsletters.





Client Support Services

We support your needs including worldwide distribution of your information

We offer a variety of services associated with the distributing and receiving of information in addition to online information services. We respond to individual requests for information such as identification or assignment of CAS Registry Number® (CAS RN®) for the export or import of chemical substances, details on compliance with regulations in various countries, and the distribution of information on chemical substances and products worldwide.

Services concerning CAS Registry Number®

What is CAS Registry Number®?

CAS Registry Number® (CAS RN®) is a unique identifier that provides an unambiguous means to distinguish chemical substances or molecular structures when there are many possible systematic, generic, proprietary or otherwise trivial names. CAS RNs are widely used as an authoritative global industry standard to ensure the accuracy of chemical information.

Chemist Consultation

From the information of the chemical substance, we provide you with CA Index Name and CAS RN® based on the CAS nomenclature. CAS RN® is assigned to a new substance upon request.

Inventory Expert Service (IES)

We provide CA Index Names for regulatory chemicals to be included on Premanufacture Notification (PMN) submissions to the U.S. Environmental Protection Agency (EPA) under the Toxic Substances Control Act (TSCA). CAS RN® will be assigned upon request.

CAS Registry Lookup

CAS staff will search the CAS REGISTRY database based on a chemical name or CAS RN® and provide you with the registered information on the requested substance.

CAS Registry Number (CAS RN®) Verified Partner Program

The CAS Registry Number Verified Partner Program provides you with an annual license to publicly use CAS RN® in your catalog, website, databases, etc.

Disseminate chemical substances to the world

CAS Chemical Supplier Insights (Service for registration of product catalogs)

We help customers register product catalogs in the CAS database (CAS Commercial Sources) for commercially available chemicals. Through this service, you can send chemical substances' information to the world through CAS SciFinder® and CAS STNext.



Machine translation services

JAICI AutoTrans (for reading technical documents)

We provide highly accurate machine translation, especially chemical substance names to support effective research of Chinese/Korean/English/French/German documents (patents/nonpatents). It is helpful to speed-up screening of several DB search results like CAS STNext/CAS SciFinder®. Japanese translation is inserted next to original descriptions in excel files and patent and document full-text articles are translated in the same lay-out as originals. Translation is carried out on servers located at a secure dedicated data center.



JAICI ProTranslator (for technical writing in foreign languages)

We provide a new-purpose machine translation service to support technical writing in foreign languages. Post-editing tool is associated in this service to help much easier and quicker correction/preparation of the machine-translated documents not only in Chinese, Korean, English but also 8 European and 4 Asian languages. You can customize the translation engine based on your word lists and translation memories to improve the translation quality by yourself!



Technical terms dictionary with thesaurus

JAICI Science Dictionary Pro

JAICI Science Dictionary is a English-Japanese-Chinese(partly) dictionary with a thesaurus for scientists such as researchers and searchers. Entries include science- and technology-related terms used worldwide, mainly in the fields of chemistry, medicine, and pharmacy. The terms are collected from patents and dissertations. The thesaurus helps you figure out relationships between different terms, including broader terms, narrower terms, synonyms, etc.

JSD Web API (web API service of JAICI Science Dictionary Pro)

JSD Web API enables your systems to get JAICI Science Dictionary Pro data via API.

Document delivery service

Article Galaxy

Article Galaxy helps you place online orders for documents, conference proceedings, books, patent specifications, etc. Article Galaxy can provide you with features such as duplicate order prevention, rentals, automatic determination of the lowest-priced source and usage monitoring of subscription journals.





Fact Databases and Software

We support various R&D activities by distributing databases and software.

We support professionals in chemistry in all aspects of their research and development activities by distributing various fact databases and software.

We will continue to offer a wide selection of chemical information products to keep up with technological advances and the needs of our users.



We distribute various fact databases and software in the field of chemistry.

We offer a wide range of products, including crystal structure databases for organic and inorganic compounds, life-science software to support drug discovery, and dictionaries of compounds.

Users can retrieve factual data on chemical compounds from our selection of databases including crystallographic data and 2D/3D structures of chemical compounds, physical properties, spectral data, and literature information in publications.

By using the database that best suits your research needs, and you will be provided rapid access to the latest factual data. The databases come with search, display, and analysis interface to help expedite your research projects.

Software for drug discovery and formulation research work more effectively in combination with suitable databases. We support the researchers using highly specialized software designed to meet their particular needs.



Tools for molecular crystals

— From analysis to understanding and application of crystal structures

- **CSD-Core** Cambridge Structural Database [produced by CCDC in the U.K.]
- **CSD-Materials** Application package for crystal structure analysis [produced by CCDC in the U.K.]

Drug discovery tools

— Solutions for life sciences

- **CSD-Discovery** Application package for life sciences [produced by CCDC in the U.K.]
- **CSD-Enterprise** Integrated package for CSD and all CCDC applications [produced by CCDC in the U.K.]

Databases of inorganic compounds

— For the design and development of functional materials

- **ICSD** Inorganic Crystal Structure Database [produced by FIZ Karlsruhe in Germany]
- **PHASE** ACerS-NIST Phase Equilibria Diagrams [produced by American Ceramic Society and NIST in the U.S.]
- **ASM Alloy Phase Diagram Database** [produced by ASM International in the U.S.]

Databases of compound properties

— Basic tools for exploratory research into natural products/polymers

- **CHEMnetBASE**
Chemical Database Online [produced by Taylor & Francis Group / CRC Press in the U.K. and the U.S.]
* Combined Chemical Dictionary * Dictionary of Natural Products * Polymers: A Property Database

Databases of mass spectra

— Advanced tools for mass spectrometry

- **NIST23 Mass Spectral Libraries** [produced by NIST in the U.S.]
- **Wiley Registry of Mass Spectral Data, 12th Edition** [produced by Wiley in the U.S.]

User Support

We offer training services to use the databases and the tools effectively. Some instructions are available in Japanese.



IP Search and Analysis Services

We search patents and literature in the fields of medicine, chemistry, and biology.

Activities relating to intellectual property rights are becoming increasingly important in Japan, where companies, universities, and research institutes are promoting science and technology as pillars of the nation. As a credible partner for searching patents and other technical documents, JAICI meets your needs with reliable experts who are skilled in database searches and knowledgeable in science and patents.



IP Information Center (SHIPS)

We provide patent search services dedicated to the fields of medicine, chemistry, and biotechnology.

Staff with deep expertise in the fields of medicine, chemistry, and biology conduct searches using advanced search techniques and provide high-quality search services unique to SHIPS.



Patent search services

According to your search purpose and budget, we develop the most suitable search strategy. We usually provide the following types of search services.

- ◆ **Infringement clearance search**
We search multiple databases by not only patent classification and keywords, but also CAS RN® and controlled terms. We have an established reputation for our screening results.
- ◆ **Validity search**
We comprehensively search patents and non-patent literature using more than 50 literature databases.
- ◆ **Novelty search**
We search for prior art of your invention, and help you check it is new and original. You can also improve your patent quality.
- ◆ **Subject matter search**
We conduct searches according to customers' desired viewpoints that cannot be handled by analysis software. Analysis and mapping of the search results are also available.
- ◆ **SDI (Selective Dissemination of Information)**
We search the latest documents of interest at your ordered frequency. According to your order, we screen them and make out a report.

Other search services

Other services include non-patent literature search, substance-related search (e.g., nucleotide and protein sequences, chemical structures, and polymers), and registration alert setting on CAS STNext.

Our clients and search fields

Our clients are major companies (pharmaceutical companies, chemical companies, food and beverage companies, cosmetic companies, etc.), universities, public institutions and patent offices and so on.

Our search fields: Pharmaceuticals, Diagnostics, Formulations, Antibodies, Genes, Cells, Regenerative medicine, Biocompatible materials, Agrochemicals, Cosmetics, Personal care products, Foods, Beverages, Films, Fibers, Organic electroluminescent devices, Semiconductor substrates, Inorganic materials, Batteries, Biodegradable materials, Biomass, Recycling, Environment, Energy, etc.

Patent Analysis Division



We help promote "intellectual property as a pillar of the nation" through our prior art search services.

To the advancement of industrial technology and the improvement of people's life, accurate and prompt review of patent applications is essential under the present industrial property rights system in Japan.

JAICI has been registered as outsourced contractor for prior art searches by the Japan Patent Office (JPO) since 2005 and continue to support patent reviews using chemical structure searches on the CAS STNext platform.

Prior art search for organic compounds specified in "Category 30"

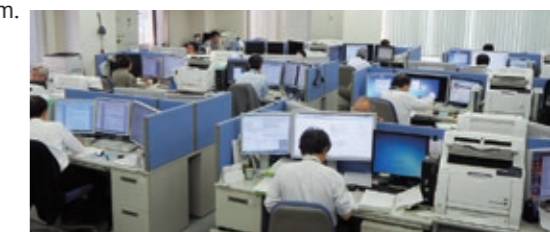
After filing a patent, a rigorous search is to be performed in the examination phase at JPO to determine whether there is prior art to judge the patentability (mainly, novelty and inventiveness) of the claimed invention.

As an outsourced organization, JAICI retrieves information about organic compounds claimed in patent applications belonging to Category 30 (one of the 39 categories of technical fields for prior art searches covering organic compounds used in pharmaceutical products, agricultural chemicals, electronic materials, etc.) and provides the information JPO examiners need to make a decision.

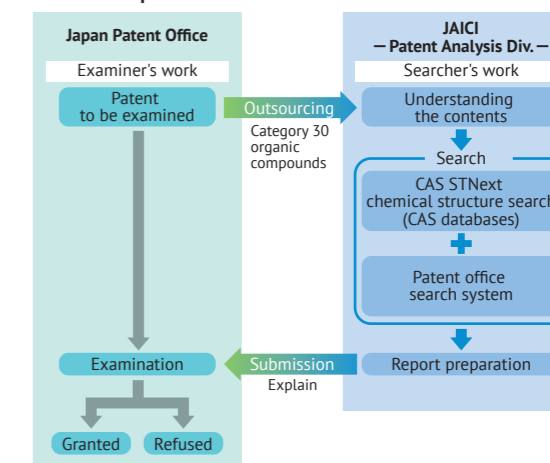
Chemical structure search in the CAS database

Making full use of the CAS database via CAS STNext, we retrieve and examine the compounds covered in the generic formula (Markush structure) claimed in the patent application of interest and document the results in a report.

Our experienced staff apply their copious chemical knowledge and practical experience in organic synthesis to provide high-quality search services.



Flow of a patent examination

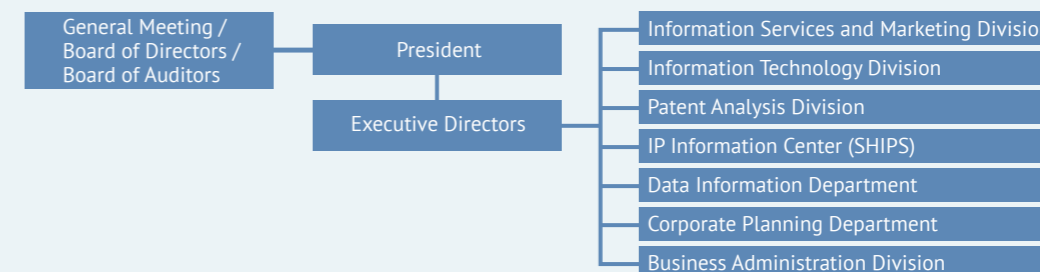


About us

Association Profile

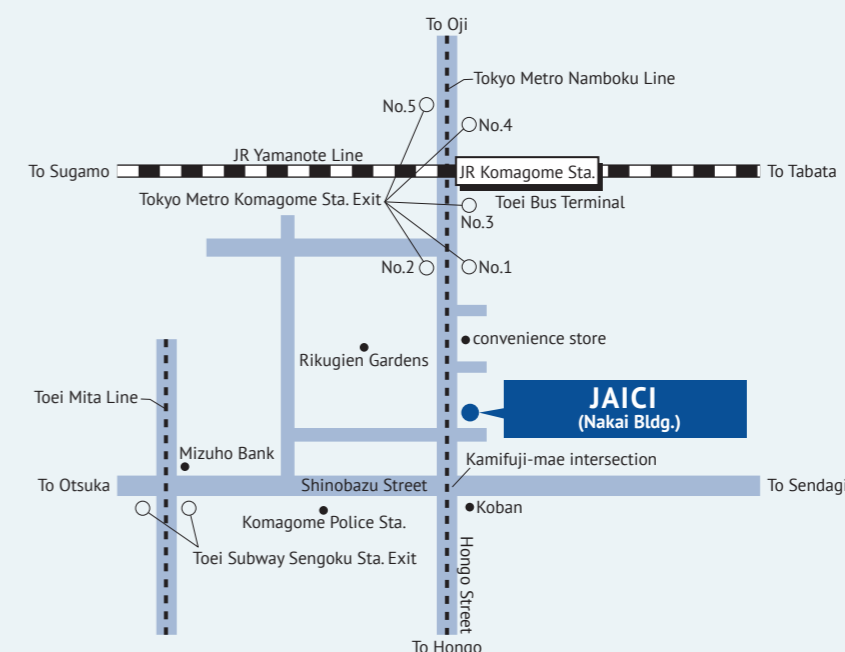
Name	General Incorporated Association, Japan Association for International Chemical Information Acronym: JAICI
Address	Nakai-Building, 6-25-4 Honkomagome, Bunkyo-ku, Tokyo, 113-0021, Japan
Foundation	1971 (Corporate Entity authorized in July 1975; Transition to a General Incorporated Association registered in April 2011)
Representative	President: Akira Ichii
Members <i>(As of April 1, 2023)</i>	<p>■ Regular members (Category 1) The Society of Chemical Engineers, Japan; Japan Explosives Society; The Society of Polymer Science, Japan; Japan Society of Colour Material; Catalysis Society of Japan; The Japan Petroleum Institute; The Society of Fiber Science and Technology, Japan; The Electrochemical Society of Japan; The Japan Institute of Energy; The Chemical Society of Japan; The Crystallographic Society of Japan; The Society of Rubber Science and Technology, Japan; The Japanese Biochemical Society; The Society for Biotechnology, Japan; The Ceramic Society of Japan; The Geochemical Society of Japan; Japanese Society of Tribologists; Japan Society for Bioscience, Biotechnology, and Agrochemistry; The Japan Society for Analytical Chemistry; The Pharmaceutical Society of Japan; The Society of Inorganic Materials, Japan; and The Society of Synthetic Organic Chemistry, Japan.</p> <p>■ Regular members (Category 2) Asahi Kasei Corp.; Ajinomoto Co., Inc.; Astellas Pharma Inc.; KUREHA CORPORATION; JSR Corporation; Sumitomo Chemical Company, Limited; Daiichi Sankyo Company, Limited; TOSOH CORPORATION; Toray Industries, Inc.; Nippon Kayaku Co., Ltd.; Nippon Soda Co., Ltd.; FUJIFILM Corporation; Mitsui Chemicals, Inc.; Mitsubishi Chemical Corporation; Mochida Pharmaceutical Co., Ltd; UBE Corporation; Lion Corporation; and Resonac Corporation.</p>

Structure



- Information Services and Marketing Division :**
Sales and marketing, contract, and user support for database services provided by CAS and FIZ Karlsruhe
- Information Technology Division :**
Support for the Association's work-related IT and developing and providing dictionary and machine translation services
- Patent Analysis Division :**
Prior-art searches for patent examinations (for Category 30, contract work as a Patent Office-registered search organization)
- IP Information Center (SHIPS) :**
Search services for patents and literature in the fields of medicine, chemistry, and biology
- Data Information Department :**
Distribution of crystallographic and property databases and molecular design/drug discovery support tools
- Corporate Planning Department :**
Project planning and budget set-up, audits on operations, personnel management, and recruitment
- Business Administration Division :**
General affairs, accounting, and public relations

Access



- Address**
Nakai-Building, 6-25-4 Honkomagome, Bunkyo-ku, Tokyo 113-0021, Japan TEL.+81-3-5978-3608
- Access by Public Transportation**
4 minutes walk from the South Exit of Komagome Station on the JR Yamanote Line
3 minutes walk from the No.1 Exit of Komagome Station on the Tokyo Metro Namboku Line
9 minutes walk from the Sengoku Station on the Toei Mita Line

*The names of companies, organizations, products, or services used in this brochure are either trademarks or registered trademarks of their respective companies and organizations.