

CAS SCIFINDERⁿ

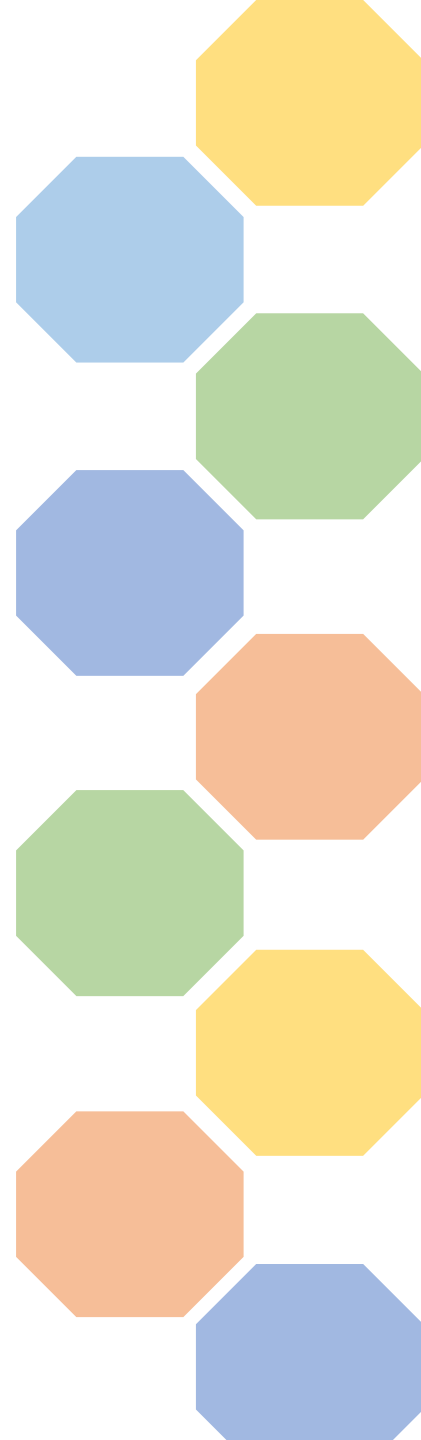
More than a literature and chemical compound database, CAS SciFinderⁿ leverages human curation to deliver relevant, actionable insights so you can innovate faster.

REQUEST A DEMO

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AGENDA

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- CAS Solution
- Subject Coverage
- Benefits
- Comparison
- Solution interface
- Demonstration
 - ❖ Substance Search
 - ❖ Reaction Search
 - ❖ Reference Search
 - ❖ Supplier Search

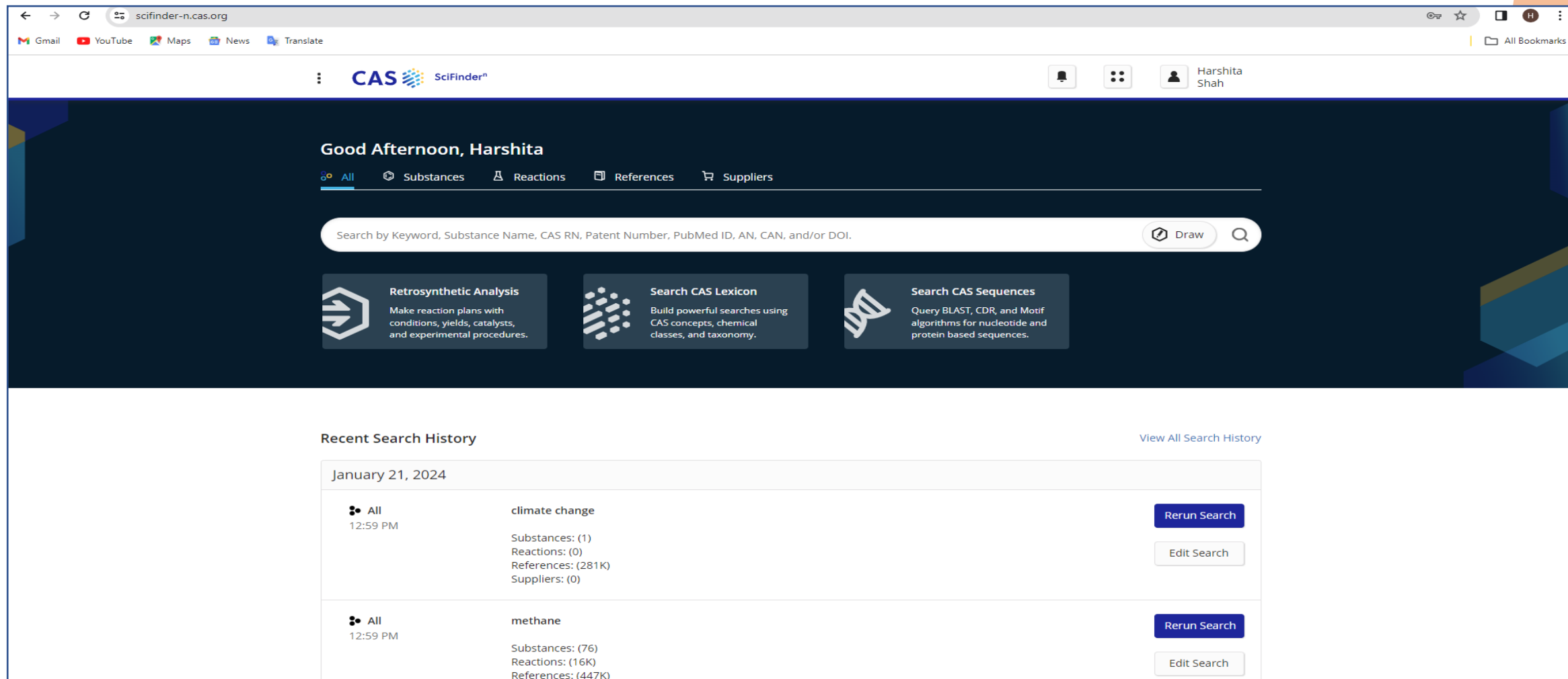


INTRODUCTION

- SciFinder[®], a database produced by the **Chemical Abstracts Service (CAS)**, a division of the **American Chemical Society (ACS)**, is the world's largest collection of chemistry information. A web-based resource, SciFinder[®] is intended for academic, commercial, research, and development users.
- Founded in **1907** as a volunteer effort to organize published chemistry research, **Chemical Abstracts Service (CAS)** officially became a self-supporting division of the American Chemical Society in 1956.
- Headquarters is in **Columbus, Ohio**, with global offices in 45+ countries. A team of over 1,000 scientists, technologists, and business professionals are passionate about advancing science and collectively speak more than 50 languages.
- CAS is a leader in scientific information solutions, partnering with innovators worldwide to accelerate scientific breakthroughs. As a leader in scientific information solutions, they curate, connect, and analyze the world's published science to accelerate breakthroughs. At CAS, their passion is advancing scientific progress.



CAS SciFinderⁿ Interface



The screenshot displays the CAS SciFinderⁿ web interface. At the top, the browser address bar shows `scifinder-n.cas.org`. The navigation bar includes the CAS SciFinderⁿ logo, a notification bell, a menu icon, and a user profile for Harshita Shah. Below the navigation bar, a personalized greeting "Good Afternoon, Harshita" is displayed. A horizontal menu contains tabs for "All", "Substances", "Reactions", "References", and "Suppliers". A large search bar is positioned below the menu, with a placeholder text: "Search by Keyword, Substance Name, CAS RN, Patent Number, PubMed ID, AN, CAN, and/or DOI." To the right of the search bar are "Draw" and "Q" icons. Below the search bar, three main search categories are highlighted: "Retrosynthetic Analysis" (Make reaction plans with conditions, yields, catalysts, and experimental procedures), "Search CAS Lexicon" (Build powerful searches using CAS concepts, chemical classes, and taxonomy), and "Search CAS Sequences" (Query BLAST, CDR, and Motif algorithms for nucleotide and protein based sequences). The "Recent Search History" section is located below these categories, featuring a "View All Search History" link. The history table lists two searches from January 21, 2024, at 12:59 PM. The first search is for "climate change" with 1 substance, 0 reactions, 281K references, and 0 suppliers. The second search is for "methane" with 76 substances, 16K reactions, 447K references, and 0 suppliers. Each search entry has "Rerun Search" and "Edit Search" buttons.

Recent Search History		View All Search History
January 21, 2024		
All 12:59 PM	climate change Substances: (1) Reactions: (0) References: (281K) Suppliers: (0)	Rerun Search Edit Search
All 12:59 PM	methane Substances: (76) Reactions: (16K) References: (447K)	Rerun Search Edit Search

Source: <https://scifinder-n.cas.org/>



CAS SOLUTIONS

CAS offers a wide range of Solutions designed to meet the needs of research, patent, regulatory, and business professionals in every phase of the innovation process.

1. **CAS SciFinder[®]**: Do better research in less time with the premier interface to the CAS content collection that offers the most advanced chemistry relevance engine in the industry.
2. **CAS Formulus[®]**: CAS Formulus[®] is a comprehensive formulations database and workflow solution. It can help you develop safe and effective products.
3. **CAS Analytical Methods[™]**: Save time with a single source to search and compare the latest published analytical methods.
4. **CAS STNext[®]**: Get a comprehensive view of the IP landscape with the premier single source for the world's disclosed scientific and technical research.
5. **CAS Scientific Patent Explorer[™]**: Search, analyze, visualize, and view relevant patent content and trends.
6. **CAS CHEMICAL COMPLIANCE INDEX[™]**: Simplify your workflow with a single resource for global regulatory information covering nearly 150 inventories and lists.
7. **SciFinder[®]**: SciFinder[®] is still supported, but SciFinder[®] is now the state-of-the-art version.
8. **FIZ PatMon**: Efficiently monitor your patent portfolio and your competitors' activity with FIZ PatMon's intuitive interface and customizable alerts.



CAS SOLUTIONS INTERFACE

CAS SciFinderⁿ

Do better research in less time with the premier interface to the CAS content collection that offers the most advanced chemistry relevance engine in the industry.

LOGIN

CAS Formulus[®]

CAS Formulus[®] is a comprehensive formulations database and workflow solution. It can help you develop safe and effective products.

LOGIN

CAS Analytical Methods[™]

Save time with a single source to search and compare the latest published analytical methods.

LOGIN

CAS STNext[®]

Get a comprehensive view of the IP landscape with the premier single source for the world's disclosed scientific and technical research.

LOGIN

CAS Scientific Patent Explorer[™]

Search, analyze, visualize, and view relevant patent content and trends.

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CAS CHEMICAL COMPLIANCE INDEX[™]

Simplify your compliance workflow with a single resource for global regulatory information covering nearly 150 inventories and lists.

LOGIN

SciFinder[®]

SciFinder is still supported, but SciFinderⁿ is now the state-of-the-art version.

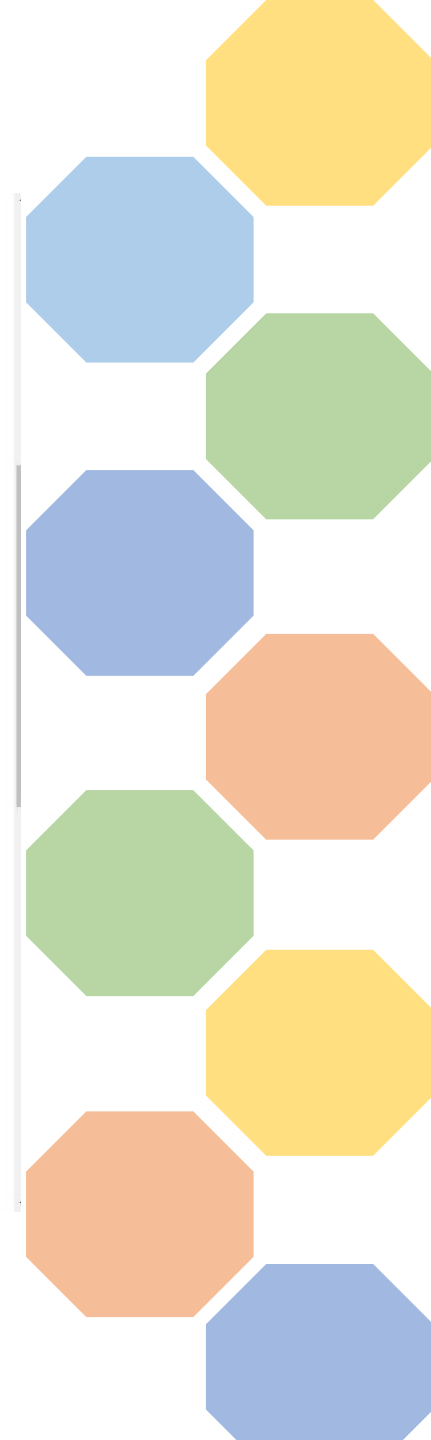
LOGIN

FIZ PatMon

Efficiently monitor your patent portfolio and your competitors' activity with FIZ PatMon's intuitive interface and customizable alerts.

LOGIN

Source: <https://www.cas.org/cas-solutions-login>



SUBJECT COVERAGE

It's a research tool for

- | | | |
|--|---------------------------------|--|
| 1. Adhesives & Coatings Engineering | 12. Food Science | 25. Microbiology |
| 2. Alloys, Ceramics | 13. Formulations | 26. Molecular/Cellular Biology |
| 3. Analytical Chemistry | 14. Genomics, Proteomics | 27. Nanotechnology |
| 4. Biochemistry | 15. Geochemistry/Geology | 28. Nuclear Chemistry & Technology Chemistry |
| 5. Biology | 16. Health/Safety (Regulations) | 29. Organic Chemistry/ Organic Synthesis |
| 6. Biotechnology | 17. Informatics | 30. Petroleum/Fuel Chemistry |
| 7. Cellulose/Renewable Material | 18. Inorganic Chemistry | 31. Pharmacology |
| 8. Chemical Engineering/ Process Chemistry | 19. Licensing | 32. Physical Chemistry |
| 9. Colloid/Surface Chemistry | 20. Management | 33. Polymers/Plastics |
| 10. Environmental Science | 21. Materials Science | 34. Rubber |
| 11. Enzymology | 22. Medical Devices | 35. Toxicology and many others... |
| | 23. Medicinal Chemistry | |
| | 24. Medicine | |



- **Accelerate Literature Review**
- **Devise Synthesis Plans**
- **Research Reactions Confidently**
- **Visualize Search Results**
- **Find Available Chemicals**

COMPARISON

➤ Based on Subject Coverage

SciFinderⁿ

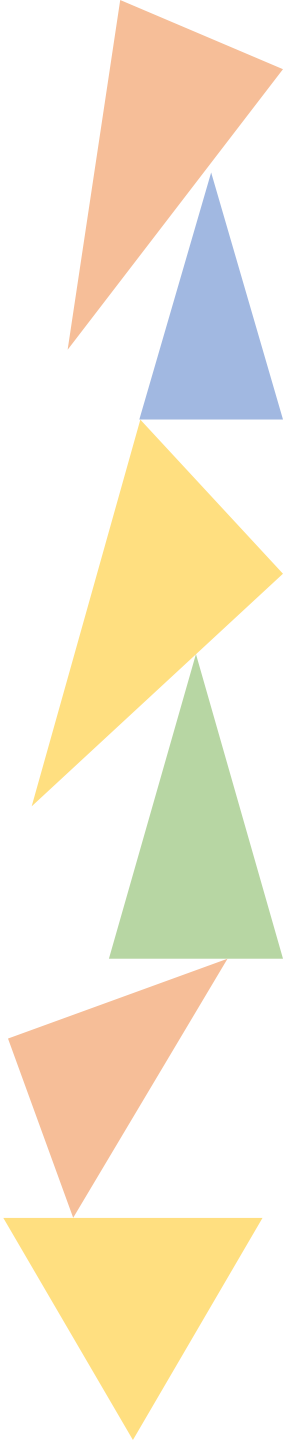
- Primarily focused on chemistry, chemical engineering, and related fields. It is an excellent resource for finding information on chemical substances, reactions, and related literature.

Web of Science

- Covers a broader range of disciplines, including science, technology, social sciences, and humanities. It is not as specialized in chemistry as SciFinderⁿ.

Scopus

- Multidisciplinary and covers a wide range of scientific disciplines, including natural sciences, social sciences, health sciences, and more. It is not specialized in chemistry but offers broad coverage across multiple fields.



➤ Search Capabilities

SciFinderⁿ

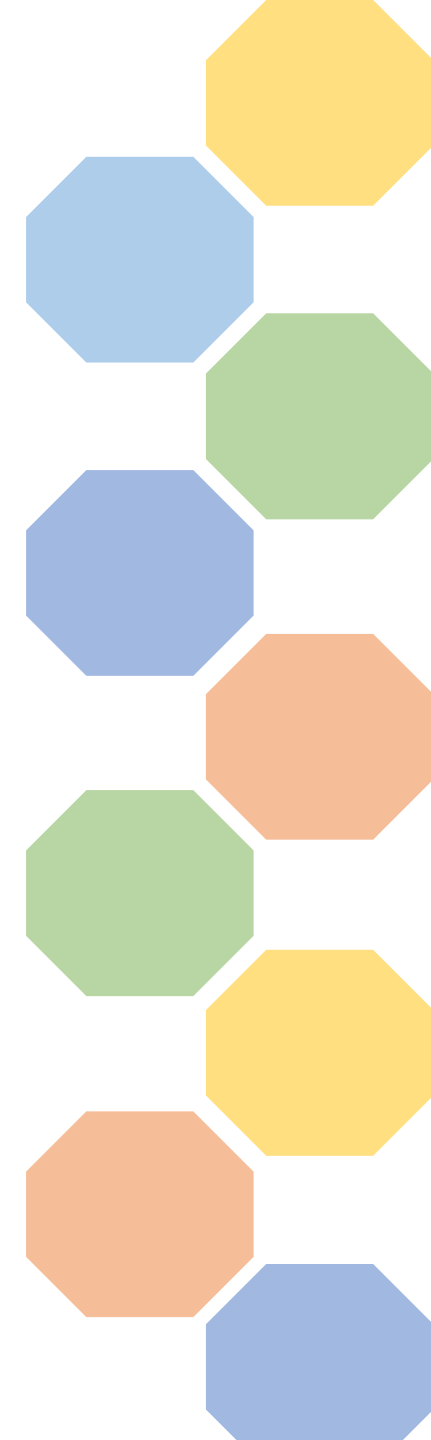
- Well-known for its advanced chemical structure searching capabilities, allowing users to draw and search by chemical structures. It supports text-based and structure-based searches.

Web of Science

- Provides powerful citation indexing and search features, enabling users to trace research trends, find highly cited articles, and identify influential authors.

Scopus

- Offers comprehensive keyword, author, and citation searching. While it provides powerful search features, it does not specialize in chemical structure searching to the extent that SciFinderⁿ does.



➤ User Interface

SciFinderⁿ

- Designed with a user-friendly interface that is particularly tailored for researchers in the chemical sciences. It offers tools like structure drawing for chemical searches.

Web of Science

- Features a more general interface suitable for a wide range of disciplines. It is known for its clarity and ease of use.

Scopus

- The Scopus interface is designed to be more general and applicable across various scientific disciplines. It aims to provide a comprehensive platform for researchers in different fields, including natural sciences, social sciences, health sciences, and more.



Solution Interface

☐ Main Interface

The options below are found on the main interface in CAS SciFinderⁿ.

A screenshot of the CAS SciFinder main interface. At the top left is the CAS logo and SciFinderⁿ text. To the right are several icons: a bell with '31', a bookmark, a person, two overlapping circles, a download arrow, an envelope, and a bell with 'Save and Alert'. Below these icons are callout boxes with descriptions: 'Access CAS Formulus[®] and CAS Analytical Methods[™]' (pointing to the CAS logo), 'Click the CAS logo to return to the main search page' (pointing to the SciFinderⁿ text), 'Access alerts, saved items, history and account settings' (pointing to the bell, bookmark, and person icons), 'Combine saved sets' (pointing to the two overlapping circles icon), 'Download' (pointing to the download arrow icon), 'Share' (pointing to the envelope icon), and 'Save answers and create alerts' (pointing to the 'Save and Alert' bell icon).

☐ Search Interface

CAS SciFinderⁿ features a streamlined search interface.

A screenshot of the CAS SciFinder search interface. At the top are tabs for 'All', 'Substances', 'Reactions', and 'References'. Below these is a large search bar with the text 'Search by Substance Name, CAS RN, Patent Number, PubMed ID, AN, CAN, and/or DOI.' To the right of the search bar is a 'Draw' button and a search icon. Below the search bar is a dropdown menu for 'Molecular Formula' and a button for 'Add Advanced Search Field'. At the bottom are three main sections: 'Retrosynthetic Analysis' (with a right-pointing arrow icon), 'CAS Sequences' (with a DNA helix icon), and a section for building searches using CAS concepts. Callout boxes provide instructions: 'Enter the query' (pointing to the search bar), 'Execute the search or press ENTER' (pointing to the search icon), 'Access fielded search, available for substances and references' (pointing to the 'Add Advanced Search Field' button), and 'Launch the structure editor' (pointing to the 'Draw' button). Examples of search queries are shown: C6H6, (C8H8)x, C22H26CuN2O5.C2H3N.

Source: <https://scifinder-n.cas.org/>

DEMO

CONCLUSION

SciFinder[®] is a powerful tool widely used by researchers, chemists, and scientists in various fields of chemistry and related disciplines. It provides access to a comprehensive collection of scientific information, including literature, patents, chemical substances, reactions, and more.

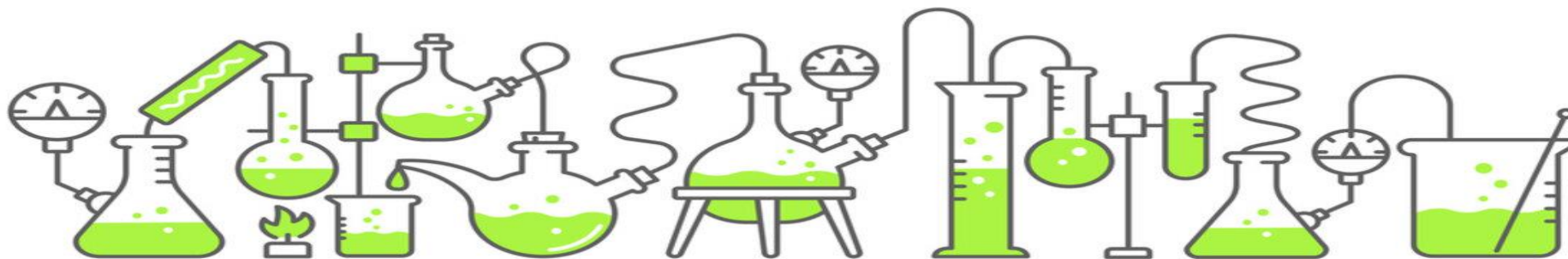
Key features of SciFinder[®] include:

- ❖ **Chemical Structure Searching:** SciFinder is well-known for its advanced chemical structure searching capabilities. Researchers can draw chemical structures and search for relevant information based on these structures.
- ❖ **Comprehensive Coverage:** It offers access to a vast repository of scientific literature, including journals, conference proceedings, and patents. SciFinder[®] is particularly strong in providing detailed information on chemical compounds and reactions.
- ❖ **Retrosynthetic Analysis:** SciFinder[®] provides tools for retrosynthetic analysis, assisting chemists in planning synthetic routes for compounds.
- ❖ **Access to CAS Registry:** SciFinder[®] includes access to the CAS Registry, a database of chemical substances with unique identifiers (CAS Registry Numbers).
- ❖ **Patent Information:** The application includes a comprehensive collection of patent information, allowing users to search for patents related to specific technologies, compounds, or processes.
- ❖ **User-Friendly Interface:** SciFinder[®] is designed with a user-friendly interface, making it accessible to researchers with varying levels of expertise.



REFERENCE

- ❑ *SciFinderⁿ Login*. (2023, August). Retrieved January 28, 2024, from <https://scifinder-n.cas.org/>
- ❑ CAS. (2023, August). *CAS Solutions Login*. Retrieved January 28, 2024, from <https://www.cas.org/cas-solutions-login>
- ❑ SciFinderⁿ (2023, August). *FAQs and Quick Reference Guides*. Retrieved January 28, 2024, from <https://cas-product-help.zendesk.com/hc/en-us/articles/17952751303053-SciFinder%E2%81%BF-Quick-Reference-Guides-for-Commercial-and-Academic-Users>
- ❑ CAS. (2023, August). *CAS SciFindern - Chemical Compound Database*. Retrieved January 27, 2024, from <https://www.cas.org/solutions/cas-scifinder-discovery-platform/cas-scifinder-n>



THANK
YOU!