

CAS SciFinder Discovery Platform™

**BETWEEN IDEAS  
AND ANSWERS ARE  
CONNECTIONS THAT MATTER**

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# CAS accelerates breakthroughs

At CAS, our passion is advancing scientific progress. As a leader in scientific information solutions, we curate, connect, and analyze the world's published science to accelerate discovery.

We are proud to partner with innovators and educators across academia, providing the hindsight, insight, and foresight they need to build upon the past and discover a better future.

**BETWEEN IDEAS AND ANSWERS  
ARE CONNECTIONS THAT MATTER**

# CAS connects you to the world's published science for better insights



Over  
**50K**  
scientific journals  
and documents

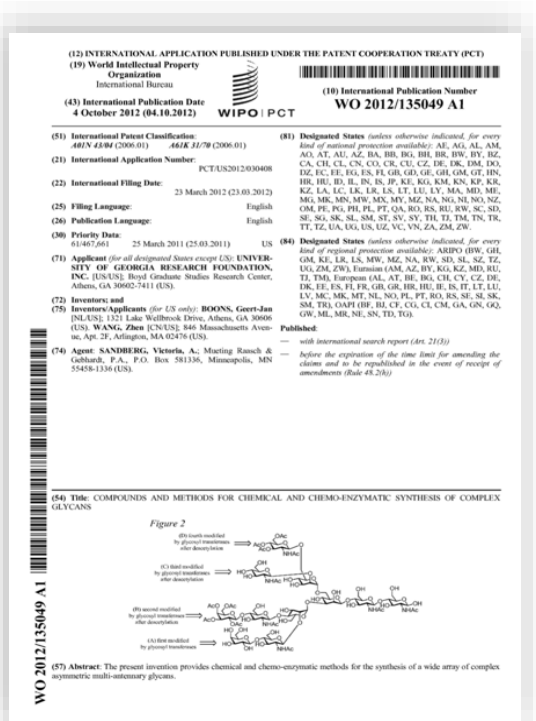
Over  
**250**  
million substances

Over  
**50**  
languages  
translated

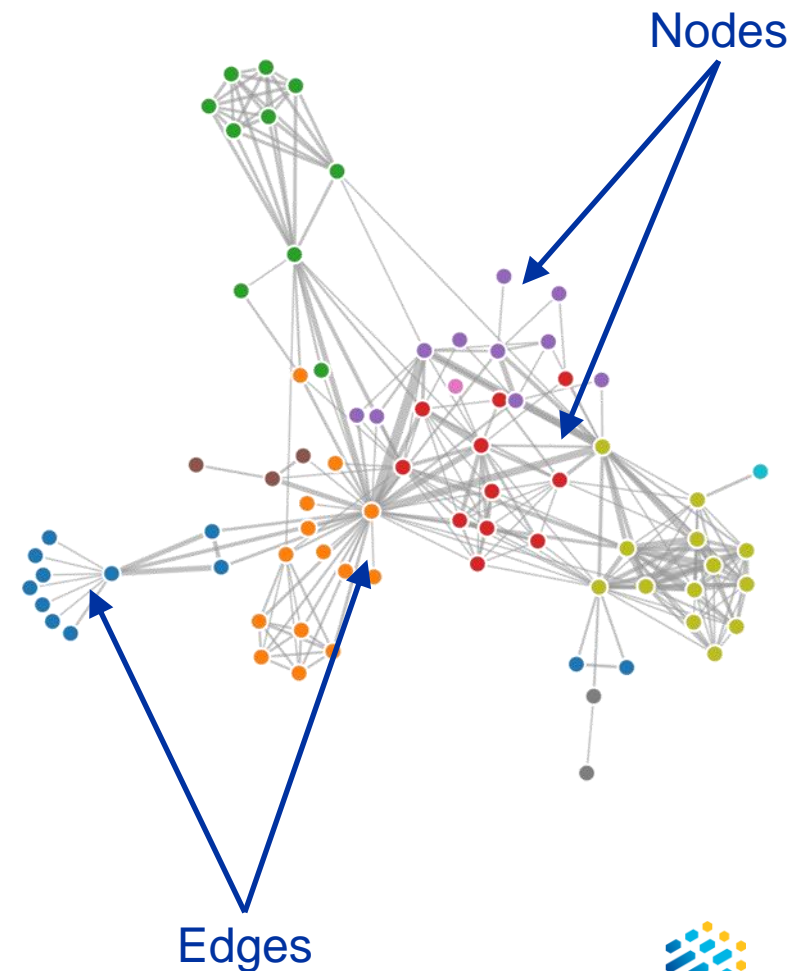
**109**  
patent offices  
worldwide

# CAS curation extracts knowledge

## Current patent example



- 7 concepts
- 138 substances
- 4,614 reactions
- 4 patent family members
- 3 cited documents



Click document to view on CAS SciFinder<sup>®</sup>

**WO 2012135049**

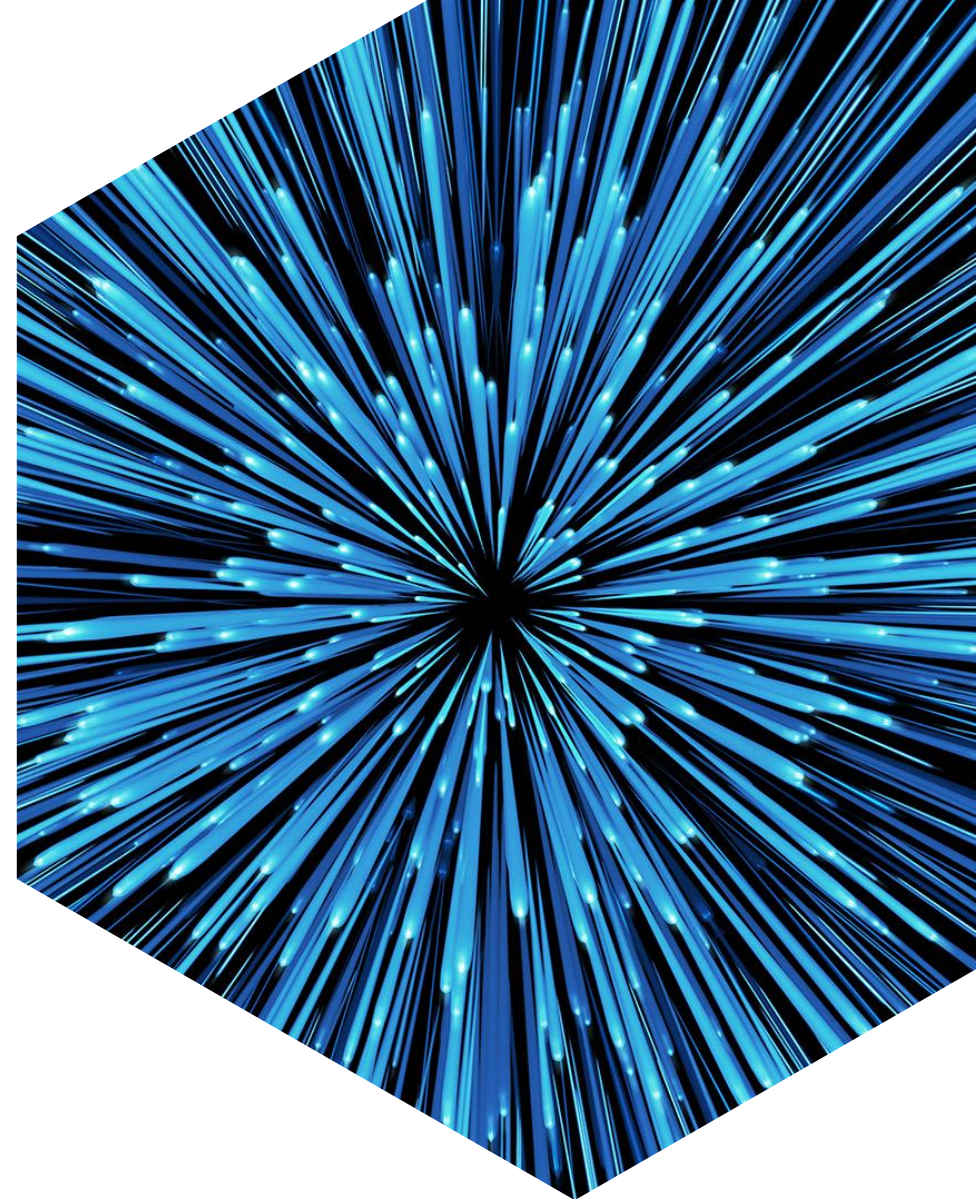
Compounds and methods for chemical and chemo-enzymatic synthesis of complex glycans

# CAS SciFinder Discovery Platform

As the volume of scientific information continues to grow, finding exactly what you need – the connections amid the chaos – can be challenging.

Researchers need best-in-class scientific information solutions to help them bring new ideas to life faster.

Whether you're reviewing the literature for funding applications and manuscripts, developing experimental plans for new projects, or searching for collaborators to help you advance the research in your field, CAS SciFinder Discovery Platform speeds your connection to relevant insights.



# CAS SciFinder Discovery Platform for Academics

Informing and enhancing the foundational scientific pursuits in Academia



**CAS SciFinder Discovery Platform** is designed to support multiple stages and types of scientific research and combines task-specific information solutions, including **CAS SciFinder<sup>®</sup>**, **CAS Formulus<sup>®</sup>**, and **CAS Analytical Methods<sup>™</sup>** with **ChemZent<sup>®</sup>** and the **CAS Content Collection<sup>™</sup>**, the most complete source of scientific information in the world.

# CAS SciFinder Discovery Platform for Academics

Speed up your science and learning with the leader in scientific intelligence

## Unmatched content

Directly access to the most comprehensive collection of chemical reactions, substances, patents, and scientific literature.

## Specialized technology

Tap into the smartest, most powerful science-aware search engine.

## Human expertise

Our scientists work in tandem with technology to identify concepts and relationships beyond keywords.

The screenshot displays the CAS SciFinder web interface. At the top, the logo and name 'CAS SciFinder' are visible, along with navigation links for 'Saved and Alerts', 'History', and 'Account'. A blue banner below the header contains a message: 'You can now use [BLAST search](#) to mine our newly enhanced collection of more than 500M proteins and nucleotides from 60+ patent authorities dating back to 1957. Plus [visually review sequence similarity and frequency](#) across your patent search results.' The main content area is divided into two sections. On the left, under 'Searching for...', there is a vertical list of search categories: 'All', 'Substances' (which is highlighted with a blue arrow), 'Reactions', 'References', 'Suppliers', 'Biosequences', and 'Retrosynthesis'. On the right, under 'Substances', there is a search bar with the placeholder text 'Enter a query...'. Below the search bar, there is a dropdown menu for 'Molecular Formula' and a 'Draw' button. A search button with a magnifying glass icon is also present. Below the search bar, there are examples of molecular formulas: 'C6H6 | (C8H8)x | C22H26CuN2O5.C2H3N'. A link for 'Add Advanced Search Field' and a link for 'Learn more about SciFinder Advanced Search' are also visible.

# CAS SciFinder Discovery Platform for Academics

Comprehensive bioactivity data to study how molecules interact with biological systems



## Extensive collection

More than 45 million bioactivity measurements and 90,000 defined targets across more than 10 million unique substances relevant to Medicinal Chemists



## Critical information

The data required for running analyses of SAR, ADME, and toxicology to understand the effect of a molecule on a target



## Intuitive search

Extensive filtering options and a tabular display with overview of ligand structure, pharmacological parameters, and assay details



# CAS SciFinder Discovery Platform for Academics

Improved information to accelerate drug discovery research with CAS Scifinder<sup>n</sup>

The screenshot displays the CAS SciFinder Discovery Platform interface. The top navigation bar includes the CAS SciFinder logo, user profile (Tetiana M. Khristova), and utility icons for Alerts and Saved. The main search area is titled 'Substances' and features a search bar with the placeholder 'Enter a query...'. Below the search bar, a dropdown menu is open, listing various search criteria: Molecular Formula, CAS Registry Number, Chemical Identifier, Document Identifier, Patent Identifier, Experimental Spectra, **Bioactivity Data** (marked with a 'NEW' badge), Biological, Chemical Properties, and Density. A secondary dropdown menu is visible next to 'Bioactivity Data', listing 'Target', 'Ligand', and 'Disease'. The interface also includes a 'Draw' button, a 'Feedback' icon, and a 'Learn More' link for advanced search.

## Searching for SAR Data

Content that specifically targets a ligand, target, and/or disease can be searched through advanced search.

Content answers can be highlighted in detail records.

# CAS SciFinder Discovery Platform for Academics

Enhancing biological research with new biosequence search in CAS SciFinder<sup>®</sup>

## Unmatched content

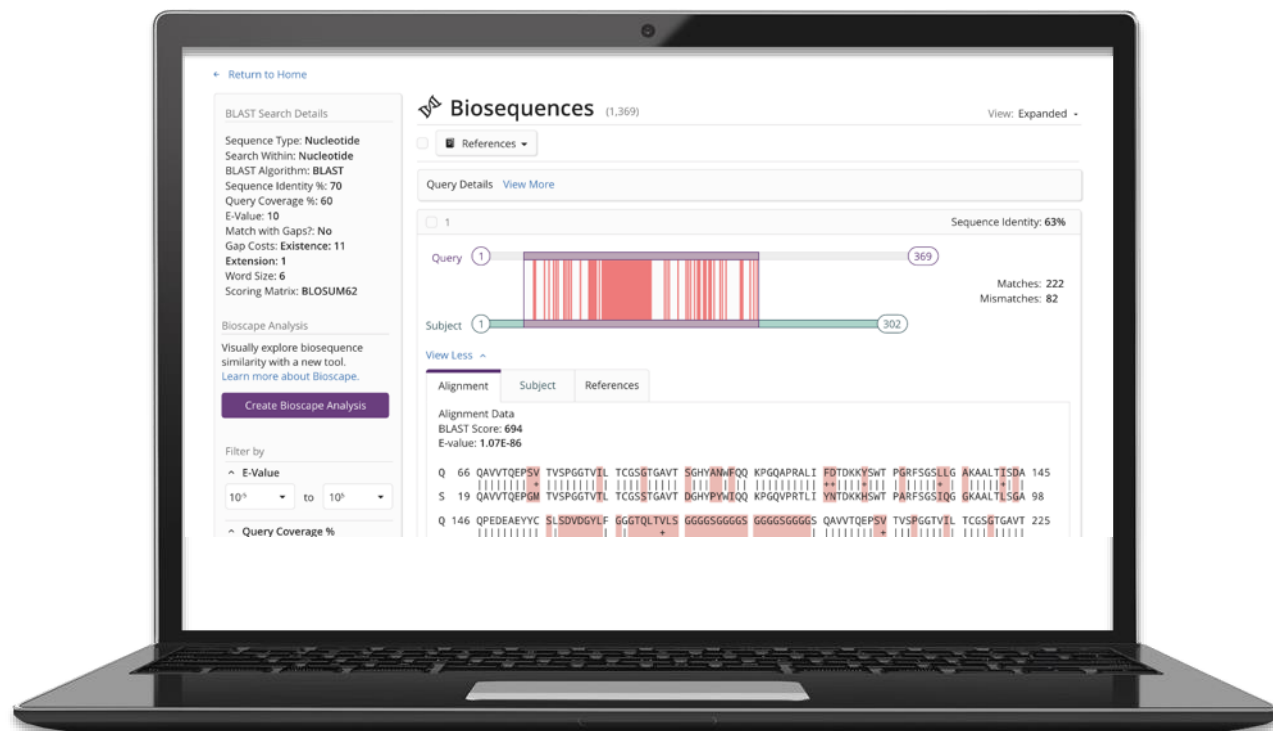
Newly enhanced collection of more than 500 million proteins and nucleotides from 60+ patent authorities dating back to 1957

## Specialized technology

Multiple search options to support your sequence search needs, including BLAST, CDR, and Motif search

## Human expertise

Both human and machine-curated biosequence collection including curated sequences not found in electronic sequence listing and other databases



# CAS SciFinder Discovery Platform for Academics

A single-source discovery platform for in-depth, multi-disciplinary scientific methods

The screenshot displays the CAS SciFinder interface. On the left is a navigation sidebar with categories: Analyte (Carcinoembryonic antigen, Prostate-specific antigen, α-Fetoproteins, MicroRNA, DNA), Matrix (Blood serum, Urine, Blood plasma, Blood, Animal tissue), Method Category, Technique, and Year. The main area shows search results for 'Analysis of Dehydroepiandrosterone in Blood plasma by Solid phase extraction' (CAS MN: 2-111-CAS-270275). The results table includes fields for Analyte, Matrix, Other Materials, Method Category (Biomarker, Medicine Assay), Technique, Equipment Used, and Source. A 'Full Text' button is visible at the bottom of the result entry.

Field	Value
Analyte	Estradiol; 7α-Hydroxy-DHEA; Dehydroepiandrosterone; Dihydrotestosterone; Testosterone; Androstenediol; Estrone; Dehydroepiandrosterone sulfate; Androstenedione
Matrix	Blood plasma
Other Materials	Reagent: Dithioerythritol; Ethyl acetate; Ammonium iodide; Methanol; N-Methyl-N-(trimethylsilyl)trifluoroacetamide; Buffers Material: C18 sorbent: HP-ULTRA1 capillary column (17 m × 0.2 mm i.d., 0.11 μm film View All
Method Category	Biomarker Medicine Assay
Technique	Electron ionization mass spectrometry; Quadrupole tandem mass spectrometry; Gas chromatography; Solid phase extraction
Equipment Used	Microwave oven; GC system; Triple quadrupole mass spectrometer
Source	Profiling of steroid metabolic pathways in human plasma by GC-MS/MS combined with microwave-assisted derivatization for diagnosis of gastric disorders Lee, Wonwoong; Lee, Hyunjung; Kim, You Lee; Lee, Yong Chan; Chung, Bong Chul; Hong, Jongki International Journal of Molecular Sciences (2021), 22 (4), -. MDPI AG Full Text Abstract

## Integrated

Seamlessly integrated into CAS SciFinder<sup>n</sup>

## Comprehensive

Hundreds of thousands of methods across multiple fields of study, including organic compound, bioassay, and water analysis

## Focused

Designed with analytical chemistry processes in mind as a single source for searching and comparing published scientific methods and techniques

# CAS SciFinder Discovery Platform for Academics

Learn how industry develops safe and effective products with the world's leading collection of formulations

Pharmaceutical Solutions for Delivering Drug to Lung: Drug Delivery Systems or Respiratory System Agents, Etc.

Location: Example 2, Table 2

Purpose: Antiasthmatics, Drug delivery systems, Respiratory system agents

Target: Asthma, Drugs, Homo sapiens, Respiratory system disease

Delivery Route: Inhalation drug delivery systems

Physical Form: Solutions

[Add to Compare](#)

Component	Function	Amount Reported
Salbutamol	hygroscopic agents	0.1 %
Sodium chloride	pharmaceutical excipients	0.1 %
Group: ethanol/water		
Ethanol	cosolvents	50 % v/v
Water	-	50 % v/v

[View Formulation Detail](#)

[8 Similar Formulations - View All](#) (opens in a new window)

**PATENT**

Delivery of submicrometer and nanometer aerosols to the lungs using hygroscopic excipients or dual stream nasal delivery

Assignee : Virginia Commonwealth University  
US20120251594  
Language: English

[Patent PDF](#) [View in CAS SciFinder®](#)

## Chemistry beyond synthesis

Understand a formulation's origin and effectiveness with access to the best information for active ingredients and excipients.

## Discover industry insights

Get insights beyond literature and interact with formulations data curated from patents, journals, and product inserts.

## Comprehensive information

Evaluate ingredients and manufacturing processes while exploring regulatory requirements in one easy interface.

# CAS SciFinder Discovery Platform for Academics

Access essential historical chemistry insights with ChemZent®

References search for "Pasteur, L." Author Name

Substances Reactions Citing Save and Alert

Filter Behavior

Filter by Exclude

Document Type

- Journal (38)
- Patent (5)
- Review (1)
- Biography (3)
- Book (2)
- View All

Language

- Undetermined (21)
- German (17)
- English (5)
- French (3)

46 Results Sort: Publication Date: Oldest View: Partial Abstract

1

**On grape acid**  
By: PASTEUR, L.  
Chemisches Zentralblatt (1849), 20(46), 731-732 | Language: German, Database: CHEMZENT

Machine Translated: The harvested grapes acid has been of KESTNEK detected after the discovery but never again. The process has in one quantity of this acid, received from the detector itself bekam with envelope of polarization appa Rates proved, that it consists of two different acid ", of which one to the right, the other to the left deflects. This capacity corresponding to designates the same said first Dextroracemsaure, the second Laevoracemsaure (Acide dextrora-cemique et Uvoracemique). The right ahlenkende acid liess is in no property of the wine acid different. The Laevoracemsaure and their salts have now ...

View More

ChemZent Full Text

Substances (2) Reactions (0) Citing (0) Citation Map

2

**On the aspartic acid and malic acid**  
By: PASTEUR, L.  
Chemisches Zentralblatt (1851), 22(49), 769-772 | Language: German, Database: CHEMZENT

Machine Translated: In its final form of embodiment of malic acid and asparagine acid has Pasteur already indicated, that both the capacity have Polarisationsebene deflecting and that this property by all compounds of these acids through fortallanz. At the same

## Comprehensive foundational chemistry

English language translations of German abstracted publications from 1830-1969 with >800K documents and 3+ million abstracts

## Exclusive online access

Only online source of Chemisches Zentralblatt with machine translated English abstracts and access to original German versions.

## Completely Integrated

Indexed to fit seamlessly into CAS SciFinder<sup>n</sup> workflows with CAS-controlled vocabulary

# THANK YOU

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