

## Case Study



Chemical Abstracts Service make the world's earliest chemistry history available to researchers

## CAS enhance their historic chemistry databases using our language technology

Chemical Abstracts Service (CAS), a division of the American Chemical Society, introduced a new solution, ChemZent, developed in partnership with us, to unlock valuable scientific information in English.



### Challenges

*Chemisches Zentralblatt* is the world's oldest journal of German chemical abstracts – from 1830 to 1969. Only available in German, the compendium was challenging to search.

Organizations were keen to have access to a complete digital repository of the earliest chemistry history.



### Solution

CAS tasked us with translation of the mammoth compendium from German into English for indexing and search – in addition to translation and parsing of ongoing chemical information emanating from China, Japan and South Korea.

We developed innovative machine learning technology to extend our existing machine translation and natural language processing solutions for the large-scale digitization, translation and indexing of 140 years' worth of German journals and patents.

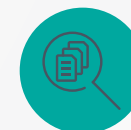
### Results



First English version of the world's oldest chemical journal



Over 1 billion words translated and indexed



3 million abstracts by author and title extracted



Digitization of 800,000 PDFs

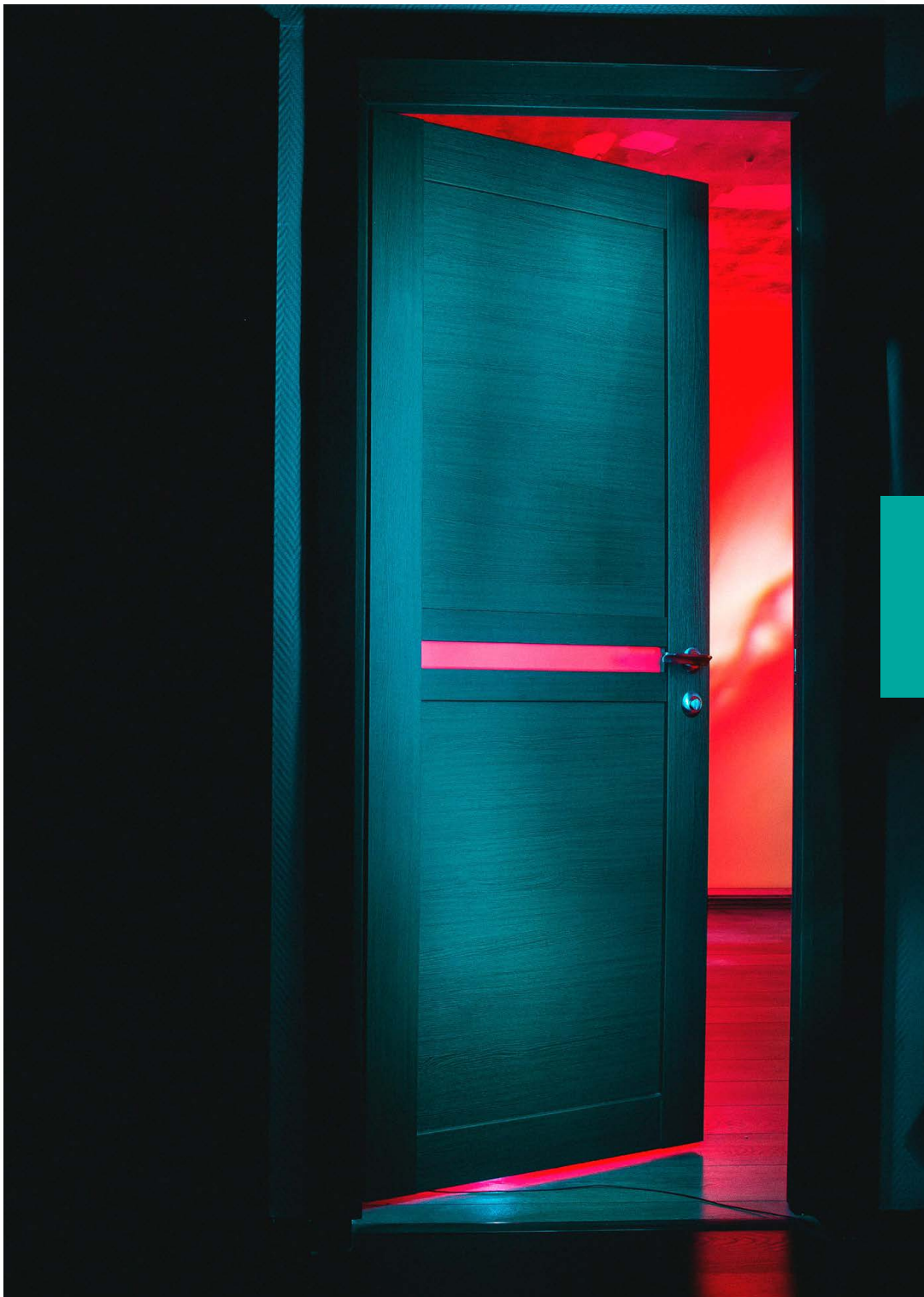
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**Access to the historic collection of Chemisches Zentralblatt via ChemZent in SciFinder has opened this scientific resource to chemists the world over, now searchable in English with summaries in English as well.**

**The ability to do an exhaustive search that includes this important foundational chemistry makes information relevant to research more easily accessible.**

Dr Matthew J. Toussant, Senior Vice President of Product and Content Development, CAS





Language Weaver, by RWS, is the world's most powerful, comprehensive and adaptable neural machine translation platform. We provide secure enterprise machine translation solutions, adapted to your content – empowering you to communicate without language barriers.

Want to find out more?  
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#### About RWS

RWS Holdings plc is the world's leading provider of technology-enabled language, content management and intellectual property services. We help our customers to connect with and bring new ideas to people globally by communicating business critical content at scale and enabling the protection and realization of their innovations.

Our vision is to help organizations interact effectively with people anywhere in the world by solving their language, content and market access challenges through our collective global intelligence, deep expertise and smart technology.

Customers include 90 of the globe's top 100 brands, the top 10 pharmaceutical companies and approximately half of the top 20 patent filers worldwide. Our client base spans Europe, Asia Pacific, and North and South America across the technology, pharmaceutical, medical, legal, financial services, chemical, automotive, government and telecommunications sectors, which we serve from offices across five continents.

Founded in 1958, RWS is headquartered in the UK and publicly listed on AIM, the London Stock Exchange regulated market (RWS.L).

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