

## What is the ICSD?

The Inorganic Crystal Structure Database (ICSD) is a database of:

- > 160,000 **inorganic crystal structures**
- > 1,700 crystal structures of **elements**

The crystal structures present in the ICSD are taken from:

- > **1,900 periodicals**
- Records from **1913 – present**

## How to search the ICSD

Ways to search the ICSD include:

Chemical name

Mineral name

Chemical formula

Bibliographic information

Unit cell parameters

Density

Space Group Symbol

Alternatively, the **Chemistry Visual Search** can dictate the elemental composition of the compound.

Search Chemistry Visual Search mode Switch to Quick Search mode

H																						He					
Li	Be																					B	C	N	O	F	Ne
Na	Mg																					Al	Si	P	S	Cl	Ar
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn										Ga	Ge	As	Se	Br	Kr	
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd										In	Sn	Sb	Te	I	Xe	
Cs	Ba		Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg										Tl	Pb	Bi	Po	At	Rn	
Fr	Ra		Rf	Ha																							

Click on element or select period and/or group.

Number of Elements  Units of Coefficients

El.Symb.	Co.(min)	Co.(max)	Ox.(min)	Ox.(max)	
AND <input type="text" value="N"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	X
AND <input type="text" value="As"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	X

Restrict total number of elements to selected number of elements

Access the ICSD via the  
Chemical Database Service  
at [icsd.cds.rsc.org](http://icsd.cds.rsc.org)

email: [cds@rsc.org](mailto:cds@rsc.org)

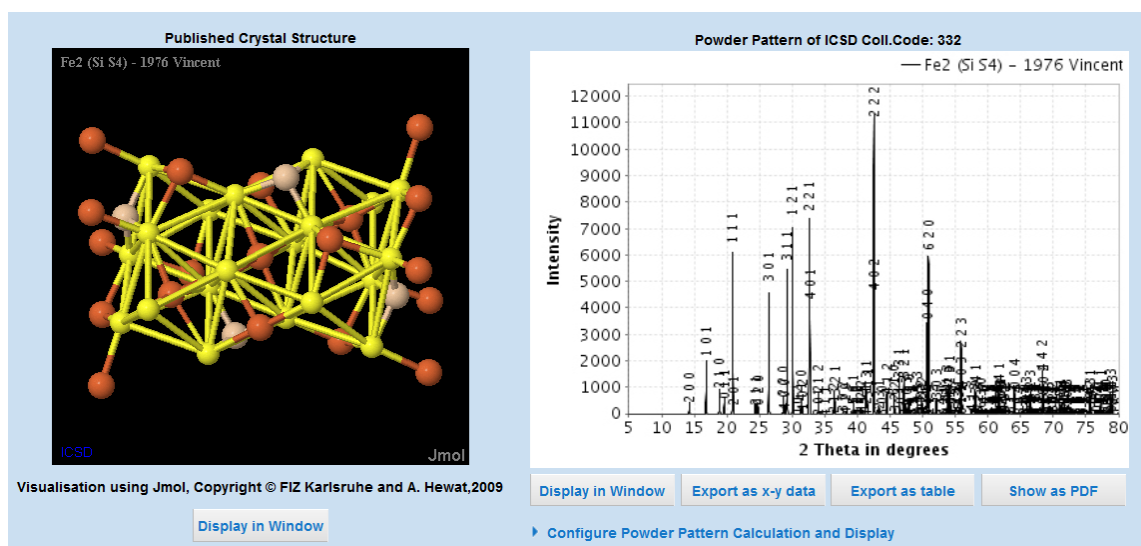
## What information is given?

Each inorganic crystal structure features additional information:

- Structural formula
- Space group
- Unit cell
- Cell parameters and cell volume
- Experimental details (pressure, temperature, powder/single crystal)
- Bibliographic information

## Visualisation of data

The **3D crystal structure** and **calculated Powder Pattern** can both be visualised within your browser.



## How do I access the ICSD?

Access to the ICSD is authenticated by IP address via [icsd.csd.rsc.org](http://icsd.csd.rsc.org). If working off-campus a Chemical Database Service username and password will be issued.

The ICSD is provided by academic IP address via the **Royal Society of Chemistry-hosted Chemical Database Service** at [cds.rsc.org](http://cds.rsc.org). The ICSD is maintained by FIZ Karlsruhe GmbH. The Chemical Database Service is funded by the EPSRC.

Access the ICSD via the  
Chemical Database Service  
at [icsd.cds.rsc.org](http://icsd.cds.rsc.org)

email: [cds@rsc.org](mailto:cds@rsc.org)