



# Squonk

Squonk Platform

Squonk Computational Notebook

Current Application domains

ChemAxon functionality

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# The Squonk Platform



## Services



calculate



predict



transform



data

## Runtime



docker



kubernetes



keycloak



## Hardware

Cloud

Virtual Private Cloud

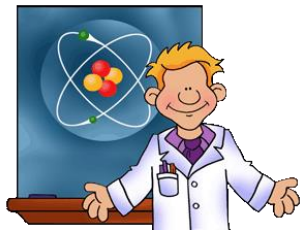
Bare metal

Laptop

Vendor agnostic  
Commercial + Open Source  
Interoperable  
Pluggable  
Containerised

Performant  
Scaleable  
Resilient  
Flexible  
Secure  
Cost effective  
Cloud enabled

# Squonk Computational Notebook



## Computational Notebook



workflows



analysis



collaboration



provenance

## Services



Democratise cheminformatics & computational chemistry (and beyond)

Make complex tools accessible to all

Break down barriers to access

Provide traceability and reproducibility

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# Application Domains

- 1: Chemical Safety Assessment
- 2: Drug Design

# 1: Chemical Safety Assessment



OpenRiskNet H2020 program ([more](#))

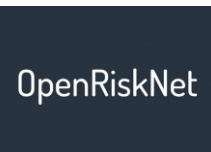
Commenced Dec 2016

e-Infrastructure for chemical safety assessment

Is driving:

Platform development

Data and predictive models for toxicology,  
metabolism



HORIZON 2020



# 2: Drug Design



Fragment Based Drug Design

Collaboration with:

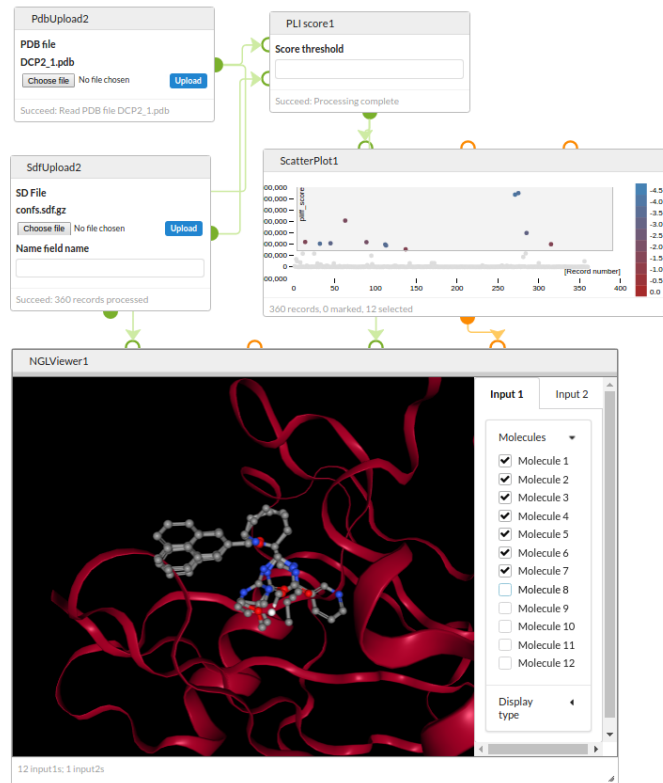
XChem at the Diamond Light Source

SGC and Statistics at Oxford University

Is driving techniques for turning  
fragments into leads:

3D visualisation and analysis

Chemical enumeration techniques



# ChemAxon Functionality



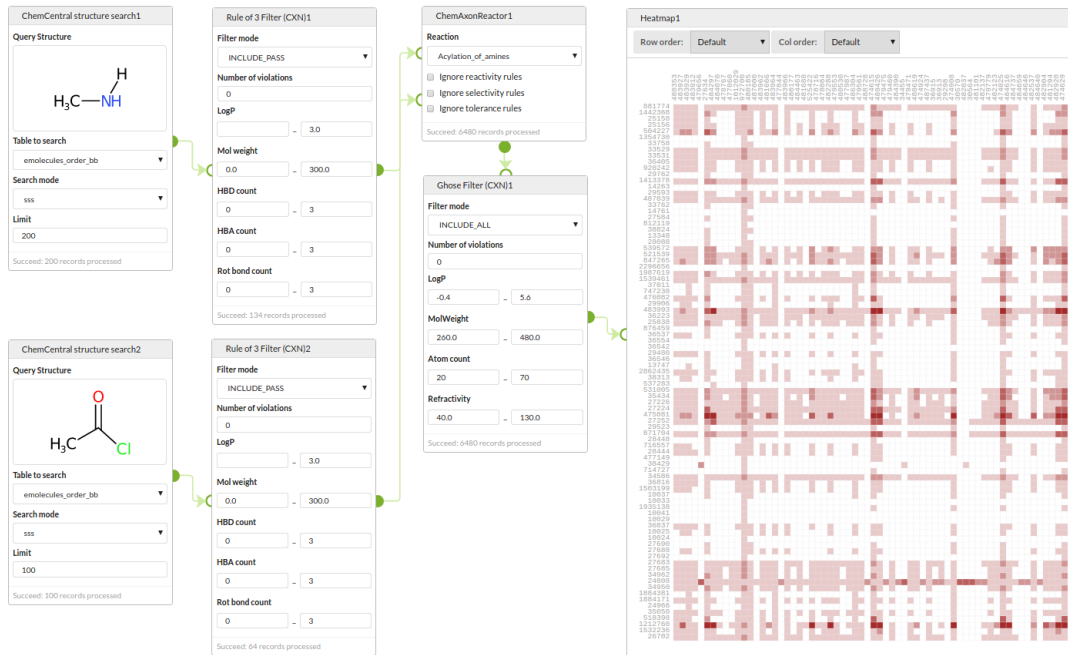
**Visual**  
Marvin JS

**Predictions**  
Property Calculators  
Filters

**Library Enumeration**  
Reactor

**Screening**  
Fingerprint screening  
Pharmacophore screening  
Clustering

**Database**  
JChem search



Looking for users wanting to use ChemAxon functionality

# The Squonk Says:



Thank you for listening, come  
and see us to find out more

We are  
hiring

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