





The ChemDraw 23 release delivers streamlined desktop and cloud offerings. Signals ChemDraw will provide full access to ChemDraw desktop applications, as well as the new Cloud-native ChemDraw applications within the new Signals ecosystem.



| Version 23.0 NEW FEATURES                       | Platform | ChemDraw Prime | ChemDraw Professional | Signals ChemDraw |
|---|----------|----------------|-----------------------|------------------|
| Dark Mode Style Sheet                           | win/mac  | •              | •                     | •                |
| Atropisomer perception                          | win/mac  | •              | •                     | •                |
| Ignore Top Level Chiral flag                    | win/mac  | •              | •                     | •                |
| Smart Paste (no overlapping on paste actions)   | win/mac  | •              | •                     | •                |
| Hydrogen Bonding in 3D cleanup                  | win/mac  |                | •                     | •                |
| Hydrogen Bonding support in 3MF                 | win/mac  |                |                       | •                |
| License Management & Authentication via Signals | win/mac  |                |                       | •                |
| Automatic Update                                | win/mac  |                |                       | •                |
| Save to Signals                                 | win/mac  |                |                       | •                |
| Open from Signals                               | win/mac  |                |                       | •                |
| Launch Signals applications                     | win/mac  |                |                       | •                |
| ChemDraw+*                                      | Web      |                |                       | •                |
| ChemDraw Collections**                          | win/mac  |                |                       | •                |
| HELM Curation***                                | Web      |                |                       | •                |
|   |          |                |                       |                  |
| ChemDraw+                                       | Platform | ChemDraw Prime | ChemDraw Professional | Signals ChemDraw |
| Dashboard                                       | Web      |                |                       | •                |
| View Recents & Favorites                        | Web      |                |                       | •                |
| Create a new Drawing from a Style Sheet         | Web      |                |                       | •                |
| File organization with Notebooks & Favorites    | Web      |                |                       | •                |
| List Views                                      | Web      |                |                       | •                |
| Drawings  | Web      |                |                       | •                |
| Notebooks                                       | Web      |                |                       | •                |
| Favorites                                       | Web      |                |                       | •                |
| Trash & Untrash Drawings                        | Web      |                |                       | •                |
| Edit Drawings in a ChemDraw web editor          | Web      |                |                       | •                |
| Duplicate a Drawing                             | Web      |                |                       | •                |
| Rename a Drawing                                | Web      |                |                       | •                |

| Download cdxml drawing  | Web      |                |                       | •                |
|---|----------|----------------|-----------------------|------------------|
| Round Trip editing to ChemDraw Desktop                                  | Web      |                |                       | •                |
| Favorite a Drawing  | Web      |                |                       | •                |
| Draw biopolymer sequences using ChemDraw+ HELM editor                   | Web      |                |                       | •                |
| Draw with centralized monomer libraries from Pistoia Alliance & Signals | Web      |                |                       | •                |
| Draw with centralized custom monomer libraries                          | Web      |                |                       | •                |
| Add Favorite monomers (peptides, RNA/DNA, Chem, Blob)                   | Web      |                |                       | •                |
| Insert HELM or FASTA string using the Text Tab                          | Web      |                |                       | •                |
| Filter libraries using text based search & peptide filters              | Web      |                |                       | •                |
| Insert Monomers to the Right or Left in a sequence                      | Web      |                |                       | •                |
| Replace a monomer in a sequence   | Web      |                |                       | •                |
| HELM Curation Application (New for 23)                                  | Platform | ChemDraw Prime | ChemDraw Professional | Signals ChemDraw |
| Browse Monomer Libraries  | Web      |                |                       | •                |
| Inspect Monomer Details   | Web      |                |                       | •                |
| Deprecate/Restore Monomers  | Web      |                |                       | •                |
| Bulk Import Custom Monomer Libraries                                    | Web      |                |                       | •                |
| Bulk Import Reports   | Web      |                |                       | •                |
| ChemDraw Collections (Formerly ChemOffice+)                             | Platform | ChemDraw Prime | ChemDraw Professional | Signals ChemDraw |
| Browse & Drill-down into ChemDraw Files (.cdx, .cdxml)                  | Win/Mac  |                |                       | •                |
| Browse & Drill-down ChemDraw Files embedded in MS Word                  | Win/Mac  |                |                       | •                |
| Browse & Drill-down ChemDraw Files embedded in MS Powerpoint            | Win/Mac  |                |                       | •                |
| Browse ChemDraw For Excel Files   | Win      |                |                       | •                |
| Create a collection from .csv files                                     | Win/Mac  |                |                       | •                |
| Create collection from SMILES text file                                 | Win/Mac  |                |                       | •                |
| Browse .mol & .sdf Files  | Win/Mac  |                |                       | •                |
| View .sdf Files properties  | Win/Mac  |                |                       | •                |
|   |          | *              |                       |                  |

| Copy Embedded Chemical Structures to the Clipboard  | Win/Mac   |                |                       | •                |
|---|---|----------------|-----------------------|------------------|
| Create Collection of Chemical Structures  | Win/Mac   |                |                       | •                |
| Adding Properties to Collections  | Win/Mac   |                |                       | •                |
| Editing Properties of Collections   | Win/Mac   |                |                       | •                |
| Saving Collection Layout as a Template  | Win/Mac   |                |                       | •                |
| Batch-Editing of Multiple Chemical Structures in Collections  | Win/Mac   |                |                       | •                |
| Structure-searching inside Cloud-hosted MS Office documents   | Win/Mac   |                |                       | •                |
| Searching across Signals Notebook (SNB) Experiments ***   | Win/Mac   |                |                       | •                |
| Create Collection of Reactions from SNB Experiments   | Win/Mac   |                |                       | •                |
| Export Collections to SD Files (v2000, v3000)   | Win/Mac   |                |                       | •                |
| Create Powerpoint Reaction Report Slide from SNB Experiments ***  | Win/Mac   |                |                       | •                |
| Create Powerpoint Molecule Report Slide from Collection   | Win/Mac   |                |                       | •                |
|   |   |                |                       |                  |
| Recent Additions  | Platform  | ChemDraw Prime | ChemDraw Professional | Signals ChemDraw |
|   |   |                |                       |                  |
| Magic Hotkeys Enhancements  | Win/Mac   | •              | •                     | •                |
| Magic Hotkeys Enhancements Shortcuts Enhancements   | Win/Mac<br>Win/Mac  | •              | •                     | •                |
|   | •   | •              | •                     | •                |
| Shortcuts Enhancements  | Win/Mac   | •              | •                     | •                |
| Shortcuts Enhancements  Join function improvements  | Win/Mac<br>Win/Mac  | •              | •                     | •                |
| Shortcuts Enhancements  Join function improvements  Smart Copy/Paste (SMILES, InChI, HELM)  | Win/Mac<br>Win/Mac<br>Win/Mac   | •              | •                     | •                |
| Shortcuts Enhancements  Join function improvements  Smart Copy/Paste (SMILES, InChI, HELM)  Aromatic Cycle Display Toggle and Preferences   | Win/Mac Win/Mac Win/Mac Win/Mac   | •              | •                     | •                |
| Shortcuts Enhancements  Join function improvements  Smart Copy/Paste (SMILES, InChI, HELM)  Aromatic Cycle Display Toggle and Preferences  Stereochemistry handling improvements  | Win/Mac Win/Mac Win/Mac Win/Mac Win/Mac   | •              | •                     | •                |
| Shortcuts Enhancements  Join function improvements  Smart Copy/Paste (SMILES, InChI, HELM)  Aromatic Cycle Display Toggle and Preferences  Stereochemistry handling improvements  Improved Polymer Brackets (Average MW)  | Win/Mac Win/Mac Win/Mac Win/Mac Win/Mac Win/Mac   | •              | •                     |                  |
| Shortcuts Enhancements  Join function improvements  Smart Copy/Paste (SMILES, InChI, HELM)  Aromatic Cycle Display Toggle and Preferences  Stereochemistry handling improvements  Improved Polymer Brackets (Average MW)  Hydrogen Bond Tool  | Win/Mac Win/Mac Win/Mac Win/Mac Win/Mac Win/Mac Win/Mac   | •              | •                     |                  |
| Shortcuts Enhancements  Join function improvements  Smart Copy/Paste (SMILES, InChI, HELM)  Aromatic Cycle Display Toggle and Preferences  Stereochemistry handling improvements  Improved Polymer Brackets (Average MW)  Hydrogen Bond Tool  Open CIF Files  | Win/Mac Win/Mac Win/Mac Win/Mac Win/Mac Win/Mac Win/Mac Win/Mac   | •              | •                     |                  |
| Shortcuts Enhancements  Join function improvements  Smart Copy/Paste (SMILES, InChI, HELM)  Aromatic Cycle Display Toggle and Preferences  Stereochemistry handling improvements  Improved Polymer Brackets (Average MW)  Hydrogen Bond Tool  Open CIF Files  Atom/Bond Color Highlighting  | Win/Mac                                 |                |                       |                  |
| Shortcuts Enhancements  Join function improvements  Smart Copy/Paste (SMILES, InChI, HELM)  Aromatic Cycle Display Toggle and Preferences  Stereochemistry handling improvements  Improved Polymer Brackets (Average MW)  Hydrogen Bond Tool  Open CIF Files  Atom/Bond Color Highlighting  Ring-Fill Coloring                          | Win/Mac                 |                |                       |                  |
| Shortcuts Enhancements  Join function improvements  Smart Copy/Paste (SMILES, InChI, HELM)  Aromatic Cycle Display Toggle and Preferences  Stereochemistry handling improvements  Improved Polymer Brackets (Average MW)  Hydrogen Bond Tool  Open CIF Files  Atom/Bond Color Highlighting  Ring-Fill Coloring  Search into SciFinder-n | Win/Mac |                |                       |                  |

| HELM Cartoon Representation                                   | Win/Mac            |                | •                     | •                |
|---|--------------------|----------------|-----------------------|------------------|
| Support for ambiguous FASTA/HELM Monomers                     | Win/Mac            |                | •                     | •                |
| Copy as 3D-printable Object (.3MF)**                          | Win/Mac            |                |                       | •                |
| Atom/Bond Color Highlight & Ring Fill transfer to 3MF         | Win/Mac            |                |                       | •                |
| Google Patents/Scholar Add-in                                 | Win/Mac            |                |                       | •                |
| PubChem GHS Safety Add-in                                     | Win/Mac            |                |                       | •                |
| MilliporeSigma Synthia Add-in (requires Synthia subscription) | Win/Mac            |                |                       | •                |
| ChemDraw Add-ins SDK  | Win/Mac            |                |                       | •                |
| ChemDraw Add-ins Dynamic Download                             | Win/Mac            |                |                       | •                |
| Support for Add-ins Token-based Authentication                | Win/Mac            |                |                       | •                |
| Shared HELM Libraries   | Win/Mac            |                |                       | •                |
|   |                    |                |                       |                  |
| Includes  | Platform           | ChemDraw Prime | ChemDraw Professional | Signals ChemDraw |
| Read and Save as .cdx / .cdxml Files                          | Win/Mac            | •              | •                     | •                |
| Read and Save as .rxn Files (v2000, v3000)                    | Win/Mac            | •              | •                     | •                |
| Read and Save as .skc Files                                   | Win/Mac            | •              | •                     | •                |
| Read and Save as .mol Files (v2000, v3000)                    | Win/Mac            | •              | •                     | •                |
| Read and Save as .sdf Files (v2000, v3000)                    | Win/Mac            | •              | •                     | •                |
| Read and Save as .rdf Files (v2000, v3000)                    | Win/Mac            | •              | •                     | •                |
| Save ChemDraw Style Sheet                                     | Win/Mac            | •              | •                     | •                |
| Structure Clean-up  | Win/Mac            | •              | •                     | •                |
| Reaction Clean-up   | Win/Mac            | •              | •                     | •                |
| Magic Hotkeys   | Win/Mac            | •              | •                     | •                |
|   |                    |                | _                     | _                |
| Chemical Bonds Tools  | Win/Mac            | •              | •                     | •                |
| Chemical Bonds Tools  Text Tool                               | Win/Mac<br>Win/Mac | •              | •                     | •                |
|   | ,                  | •              | •                     | •                |
| Text Tool   | Win/Mac            | •              | •                     | •                |
| Text Tool  3D Perspective Tool                                | Win/Mac Win/Mac    | •              | •                     |                  |

| Brackets Tool  | Win/Mac | • | • | • |
|--|---------|---|---|---|
| Pen Tools  | Win/Mac | • | • | • |
| Shapes Tool  | Win/Mac | • | • | • |
| Chemical Polymers Tools                                  | Win/Mac | • | • | • |
| Mass Fragmentation Tools                                 | Win/Mac | • | • | • |
| Thin Layer Chromatography Tool                           | Win/Mac | • | • | • |
| Gel Electrophoresis Tool                                 | Win/Mac | • | • | • |
| Insert OLE Object in ChemDraw                            | Win     | • | • | • |
| Copy ChemDraw Structures as OLE Object                   | Win     | • | • | • |
| Show Stereochemistry                                     | Win/Mac | • | • | • |
| Relative Stereochemistry (ISIS compatibility)            | Win/Mac | • | • | • |
| Reaction Interpretation                                  | Win/Mac | • | • | • |
| Reaction Mapping   | Win/Mac | • | • | • |
| Calculate MW   | Win/Mac | • | • | • |
| Calculate Exact Mass                                     | Win/Mac | • | • | • |
| Calculate Chemical Formula                               | Win/Mac | • | • | • |
| Calculate Elemental Analysis                             | Win/Mac | • | • | • |
| Calculate m/z  | Win/Mac | • | • | • |
| Copy/Paste as CDXML                                      | Win/Mac | • | • | • |
| Copy/Paste as SMILES                                     | Win/Mac | • | • | • |
| Copy/Paste as SYBYL (SLN)                                | Win/Mac | • | • | • |
| Copy/Paste as InChI                                      | Win/Mac | • | • | • |
| Copy/Paste as Mol File / Mol3000                         | Win/Mac | • | • | • |
| pKa / Log P / Log S                                      | Win/Mac | • | • | • |
| tPSA   | Win/Mac | • | • | • |
| Atom List Generic Structures (Enumeration)               | Win/Mac | • | • | • |
| Variable Attachment Generic Structures (Enumeration)     | Win/Mac | • | • | • |
| Label Repeating Units Generic Structures (Enumeration)   | Win/Mac | • | • | • |
| Polymer Repeating Units Generic Structures (Enumeration) | Win/Mac | • | • | • |

| Chemical Structures Templates                  | Win/Mac | • | • | • |
|--|---------|---|---|---|
| Laboratory Equipment Templates                 | Win/Mac | • | • | • |
| Analyze/Check Structures                       | Win/Mac | • | • | • |
| Expand/Contract Labels                         | Win/Mac | • | • | • |
| Define/Use Nicknames                           | Win/Mac | • | • | • |
| Document Metadata/Tagging                      | Win/Mac | • | • | • |
| Multiple ChemDraw Items Folder                 | Win/Mac | • | • | • |
| Multicenter Attachments                        | Win/Mac | • | • | • |
| Save as JPEG image                             | Win/Mac | • | • | • |
| Save as PNG image                              | Win/Mac | • | • | • |
| Save as TIFF image                             | Win/Mac | • | • | • |
| Save as Scalable Vector Graphics (SVG)         | Win/Mac | • | • | • |
| Save as Encapsulated Post Script (EPS)         | Win/Mac | • | • | • |
| Name-to-Structure / Structure-to-Name          | Win/Mac |   | • | • |
| Predict 1H NMR                                 | Win/Mac |   | • | • |
| Predict 13C NMR                                | Win/Mac |   | • | • |
| Search SciFinder                               | Win/Mac |   | • | • |
| Search SciFinder-n                             | Win/Mac |   | • | • |
| Search Reaxys                                  | Win/Mac |   | • | • |
| Reaction Stoichiometry Grid                    | Win/Mac |   | • | • |
| R-Group Table Generic Structures (Enumeration) | Win/Mac |   | • | • |
| BioDraw Toolbar                                | Win/Mac |   | • | • |
| cLogP  | Win/Mac |   | • | • |
| HELM Toolbar                                   | Win/Mac |   | • | • |
| Copy/Paste as HELM                             | Win/Mac |   | • | • |
| Copy/Paste as FASTA Peptide                    | Win/Mac |   | • | • |
| Copy/Paste as FASTA DNA/RNA                    | Win/Mac |   | • | • |
| Support for HELM notation                      | Win/Mac |   | • | • |
| CAS RN to Structure from ChemACX.com           | Win/Mac |   | • | • |

| Enhanced Stereochemistry Support  | Win/Mac |  | • |  |
|---|---------|--|---|--|
| ChemDraw for Excel  | Win     |  | • |  |
| CombiChem for Excel   | Win     |  | • |  |
| Name-to-Structure / Structure-to-Name for ChemDraw for Excel            | Win     |  | • |  |
| Chem3D Professional   | Win     |  | • |  |
| ChemFinder Standard   | Win     |  | • |  |
| ChemScript  | Win     |  | • |  |
| ClogP/CMR for ChemDraw for Excel/Chem3D                                 | Win     |  | • |  |
| Molecular Networks (pKa/Log P/Log S) for ChemDraw for Excel/ Chem 3D $$ | Win     |  | • |  |
| Molecular Topology for Chem Draw for Excel/Chem 3D                      | Win     |  | • |  |
| ChemProp Std Properties for Chem Draw for Excel/Chem 3D                 | Win     |  | • |  |
| PubChem GHS Safety Add-in   | Win/Mac |  |   |  |
| Google Scholar / Google Patents Add-in                                  | Win/Mac |  |   |  |
| Save as 3D-printable object (.3MF)                                      | Win/Mac |  |   |  |
| Copy as 3D-printable object (.3MF)                                      | Win/Mac |  |   |  |
| Transfer Atom/Bond Color Highlights to 3D-printable object              | Win/Mac |  |   |  |
| ChemACX Explorer  | Win/Mac |  |   |  |
| Custom ChemDraw Add-ins SDK   | Win/Mac |  |   |  |
| Support for Token-based Authentication of Add-ins                       | Win/Mac |  |   |  |
| Shared HELM Libraries   | Win/Mac |  |   |  |
| Chem3D Ultra  | Win     |  |   |  |
| Chem3D Interface to Conflex   | Win     |  |   |  |
| Chem3D Interface to Autodock  | Win     |  |   |  |
| Chem3D Interface to GAMESS 2020   | Win     |  |   |  |
| Chem3D Interface to Gaussian 16W  | Win     |  |   |  |
| Chem3D Interface to MOPAC 2016  | Win     |  |   |  |
| ChemFinder Ultra  | Win     |  |   |  |
| ChemFinder for Oracle   | Win     |  |   |  |

| Explorer Window View in ChemFinder Ultra              | Win |  | • |
|---|-----|--|---|
| BioViz in ChemFinder Ultra                            | Win |  | • |
| Compound Profiles in ChemDraw Finder Ultra            | Win |  | • |
| Clustering in ChemFinder Ultra                        | Win |  | • |
| Combine ChemFinder Query Hit Lists                    | Win |  | • |
| ChemFinder Exports to MS Word/Excel                   | Win |  | • |
| ChemProp Pro Properties for ChemDraw for Excel/Chem3D | Win |  | • |

<sup>\*</sup>ChemDraw+ is the new web-based ChemDraw application









<sup>\*\*</sup>ChemDraw Collections is a cloud-native application that is automatically updated quarterly

<sup>\*\*\*</sup>HELM Curation is a web-based application for the curation of centralized monomer libraries for use in the HELM editor in ChemDraw+ and Signals