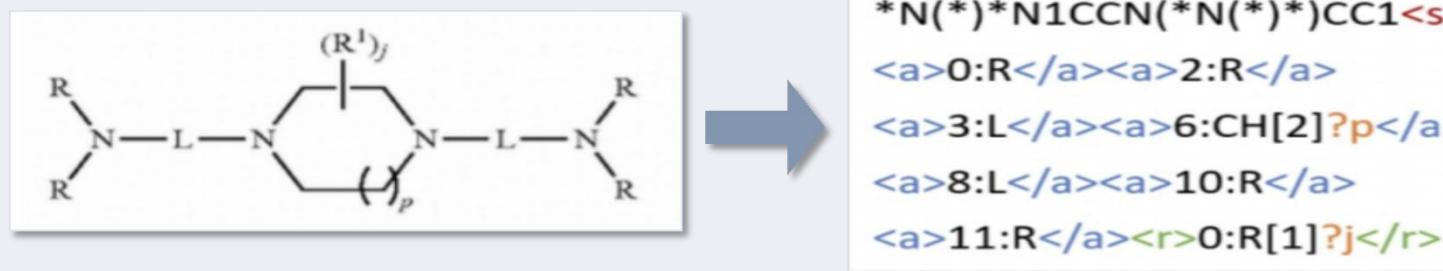
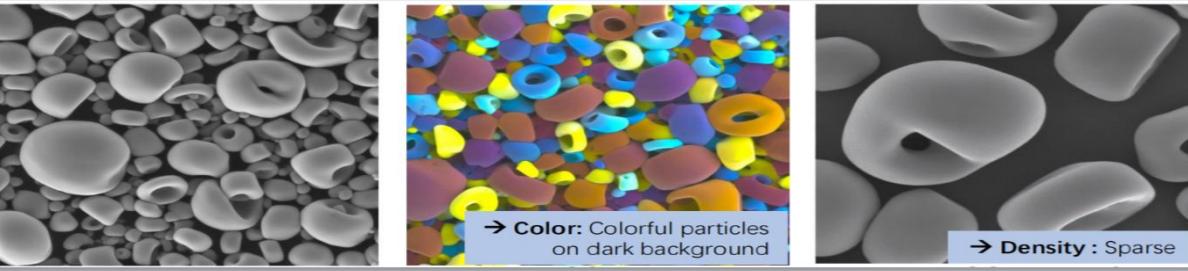


Synthetic Generation

e.g. E-SMILES format representation



e.g. Generate electron micrograph image



Filter

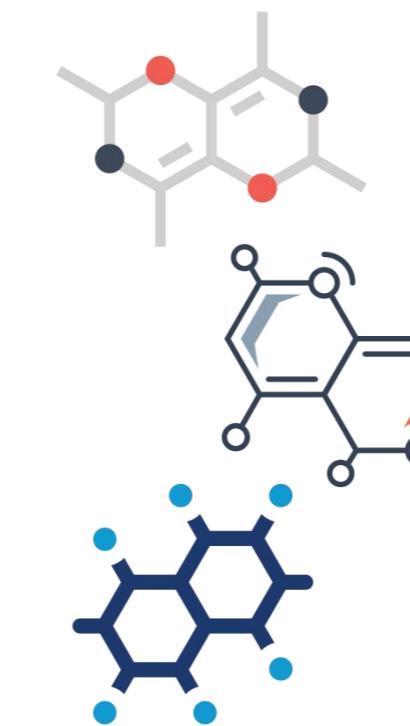
For EM representation:

1. Ensure chemical validity.
2. Check high-value complex molecules.

For image:

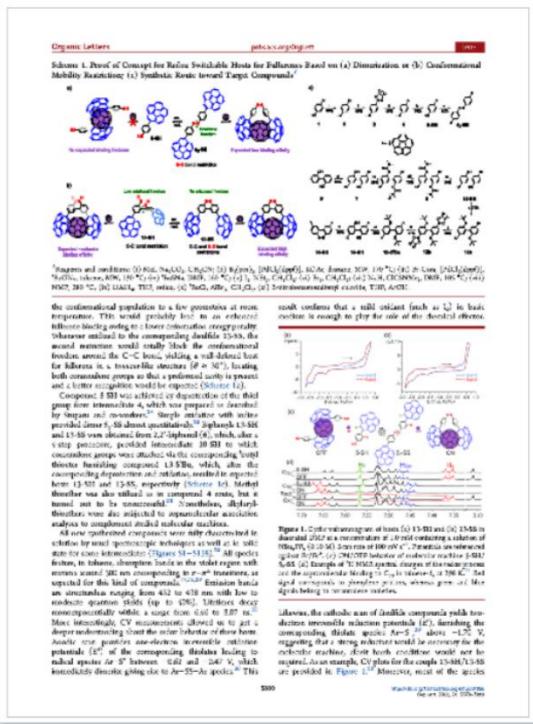
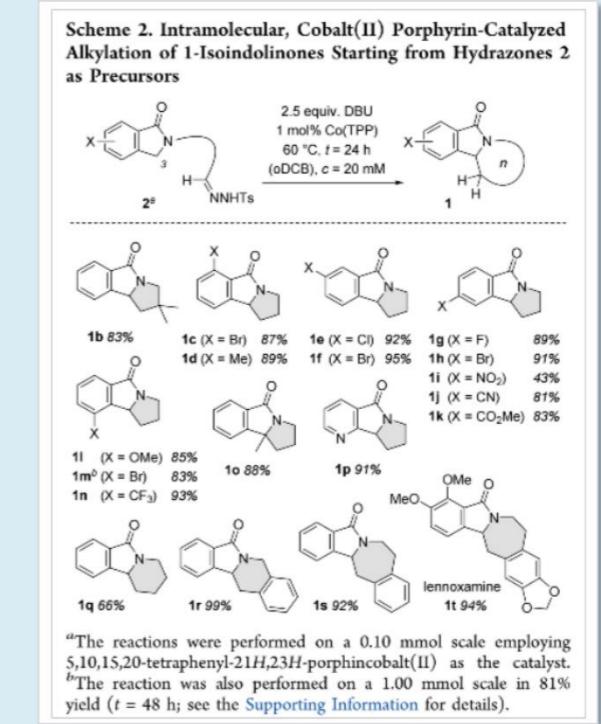
1. Verify image quality.

Refining Loop



Real-World Sources

Papers
EM images
Patents



Generate Questions



Scientist in the loop

For questions:

1. Review and edit.
2. Create hard negatives.