# **NCN at Northwestern Tools**





### NCN@Northwestern Tool Support

We have identified a list of tools for which we commit the following level of service:

- monitor support tickets, questions, and wishlists and provide a response within one business day.
- fix simple bugs within a week.
- move long term projects and tool improvement requests to a public wish list.

The overall support structure and philosophy of the NCN and nanoHUB is <u>described in a</u> <u>different page</u>.

### NCN@Northwestern Supported Educational Tools

- <u>NUITNS</u> is our "Northwestern Initiative for Teaching NanoScience" consistent of 5 different tools. All the tools in NUITNS are fully supported:
  - <u>Theoretical Electron Density Visualizer</u> TEDVis calculates and displays 3D maps of molecular ED and its derivatives from the wave function.
  - Molecular Structure Tracer High-quality display of molecular structures.
  - <u>UV/Vis Spectrum simulator</u> Molecular electronic spectra.
  - <u>CNDO/INDO</u> Semi-empirical Molecular Orbital calculations.
  - <u>QC-Lab</u> Quantum Chemistry Lab.
- <u>NanoSphere Optics Lab</u> Optical properties of nanospheres suspended in water, air, or other solutions.
- <u>Nanosphere Optics Lab Field Simulator</u> Study of the Electric field induced by Light-Nanoparticle interaction.
- EPR Electron Paramagnetic Resonance.

### NCN@Northwestern Supported Research Tools

- <u>PNP Cyclic Peptide Ion Channel Model</u> Simulate ion flow in a system modeled after cyclic peptide ion channels using Poisson-Nernst-Planck (PNP) theory.
- <u>CGLS</u> Coarse-Grain Lipid Simulator.
- <u>AcMe NPDS</u> Active Media FDTD Nanophotonics Device Simulator.

## **Tool Improvement Wishlist**

User due post questions or send support tickets where they essentially ask for new features in tools or suggest improvements. With the limited resources we have available we want to manage these tool suggestions publicly. Eventually we believe that each tool will have its own "Wishlist". For now we summarize the tool improvment wishes here.

#### Links to: Tools, Questions and Answers, and Wishlists

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ΤοοΙ	Questions	Wishlist
<u>NUITNS</u>	<u>Questions</u>	<u>Wishes</u>
<u>QC-Lab</u>	<u>Questions</u>	<u>Wishes</u>
<u>TEDViz</u>	<u>Questions</u>	<u>Wishes</u>
<u>MoIST</u>	<u>Questions</u>	<u>Wishes</u>
UV/Vis Spectrum simulator	<u>Questions</u>	<u>Wishes</u>
INDO/CNDO	<u>Questions</u>	<u>Wishes</u>
NanoSphere Optics Lab	<u>Questions</u>	<u>Wishes</u>
NSOL – Field Simulator	<u>Questions</u>	<u>Wishes</u>
PNP Cyclic Peptide Ion	<u>Questions</u>	<u>Wishes</u>
Channel Model		
Electron Paramagnetic	<u>Questions</u>	<u>Wishes</u>
<u>Resonancel</u>		
Active Media Nanophotonics	<u>Questions</u>	<u>Wishes</u>
Device Simulator		