

# ab\_For Research Groups

Projects focused on research in Chemistry. Usually for a specific research group.

## Aye - Laptop and desktop support barriers

Many of Yimon's support tickets related to her desktop and laptop lead to successfully addressing symptoms, and not addressing underlying structural issues implied to exist. Thus, this page tries to collect in one place tickets and other information to help better respond to future requests for support. This situation, which includes software not being kept up to date for whatever reason, is expected to only get worse, alas.

## Cluster and other high-performance systems support

Lulu Zhu does or leads us for our Linux-based work. Roger is our lead for Windows server-based work.

- [All clusters](#) — Park items related to... (see this full page for list)
- [HPC ideas from Cornell folks outside CCB](#) — CU peers respond to a query to fulfill an immediate need of 64-512 cores. May 2014.
- [P041 ChemIT Headnode creation](#) — This community resource could, when completed, help many groups with clusters.
- [P062 Scheraga cluster Matrix upgrade](#)
  - [Files shared with Czarek](#) — Deprecated method. Please use Box.com method instead.
  - [NFS versus iSCSI](#) — For the Synology box, use NFS? Or, use iSCSI? Here are some helpful links as we try to answer that question, for this project.
  - [Purchase decisions and related issues](#)
  - [Status for 8/25/14 Monday check-in](#)
- [P076 Widom Cluster](#) — Make Widom's cluster operational, including adding new hardware. 2 phases.
- [P089 Hoffmann cluster re-expansion](#) — Fall 2014, \$30K grant. Added 10/2/14.
- [P140 Cluster migration to CAC](#) — Exploring idea and value in moving select Chemistry clusters to CAC, from 248 Baker Lab.
  - [Text entered into the CAC Project Request Form](#) — Some text Oliver entered to complete the form Dec. 22, 2016.

## Coates tickets and projects summary page

January 2018: To help prioritize and keep track of multiple initiatives by Chemistry IT for and with the Coates group.

## CUL and Symplectic

The Library is looking at a better way of gathering a quality list of faculty publications than the current manual entry process.

## Learning Catalytics Mobile and Web Polling Pilot

Learning Catalytics is being used in Baker 200. But that room has insufficient wireless until building's network is upgraded (scheduled for that room by the end of Feb?).

## Linux Workstations

- [Cerione, 3D workstations](#)

## NSF Data Management Plan

Ronald Hoffmann's group's need to fulfill NSF's data management requirements.

## P049 Chen - Imaging instrument (microscope) computers

~2 are XP, all others Win7.

## P057 Windows XP remediation

April 6, 2014 Microsoft no longer supporting (patching) Windows XP. Thus, they will become increasingly vulnerable to compromise, and must be taken off the network, per University IT policy.

## P150 Chen - Increase productivity for Matlab computations

Ideas: Expand computational capabilities (power and/ or number of computers), increase efficiency of code, streamline workflows, etc.

- [Chen - Consult on scaling up image processing work](#) — Chen process many, many images using group-developed software (on Matlab?). It uses dedicated computers (all in the lab?) to meet current needs, but Peng is concerned that it will not scale well. In addition to processing power, effort demands and produces copious amounts of data, currently stored on one-off, external hard drives.

## Petersen group outbound transition

Work to transition Petersen group out of Cornell Chemistry summer 2018

- [Petersen Computational Computers](#)
- [Petersen EZBackup computers](#)
- [Petersen group phones](#)
- [Petersen Instrumentation computers](#)

## **z\_Finger on the pulse, Research**

Possible projects, low-level explorations, etc.

- [Reducing hard drive failures and consequences on server](#) — What are the cost trade-offs of reducing server hard drive failures? What can be done to mitigate consequences to drive failures?