**Carnegie IR 2017 Annual Report**

**COMPRES Facilities Comments**

**Bin Chen**

The facility has served many user groups for both online and mail-in measurements, resulting in a few high-profile publications in Earth science (i.e. Nature Geoscience). The request for a junior beamline scientist is well justified, as the commissioning of the new beamline requires additional man power. Does COMPRES have the budget in the COMPRE IV proposal to cover this additional beamline scientist?

The “kick-off” workshop should be widely advertised targeting the COMPRES community, to inform and attract potential new users. Is it possible to record the workshop presentations for people who can not attend the workshop? This will be useful to increase the user base of the facility from the COMPRES community.

**Arianna Gleason**

-Excellent match between this facility and the scientific drivers in not just the Earth Sciences community but also more broadly in the condensed matter physics and materials science communities.

-User base seems fairly limited in terms of institution diversity, but I think this due mostly to the short operation period thus far. It would be nice to see a more diverse academic interest as well as other national lab scientists.

-The nature of the partnership between COMPRES and the PIs is unclear. I’m not sure what, if any, professional development has taken place so far.

-The relationship between COMPRES and the host facility seems quite good.

**Anne Pommier**

*-Science*: (Overview section is heavily “inspired” from their last year report…)

Half of the research highlights focus on interesting Earth science applications (water cycle, water in mylonites), the other half on material science/chemistry topics. However, most of the publications (all but the 2 mentioned above) are not in Earth and planetary science journals. This criticism has already been made by the Committee in the last 2 reports, but it seems that still no action is taken to increase the number of geophysically relevant studies.

*-User community:* Where are the statistics? I could not find the proportion of COMPRES users or other info like the oversubscription rate (only a list of users at the end of the report).

Are students and early career scientists supported?

It would be good to know how successful the mail-in service is (it was last year but nothing is said about it in this year’s report).

*-Management team:* 1 beamline scientist, Dr. Liu (COMPRES funding through subaward, so not directly paid by COMPRES? Unclear to me).

Funding is requested to support a “junior beamline scientist” but it is not clear why a second scientist is needed and how activities will be split between her/him and Dr. Liu (I assume that the more than succinct part of the report dedicated to this hire is not something that will be financially supported by COMPRES).

Last year’s report was referring to a new postdoc position: has this been canceled?

*-Facility:* (probably a naive question here, but how much is COMPRES support for this facility? It is very tough to understand what is supported or not by COMPRES in this report).

Development of the facility highlights the dipole vacuum chamber and the FIS/MET cabins, but only the latter is described in the report. Instead, the vacuum chamber seems only part of future activities (how much was this developed this year?)

The planned activities seem well tuned for geoscience studies, which hopefully will increase the number of Earth science publications from this facility.

The planned FIS/MET workshop (May 2018) will require COMPRES funding (workshop proposal will be submitted to EOID) but the description of the workshop does not highlight any geoscience application. It would be good to encourage them to include that before they submit their proposal to EOID.

**Mark Rivers**

The dark period for synchrotron IR at BNL should come to an end in about 6 months. The progress on constructing the large cabins on the floor has been good, and the IR extraction ports should be happening now.

Liu has worked to keep the community engaged and provided a lab IR source since NSLS shut down in 2014.

The new facility should be excellent, and I expect it will be oversubscribed since only 50% will be for high-pressure users.

I would have liked to see information on the ALS 1.4 publications. Are there any publications from the COMPRES users there yet?

About 50% of the publications have some COMPRES relevance.

Next year there should be synchrotron users, and we expect the report to comply with the template, i.e. who was funded by each agency, etc.

ME: **follow up to get template info; no justification presented for junior scientist.**

**Dan Shim**

**Budget justification for salary support does not have enough detail. For example, how many months are being asked for two different scientists?  Will the budget increase significantly by adding one more person to the team?**