**Arizona MAP 2017 Annual Report**

**COMPRES Facilities Comments**

**Bin Chen**

The multianvil assembly fabrication facility continues to be a great asset to the COMPRES community. It is great to see the effort of testing a new grade of tungsten carbide cube for achieving higher pressures, complementing the effort from the DELVE project. In this year’s report, an increased number of publications are listed, which benefit from the MAP facility.

My understanding for the LMAPF report is just a status report, as the press is not yet funded by NSF. The budget for materials and supply is at the low end, so it may not be able to sustain such a large facility (Large tungstein carbide cubes are quite expensive).

**Arianna Gleason**

-Fabrication of unique and chemically complex sample materials for the COMPRES user community is clearly a key asset. It is unclear to me the benefit of supporting the LMAPF at this time and what additional service beyond what is already being provided at ASU is gained by a new 2.9M investment as listed in these documents.

-User community is quite broad and cross cuts domestic and international academic needs, as well as several national laboratories.

-It is unclear the extent to which the technicians or students operating this facility have access to COMPRES partners for professional development. Maybe this connection needs to be further established/developed?

-It sounds like the existing capabilities already match the current and coming needs of the community and appropriate support is matched on the ASU side.

**Anne Pommier**

COI

**Mark Rivers**

This project continues to be very successful.

This year they have made a real improvement in tracking publications that use the facility. This will help COMPRES in its reporting to NSF.

They have done more work on evaluating and testing carbide, in part for the DELVE project. This is a positive development. It continues the systematic work that needs to be done to improve the multi-anvil technology, but which individual labs typically do not have the time and resources to do.

The efforts on crushable forsterite seem like a very good thing to pursue.

The number of cell assemblies they provide under the Cost of Sales program is really impressive, 2,085 last year.

The use of undergrads in the project is great both for training and for keeping costs low.

I liked the inclusion of the 1 pagers from the 3 different facilities. They should keep this up, and highlight different facilities in coming years.

For the 5,000 ton press I was confused on the budget. The estimate the operating costs at about $250K/year, but only ask COMPRES for $20K/year. Where does the rest come from?

When will we know if this is a real request, i.e. if the MRI proposal is selected by ASU?

**Dan Shim**