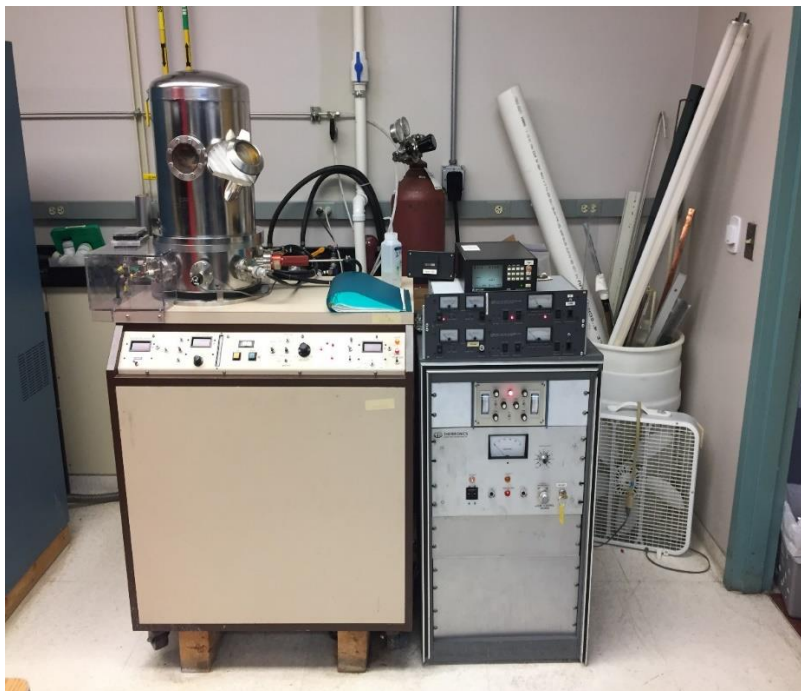


Thermionics VE-100 Vacuum Evaporator



The Thermionic evaporator at NCF combines thermal and electron-beam deposition capabilities for flexibility when depositing metals or compound materials. The system has 3 crucibles available for e-beam deposition, and 1 boat for thermal deposition. The system primarily uses a turbo pump for the chamber so pump down time is approximately 2 hours. After passing the NCF safety exam, users can request training on this machine by sending an email to ncftech@uic.edu. Those not trained can request an NCF work service order by contacting the lab manager.

Location: packaging bay

Training: 3 sessions (2 trainings and a checkout session)

Technical Specifications:

- # of E-beam Crucibles: 3
- # of Thermal boats: 1
- Max E-beam Current:
- Max Thermal Current:
- Max # of samples: one 3-inch sample (a user with a specific need could request the fabrication of different type of sample holder)
- Min Chamber Pressure: $\sim 6 \times 10^{-6}$ torr
- Thickness Monitor: Quartz Crystal monitor, provided by the user