

INCIDENT — TANK DAMAGE, KRIEGER HALL (MAY 2014)

While performing experiments in a large water tank, a researcher placed an incandescent spotlight in front of a 2-inch thick Plexiglas observation window. During the experiments, the lamp slipped and came to rest against the window surface. The window melted one-third of the way through, compromising its mechanical integrity.



Fortunately, the window had been oversized—three times the vendor's recommended thickness. The researcher discovered the damage before the tank leaked and flooded the basement floor of Krieger.

LESSONS LEARNED

- When placing temporary equipment in lab, make sure it is safely positioned and secured.
- When specifying equipment to a vendor, consider overdesigning structural components if there is a risk of failure or damage and the consequences would be serious.

DISCUSSION QUESTIONS

1. What areas in our equipment are subject to external damage?
2. What would the consequences be if those items were damaged or destroyed?
3. What can we do to mitigate the severity or probability of such damage?