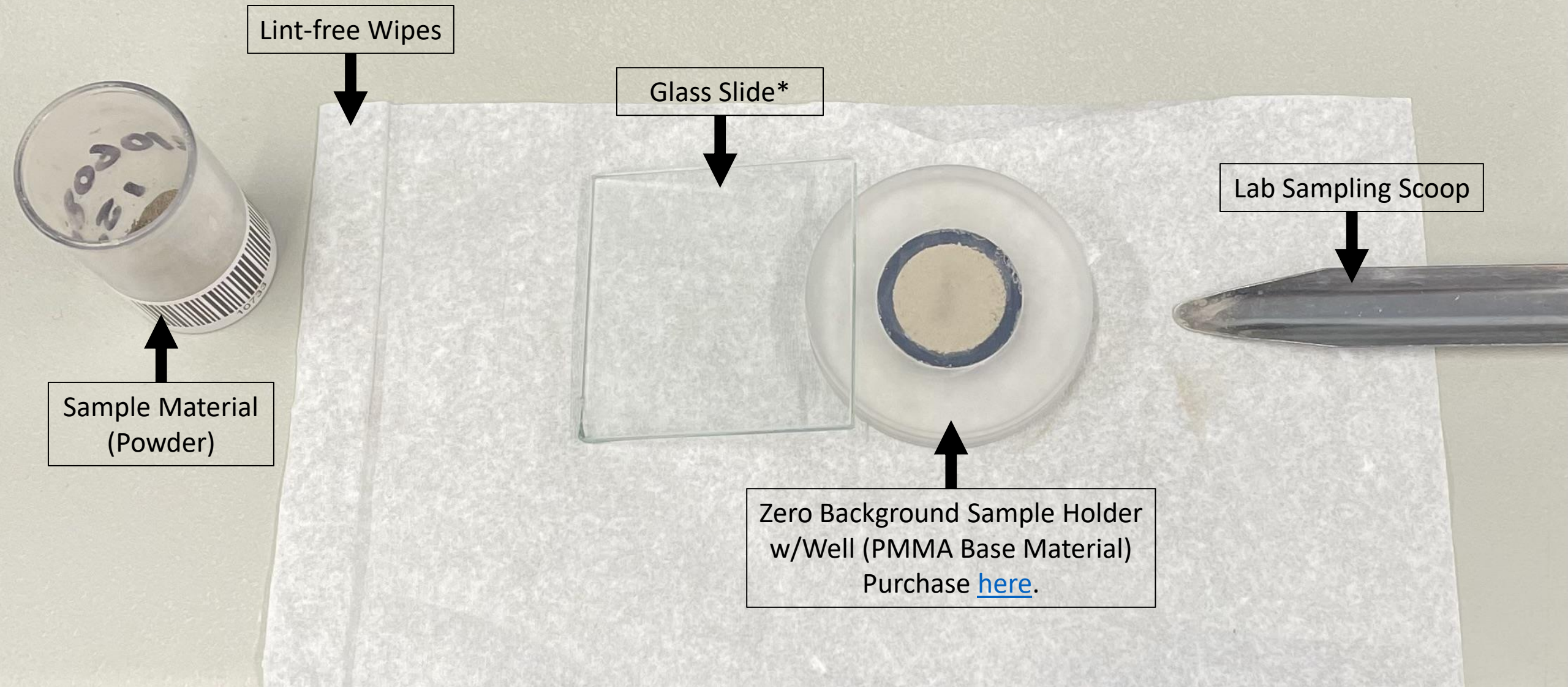


# Sample Preparation Process: Zero- Background Sample Holder (With Well)

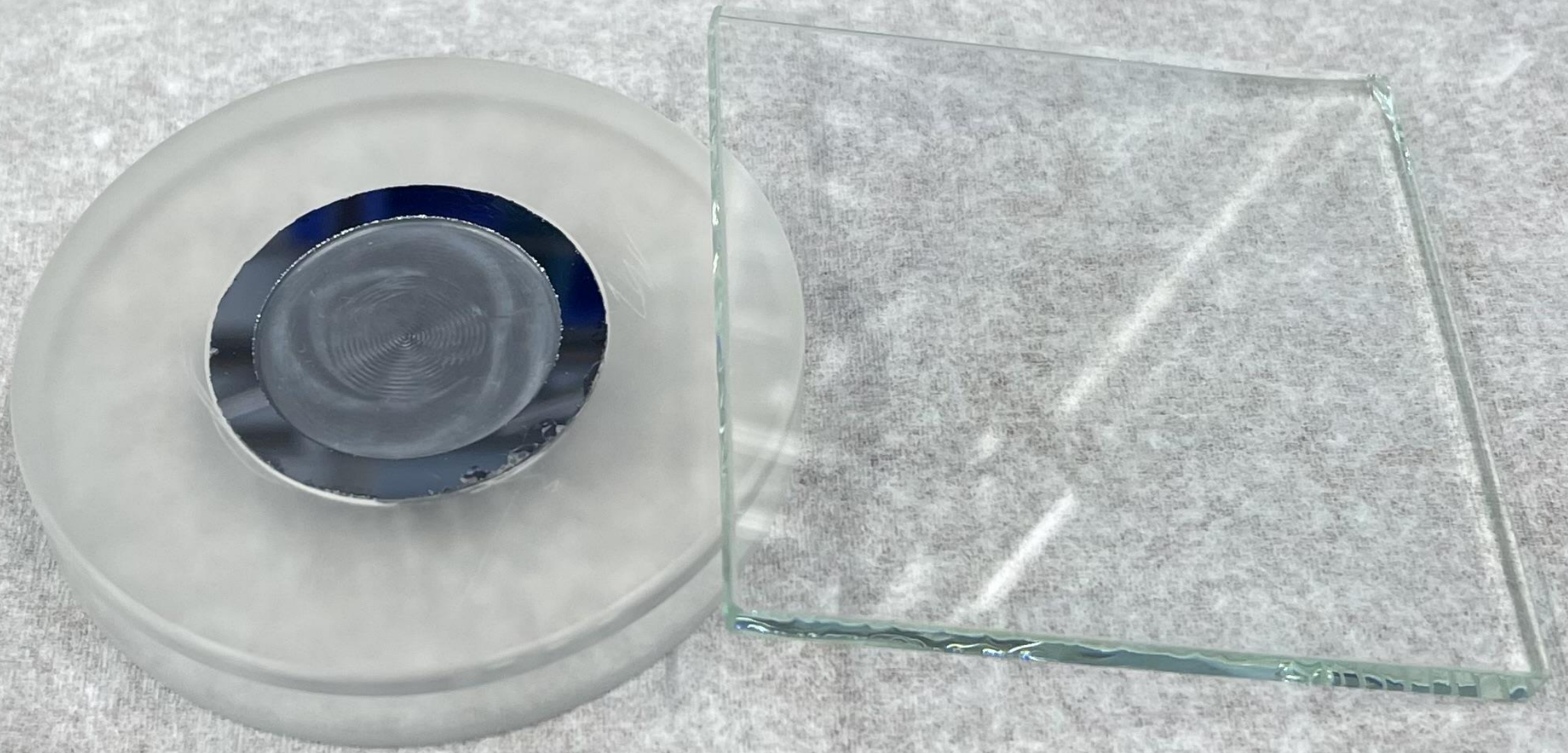


# Items Used in Demonstration



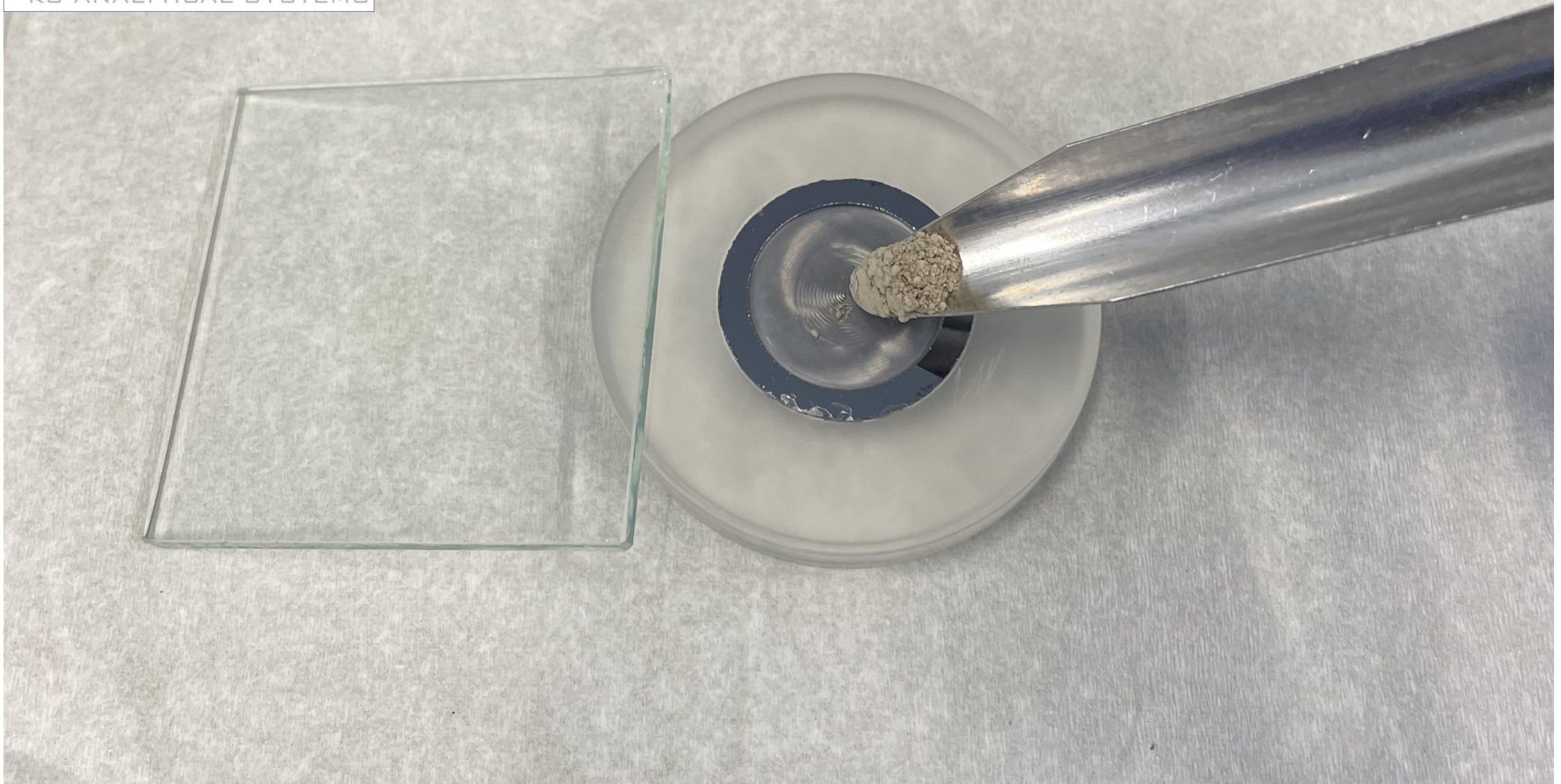
\*Some users prefer a non-smooth / chemically-etched glass slide, also an acceptable option for this process.





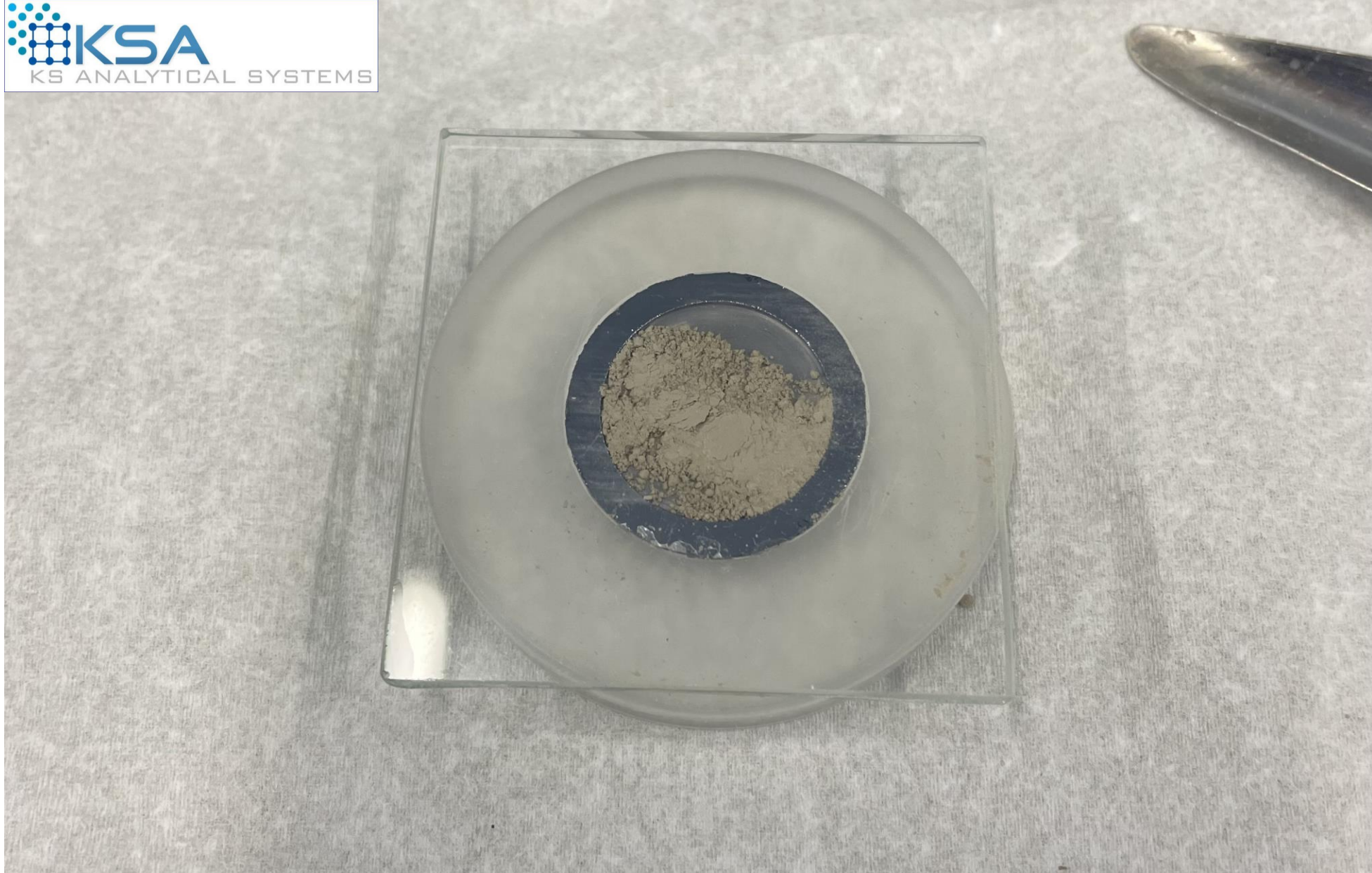
Before starting the sample preparation process, clean the sample holder, glass slide, and lab sampling scoop using Isopropyl Alcohol and lint-free wipes. Re-clean all items between each sample preparation to prevent sample cross-contamination.





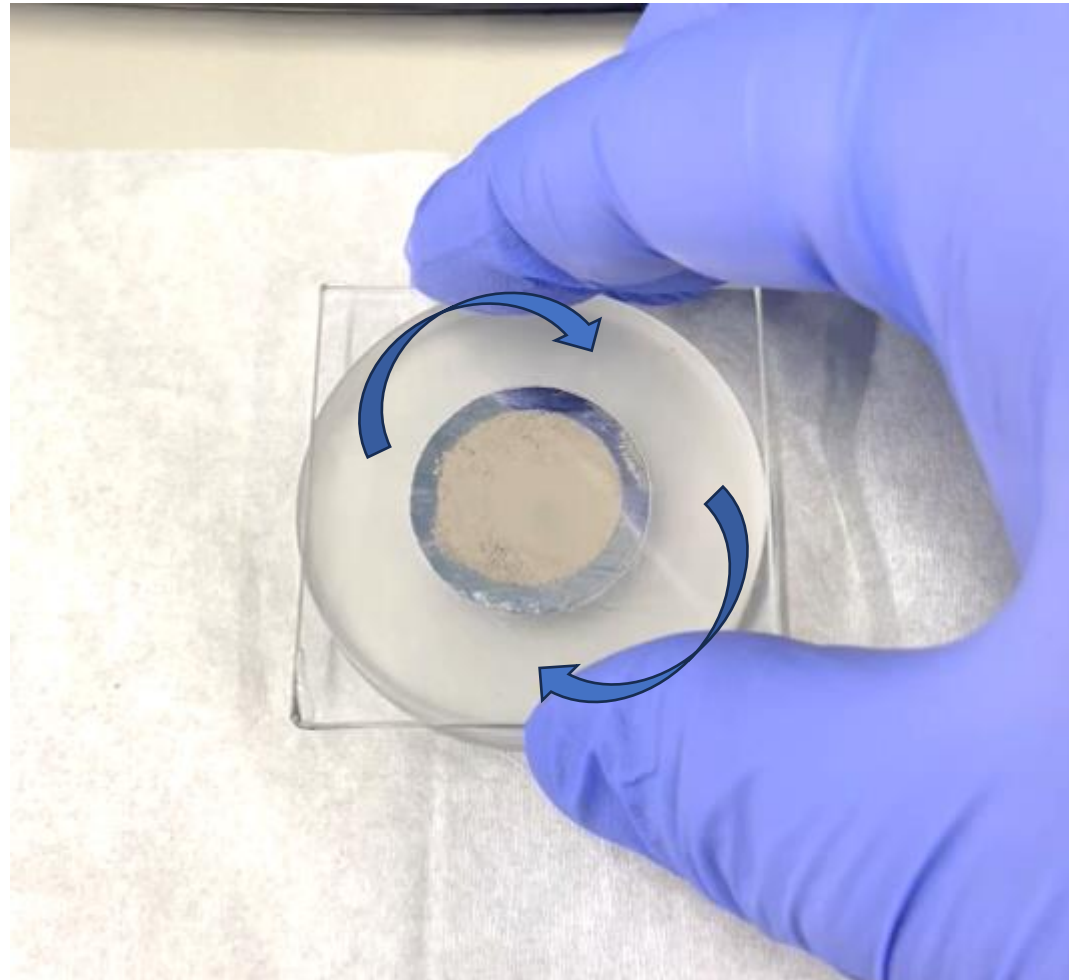
Begin by scooping a very small amount of sample material directly into the center cavity of the sample well.





Use the glass slide to gently flatten and spread out the loaded sample material. A twisting motion can be utilized on the glass slide to help spread the material around within the cavity (see next slide).

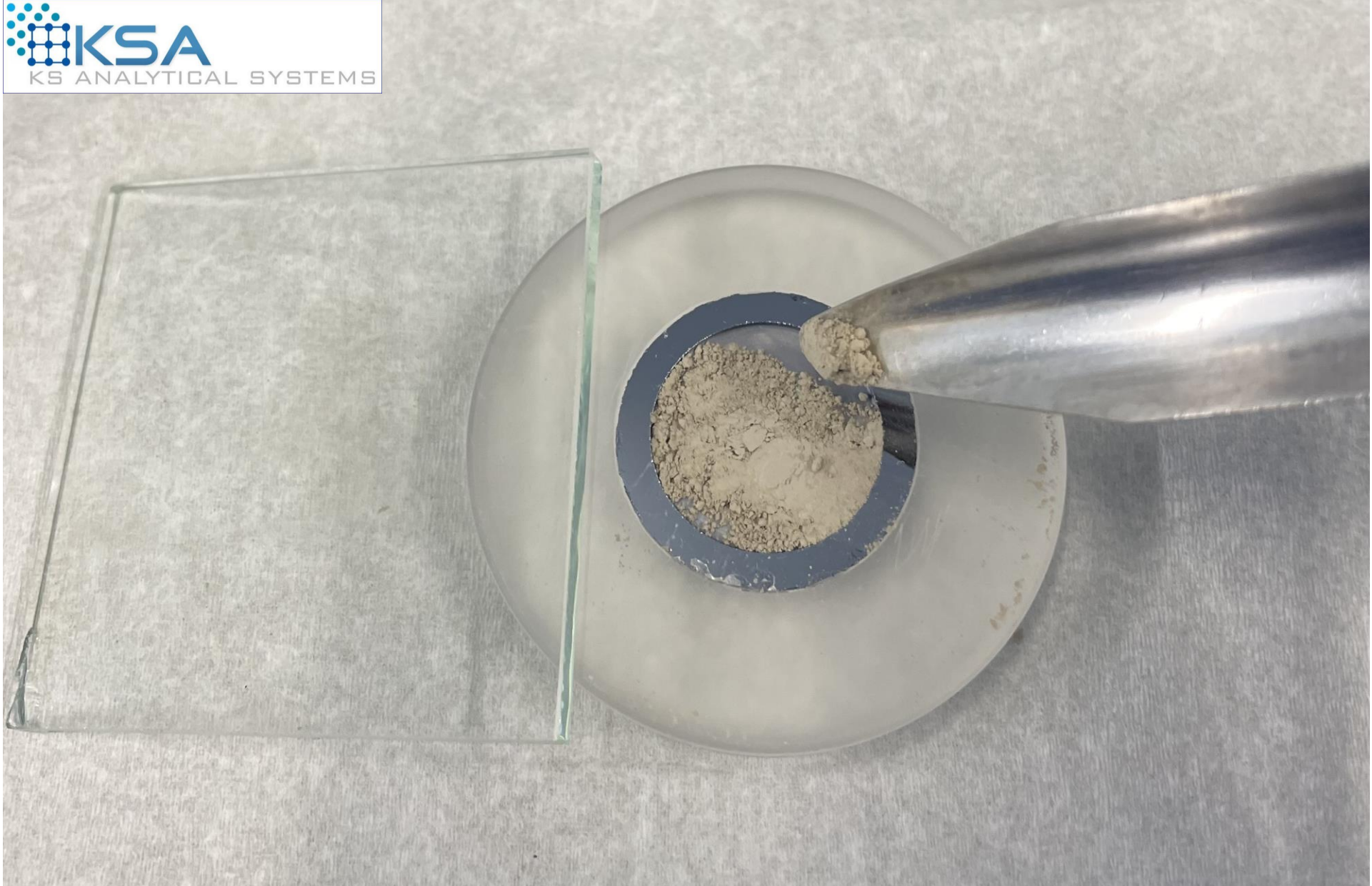
# Glass Slide “Twisting Motion”



Twist the glass slide back and forth, keeping it flat on the surface of the sample holder and applying a small amount of even, downward pressure\*.

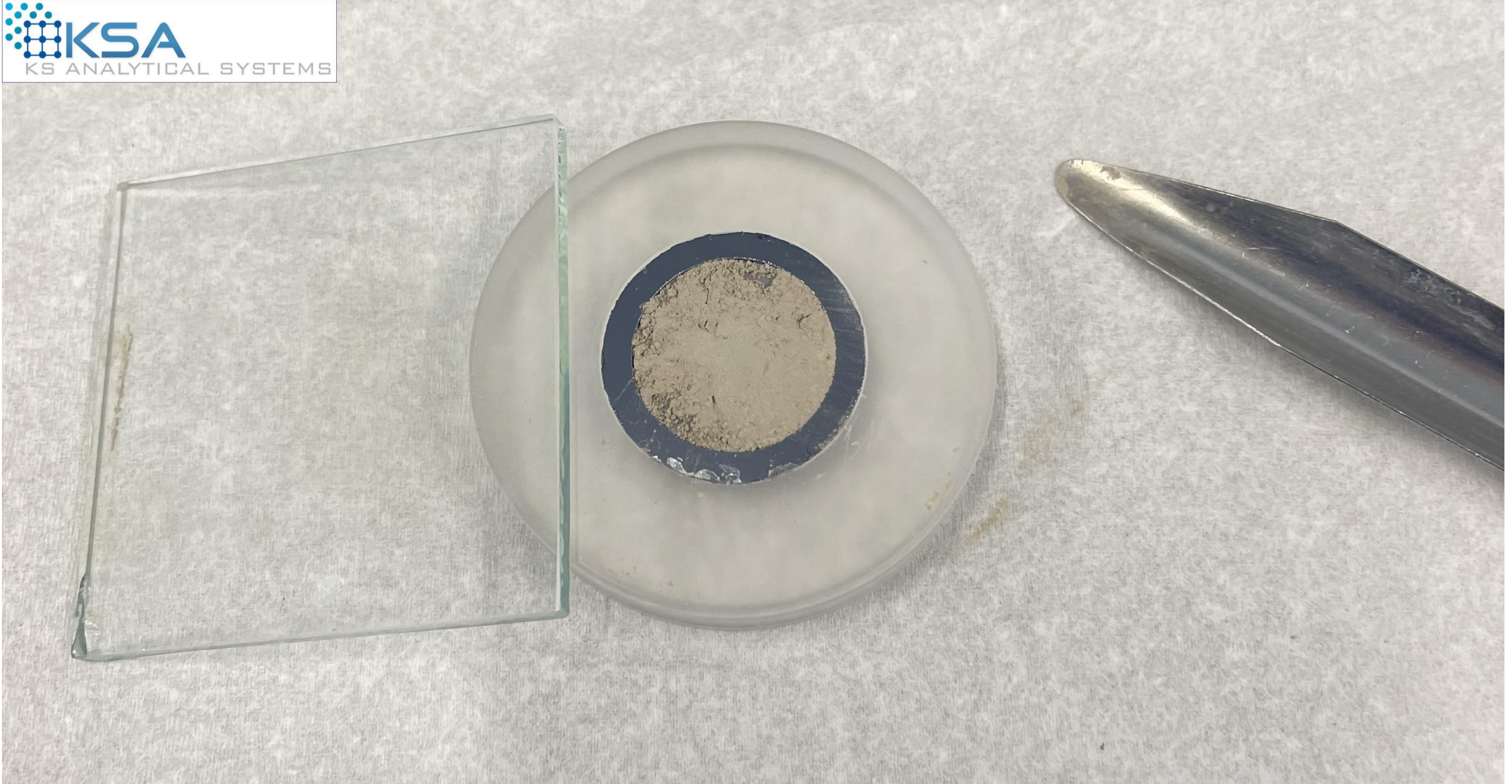
\*Applying any substantial (and/or localized) downward pressure can result in both damage to the zero background plate and “preferred orientation” in the sample material.





Carefully move the glass slide to the side. Add a smaller amount of sample material to the cavity. The goal is to fill, but not overfill the cavity.





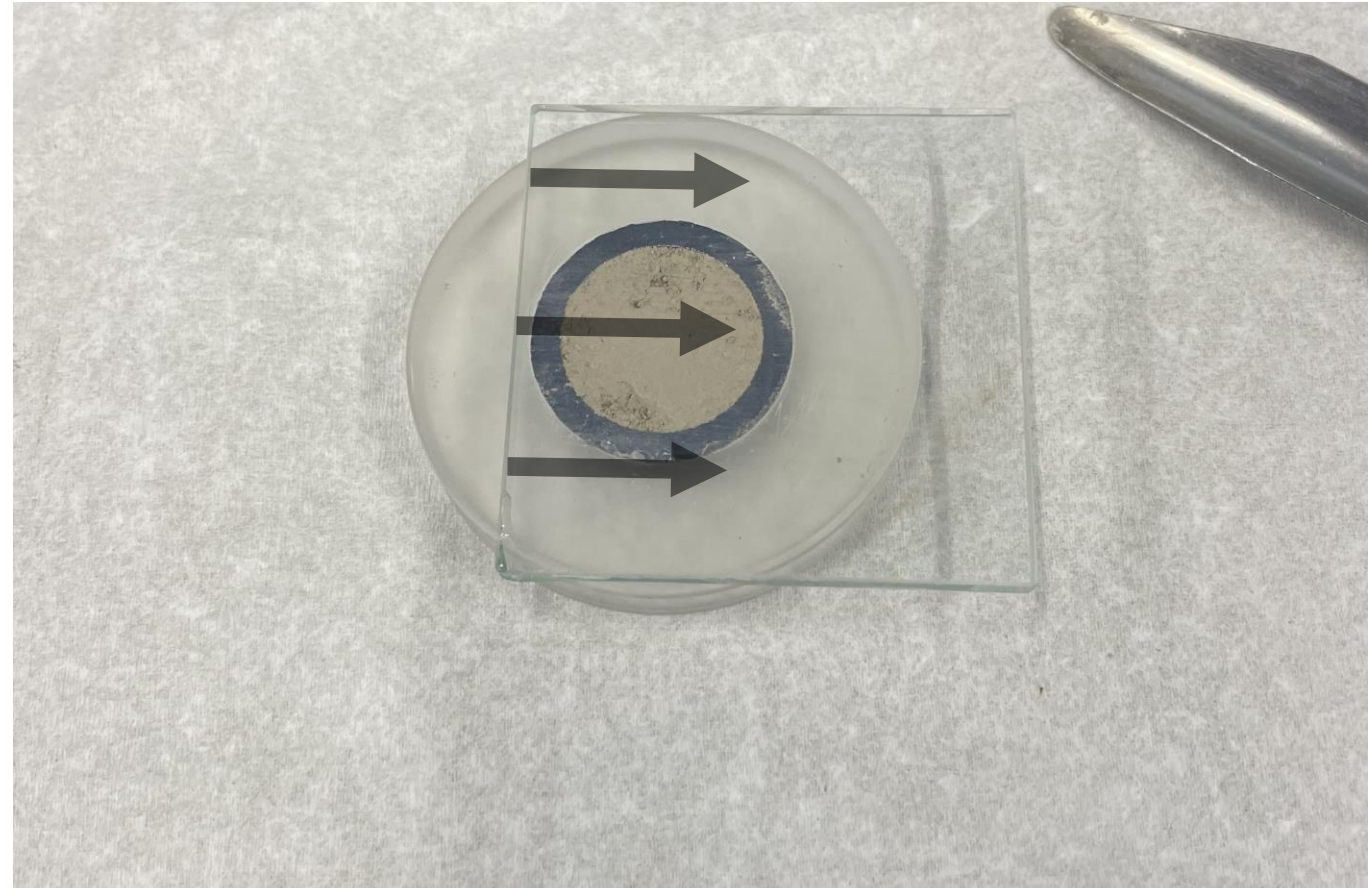
Again, use the glass slide to flatten and spread out the sample material within the cavity, then carefully move the glass slide away from the surface of the sample well. Repeat this process with smaller and smaller volumes of sample material, until the cavity is filled and level (flush) with the surface of the zero background plate.



# Other Helpful Notes:



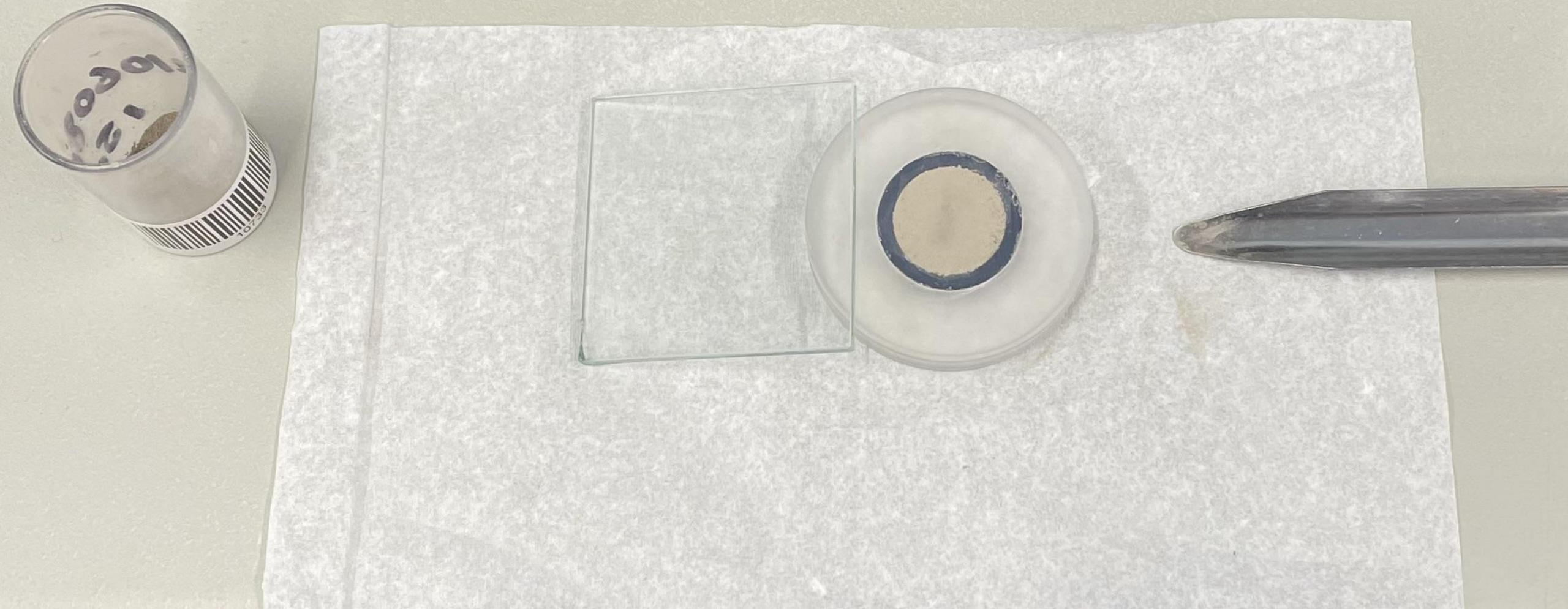
To remove any excess sample material that may have been deposited outside of the sample well, carefully use the edge of the glass slide to move the material away from the area. Be sure to avoid the area of the sample well cavity.



In addition to using the glass slide in a gentle twisting method, the glass slide can also be “pulled” while it is laying flat on the surface of the sample holder. This can help spread the sample material laterally within the sample well cavity.



# Sample Preparation Complete



The sample is now ready for analysis.