Preparation of Dip (Coated) Slides

WARNING: HAZARDOUS CHEMICALS. Do not use this protocol if you are not aware of all the safety precautions required to work with these chemicals. Consult all material safety data sheets. Work in a fume hood with proper safety technique. Wear appropriate safety gear.

SUPPLIES: 3 Coplin jars; forceps; slides. They need to be clean and lint free. Mark the Coplin jars so they can be used for the same solutions again later. Wear gloves when making the solution and dipping the slides.

- 1. Layer the bottom of the hood with paper towels.
- 2. Make a 2% solution of 3-aminopropyltriethoxysilane by putting 49 mLs acetone in the first jar and adding 1mL of 3-aminopropyltriethoxysilane. Ensure the solution is well mixed by pipetting up and down a few times.
- 3. Fill the second jar with 50 mLs of acetone.
- 4. Fill the third jar with 50 mLs of distilled deionized H₂O.
- 5. Place three or four test tube racks on the paper towels under the hood. Slides will be leaned against the racks once the slides have been dipped.
- 6. To begin dipping the slides, place between 5 and 7 slides in the first jar (the acetone/aminopropyltriethoxysilane solution). Let stand for approximately one minute before removing.
- 7. Transfer these slides to the second Coplin jar (acetone). While letting these slides stand for approximately a minute, reload the first jar.
- 8. Transfer the slides in the second jar to the third jar (dH₂O). While letting these slides stand for approximately a minute, continue transferring slides from the first to the second jar, and reload the first jar.
- 9. Before removing the slides from the dH₂O, rinse them well by repeatedly dipping them a few times in the dH₂O. Using forceps, lean the slides against the test tube racks in order for them to dry.
- 10. Repeat this process until the desired number of slides has been completed. When the slides are dry (about 10-15 minutes) place them in a dip slide box. The slides should be clear and free of white spots. White spots indicate improper rinsing.
- 11. Clean up the hood. Place the solutions in the first and second jars into a properly labeled waste jar. The dH_2O may be disposed of down the sink. The three Coplin jars may remain in the hood for future use.
- 12. Put the test tube racks away. Dispose of the paper towels in the waste container in the hood along with gloves and any other waste.