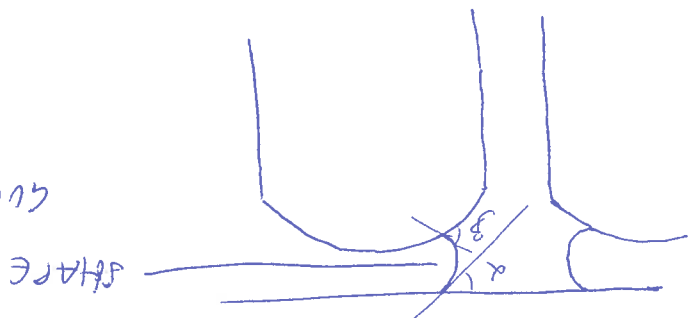
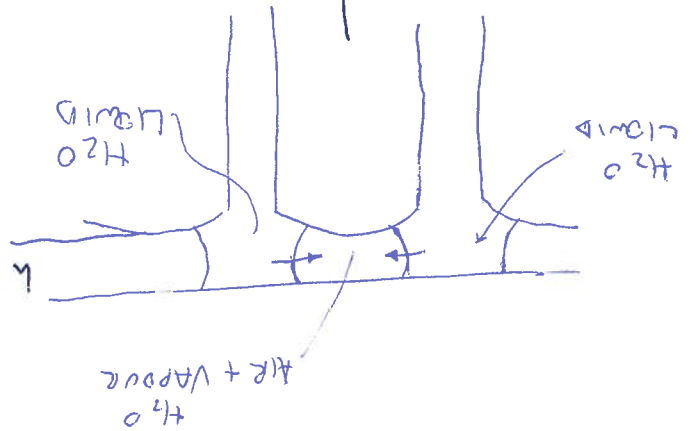


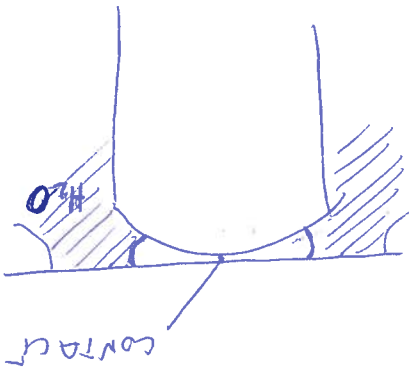
LET US ASSUME THE PILLAR HAS THE FOLLOWING FORM



GULBINO'S THEOREM FOR AREA
 * mat files for calculating force

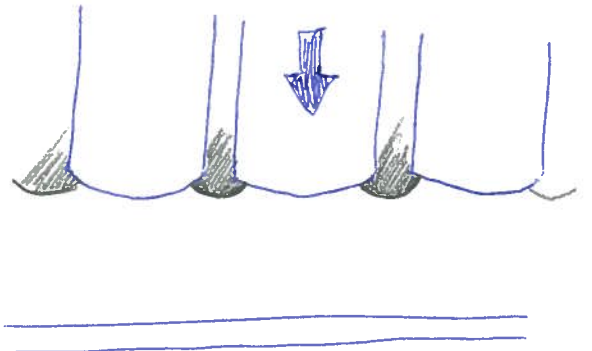
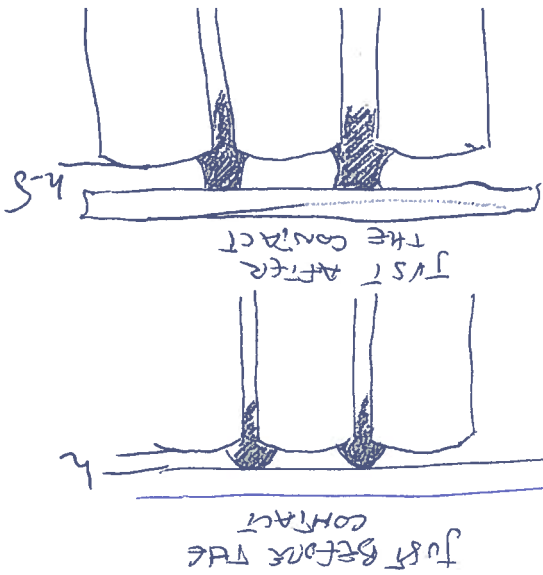


When we/the system reduce the height h , the WATER WANTS TO GO INTO THE CENTRE BUT THE AIR TAPPED WANTS/TRIES TO STAY THAT



CAPILLARY FORCE WANTS TO DECREASE THE GAP TO THE LOWEST AS POSSIBLE IT MEANS

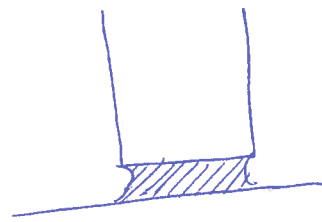
LIKE A NOSE IN 3 FRAMES



WHICH PREFERENCE? UNTILL WHEN? WHERE IS THE EQUILIBRIUM?

Adhesion Mechanism

①

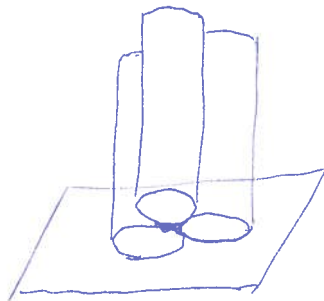


FLAT FLAT
CAPILLARY



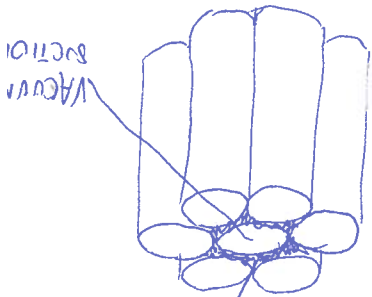
FLAT - BOUNDARY
FLAT - FLAT
CAPILLARY

②



INTERFACES
CAPILLARY + VACUUM SECTION
FLAT BOUNDARY
FLAT FLAT

③



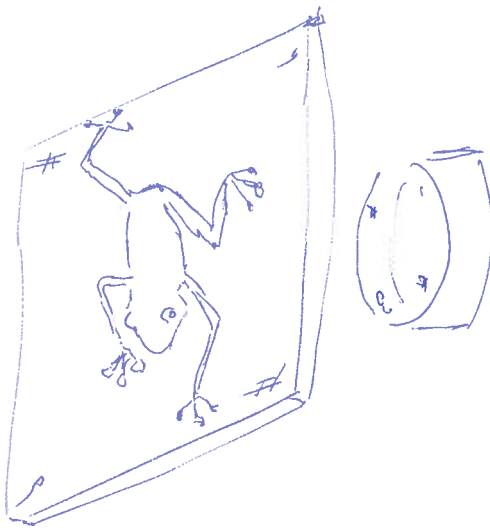
AIR IS NOT TRAPPED
NO SECTION EFFECT



F_1 & GEOMETRY CAN NOT EXPLAIN THEORETICALLY
THE BOTTOM EFFECT

$F_3 \gg 6 \cdot F_2$ DUE TO SECTION EFFECT
HP TO BE MEASURED

FINGER PRINTS



1^o EXP. MAKING AND OBSERVING THE FROG CLIMBING ON A DRY GLASS

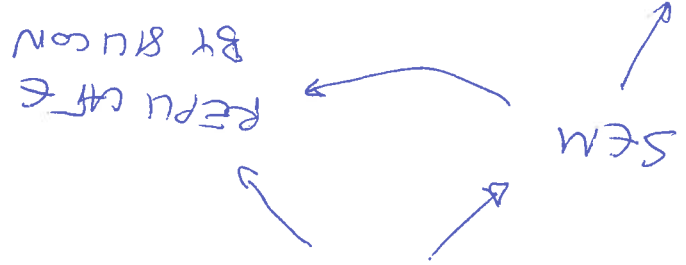
2^o EXP. OBSERVING & FROG CLIMBING ON A WET GLASS



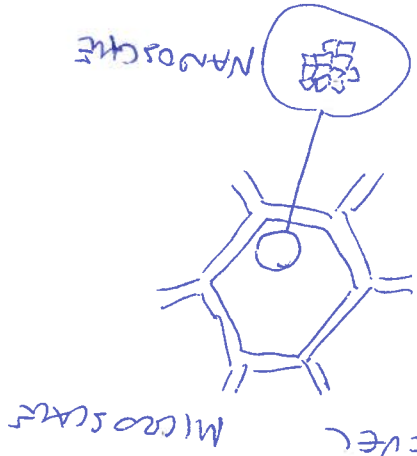
BY USING A CAMERA WE CAN PICTURE THE POSITION OF ITS FINGERPRINTS LEFT ON THE GLASS



SPRAYER GOLD ON GLASS AND SEM



OBSERVE THE FINGERPRINTS AT BOTH LEVEL MICROSCOPY



REPLICATE BY SILICON

PUT A DROPLET OF WATER ON THE SURFACE AND OBSERVE FINGERPRINT AND OBSERVE IF IT IS HYDROPHILIC OR HYDROPHOBIC