

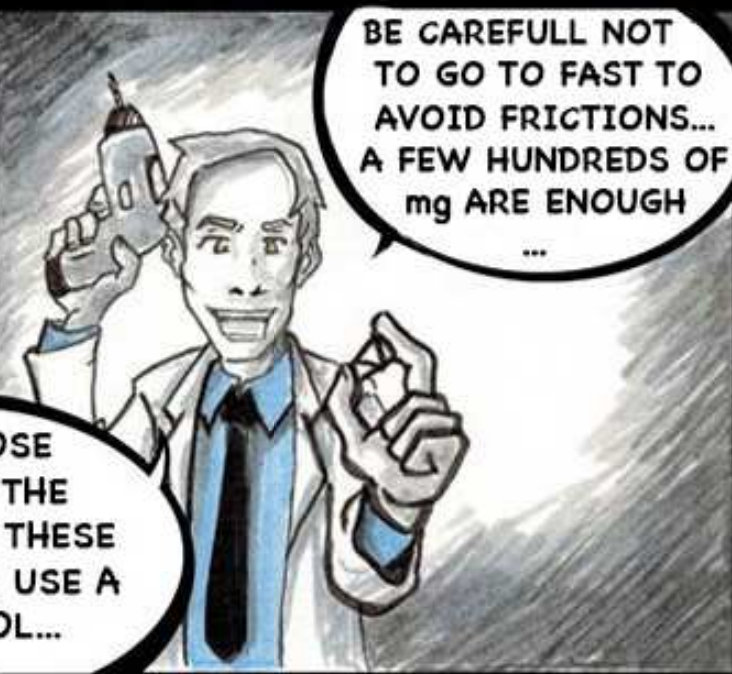
WHAT CAN YOU DO TO ANALYZE MY CERAMIC?



I CAN TEST THE ANTIQUITY OF ITS FIRING USING THERMOLUMINESCENCE

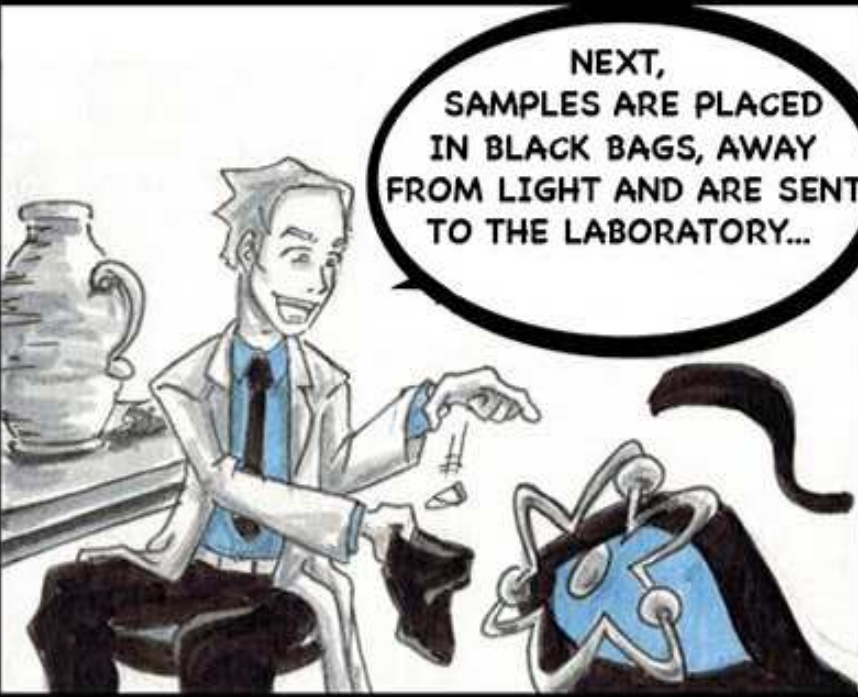


FIRST WE NEED TWO SAMPLES REPRESENTING THE OBJECT




BE CAREFUL NOT TO GO TOO FAST TO AVOID FRICTIONS... A FEW HUNDREDS OF MG ARE ENOUGH
...

WE CHOOSE CAREFULLY THE LOCATION OF THESE SAMPLES AND USE A SUITED TOOL...

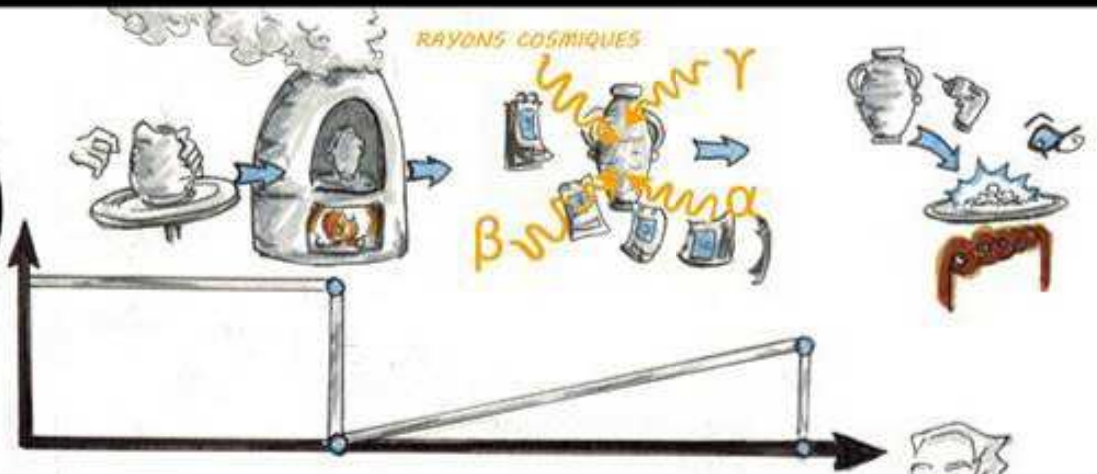


NEXT, SAMPLES ARE PLACED IN BLACK BAGS, AWAY FROM LIGHT AND ARE SENT TO THE LABORATORY...



AND NOW, MORE DETAILS ON THE TECHNIQUE ITSELF FOR A BETTER UNDERSTANDING

TL USE THE CAPACITY OF CRISTALS TO ABSORBE ENERGY COMING FROM ITS ENVIRONMENT ...

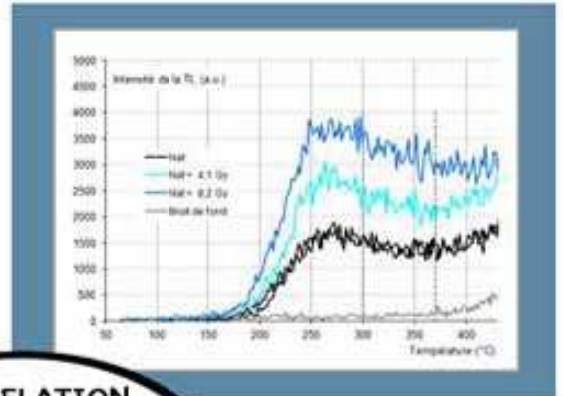


THIS ENERGY COMES FROM NATURA RADIOACTIVITY AND COSMIC ENERGIES: IT IS ABSORBED CONSTANTLY THROUGH TIME...

IN LAB, WE HEAT THE SAMPLES TO RELEASE THE STORED ENERGY SINCE LAST FIRED, WE OBSERVE A LUMINESCENCE...



IT IS THIS LUMINESCENCE OBSERVED AS A RESPONSE TO THE HEATING WHICH NAMES THE TECHNIQUE: THERMOLUMINESCENCE!



$$t = \frac{ED}{I}$$

t: Ancienneté de la cuisson
ED: Energie accumulée dans le matériau
I: Energie absorbée/an

THE RELATION BETWEEN "ED" AND "I" ALLOWS THE DETERMINATION OF THE ANTIQUITY OF THE FIRING "t"...

NATURALLY, THERE ARE LIMITS TO THE TECHNIQUE, SUCH AS...

SOME CERAMICS, PARTICULARLY FAÏENCES AND PORCELAINES DO NOT WORK WELL WITH THE "TRADITIONNAL" TL TESTS



HOWEVER, TL REMAINS MOST OF THE TIMES AN EFFECTIVE, QUICK AND CHEAP TECHNIQUE

