Surface phenomena

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1 11-03-25: — Introduction

What is a surface? It is a boundary between 2 different phases, there's a change of density, but it is a continues transition. The interaction between the two are just all the possible scenarios where one phase changes into the other. It is not a sudden change.

Porosity: We can different types of pores, follow the slides (*pag. 10*). These are all the possible construction.

Pores: Classification (Important for exam):

- Micropores: $w < 2nm$
- Mesopores: $2nm \leq w \leq 50nm$
- Macropores: $w < 50nm$

Possible applications are adsorption and filtration.

Why surfaces? Catalysis, micro/nanoelectronics, Energy, Biological (brain, photosynthesis). Remember that there's a gigantic gap between the experimental conditions and than the practical applications.