

# Refinerías más rentables con craqueo catalítico

Vincent Blay



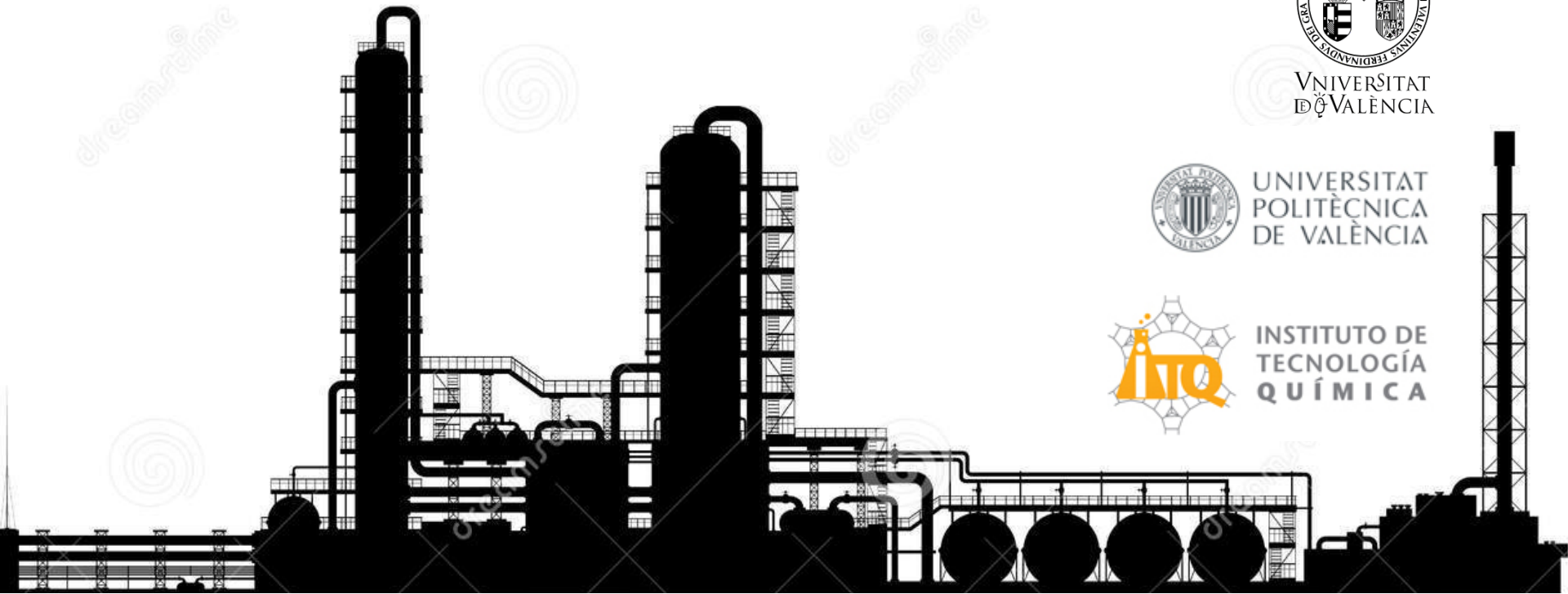
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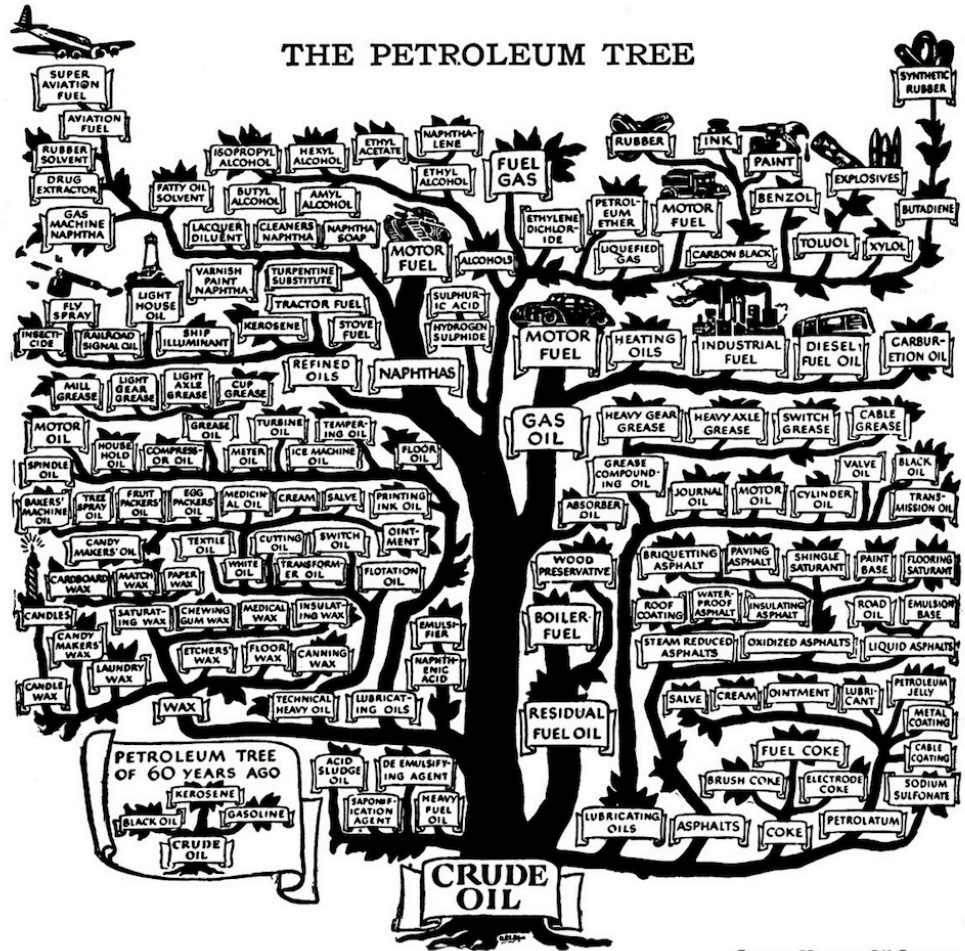
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# THE PETROLEUM TREE



Socony-Vacuum Oil Company





# THE PETROLEUM TREE



## Plastics

Plastics come in a large variety from sporting equipment, storage containers, toys, toothbrushes, artificial hearts to everyday household products.

## Carbon Black



Carbon Black is used in paints, inks, rubber, cement, batteries, televisions, radios and computers.



## Cosmetics

Soap, cleansing creams, toothpaste, shampoo, hair spray, lotion, cologne, baby oil, lipstick, lip balm, nail polish, hand cream, shaving cream and suntan lotion among others all come from crude oil!

## Synthetic Fabrics



Nylon, Orlon, Dacron and Dynel are all made from petroleum. Parachutes, carpets, rope and Astro-Turf are made from these synthetic fabrics.

## Medicines



Medicines such as aspirin, antihistamines, Vaseline, alcohol, ammonia, antibiotics and antiseptics all contain petrochemicals.

## Natural Gas and Propane



Nearly 7 out of every 10 homes are heated with natural gas. We also use it to cook food, dry clothes and heat water. Businesses use it in many ways, from cooking to fueling high temperature blast furnaces.

## Synthetic Rubber



Synthetic rubber was developed during World War II. Today, we find it in gloves, tennis shoes, boots, tires, swimming floats, hoses, stoppers, rubber bands, belts, skate wheels, shoe heels and balloons.

## Waxes



Waxes are used to make waxed paper, candy, gum, candles, crayons and soap.



**Fuels** Gasoline, jet fuel, kerosene and other products help fuel automobiles, trucks, motorcycles, airplanes, golf carts, lawn mowers and edgers.



Socony-Vacuum Oil Company

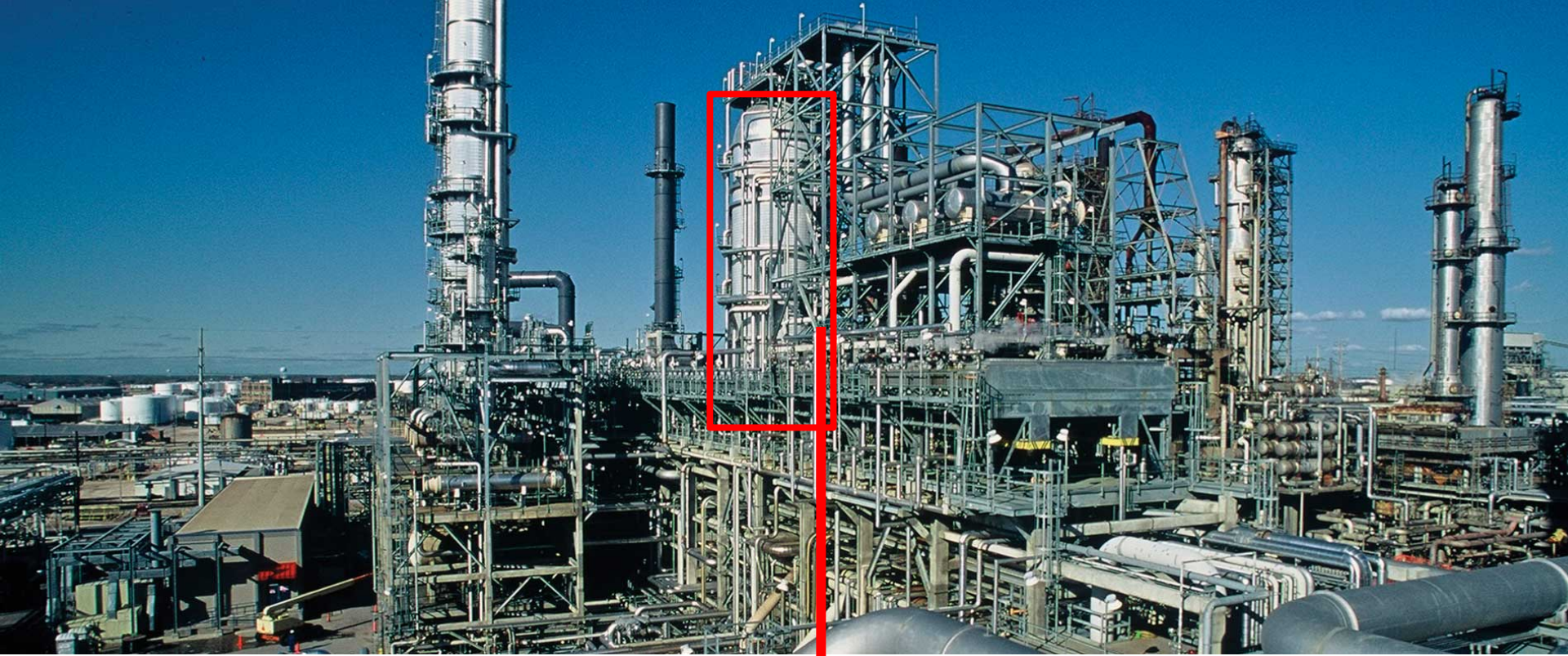


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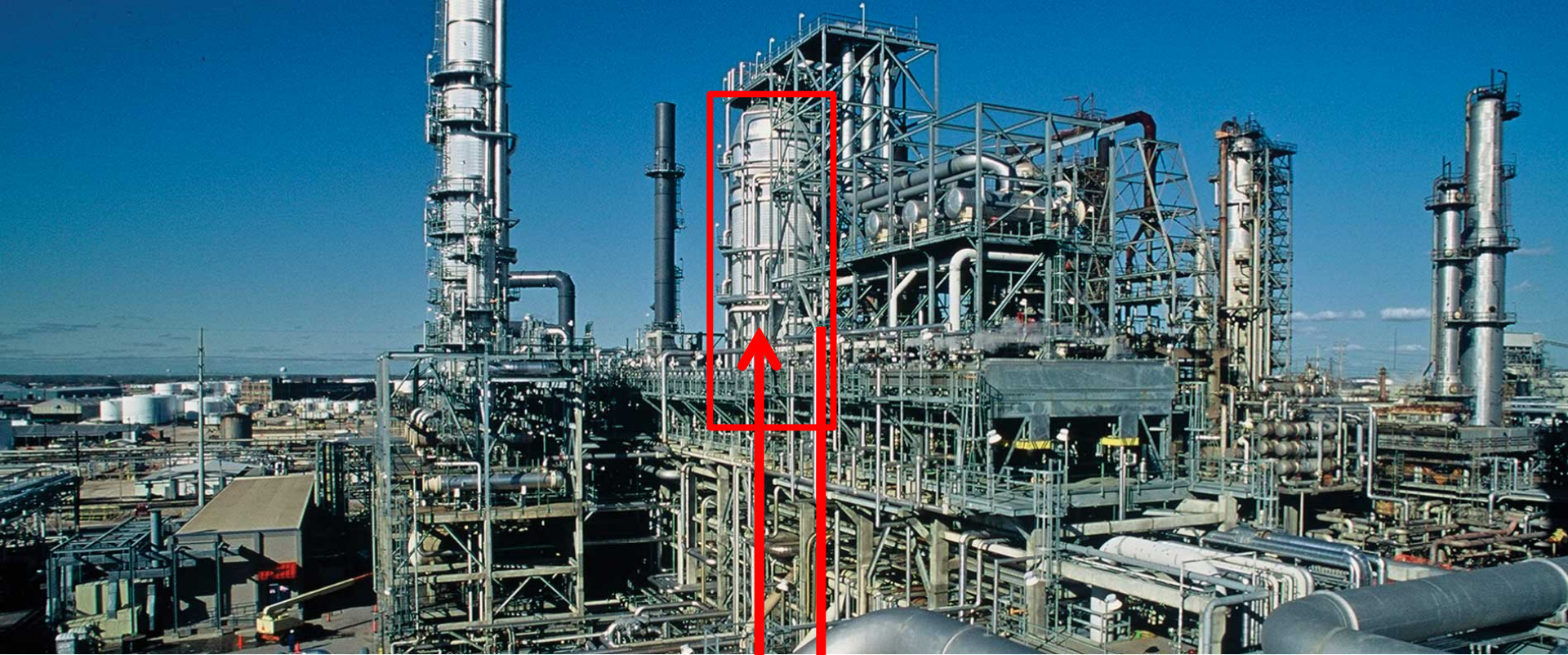




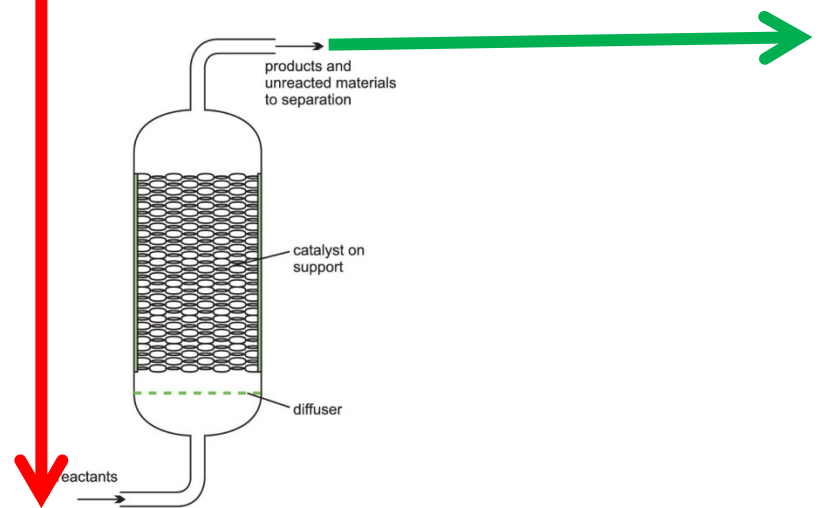
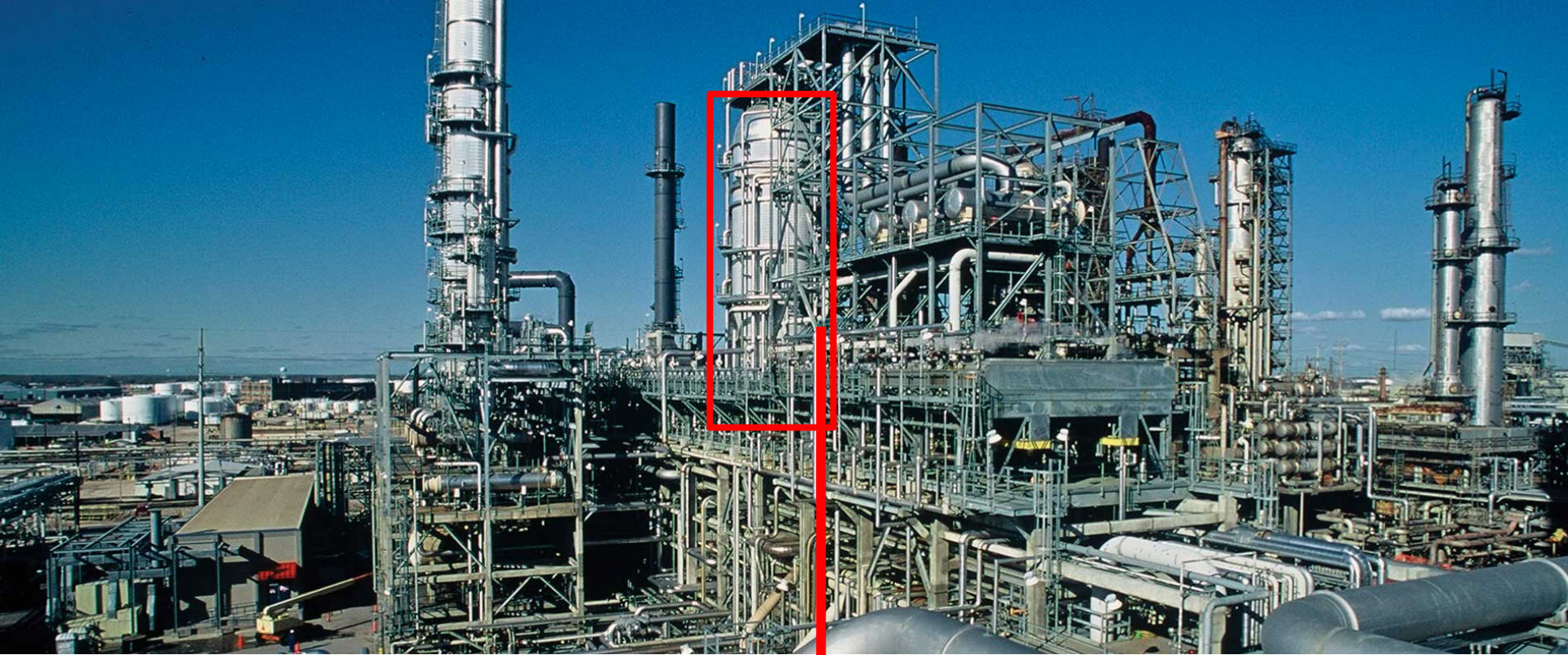


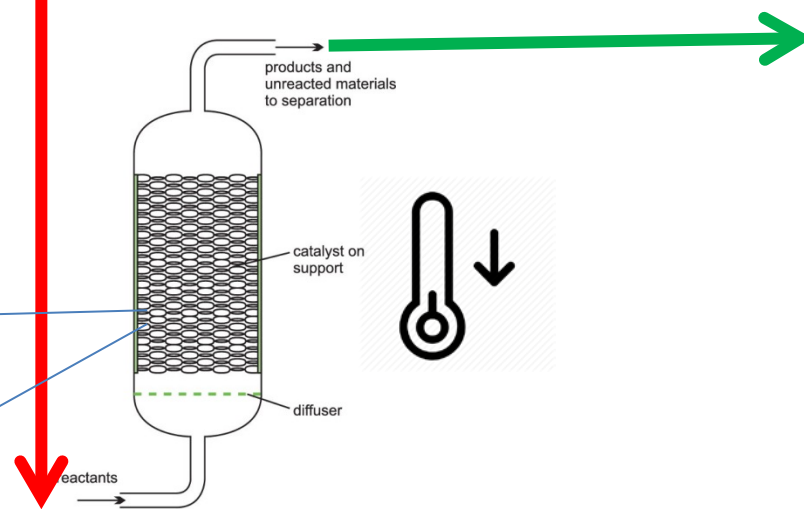
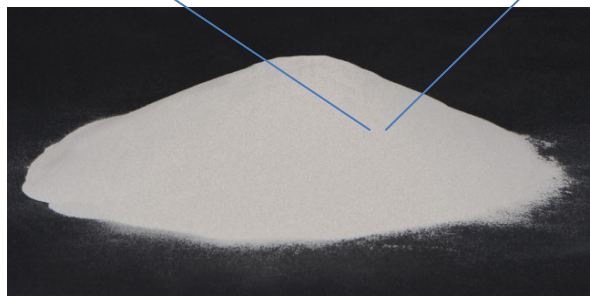
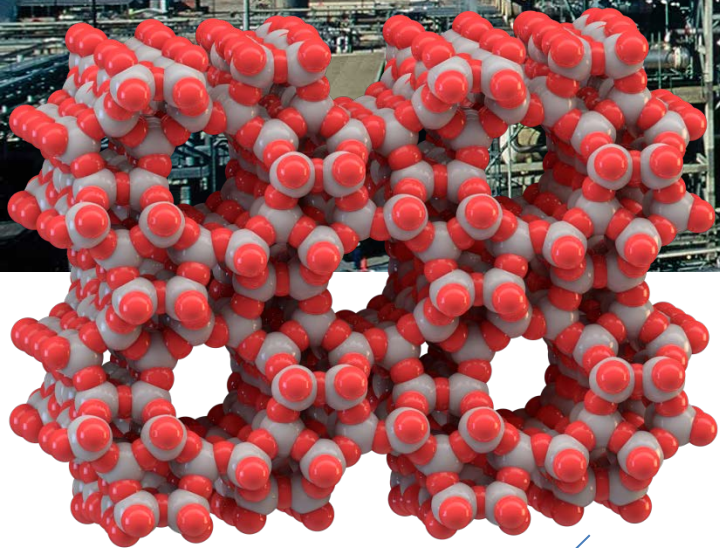
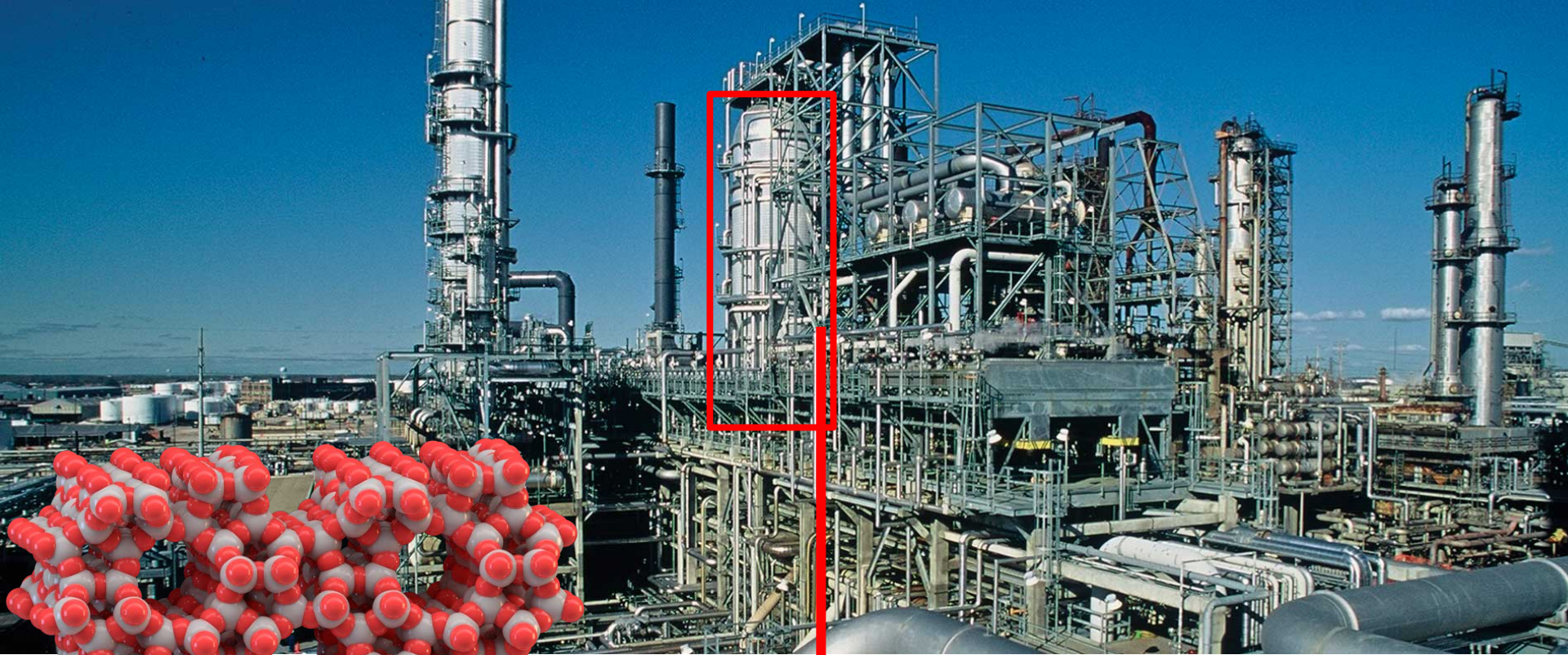
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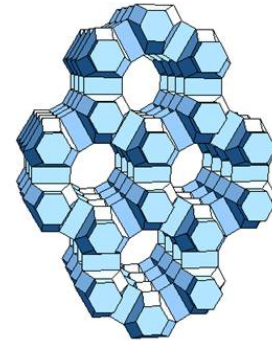
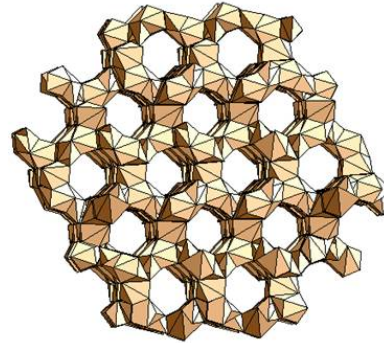
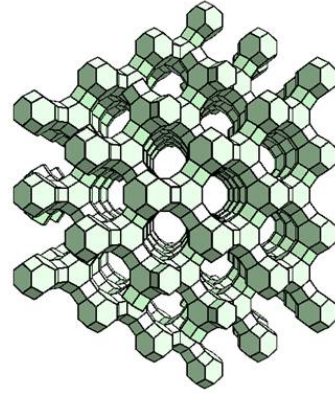
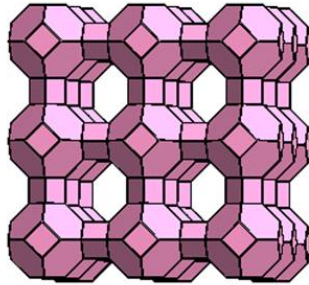
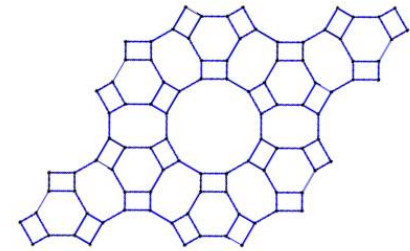
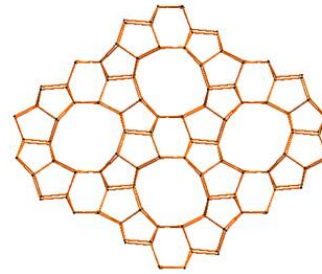
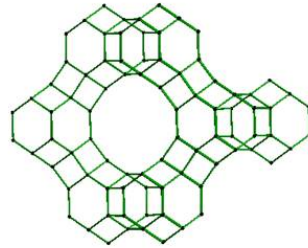
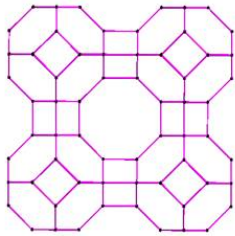








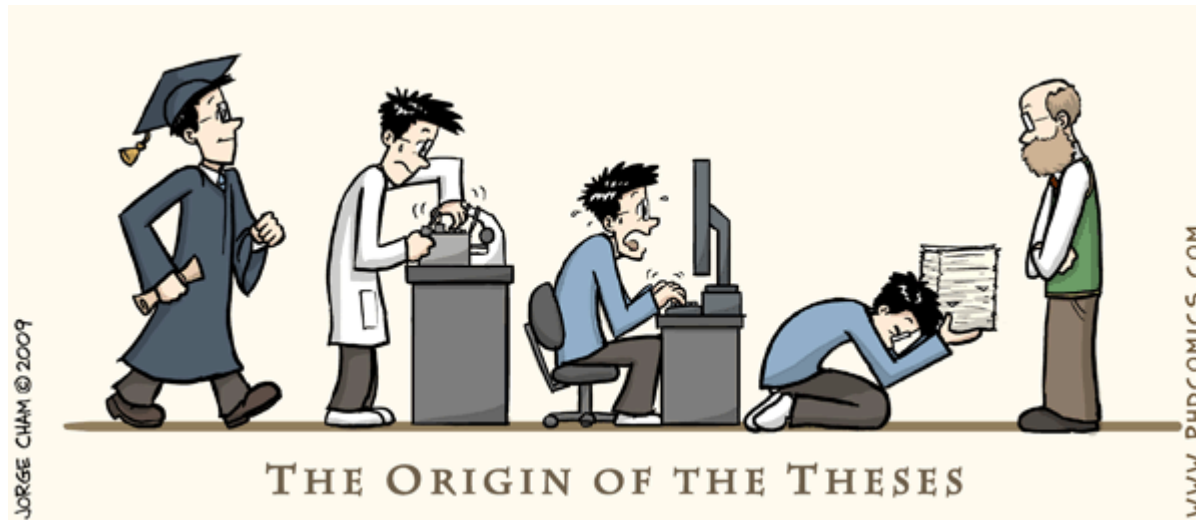




# Refinerías más rentables con craqueo catalítico

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- Objetivo:
  - Desarrollo y optimización de catalizadores basados en **zeolitas** para la conversión selectiva de **corrientes ricas en olefinas intermedias** para la producción de **productos de alta demanda**, especialmente **propileno** y etileno.
- ¿Cómo?
  - Ensayo de distintas estructuras de zeolitas.
  - Ensayo de variaciones de una misma zeolita (ej. distinta composición).
  - Estudio de parámetros experimentales (tiempo de residencia, presión parcial, temperatura...).
  - Análisis de actividad, selectividad y estabilidad de los catalizadores y su relación con las propiedades estructurales y físico-químicas de los materiales.
  - Propuesta de esquema de proceso.