

THE TEACHING REVOLUTION

WOUDSCHOTEN CHEMIE CONFERENTIE 2020

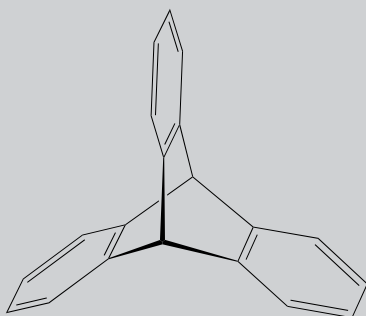
Daniel Blanco Ania

Radboud University

6-11-20

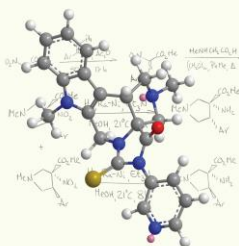
ONCE UPON A TIME...

1995



ACADEMIA BLANCO
Química Orgánica

PARALLEL SYNTHESIS OF POTENTIAL DRUGS
BASED ON THE 2-ARYLETHYL AMINE MOIETY



Daniel Blanco Ania

2009

2019





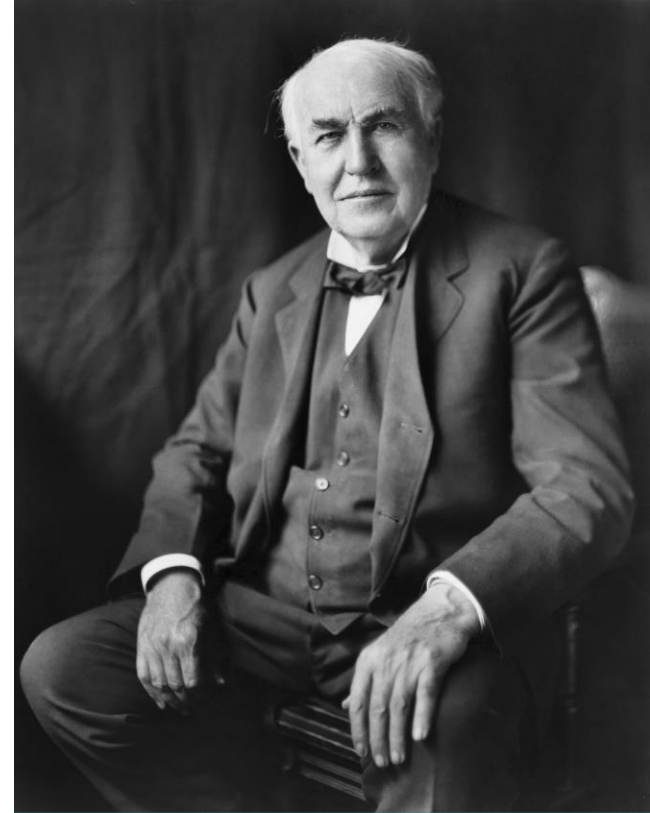
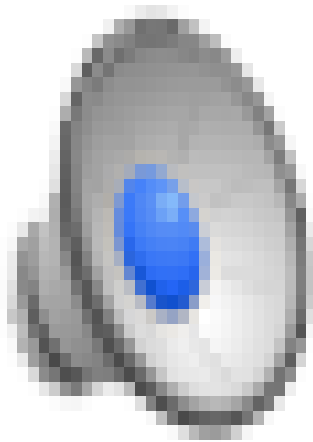
HAS THERE BEEN A TEACHING REVOLUTION IN THE LAST 100 YEARS?

November 6th, 2020

Woudschoten Chemie

3

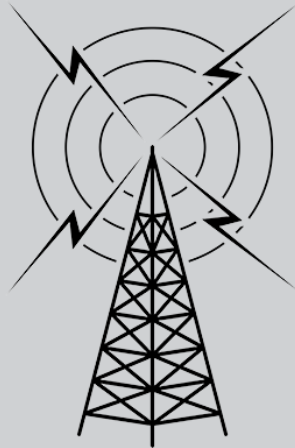
“I believe that **the motion picture is destined to revolutionize our educational system**, and that in a few years it will supplant largely, if not entirely, the use of textbooks”



Thomas Edison

1922

1930's



1950's



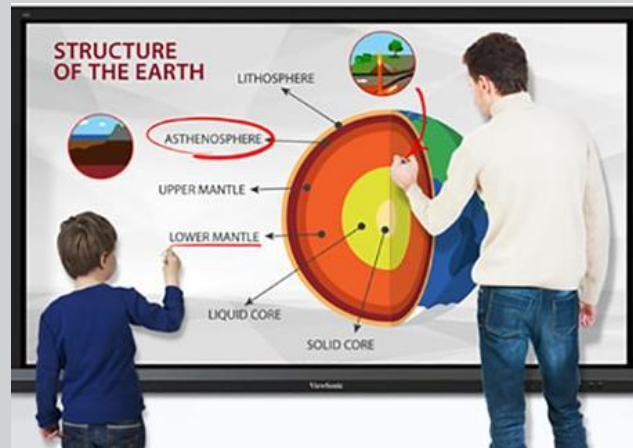


1980's

1990's



2000's



A photograph of a diverse group of students in a classroom. In the foreground, a young woman with reddish-brown hair in a ponytail, wearing a grey t-shirt and jeans, sits at a desk with a blue book. To her right, a young woman with dark hair in a red and white plaid shirt sits with her chin resting on her hand, looking towards the camera. Behind them, several other students are visible, some with their hands raised. The classroom has large windows on the left and colorful posters on the wall. A teal semi-circle in the top left corner contains the year '2020'.

2020

November 6th, 2020

Woudschoten Chemie

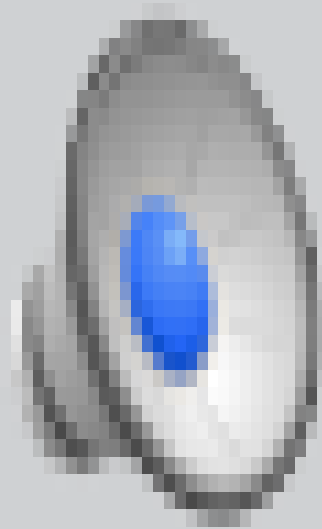
1950



WHAT DO YOU THINK IS THE MAIN REASON WHY THIS REVOLUTION HAS NOT TAKEN PLACE?

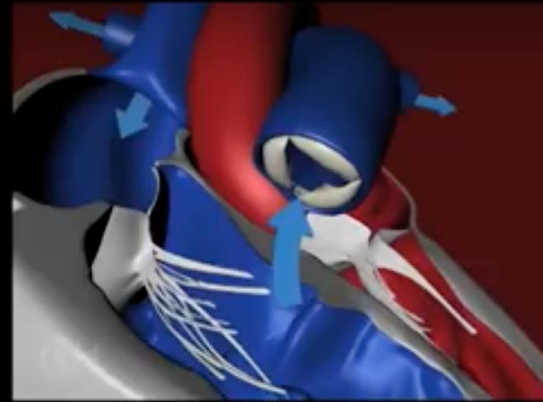


HOW THE HEART WORKS





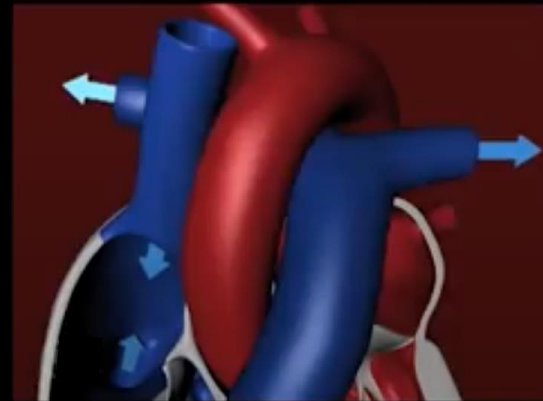
1. The right atrium receives oxygen rich blood from the lungs.



3. The blood is squeezed and ejected into the pulmonary artery.



2. The blood is pumped into the right ventricle through the mitral valve.



4. The pulmonary artery splits, sending blood to each lung.

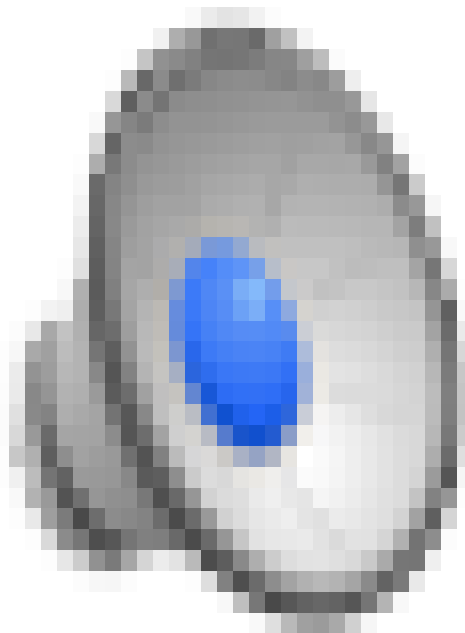


WHAT IS BETTER FOR LEARNING, AN ANIMATION WITH NARRATION OR A SET OF STATIC PICTURES WITH TEXT?



CALL ME AN ARTIST BECAUSE I DRAW ATTENTION





A person is standing on a tall, narrow ladder that extends from the bottom of the frame towards the top. The person is positioned on one of the upper rungs, facing away from the camera and slightly to the left. They have their right arm raised and are looking upwards. The background is a vast, cloudy sky with soft, white clouds against a pale blue-grey backdrop. The overall mood is one of aspiration and reaching for goals.

HOW CAN WE MOTIVATE STUDENTS (AND MAKE A TOPIC INTERESTING)?

1 ROLE MODEL



2 CLEAR OBJECTIVES



3 HIGH GOALS



4 FEEDBACK



5 RAPPORT



6 MAKE IT FUN



ROLE MODEL

COMMITTED

KNOWLEDGEABLE

PASSION

ENTHUSIASM

PERSONALIZE



CLEAR OBJECTIVES



When you finish this course, you should be able to...

Develop as a person

Learn and practice browsing skills

QUESTIONS

- What is the title of the symphonic poem of the beginning?
- Which movie included this symphonic poem in its soundtrack?
- Which is the name of the movie where they talk about hexavalent chromium?
- How many carbon-to-carbon hydride transfer reactions can you think of?



HIGH GOALS

SPECIFIC

MEASURABLE

ATTAINABLE

REALISTIC



**Ask
Questions**

**Actively
Listen**

**Show
Empathy**

**Ask and
Use Their
Names**

RAPPORT

**Find
Common
Ground**



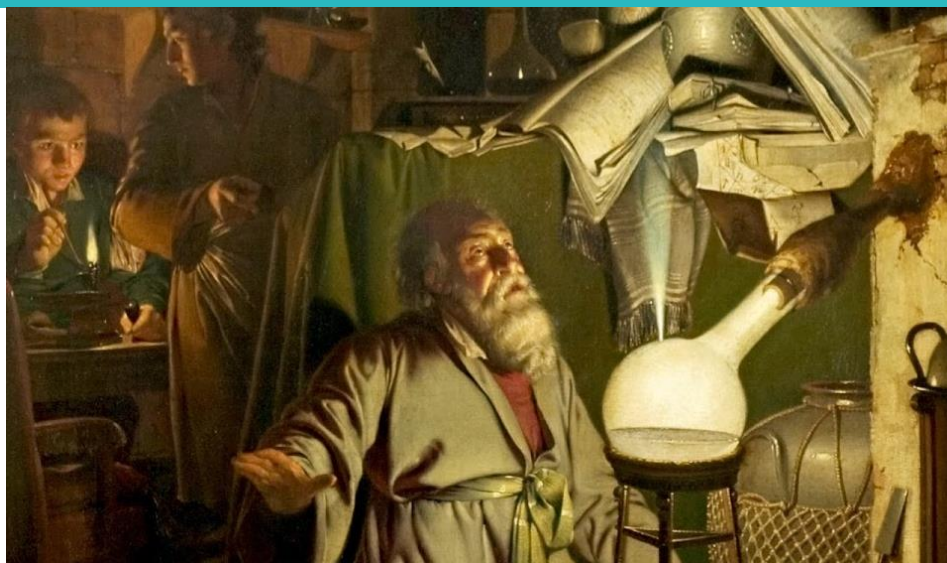
MAKE IT FUN

REDUCTIVE AMINATION

[illegible]

DISCOVERY OF PHOSPHORUS

In 1669, Hennig Brand was looking for the **philosopher's stone** by boiling his own urine



Hennig Brand (1630-1692)

After days of heating up liters of stagnant pee, he managed to isolate a white waxy solid.

After dark, he observed that this new substance glowed with an eerie green light. He called it “**phosphorus**” (**light bearer**)

Kahoot!



Bio-economy 2

0 favorites 1 play 8 players

Play

Edit



A public kahoot



DBlancoAnia

Created 11 months ago

2 - Quiz

What is the main composition of biomass?



3 - True or false

Incorporation of heteroatoms is the main focus of the generation of commo...



4 - True or false

Elimination of heteroatoms is the main focus of the generation of bio-based ...



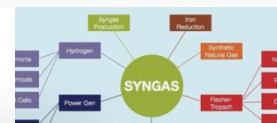
5 - Quiz

What is the main composition of biogas?

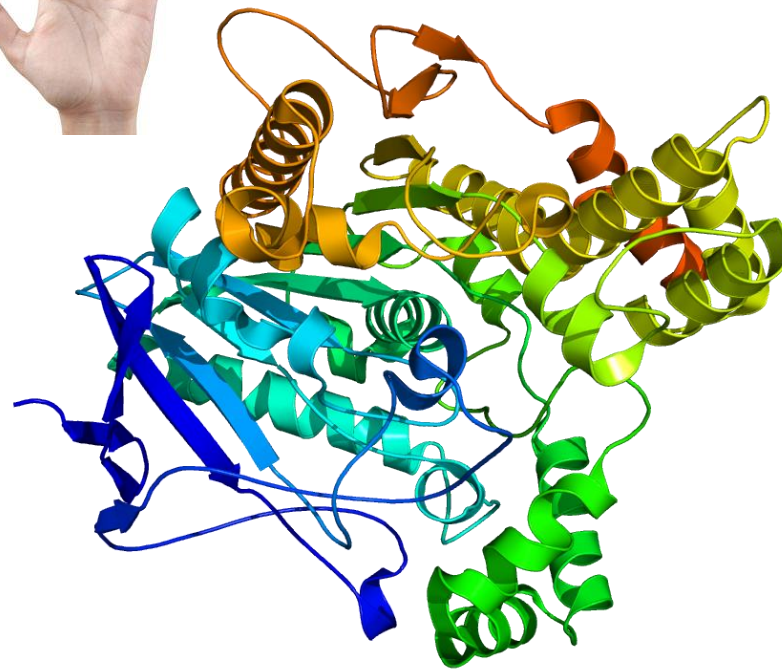
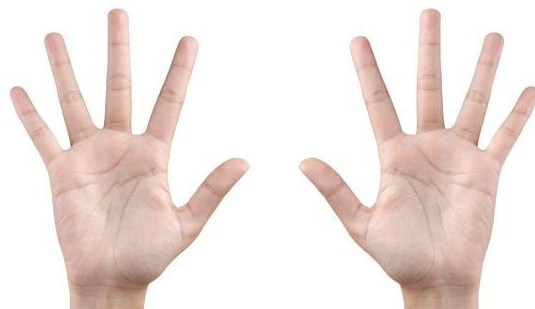


6 - Quiz

What is the main composition of syngas?



CHIRALITY





**AND CORONAVIRUS CAME ALONG...
CAN I ADAPT ALL THIS TO
ONLINE TEACHING?**

1 ROLE MODEL



2 CLEAR OBJECTIVES



3 HIGH GOALS



4 FEEDBACK



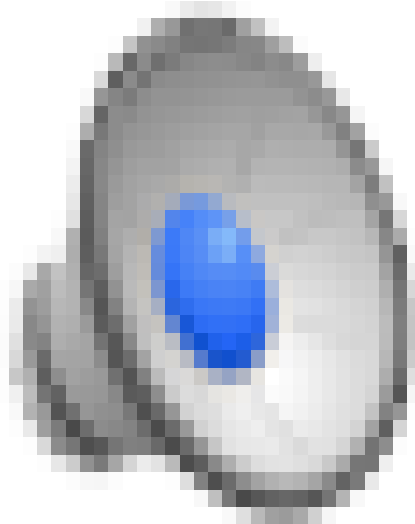
5 RAPPORT



6 MAKE IT FUN



ROLE MODEL



1 ROLE MODEL



2 CLEAR OBJECTIVES



3 HIGH GOALS



4 FEEDBACK



5 RAPPORT



6 MAKE IT FUN



TEACHING REVOLUTION?

IS ONLINE EDUCATION THE FUTURE?

*Thank
you*