

VŠB TECHNICKÁ  
UNIVERZITA  
OSTRAVA

CENTRUM ENERGETICKÝCH  
A ENVIRONMENTÁLNÍCH  
TECHNOLOGIÍ

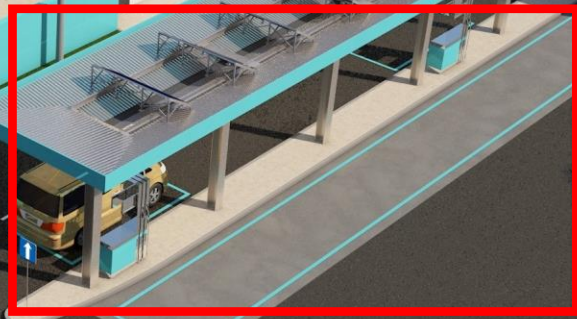
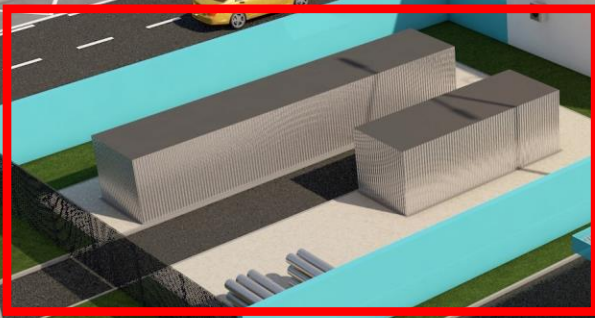
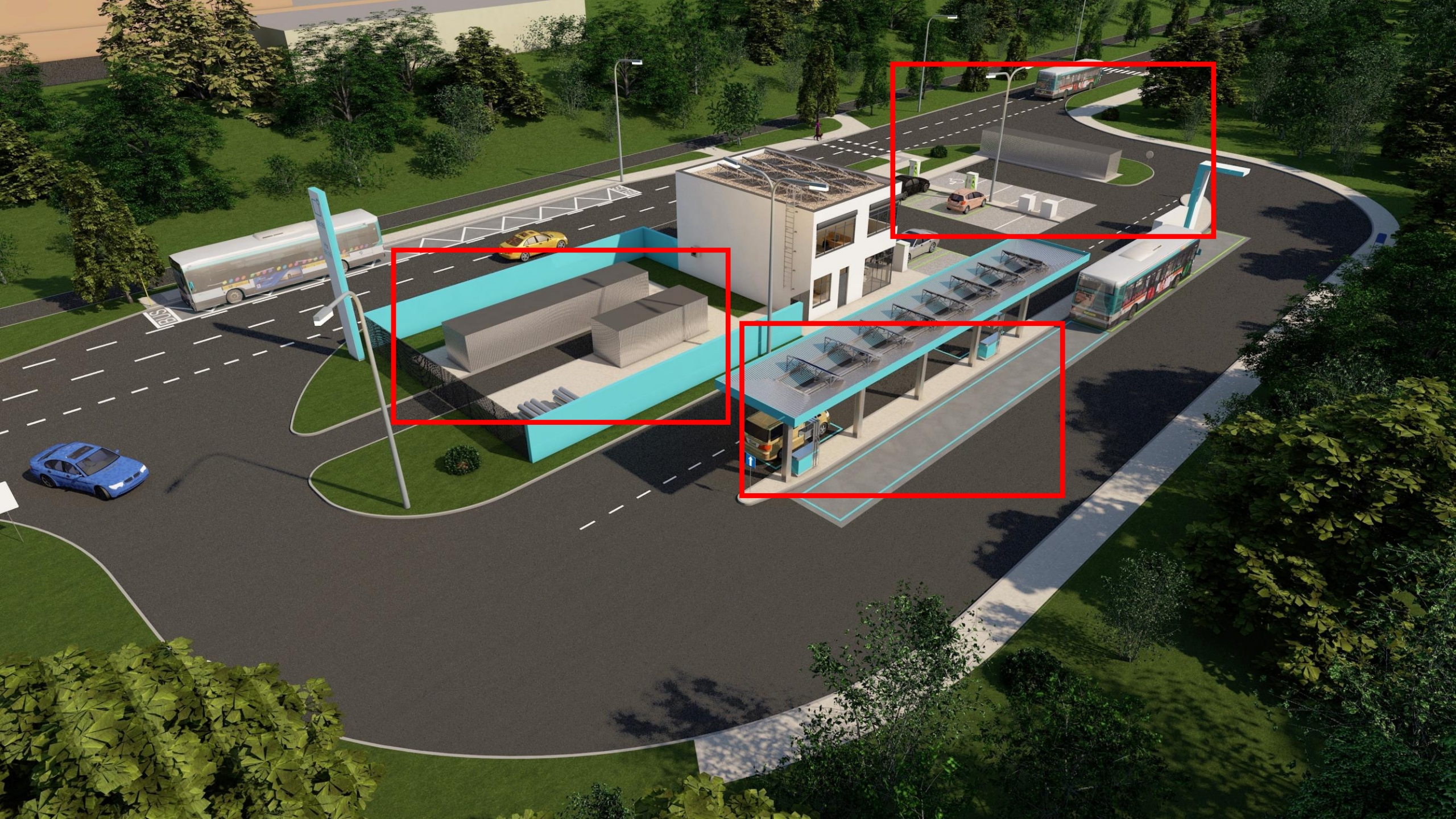
VÝZKUMNÉ  
ENERGETICKÉ  
CENTRUM



Data SIO, NOAA, U.S. Navy, NGA, GEBCO  
Image Landsat / Copernicus  
Image IBCAO

Google Earth





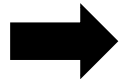


# Experiment laboratoř

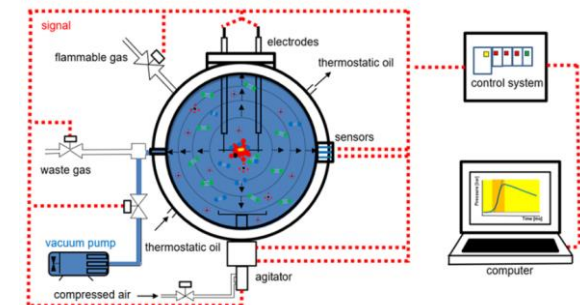
VODÍK + VZDUCH

25 °C

BARVA  
MODRÁ



1013 hPa

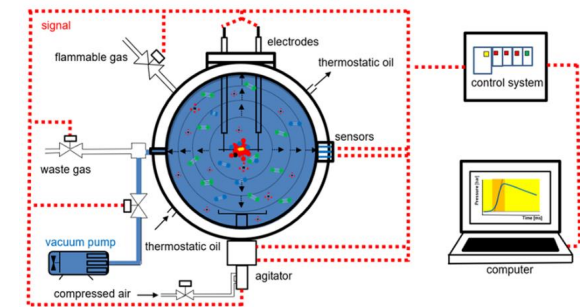


# Experiment laboratoř

**METAN + VZDUCH**

**25 °C**

**BARVA**  
**ORANŽOVO**  
**MODRÁ**

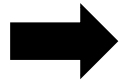


## Experiment laboratoř

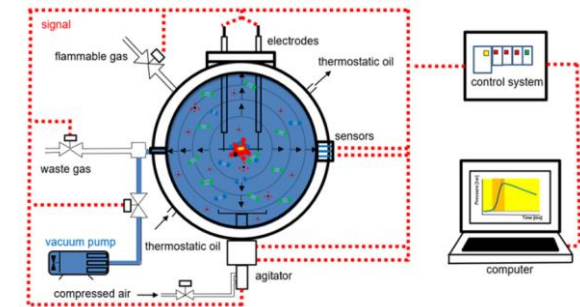
VODÍK + METAN + VZDUCH

25 °C

BARVA  
MODRO  
ORANŽOVÁ



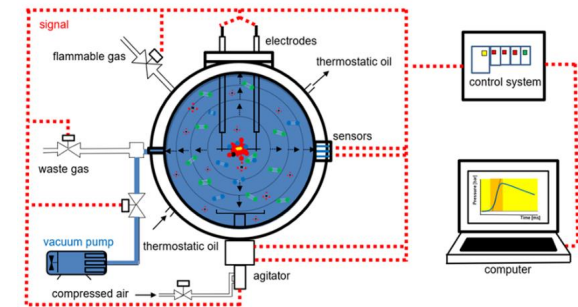
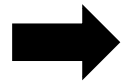
1013 hPa



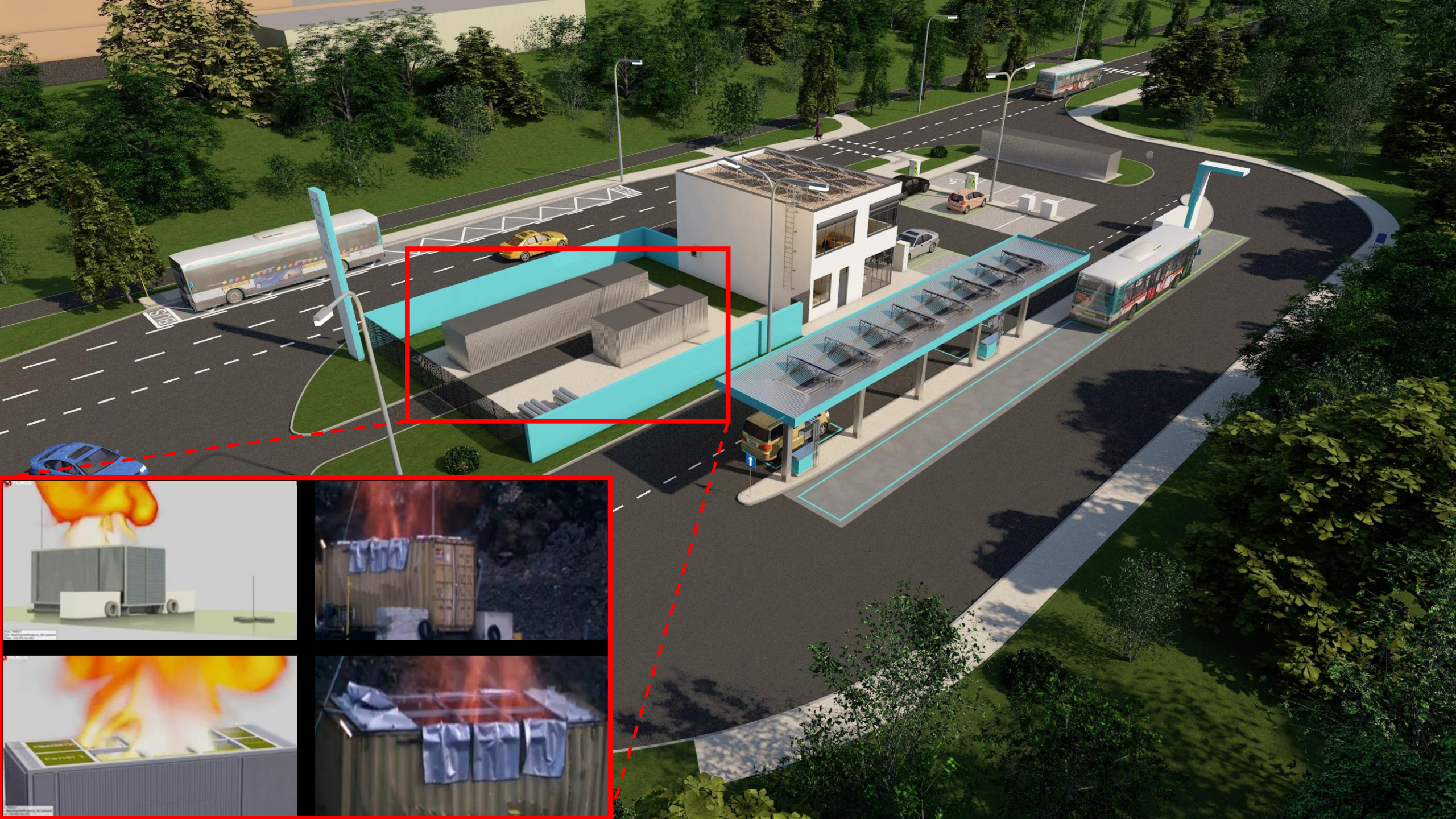
## Experiment laboratoř

VODÍK + METAN + OXID UHELNATÝ + VZDUCH

BARVA  
HNĚDO  
ORANŽOVO  
MODRÁ





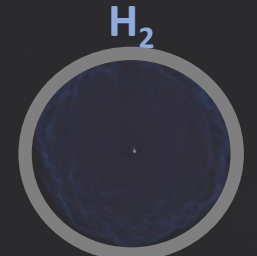




## Experiment velké měřítko



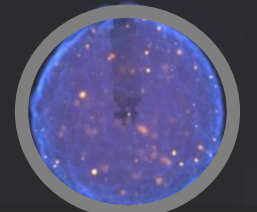
**BARVA**  
NEVIDITELNÝ?  
**HNĚDÁ ?**  
**ORANŽOVÁ ?**  
**MODRÁ ?**



$\text{CH}_4$



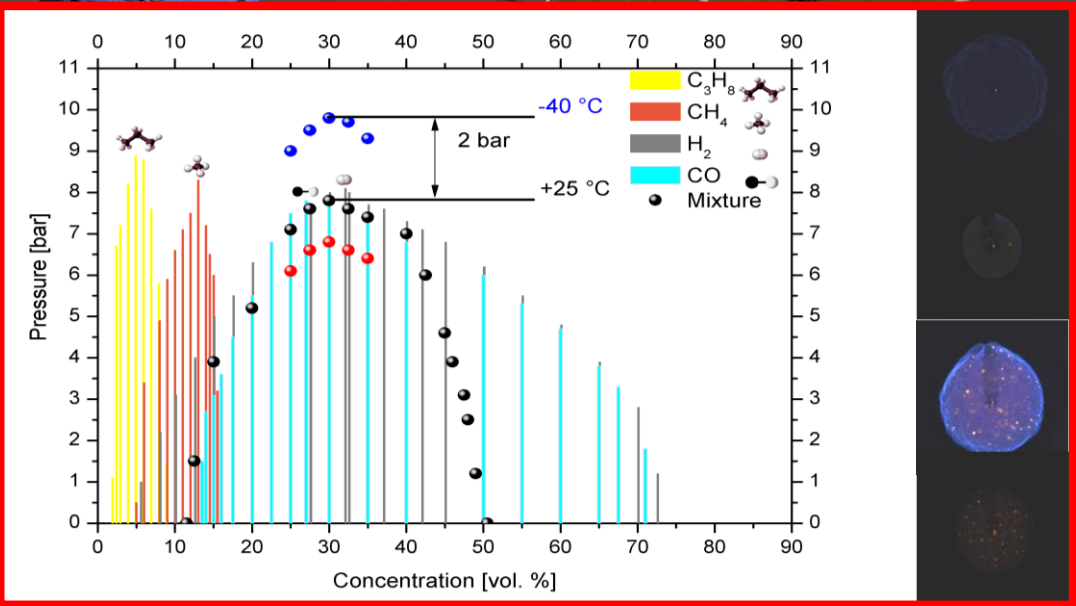
$\text{H}_2 + \text{CH}_4$



$\text{H}_2 + \text{CH}_4 + \text{CO}$









## Experiment laboratoř

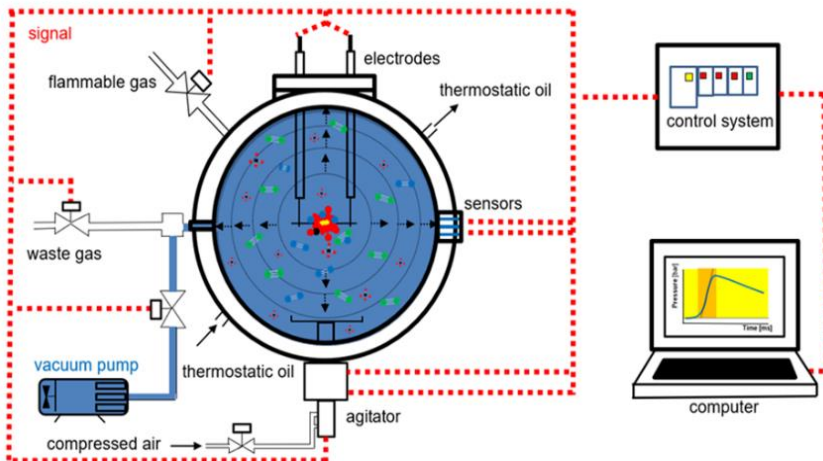
**HOŘÍ ?**  $\xrightarrow{NE}$  **VZPLANE ?**  $\xrightarrow{ANO}$

ANO

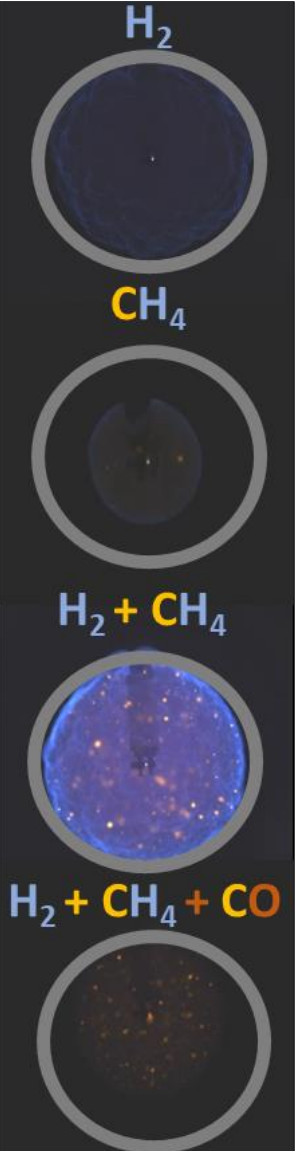
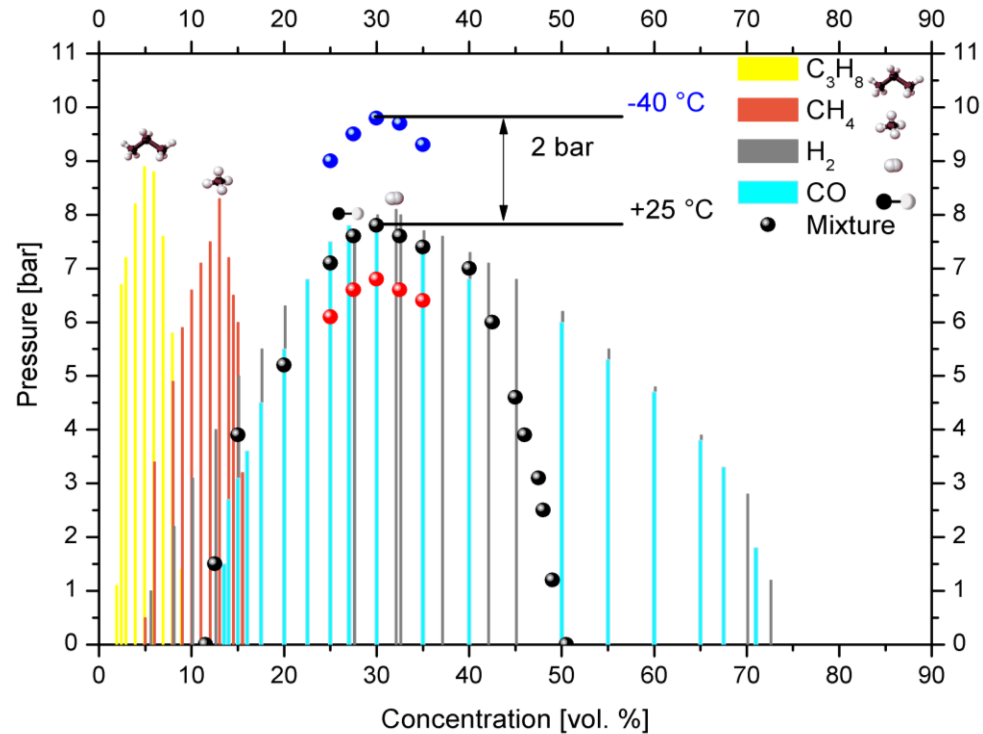
**BOUCHÁ ?**  $\xrightarrow{NE}$  **PODMÍNKY ?**

ANO

## Jak moc + PODMÍNKY ?



## Jak moc + PODMÍNKY ?









# Experiment laboratoř

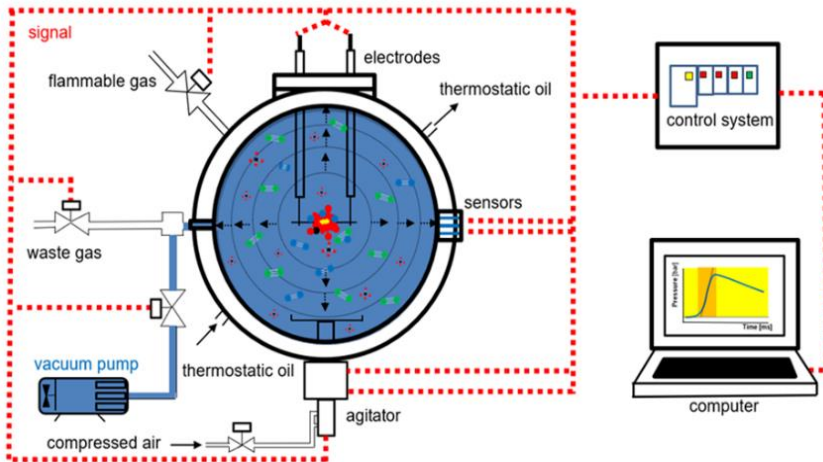
HOŘÍ?  $\xrightarrow{NE}$  VZPLANE?  $\xrightarrow{ANO}$

ANO

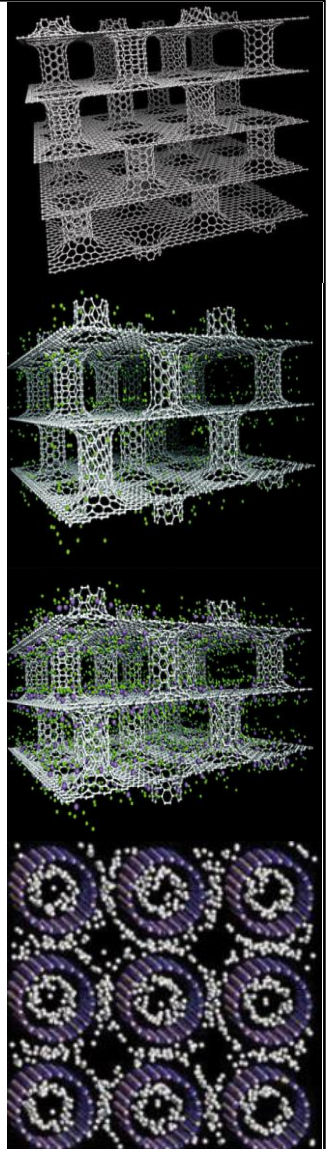
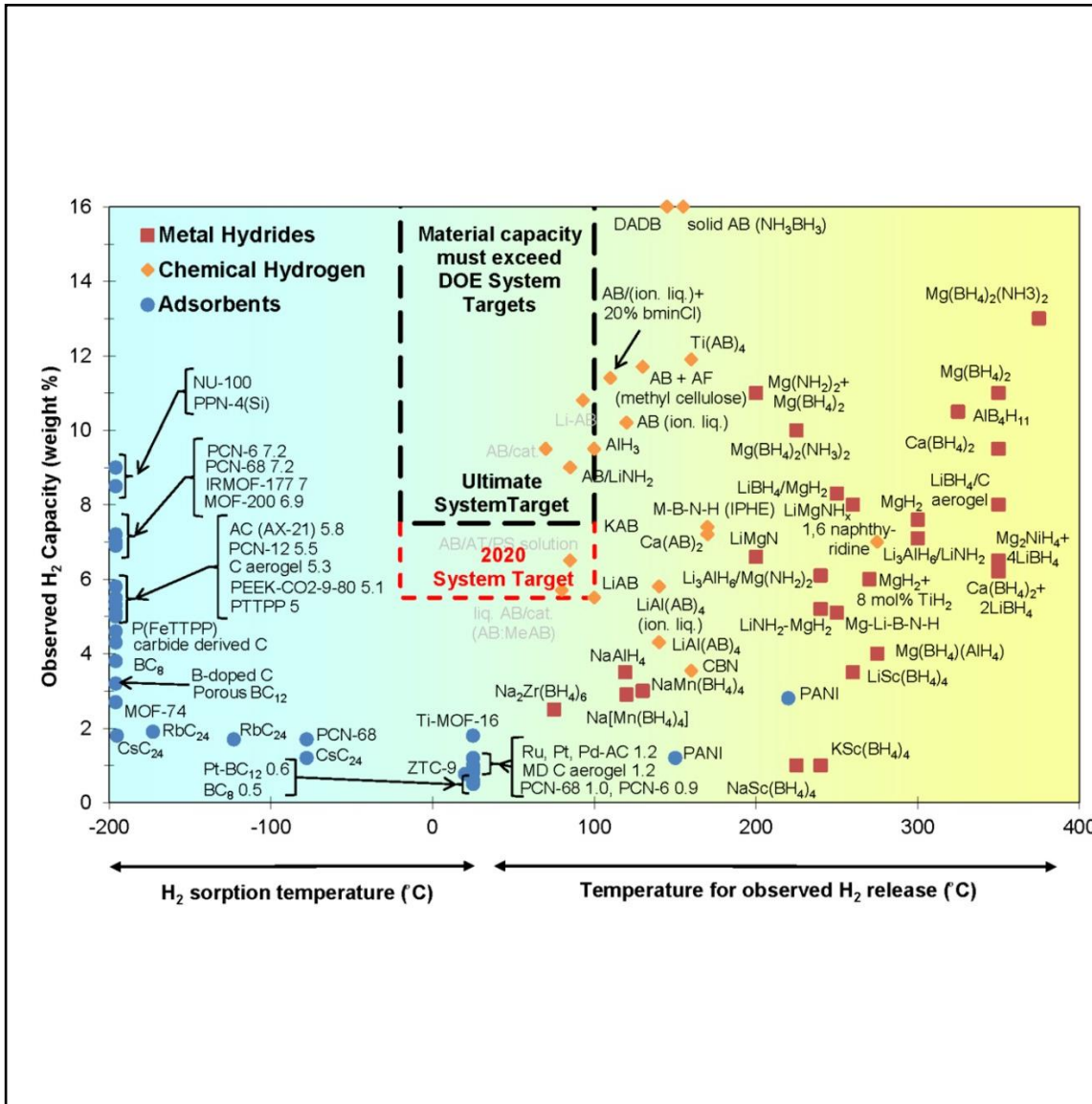
BOUCHÁ?  $\xrightarrow{NE}$  PODMÍNKY?

ANO

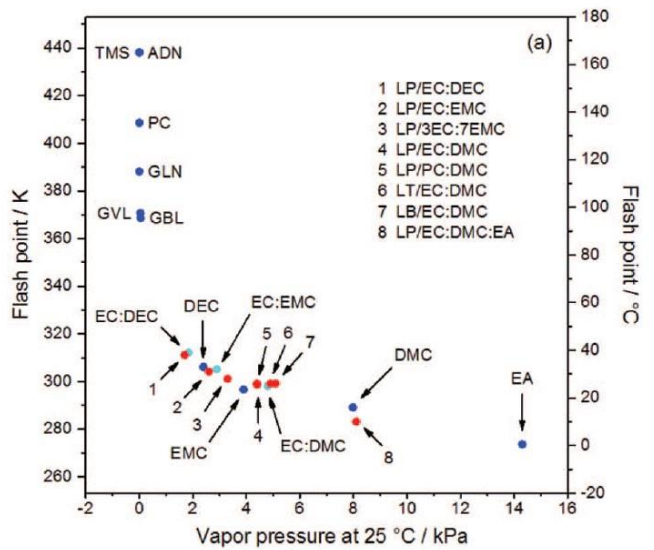
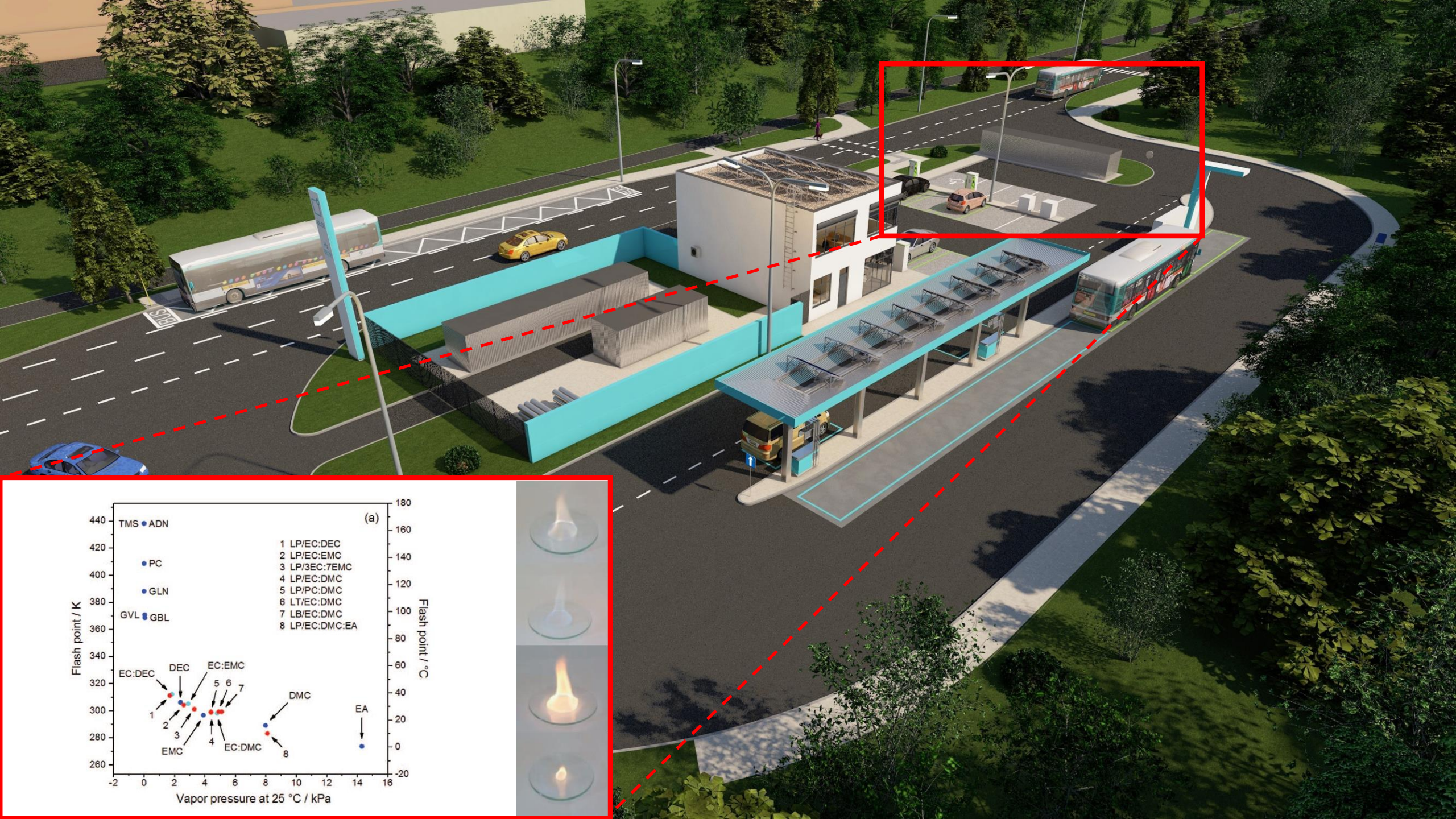
# Jak moc + PODMÍNKY?



# Jak moc + PODMÍNKY?

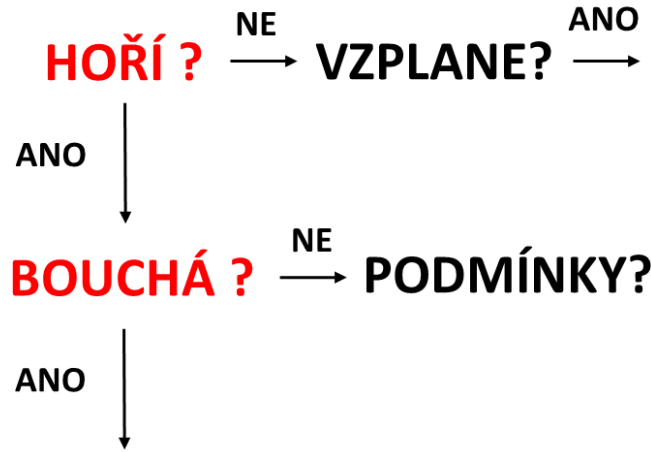




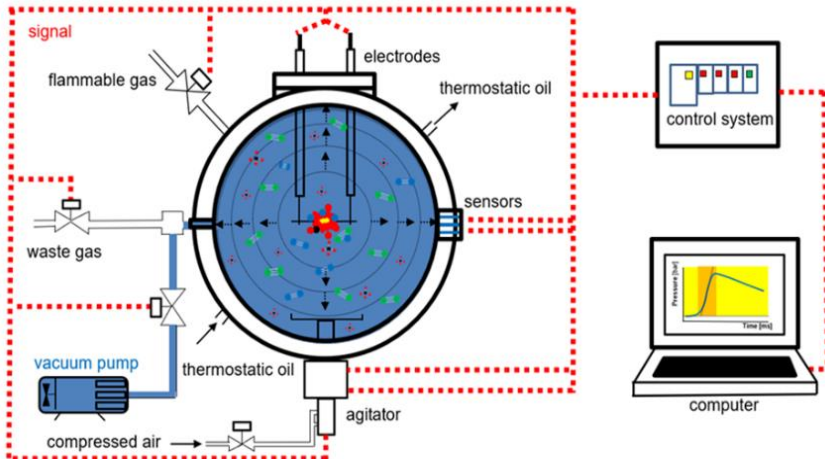




## Experiment laboratoř

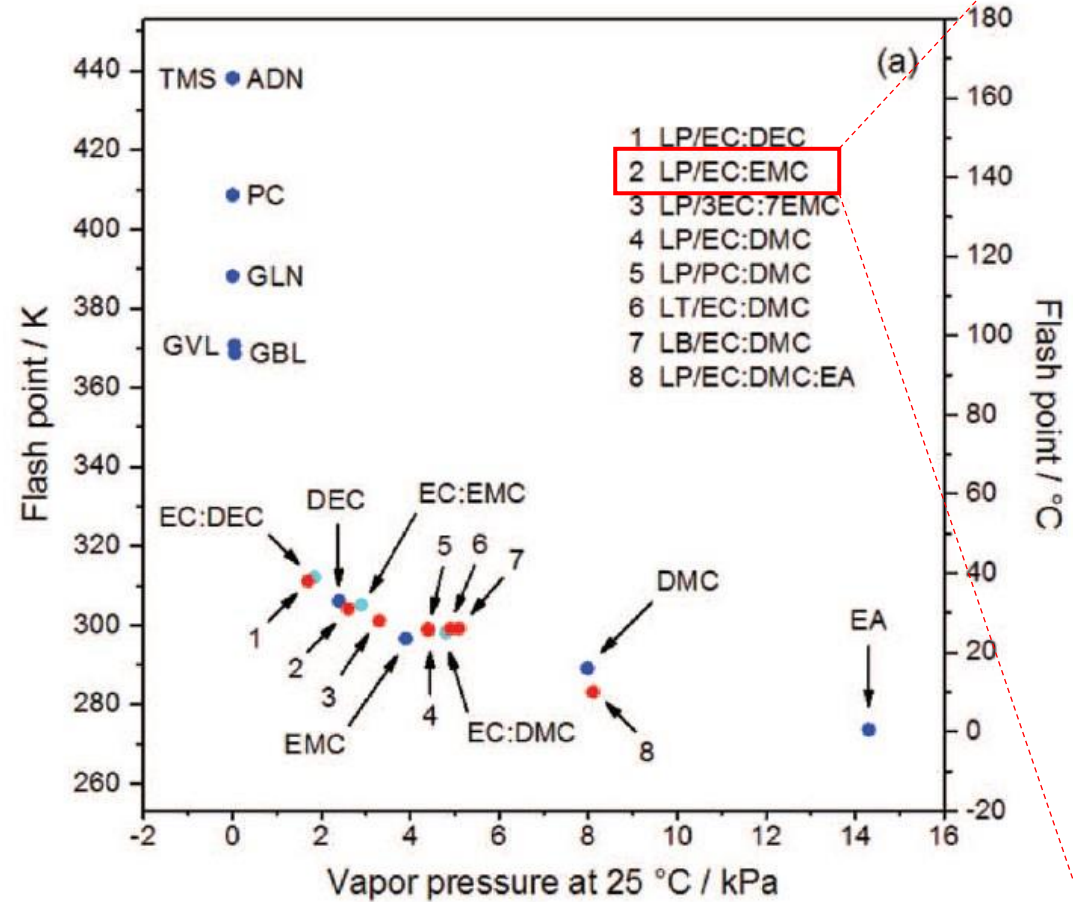


## Jak moc + PODMÍNKY?



## Jak moc + PODMÍNKY?

### LiPF<sub>6</sub>/EC:EMC







Data SIO, NOAA, U.S. Navy, NGA, GEBCO  
Image Landsat / Copernicus  
Image IBCAO





**Michael Faraday**

\* 22. září 1791

† 25. srpna 1867

*„Věda sama není v životě to nejdůležitější,  
jsme lidé a měli bychom mít lidské city.“*

*Avšak nemusíme se bát vodíku,  
budeme-li s ním v technologiích zacházet bezpečně.*



# Děkuji za pozornost

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