

A 3D molecular model visualization of a complex organic molecule, possibly a VOC, rendered in a dark purple and black color scheme. The molecule features a central ring structure with various substituents, including what appears to be a sulfur atom (yellow) and several oxygen atoms (red). The background is dark with some blurred molecular structures and small yellow and red dots, suggesting a scientific or technological theme.

ProTech Sensors

**Innovative
VOC sensor
technology**

Our primary focus...

To dramatically expand the capabilities of **VOC detectors** by improving...

selectivity,

speed, and

ease of use



About Us

ProTech Sensors is developing a novel VOC sensor technology that can be targeted to detect numerous compounds for industrial, residential, medical and military applications.

Platform Technology



Petrochemical

Benzene
Toluene
Ethylbenzene
Xylene



Oil & Gas

Benzene
Toluene
Ethylbenzene
Xylene



Home

Benzene
Formaldehyde
Methylene chloride
Tetrachloroethylene
Ethylene glycol
Toluene
Xylene
1,3-butadiene



Medical

Isoprene,
Acetone,
...



Military

Pentanal
4-butyrolactone
2-pentanone
2-hexanone
2-cyclopenten-1-one
3-methylheptane and
2-heptanone, Isoprene
Naphthalene

Initial Customer Focus – BTEX

Gas detector manufacturers are actively searching for a sensor technology that can identify multiple VOCs

Petroleum Refinery Applications

Honeywell

MSA
The Safety Company

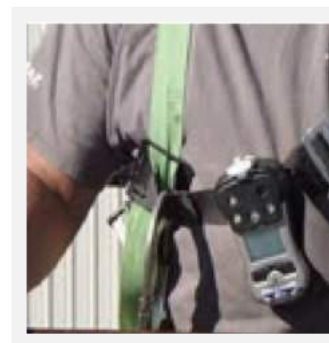
mocon



Handheld



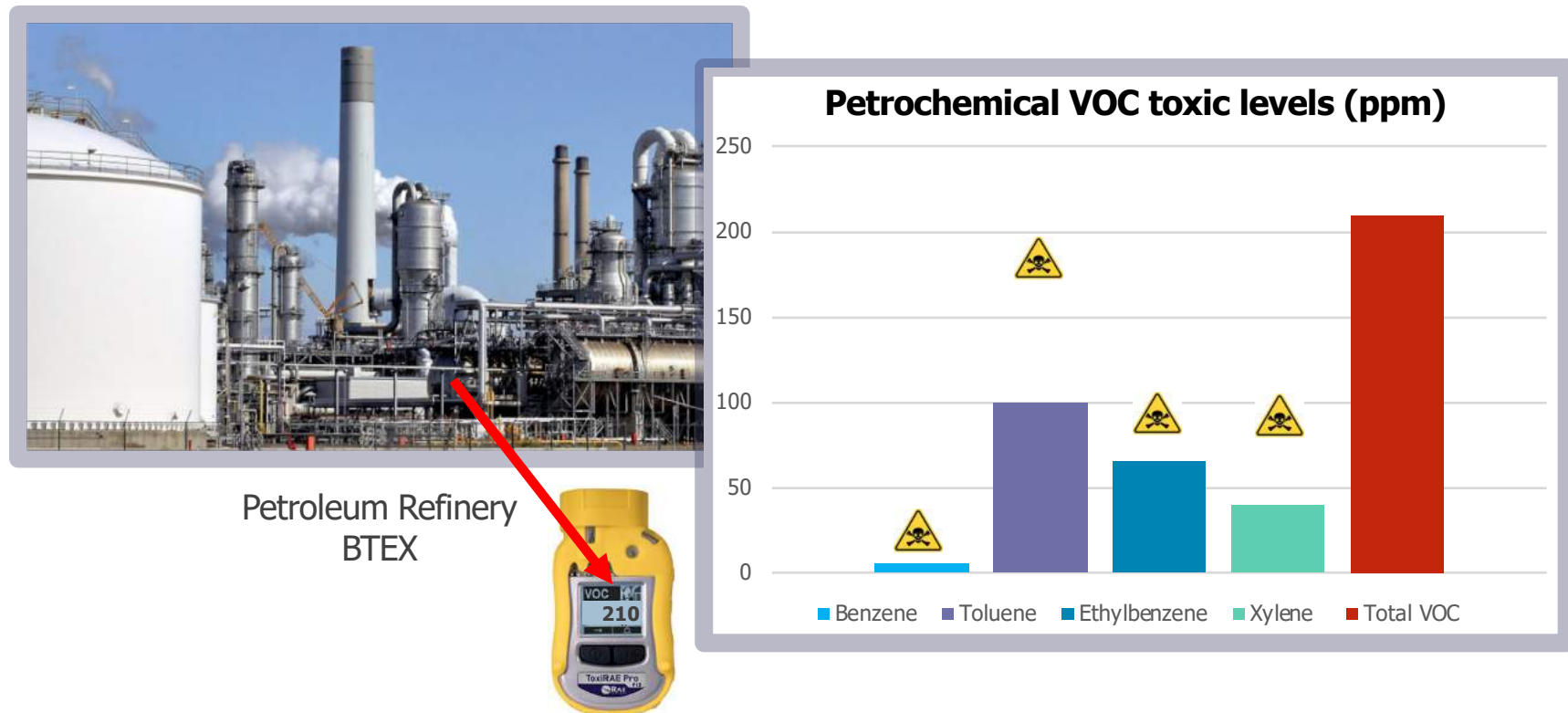
Fixed



Wearable

Problem – Selectivity / Sensitivity

No low cost sensors available that provide selectivity and sensitivity

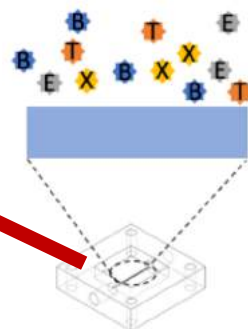




Solution

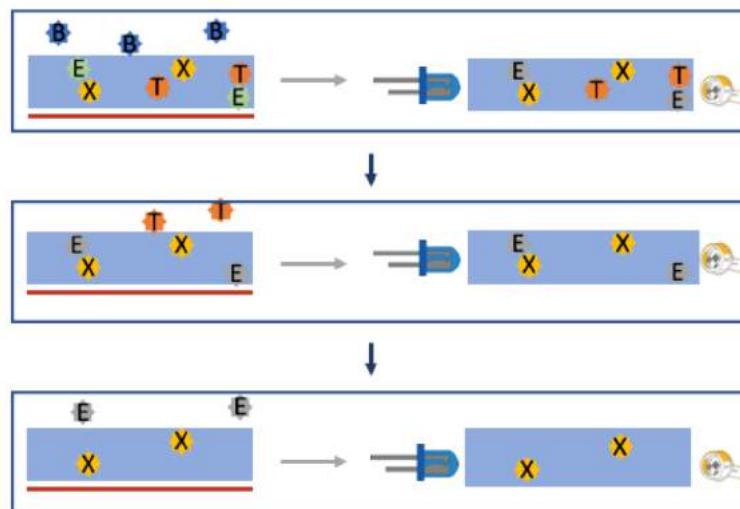
Polymer waveguide combined with thermal desorption enable sensor to detect multiple compounds.

Step 1: Pre-concentration



Step 2: Separation

Step 3: Quantification



Timeline

Fall 2020

Optimized
Prototype /
Business Plan



Winter 2021

Production
Prototype



Fall 2022

Commercial
Version – MEMS
Hybrid



Sales

Competitive Landscape

