

## World's First Smell Detector Chip for the Mass Market



*Wherever we are, we are surrounded by different kinds of smell.*

*But can you digitize, measure and then use smells?*

[www.smell-inspector.com](http://www.smell-inspector.com) ➔

# Unlimited number of use cases: Wherever smells matter!

## Home Appliances



## Industrial Appliances



## Air Quality



## Safety & Security



## Quality Control



**Healthcare & Medicine**  
**Drones & Robots**  
**Automotive & Aviation**  
**Perfumes & Body Care**  
**Agriculture & Product Safety**  
**Research & Development**  
**...and many, many more...**

## Food & Beverages





# Smell Inspector: A tool for developers and end users

- affordable hand-held device
- very low power consumption:
  - < 1  $\mu$ W for the detector chip
  - < 300  $\mu$ W for read-out electronics
- software compatible with mobile devices
- compatible with Arduino and Raspberry-Pi
- connection via USB, Wi-Fi or Bluetooth
- contains four Smell iX16 detector chips

Smell.  
INSPECTOR



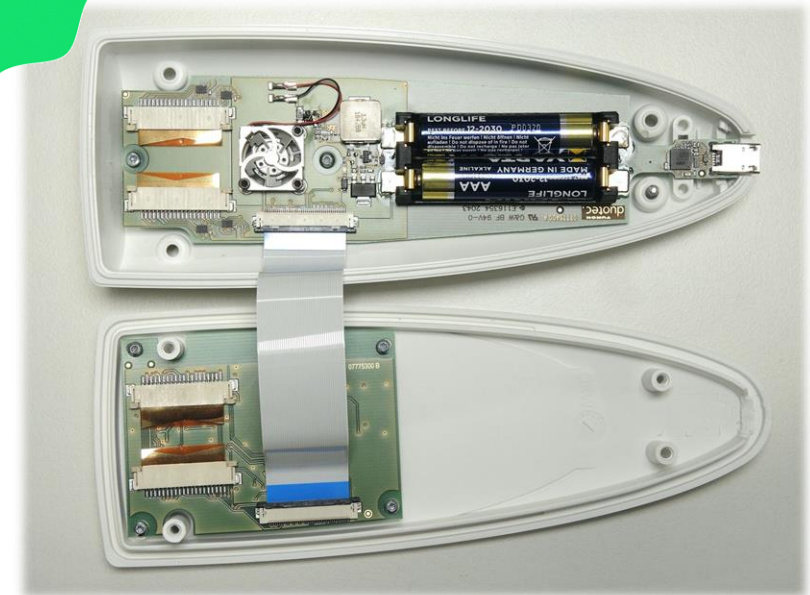
Soon on  
**KICK  
STARTER**

- high sensitivity to different gases and VOCs
- low-cost and compact
- modular: easy adaptation to specific applications
- application as disposable chips possible

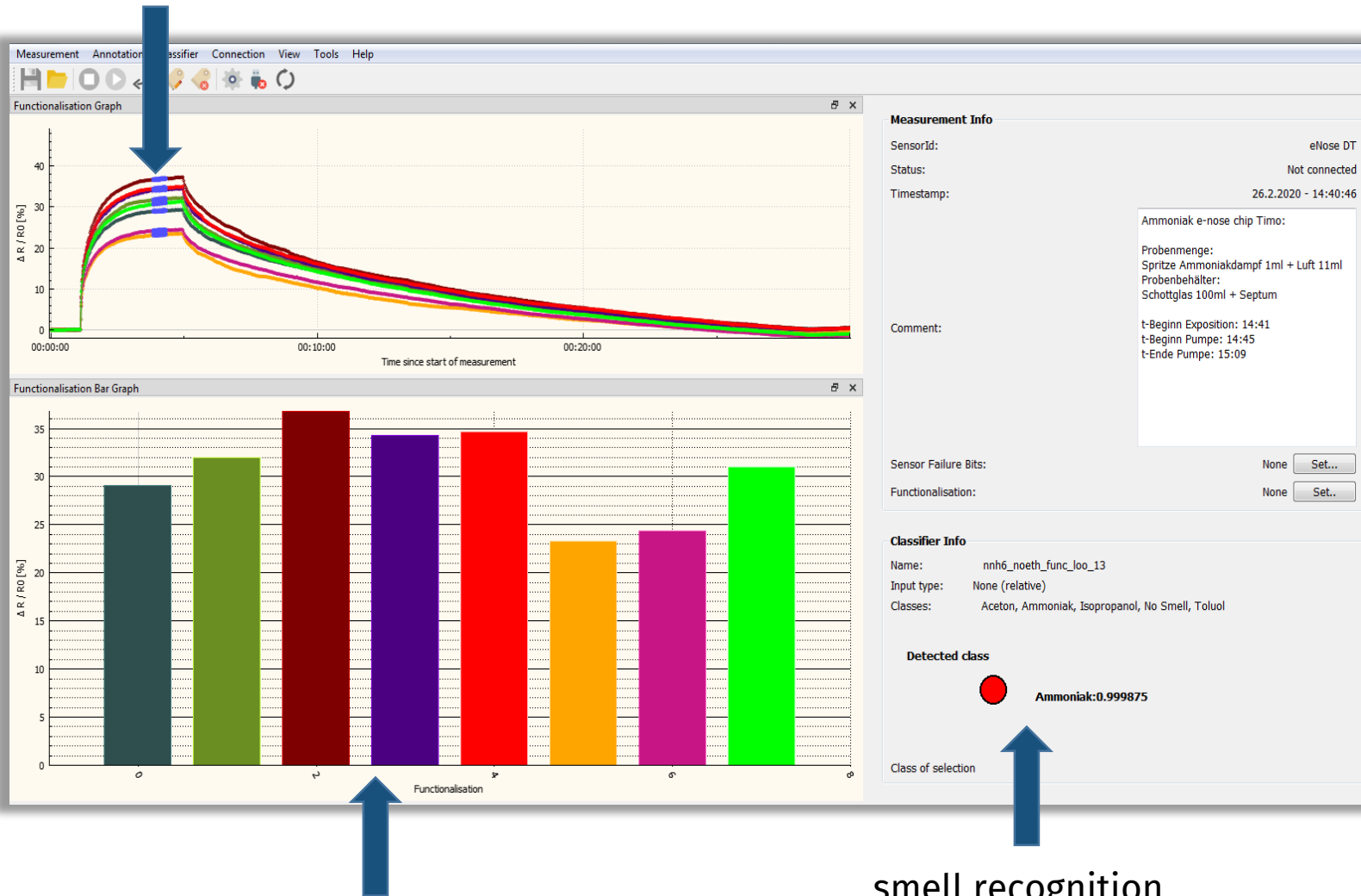
Smell.  
iX16



16-channel detector on foil



time resolved visualisation of smell measurements



smell specific pattern

smell recognition

Smell.  
ANNOTATOR

- provided with Smell Inspector
- used for:
  - recognition of stored smells
  - control and annotation of measurements
  - storing digital smell patterns
- developer version provides:
  - various sensor parameters
  - further useful features
- Windows and Linux versions available
- Android and iOS versions follow

# Our references: Pilot projects



SNIFFBOT: search for leaks of dangerous gases



How Roboy  
Learns to  
Smell



recognition of food and beverages smells

TURCK  
**duotec.**

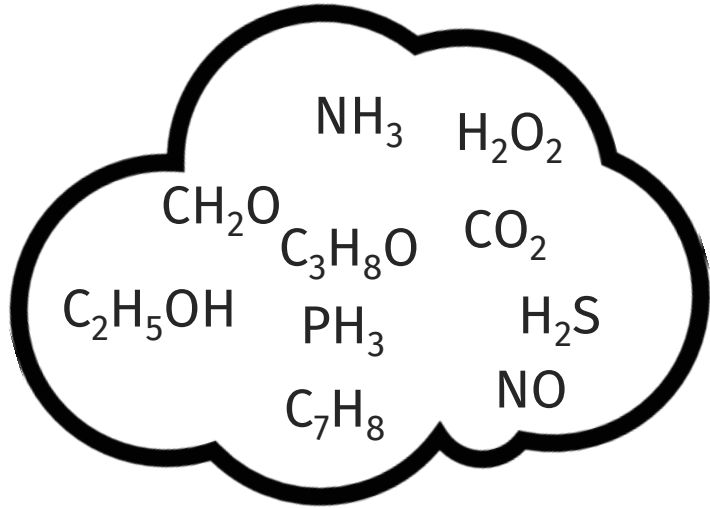
recognition of different VOCs

 **Centaur**

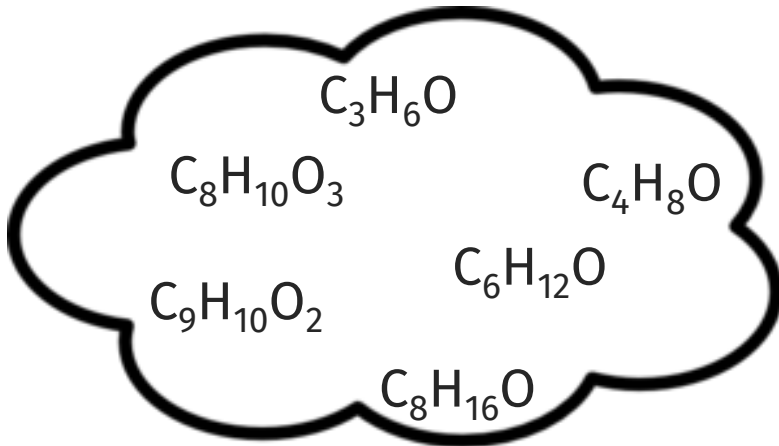
fumigation process monitoring



# Tested gases, VOCs and smells



red wine  
lemon juice coffee  
garlic orange juice  
vodka



guaiacol tee  
perfumes chocolate

onion  
fish potato  
orange meat  
spoiled banana spoiled meat  
trash smell  
spoiled fish

**All substances and smells are recognized with one hand-held device**

SmartNanotubes Technologies GmbH

Dresdner Str. 172

01705 Freital

Germany

Web: [www.smart-nanotubes.com](http://www.smart-nanotubes.com)



*Smell.*  
**INSPECTOR**



Linked **in**



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für Bildung  
und Forschung