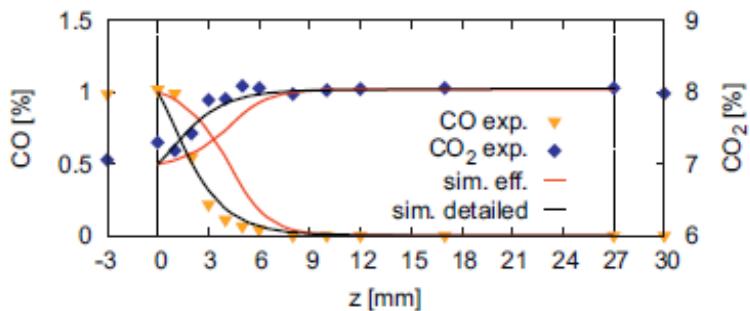
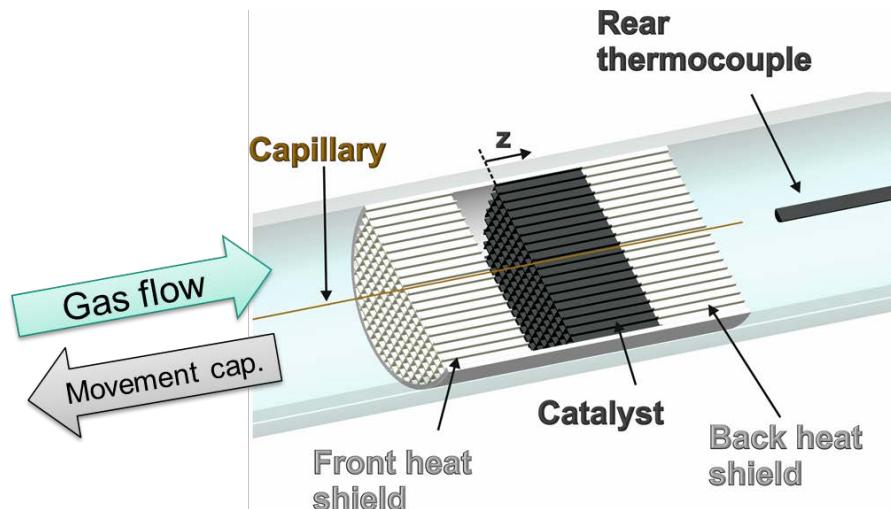


# Lab test benches: SpaciPro

## Capillary in-situ technique for axially resolved profiles



D. Chan, S. Tischer, J. Heck, C. Antinori, O. Deutschmann.  
Applied Catalysis B: Environmental 156–157 (2014) 153.

Staff: Dr. Claudia Antinori, Azize Ünal

D. Livio, C. Antinori, A. Donazzi, A. Beretta, G. Groppi, O. Deutschmann, Appl. Catal. A 467 (2013) 530

[www.abgaszentrum-karlsruhe.de](http://www.abgaszentrum-karlsruhe.de)

Tests of catalytically coated honeycombs ( $d = 2 - 2.54$  cm, length  $\sim 5$  cm)

Axially resolved profiles of species concentration, gas-phase and surface temperatures (resolution: 0.25 mm)

Gases:

Gaseous and liquid HCs, CO,  
 $\text{CO}_2$ ,  $\text{NH}_3$ , NO,  $\text{NO}_2$ ,  $\text{O}_2$ ,  
Air,  $\text{N}_2$ ,  $\text{H}_2$ ,  $\text{H}_2\text{O}$

Temperature:

RT – 1000°C

Pressure:

1 atm

Flow:

0.5 - 5 slpm

Gas analytics:

FT-IR, MS

Applications: Oxidation reactors, DOC, TWC, ...

Available for teaching, research, and service

Exhaust-Gas Center Karlsruhe

Prof. O. Deutschmann, Prof. J.-D. Grunwaldt