

***Illustrative research project***

**System for ozone destruction from residual gases for environmental applications**

**MATNANTECH project 225/ 2004-2006**

***Project director dr. Elisabeth-Jeanne Popovici***



***SIDORA***



**Results**

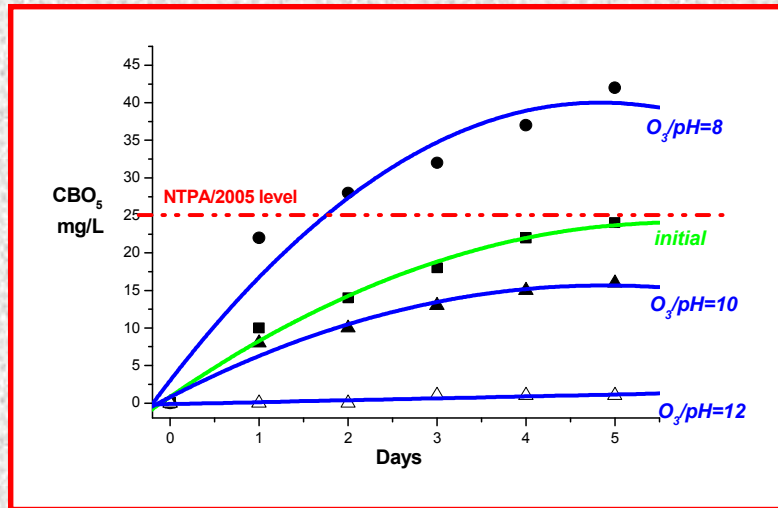
**•Manufacture of one system for the destruction of ozone from residual gases (= SIDORA), for environmental applications**

- Manufacture of SIDORA device;
- Synthesis and characterisation of the filler (= catalyst)
- Method for waste water treatment with ozone-TOZAR
- Testing SIDORA in the installation for waste water treatment with ozone

•Development of an idea from the Romanian Patent Application **CBI A00148/25.02.2003**)

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# Treatment of waste waters with ozone O<sub>3</sub> -TOZAR



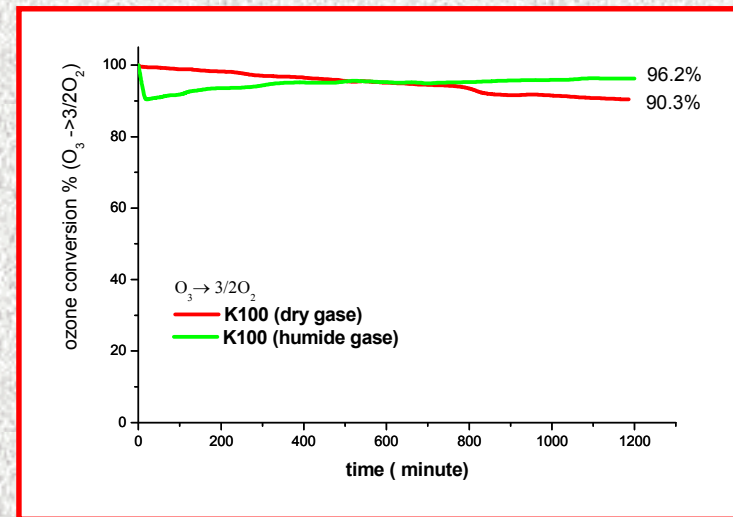
## Tests for waste water treatment with O<sub>3</sub>

Conditions:

Waste waters from CFR

Contamination monitoring: CBO<sub>5</sub> (OXYCAP WTW )  
(where untreated water –green line );

Method: TOZAR



## Tests for O<sub>3</sub> destruction using CATALYST K100

Conditions:

- 1.6 g catalyst based on MnO<sub>2</sub>/alumina (= Catalyst K100);
- O<sub>3</sub> in oxygen (40 mg/L); RH=80.4÷ 85.1%;



**Micropilot installation for waste water treatment with ozone**