Slaughterhouse wastewater properties assessment by modern and classic methods

Ramona Crainic1 and Radu Fechete2,\*

**The CPMG and PGSE pulse sequences**

|  |
| --- |
| (a) |
| (b) |
| **Figure SI 1**. a) The CPMG (Carr-Purcell-Meiboom-Gill) pulse sequence consisting of a tipping (excitation) radiofrequency pulse and a series of *n* refocusing pulses generating a series of multi-exponential decay echoes, with the echo time 2τ and a total duration of 2nτ and b) The PGSE (pulsed gradient stimulated echo) pulse sequence with the echo time τ, duration of the coding/encoding grdient δ and the free diffusion period Δ. |

**The *T*2-distributions measured for sludge**

|  |
| --- |
|  |
| **Figure SI 2.** The normalized *T*2 –distributions recorded for the sludge residue collected from a chicken slaughterhouse in the months 1, 2, 3 and 4 of monitoring. |

**The self-diffusion coefficient *D* distributions measured for sludge**

|  |
| --- |
|  |
| **Figure SI 3.** The normalized *D*–distributions recorded for the sludge residues collected from a chicken slaughterhouse in the months 1, 2, 3 and 4 of monitoring. |

**The relationship between the total absorbance in the VIS-NearIR spectra and turbidity**

|  |
| --- |
|  |
| **Figure SI 4.** The relationship between the total absorbance in the VIS-NearIR spectra and turbidity measured for milky-like samples. |

**The proportions and eigenvalues resulted from PCA applied on the measured parameters of poultry slaughterhouse wastewater**

|  |  |
| --- | --- |
| (**a**) | (**b**) |
| **Figure SI 5.** (**a**) The proportion and cumulated proportion function of principal component number as resulted from PCA – analysis using the input data presented in Table 1 for the wastewater and sludge collected from a chicken slaughterhouse; (**b**) The eigenvalues (variance) function of the principal component number PC1 – PC6. |