# Research Report ਛੋ



# THE MONITORING OF WATER QUALITY USED IN DIALYSIS

# Goal of the project

The goal of the project is to monitoring the water quality used in dialysis.

# Short description of the project

During the project various parameters of dialysis water are periodical analyzed from samples collected by the beneficiary. The parameters analyzed and the times for the samples collections are commonly agreed by the beneficiary and by the execution team. The analysis of the main parameters for the monitoring of water quality used at dialysis are needed to see if they are into the maximum admissible concentration of legislation..

#### Project implemented by

Faculty of Industrial Chemistry and Environmental Engineering. Department of Applied Chemistry and Engineering of Inorganic Compounds and Environmental.

# Implementation period

January 3, 2016 - January 4, 2017

#### Main activities

- During the project the metal ions (Al, Pb, Cu) from the dialysis water will be analyzed each month.
- The ions Ca, K, Mg, Na, AI, Cu, Pb, Cr, Sb, As, Ba, Cd, F<sup>-</sup>, Hg, NO<sub>3</sub><sup>-</sup>, Se, Ag, SO<sub>4</sub><sup>-2-</sup>, Be, Cl<sup>-</sup>, TI, Zn from system water, deionized water and permeate will be analyzed in one month.

#### Results

Monthly are analyzed three samples of water (system water, deionized water and permeate) to determine the concentrations of metal ions.

#### Applicability and transferability of the results

- Improved university-industry relationships.
- Updating curricula in accordance with the economic realities of the local area.

• The results are consistent with the legislative framework in force. Adoption by the university of new mechanisms and management techniques resulted from the project activities.

# Financed through/by

S.C. NEFROMED S.R.L.

# **Research Centre**

Research Center of Environmental Sciences and Engineering

#### Research team

University Lecturer Ciopec Mihaela, PhD Associate Professor Negrea Adina, PhD

#### **Contact information**

University Lecturer Mihaela Ciopec, PhD Faculty of Industrial Chemistry and Environmental Engineering Department of Inorganic and Applied Chemistry and Environmental Engineering, Bv. Vasile Pârvan, No. 6, R0300223, Timisoara Phone: (+40) 256 404192 Mobile: 0722806880 E-mail: mihaela.ciopec@upt.ro