CLASSIFICATION OF DRINKING WATER SAMPLES USING CHERNOFF'S FACES VISUALIZATION APPROACH

A. ASTEL[1]   **M. BIZIUK**[2]   **J. NAMIEŚNIK**[2]

Abstract: The study shows the importance of drinking water monitoring with simple but powerful visualization tools to better understand spatial variations in water quality and reports the results of classification of drinking water samples analyzed at various districts in the Gdańsk area (Poland), over the period 1993-2000. The complex data matrix containing results of disinfection by-products determination (1756 observations) was successfully treated with Chernoff's Faces visualization approach yielding two groups of similarity among the sampling sites reflecting different types of supplied drinking water (surface and groundwater).

Key words: drinking water, VOCl, visualization, Chernoff's Faces, spatial changes in quality.