Contribution ID: **514** Type: **Oral**

Chemical elemental analysis of cysts fluids by X-ray fluorescence spectroscopy with the use of total reflection of X-ray

Every year over 3,000 women in Poland hear the diagnosis of ovarian cancer and this number keeps growing. Despite the rapid development of medicine including diagnostic techniques the situation doesn't change much. It stimulates the research of newer and faster diagnosis and treatment methods of the cancer. The medicine reaches out to the other branches of science and technology to approach this problem. One of the most reliable method of quantitive and qualitative elemental analysis is the well known x-ray fluorescence method. It uses x-ray to perform a nondestructive analysis of many kinds of samples - not only biological but also environmental and industrial. This method is often used in quality control, criminology and archeology. My research is based on examining eight different samples of liquid extracted from ovarian cysts using TXRF method. The results are very promising and can be used as a background for a wider application of this method in the area of medical diagnostics.

Primary author: Ms ŚWIERCZ, Aleksandra (AGH University of Science and Technology in Cracow, Poland)

Presenter: Ms ŚWIERCZ, Aleksandra (AGH University of Science and Technology in Cracow, Poland)

Track Classification: Applied Research