

**Project name:** **Determination of elemental impurities in e-liquids**

**Beamtime Report**  
**15.04.2013- 02.06.2014**

**General information**

<b>Name of the rapporteur</b>	<b>Name of the rapporteur's organisation</b>
Grzegorz Górecki	Ofir Jacek Bilski
<b>Type of research (nanotechnology/health care/chemistry etc.)</b>	<b>Name of the research facility</b>
Chemistry	Helmholz Zentrum Geestacht
<b>Date of the measurement, duration</b>	<b>Location of the event</b>
12.03.2014 – 02.06.2014	Helmholz Zentrum Geestacht
<b>Facility personnel participating in the measurement</b>	
Dr. Daniel Poefrock	

**Description of the project**

<b>Research description (short summary as written in the application)</b>
Determination concentration level of elemental impurities in e-cigarettes liquids produced by OFIR.
<b>Summary of activities (experiments performed, beamtime used, preliminary overview of results, next steps and other relevant information)</b>
<p>Performed experiment includes concentrations levels determinations of 55 elemental impurities in 3 types of liquids produced by OFIR using ICP-MS-MS. First result showed very low concentrations of metallic impurities, especially toxic heavy metals. Next steps should be: repeat this type of experiment on samples collected from vaping products under normal conditions of using e-cigarette and perform this range of measurements on standard reference tobacco material and common analogue cigarettes (in tobacco and smoking products trapped in standard smoking conditions.)</p>

**How would you describe cooperation and assistance from industrial liaison officers and national contact points while preparing and carrying out the research at large scale facilities?**

In Poland mr Krzysztof Zieliński and prof. Jablonska provide us very soon contact with convenient facility and help describe and detail conditions of experiments. Contact with dr Appleby was also good and fast, he help to choose proper method of analysis and provide contact with facility, that have capabilities to perform measurements for us. By reason of using non typical method for this projects experiments took very long period of time.

**Other personal remarks**

The biggest disadvantage of performed measurements was, that similar measurments cant be performed on standard reference materials and we havent a reference point

**Annexes**

**Annexes**

(list of annexes; meeting minutes, graphical illustrations, tables and other supplementary data)