**Mass Spectrometer with inductively coupled plasma**

**ICP-MS**

**Equipment:** Mass spectrometer with indictive coupled plasma (Shortage: ICP-MS)

**No. of Equipment: TUL8**

**Responsible coordinator:** doc. RNDr. Michal Řezanka, Ph.D.

**Name of Institution:** Technical University of Liberec

**Address of Institution:** Bendlova 1407/7, 46117 Liberec

**E-mail:** michal.rezanka@tul.cz

**Telephone:** 485 353 445

**Homepage:** www.tul.cz

**Contact person: Ing. Martin Palušák**

**E-mail: martin.palusak@tul.cz**

**Telephone:** 485 353 937

**Equipment Description**

**Description of equipment:**

ICP-MS NexIOn300D (Perkin Elmer) with autosampler and possible combination with HPLC (Flexar - Perkin Elmer)

**Specification of expertise relevant to NanoEnviCz workpackages:**

**WP3**f,g, **WP4**a,b, **WP7**e,h,i,

**Detailed description of expertise**

**Please, specify the main research topics connected with equipment**:

ICP- MS is able to quantify many elements in very low concentration (from ppt). Research topics could be directed both to toxicity studies of metals or to catalytic properties of metals and metallic compounds.

**Please, specify the secondary research topics connected with equipment**:

Studies of metals speciation in environmental matrices.

**Keywords describing research area:**

Arsenic, lead, copper, chromium, cadmium, speciation, organometals, organotin

**Competence**

**Relevance for applied and industrial research:**

Metals and metallic compounds can be studied in industrial products as well.

**Relevance for fundamental studies:**

Fundamental behavior of metals could be studied with the limitation to dissolved forms.