



Process Innovation Nucleus S.R.L.

Tax Identification Number 33253778, J52/294/2014 | București Ave. no. 289, Mihăilești, Giurgiu
County, Romania

LETTER OF PRESENTATION

We are pleased to introduce to you our company by describing bellow the activities and business opportunities that we can develop together through a sustainable and efficient collaboration.

Who are we?

Process Innovation Nucleus (PIN) is a company established in 2014, having 100% private Romanian-Latvian share capital. Our company focuses its resources in research and innovation activities based on chemistry and physics principles applicable in the industrial sector.

The company's know-how comes from the value of our team of researchers, relating both to their individual experience as well as to their group experience as a hole in various research actions.

Currently, our research team is led by a Latvian physicist, Mr. Voldemars Belakovs , a researcher with a vast international experience in scientific research and innovation activities at NASA, CERN and other important institutes from Europe and Russia.

What do we intend to do?

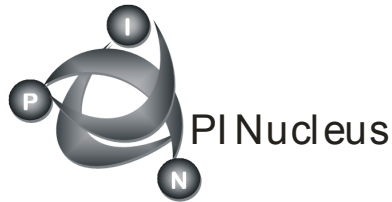
During the following 18-24 months, we are developing an innovation project concerning **a new nanotechnology and equipment for producing nanopowders based on an invention validated by the European Patent Office**, having the international publication number WO 2013/087227 A1, under the international patent classification B22F 1/00 (2006.01). The identification data is available by following the link bellow (i.e. WIPO/World Intellectual Property Organisation detabase):

<http://patentscope.wipo.int/search/en/detail.jsf?docId=WO2013087227&recNum=150&docAn=EP2012051479&queryString=&maxRec=7285034>.

As a result of undertaking the project, we will put on the market the following items:

- **nanopowders**
- **apparatus for producing nanopowders,**

Both items will integrate the latest aforementioned nanotechnology which will allow for producing nanopowders having multiple applications in your industrial field.



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Short description of the new nanotechnology

Briefly, the technology we want to develop utilizes various reactive metals catalysts and high frequencies for producing nanopowders.

Unlike conventional technologies which use expensive and complicated equipment (e.g. plasma, accelerators, etc.) for producing nanopowders, while being inefficient concerning costs and production rate, as well as presenting difficulties in scaling-up and generating environmental issues, the new technology represents an environmentally-friendly solution, using a complex main equipment allowing for a higher production yield with lower costs in shorter processing time.

The main benefits of the new technology

The nanopowders to be produced can be described through a series of benefits, presented bellow. The materials/products incorporating our nanopowders will have improved performances, able at generating further optimization of production costs by reducing the input materials, etc. The benefits relate, but are not limited to the following:

- Producing **high quality nanopowders** with 99.9% purity.
- Producing smaller nanopowders, with an **extremely precise dimension** (down to atomic level) and **crystalline orientation**.
- Producing nanopowders through an environmentally-friendly and efficient technology which allows for a **reduction in the price of nanoparticles up to 50%** when compared with current market prices.
- Under normal conditions, the nanopowders produced by employing the proposed technology **do not create agglomeration**, being of very high and high quality (i.e. the very high quality nanopowders have a **spherical shape, in the range of 1-5 nm, 5-10 nm diameter similarly continuing to up to 100 nm**; the high quality nanopowders have a spherical shape and diameter between 1-100nm).
- Ensuring a **mass production** in a **shorter processing time**.

What do we offer?

As a result of implementing the innovation project, PIN will be able to offer to interested companies two categories of products:

- **Nanopowders** produced by employing the new technology integrating the previously described benefits.
- **Apparatus for producing nanopowders**, which will put into practice the principles of the new technology integrating the previously described benefits.



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We estimate the launching of the new products on the market at the beginning of 2017/within a short period of time of 18 up to 24 months from now.

What are we interests in?

Taking into consideration that we have identified your company as being a nanopowder user in their production process, we would appreciate to know **your interest** regarding a potential future acquisition of **nanopowders** or **nanopowder producing equipment**. Expressing your interest will not represent undertaking any kind commitment from your part.

May you be interested and need further details regarding the information above, we would gladly respond and be at your disposal by E-mail: geanina.banu@pinucleus.ro or by telephone: **(+4) 0724 384 111**.

Thank you in advance.

Respectfully,

Geanina Banu
Research &Development Manager