

CONMET LLC

Interview with Mr. Evgeniy Kozlov, Executive Director

CONMET LLC is a Russian-based manufacturer of medical devices and titanium implants for more than 20 years. The main goal of the company is to produce innovative and high quality products. The materials used at CONMET are of the highest excellence and match all of the strictest quality requirements. CONMET produces cranio-maxillo-facial implants, spinal fixation products, and dental implants (all of the products are made of titanium or titanium alloys). From 1996, using 3D technologies, the company has been manufacturing also individual implants for neurosurgery and trauma. The company is certified by BSI and it has ISO 13485, ISO 9001, and CE certificates.



CONMET acquired their PICOSUN™ P-300B batch ALD system in 2012. The system is designed specifically for manufacturing of medical devices and it is integrated in the company's clean room. CONMET uses their PICOSUN™ ALD system for bioactive coatings on medical implants, with plans to extend its use in the future.

Mr. Kozlov, what are the key topics you work with at CONMET?

Being the Executive Director of the company one of the key topics in my work is the development of innovations related to Atomic Layer Deposition (ALD) processes and nanostructured materials.

What is your experience in ALD and how did you learn to know about the technology?

My experience in ALD started 2008, when we initiated collaboration with the Moscow Institute of Physics and Technology (MIPT). At that time, there was a laboratory-scale ALD system installed at the Department of Common Chemistry, run by Prof. A. P. Alekhin.

In your field of industry, what are the benefits of ALD compared to other surface coating methods?

After studying a number of different coating technologies, we decided to use ALD because it gives the possibility to create coating with excellent uniformity and defined crystal structure. This makes the implant surface bioactive, which leads to high osseointegration.

How did you learn to know about Picosun?

We learnt about Picosun from MIPT. Their lab-scale ALD equipment was manufactured and installed by Picosun.

What were the factors that made you choose Picosun as your ALD technology provider?

The main factors for selecting Picosun equipment were the possibility to carry out ALD processes for 3D objects and the equipment's reliability.

For what purposes and applications does CONMET utilize ALD?

For adding the properties of bioactivity to medical implant surfaces.

What would you see as the key benefits that ALD has brought to your products and business?

ALD created a competitive advantage for our products in the medical implant market.

How do you see the significance of ALD in the future?

We see the significance in the development of new types of surfaces increasing the properties of implant osseointegration, as well as creating corrosion resistant coatings for medical instruments. We plan to expand our use of ALD for coating of wide range of new implants and instruments in the future.

What do you feel are the most positive features of your PICOSUN™ ALD system?

Our PICOSUN™ ALD system has been providing stable and reliable processing for implant surface coating already for a number of years.

What is your opinion of Picosun's products, services and Picosun as a company?

We have a good opinion about the high level of service and technical support we have received from Picosun during the years.

To whom would you recommend PICOSUN™ ALD technology?

We do recommend PICOSUN™ ALD technology for all of the industries where surface modification on microscale plays a key role in the product development.



Mr. Evgeniy Kozlov finished his education in mechanical engineering in 1982. After working several years in the aerospace industry testing nuclear rocket engines, in 1995 year he joined CONMET LLC as technical director, focusing on the development and manufacturing of titanium implants for surgery and dentistry. Now he is the Executive Director of the company.