

California Nanotechnologies provides Advanced Material Solutions using State of the Art Powder Processing and Sintering Technology



Eric Eyerman
Chief Executive Officer

California Nanotechnologies
Cal Nano
(TSX-V: CNO)
(OTCMKTS: CANOF)

<https://www.calnanocorp.com/>

Interview conducted by:
Bud Wayne, Editorial Executive
CEOCFO Magazine

CEOCFO: *Mr. Eyerman, what is "Nano" material, and would you tell us about your nano-structured components and materials, why they are important and why California Nanotechnologies/Cal Nano is an important company?*

Mr. Eyerman: For Cal Nano, nano-materials refer to nano-grained and nanoparticle-sized ceramic and metallic powders. We will take standard powders and then use our cryogenic milling and spark plasma sintering processes to produce and sinter the nanostructured and advance material systems into solid parts. We have many years of expertise with these technologies. Our goal is to provide customers with our services to produce the next generation of new and exciting materials, both for research and development and for their products.

CEOCFO: *Who are your nanostructured components and materials important to? What industries, business types and uses?*

Mr. Eyerman: Our customers can range from collaborative research efforts with universities and national labs, to large programs with multinational corporations. We do a lot of business with the aerospace and energy industries. The materials can range from advanced cutting bits and cutting tools to your ultra-high temperature ceramic composites for various space and aerospace applications.

CEOCFO: *What are some of the services that you offer?*

Mr. Eyerman: Our two main technologies as I mentioned before are cryogenic milling and Spark Plasma Sintering (SPS). We offer toll services for both these technologies which include everything from fundamental R&D to low volume production work. Along with those we have supporting equipment which includes machining, wire EDM, which is another way to precisely cut materials, and then basic mechanical testing services that we also offer.

To go along with those services we are also the official North American technical representative for the Japanese manufacturer of the SPS equipment, SUGA. Any SPS equipment that is installed in North America is done by Can Nano. We do the installation, training, and servicing of all that equipment and we also provide technical assistance to all the SPS customers in North America. We have extensive experience with the technology.

CEOCFO: *What is SPS (Spark Plasma Sintering)? What is the advantage of being able to rapidly consolidate ceramic, metal and composite materials?*

Mr. Eyerman: SPS is an advanced powder consolidation material bonding technique. We can do everything from low temperature metals up to the highest temperature ceramic. There is really not much that can't be sintered with the

technology. It uses uniaxial pressure and pulsed DC current to sinter fully dense parts or parts with controlled porosity. It is ideal for sintering nanostructured materials because it can consolidate powders fast and at lower temperatures than your conventional sintering technology. This allows us to retain the microstructure and special properties of advanced nano-materials.

CEOCFO: *What is Cryogenic Milling?*

Mr. Eyerman: Cryomilling, as we call it, is a powder processing method that it involves high energy ball milling in a cryogenic liquid. It can be done in liquid argon or liquid nitrogen. It is used to rapidly reduce the particle size of materials that would normally smear, such as polymers, and then for metallic alloys it will actually produce what we call nano-grains in them and that will improve your mechanical and thermal properties.

CEOCFO: *Do you actually provide these services, do you sell products for others to do it or do you do both?*

Mr. Eyerman: We only provide the services for the cryomilling. For SPS we do both. We represent the manufacturer so if anyone is interested in buying a piece of equipment, we are there to help with that interaction and do the installation. We also have multiple systems in-house and we offer SPS processing services. You send us the materials and we will do trials to show you that it works. Then you buy your own equipment or you if you do not have the funding or want to get involved with sintering yourself, we can do everything here, R&D and production, and just provide you with your final part.

“Our goal is to provide customers with our services to produce the next generation of new and exciting materials, both for research and development and for their products.”- Eric Eyerman

CEOCFO: *Would you tell us about your facilities, why they are world-class and why the procedures and processes you have put in place are important to your customers?*

Mr. Eyerman: Our facilities include three cryomilling systems and two SPS systems along with supporting equipment like lathes, mills, the wire EDM that I mentioned, and then a couple different mechanical testing systems including an Instron machine for tensile and compression testing. We are among the only companies in the world to offer both the cryomilling and SPS services in combination. These processes are really key in producing advanced material systems for all different sorts of applications. We have the supporting equipment that allows us to be quick and agile when it comes to any new challenges that arise.

CEOCFO: *In October 2019, you announced record revenue for Q2/FY2020. What is the financial picture today? How do you account for these revenues?*

Mr. Eyerman: The increased revenue are the results of continuing to gain more programs from large aerospace manufacturer customers along with more work from multiple US national labs. We actually just announced our Q3 results and that was the second largest Quarter in the company’s history. We continue to add more customers on a regular basis and I am very positive about our financial future.

CEOCFO: *Where will future growth come from? Will it come from new geographic markets, new product markets, new products or increased demand from existing customers or existing markets?*

Mr. Eyerman: Future growth is going to come from a combination of increased demand from our existing customers as we continue to ramp-up their programs, and then from new customers and it can be from a variety of markets. The demand for the next generation of advanced materials for aerospace and space applications continues to increase and we are working with a lot of customers in these areas.

CEOCFO: *What is your sales strategy? Do you depend more on distributors, partners or your own sales staff?*

Mr. Eyerman: For sales strategy we focus our efforts on exhibiting and marketing at multiple material science and advanced manufacturing conferences. We also continue to grow a large network of academic and industry professionals that regularly refer their colleagues to us whenever they need our services. Because of our unique services and through our search engine optimization, we also get a lot of customers that find our website through online searches.

CEOCFO: *You have been on the job for one year now having become CEO, January 21st of 2019. What did you bring to the table that made you the right person for the job??*

Mr. Eyerman: Before becoming CEO, I had been with the company for multiple years so I was already extremely familiar with all the capabilities and services that we offer. I had already been attending all the important conferences and was COO before this. I had already had a close relationship with all of our customers.

CEOCFO: *What are some of the strategies and changes that you have implemented over the past year to put your stamp on the company?*

Mr. Eyerman: Over the past year I worked a lot with my core team of managers to optimize and improve our SPS and cryomilling processes. I have also worked a lot closer with some of my colleagues in academia that are doing the advanced research in these fields, which allows us to stay on the cutting-edge of what is going on.

I would say the key thing is really communicating to customers that these technologies are not just for R&D, small scale research work, which can be a common misconception. They actually can and will be used for high-volume production of the next generation of advanced products.

CEOCFO: *What is your management style? Are you very hands on?*

Mr. Eyerman: I would say I am very open-minded and hands-on. I like to have short meetings with my team of managers on a regular basis to make sure everyone is on the same page with our programs and what we are doing. I am always available to listen to any suggestions that anyone at the company has.

CEOCFO: *Is reaching out to investors an important part of your job? Do you spend a great deal of time attending conferences, both investor and industry conferences?*

Mr. Eyerman: In the past my main focus has been working on the operation and just improving the business and our customer relationships as a whole. In the future I am going to be focusing more on investors. I do spend some time at conferences throughout the year.

CEOCFO: *In closing, address potential customers, potential and existing shareholders? Why have confidence in the future of Cal Nano and the direction and plans that you have put in place and begun to implement over the past year?*

Mr. Eyerman: We have a unique expertise and unique technologies that are well suited for making advanced materials using powder and taking those powders and making them into solid components. As more industries and markets look for the next generation of high-performance materials whether that is increased mechanical strength, certain thermal properties or any variety of things, Cal Nano can utilize SPS and cryomilling to produce them in ways that other companies just cannot. That will be everything from getting your R&D done to actually doing the production work.

