## Message from the CEO

After notable progress in both business and technical areas during 2011, the year 2012 is poised to become the “Year of Commercialization” for MesoCoat’s CermaClad and PComP! To manage this commercialization, in 2011 we began constructing a manufacturing facility at our headquarters in Euclid, and began operations in another in Eastlake.

As a result, MesoCoat is ready to deliver the first batch of an order that is part of a long term supply contract from one of the largest industrial pump manufacturers in Canada for PComP nanocomposite cermet coating materials. We are also ramping up production to meet anticipated demand from other pump and oilfield equipment manufacturers.

MesoCoat has also begun working with the top oil sands producers in Canada to develop and qualify CermaClad wear-resistant cladding for hydro-transportation and tailings pipe.

Det Norske Veritas, one of the largest global risk management and testing labs, characterized CermaClad for the American Petroleum Institute. The tests showed that CermaClad is 85% more corrosion-resistant with 50% higher bond strength than the standard weld overlay coatings.

Forbes list of America’s 100 Most Promising Companies ranks MesoCoat Inc. #50. We are ranked highest among four companies that represent the materials industry, number one in Ohio, and we are the only nanocomposite company on the list.

To help spread industry knowledge about our technologies, Abakan Inc. (which owns 51% of MesoCoat and 41% of Powdermet) has entered into a consulting agreement with First Canadian Capital Corp. for strategic marketing and investor
MesoCoat Partners with Canadian Oil Sands Producers

Earlier this month, Andrew Sherman (CEO, MesoCoat) and Robert Miller (CEO, Abakan) met in Calgary and Edmonton with oil sands producers, coating companies, investors, research institutions, and top-level executives from the government of Alberta.

The purpose was to form strategic partnerships to develop and qualify wear-resistant cladding for hydro-transportation and tailings pipe. These pipes are heavily used in the oil sands mining operation for transportation of slurry and recycling of the waste stream.

Oil sands producers are interested in CermaClad as a replacement for the chrome carbide weld overlay that currently protects the pipe ID but has an average life span of only 15 months. CermaClad wear resistant clad samples have extended coating life by a factor of three in lab testing. Next generation structural amorphous metals now under development by MesoCoat and a national lab are expected to have even longer life at lower cost.

API Verifies CermaClad Clad Pipe Corrosion Resistance

MesoCoat’s CermaClad metallurgically bonded corrosion resistant alloy clad products have met or exceeded API-5LD standards during independent verification testing by Det Norske Veritas. The tests were conducted on an X65 carbon steel substrate that was CermaClad with a 3-mm thick layer of Alloy 625.

Test results showed:

- ASTM G28 tests indicated a corrosion rate 85% lower than that of the widely used weld overlay technology.
- Bond strength exceeded the API-5LD standard by 50%.
- ASTM A264 test for mechanical integrity passed all requirements of API-5LD.
- EDAX analysis for composition & metallurgy has shown little to no iron contamination (dilution) beyond 0.1mm from base metal. This is a 400x improvement over competing weld overlay where there is significant
Forbes names MesoCoat to list of “America’s Most Promising Companies”

Abakan Inc., Miami, FL., announces that its subsidiary, MesoCoat Inc., Euclid, Ohio, has been ranked number 50 in the Forbes list of America’s 100 Most Promising Companies.

MesoCoat provides industry-leading wear and corrosion solutions with CermaClad, its high-speed large-area fusion cladding technology. CermaClad offers 15 to 100 times higher productivity, six times better corrosion resistance, and three times better wear resistance at lower cost than competing solutions.

MesoCoat is currently completing the final field testing of its PComP nanocomposite metal coatings with Fortune 500 oilfield equipment manufacturers, and has begun development of full scale metallurgical clad pipes for qualification in its new production facility.

“We are honored that our potential is recognized by an institution of Forbes’ reputation,” says MesoCoat’s CEO and founder Andy Sherman. “Our employees and sponsors deserve the recognition for their efforts as we look forward to introducing our unique products, which eliminate downtime, waste, maintenance costs, and liabilities for our customers.”

Lux Research Inc. brings MesoCoat “to the threshold of the Dominant quadrant”


The report has this to say about MesoCoat:

*MesoCoat rises as the chrome alternative option. MesoCoat’s technical potential – thermally sprayed nanocomposite ceramic–metallic (cermet) coatings and metal claddings as alternatives to toxic chrome – combined with its significant business progress over the past year, including a deal with Petrobras, has brought it to the threshold of the “Dominant” quadrant.*