# **Alberta companies**

## **ChemRoutes Corporation**

ChemRoutes is a private company that works at the interface of chemical biology, nanotechnology and medicinal chemistry, developing new tools and technologies under the ChemDiscovery Platform™ for early compound discovery in pharmaceuticals, agrochemicals, animal health, flavors and fragrances.



For its academic and SME partners, it has created Canada's largest focused small molecule collection, based around its proprietary and novel scaffolds, which can be partnered under the Collaborative Research Opportunities Platform (CROP) Program™. These base scaffolds are focused on the novel spirocycle and Nitrogen-bridgehead templates which are designed to target protein-protein interactions for GPCR, Kinase and Ion channel research areas.

It targeted collection of ChemKit<sup>™</sup> building blocks around novel chemotypes have been used for the creation of novel fragment based libraries or used as diversity building blocks for DNA encoded libraries.

All templates, building blocks and libraries meet the Ro3 or Lipinski rules and are not listed in any public databases or suppliers, but are made available directly through ChemRoutes Corporation under semi-exclusive or exclusive programs.

### **Business objectives**

- Open new markets for the academic and SME researchers under the CROP Program in Asia
- Expand the existing client network

## Ideal business partner or investor

- Academic drug discovery groups
- Small and medium-sized enterprises

### **Contact**

**Aubrey Mendonca**, President and CEO 9719 - 42 Avenue Edmonton, Alberta, Canada T6E 5P8

Tel: +1-780-970-4783

Email: <a href="mailto:aubrey@chemroutes.com">aubrey@chemroutes.com</a>
Website: <a href="mailto:www.chemroutes.com">www.chemroutes.com</a>



## **Ingenuity Lab**

Ingenuity Lab is a provincially-funded nanotechnology initiative located in Edmonton, Alberta, Canada. We employ a diverse, wide ranging team who originate from around the world in order to harvest their significant differences in perspective and apply them to finding solutions to societies' grand challenges.

We are searching for implementable solutions to problems ranging from carbon sequestration and diabetes, to oil spill clean-up and sustainable agriculture.

Ingenuity Lab was also named as a semi-finalist in the NRG Cosia Carbon XPRIZE competition for its technology that utilizes the photosynthetic properties of plants to create value added chemical by products from flu gases, making carbon sequestration not only environmentally beneficial but also beneficial for businesses implementing it.

## **Business objectives**

• To identify and forge strategic partnerships with companies interested in deploying novel environmental sustainable technologies.

### Ideal business partner or investor

- Partners to support the construction, demonstration and commercialization of a novel carbon transformation technology in support of the XPrize Carbon Competition.
- Partners with a shared interested in developing and translating technologies in the healthcare, environment and agricultural spaces.

## Contact

Jeff Germain, Operations Manager 1-070C, 11421 Saskatchewan Drive NW Edmonton, Alberta, Canada T6G 2M9

Tel: +1-780-492-9765

Email: jgermain@ingenuitylab.ca

Website: www.ingenuitylab.ca

## Nanalysis Corp.

Nanalysis manufactures and commercializes portable, benchtop nuclear magnetic resonance (NMR) spectrometers. Founded in 2009, Nanalysis was an early



entrant and is now a class leader in this rapidly developing market. We were the first company to introduce a 60 MHz (1.4 Tesla magnetic field) product. We market and sell our product worldwide.

Nanalysis is a leader in the field of benchtop NMR spectroscopy and we have a robust, innovative product pipeline. While innovation in NMR spectroscopy has historically been driven by the need for ever-stronger magnetic fields, Nanalysis has created an NMR spectrometer that is lower field, more robust, affordable technology that is more pervasive albeit less powerful. NMR is the last major analytical technology to miniaturize, however with this innovation we have created an easy to operate, powerful analytical device that fits virtually anywhere.

Nanalysis' current product, the 60MHz NMReady – 60c, has been well received by the academic training market and is now becoming a standard of early career science training for chemists, pharmacists, chemical technicians and more. Our value proposition of providing hands-on access to NMR has positively impacted the training of undergraduate students. The NMReady helps educators provide an active-learning, guided-inquiry approach where instrumentation is integrated directly into the curriculum.

Nanalysis has world-leading expertise in the design and manufacture of compact, high power and purity permanent magnets as our core competence. While currently used exclusively for nuclear magnetic resonance spectroscopy, the company has an active surveillance program for new applications of its core competence and for new materials, products and processes that can extend our commercial advantage in existing products or to develop new products.

### **Business objectives**

- We will look to the individual demands of the Japanese market.
- The company representatives will seek to find distributors for Singapore and Taiwan and to discover the specific needs of the customer base in these locales through meeting with the customer base.

#### Ideal business partner or investor

- We have a well-established distributor in Japan and will seek to re-affirm our relationship.
- In both Taiwan and Singapore, we will seek distributors with good geographic coverage, knowledge of the local market place and a proven track record selling scientific instruments.

### Contact

Sean Krakiwsky, CEO

Bay 4, 4500 - 5 Street NE, Calgary, Alberta, Canada T2E 7C3

Tel: +1-403-769-9499 / Email: sean.krakiwsky@nanalysis.com / Website: www.nanalysis.com



## The National Institute for Nanotechnology (NINT)

The National Institute for Nanotechnology (NINT) is a program of the National Research Council of Canada and is actively engaged in research collaborations with several small, medium and multinational industrial partners as well as universities and government laboratories.

NINT devises nano-enabled solutions that meet scalability, integration, manufacturability and environmental health and safety requirements for product development. Through our diversity of expertise and collaboration, we discover, design, characterize and demonstrate nanoscale materials, devices and processes in order to realize new scientific insights and create new nano-enabled products.

Dr. Abebaw Jemere is a Senior Research Officer and the nanobiology group leader. His expertise lies at the intersection of micro/nanotechnology and bio and environmental systems, particularly in the development of nanobiosensors and lab-on-a-chip systems for chemical, biochemical and biological analysis.

### **Contact**

**Abebaw Jemere**, Senior Research Officer 11421 Saskatchewan Drive Edmonton, Alberta, Canada T5Y 3C1 Tel: +1-780-641-1712

Email: abebaw.jemere@nrc-cnrc.gc.ca
Website: http://www.nint-innt.ca/



## **NEMSOR Technology Inc.**

NEMSOR Technologies Inc. is a spin-off company from the MEMS/NEMS Advanced Design Laboratory at the University of Alberta's Faculty of Engineering.

NEMSOR has a number of products that deals with high sensitivity MEMS/NEMS sensory solutions for infrastructure (bridges, tunnels, pipelines, power and nuclear plants), health monitoring, earthquake impact on concrete infrastructure, railways health monitoring with energy on demand protocols, crack life monitoring and in-situ bonding integrity monitoring. We also provide sensory products for human-machine interaction using force based MEMS/NEMS touchscreen sensors and wearable sport, and health technologies with optimum size and power consumption.

Nemsor Sensory solution are micro and nano-based, which are designed, fabricated and packaged to be remote, self-sustaining and low in cost with volume production with commercialization operations in Canada, the U.S., Europe, Japan and Southeast Asia.

## **Business objectives**

- NEMSOR Technologies is aiming to market its main MEMS/NEMS 3D force and strain sensors in the Japan and Southeast Asia markets in the field of health monitoring for critical infrastructure and consumer electronics.
- NEMSOR is planning to meet with potential customers and discuss initial entry cost for NEMSOR MEMS/NEMS sensors which needs to take into consideration existing pricing strategies and how to place NEMSOR new MEMS/NEMS sensory technology within their products.
- In addition to securing potential customers and distributors in the Japan and Southeast Asia markets, we are also looking for potential investors in our MEMS/NEMS 3D sensory technology.
   We are looking for micro Fabrication partners as well as suppliers of sensors in the field of consumer electronics and critical infrastructure monitoring.

## Ideal business partner or investor

 We are looking for partners who can buy into or MEMS/NEMS 3D sensory technology in a number of fields. NEMSOR sensors can be aligned accordingly to the partners' need and the price points can be defined.

#### Contact

Walied Moussa, President and CEO TEC Edmonton, Suite 4000 10230 Jasper Avenue NW Edmonton, Alberta, Canada T5J 4P6

Tel: +1-780-902-1224

Email: walied.moussa@nemsor.com



# **University of Calgary**

The University of Calgary is a comprehensive research university, ranked one of Canada's top research universities, combining the best of university tradition with the city of Calgary's vibrant energy and diversity. The University's main campus occupies a beautiful setting with a view of the Rocky Mountains, covering more than 200 hectares. Currently, more than 30,000 students are enrolled in undergraduate, graduate and professional degree programs.

The staff at the Nano/Micro-Sensors & Sensing Systems (NMSSS) Laboratory are experts in the design, fabrication, characterizations of nano/micro-sensors and sensing systems for the variety of physical and chemical sensing applications. Our research focuses on creating multimodal gas/vapour sensors, innovate novel nano-metrologies based on scanning probe microscopy, and numerical/experimental study of micro/nanoscale fluid-structure interaction phenomena.

## **Business objectives**

- Developing joint-research projects in the areas of nano/micro-sensors and sensing systems technology;
- Developing new relationships which can lead into contracted research and development opportunities

### **Contact**

**Dr. Seonghwan Kim,** Assistant Professor and Canada Research Chair in Nano Sensing Systems 2500 University Dr. NW Calgary, Alberta, Canada T2N 1N4 Tel: +1-403-220-6624

Email: <a href="mailto:sskim@ucalgary.ca">sskim@ucalgary.ca</a>

Website: http://www.ucalgary.ca/sskim/

### **Grafoid Inc.**

Grafoid is a world-leading graphene research development and investment company. We produce graphene for application development and commercialization, and partner with leading corporations around the world to bring those applications to market.

Grafoid has a suite of proprietary, low cost, scalable, graphene materials – trademarked as MesoGraf and Amphioxide – which we produce using a patented one-step process that is environmentally friendly and low in cost. We have selected and defined three key areas of focus for our graphene materials, which are: energy creation transmission and storage, coatings, and polymers/silicones. We are currently in negotiations with a number of potential JV strategic partners.

### **Business objectives**

- We are seeking strategic partners on a global basis to achieve our goal of becoming the world's leader in mass-commercialization of graphene applications utilizing our patented one-step graphene production process.
- Grafoid is expanding around the globe. From research and production facilities in Singapore and Canada, the company has joint venture application development underway with companies and institutions in North America and Europe, and now seeks to open the Asian market with strategic alliances.

### Contact

Chester Burtt, Director 945 Princess Street Kingston, Ontario, Canada K7L 0E9 Tel: + 1-613-220-2805

Email: cburtt@grafoid.com Website: www.grafoid.com

Laura Armiento, Corporate Development Associate

Tel: +1-613-809-2692

Email: <a href="mailto:larimento@grafoid.com">larimento@grafoid.com</a>