



INDUSTRY BULLETIN: Avalon's Canadian University Student Outreach Initiatives Building Rare Earth Awareness

In our ongoing efforts to provide you with broader communications and industry information, we are pleased to issue this Industry Bulletin, which reports on Avalon's growing outreach initiatives to Canadian students and universities to build greater awareness of the rare earths business. These initiatives are in addition to Avalon's ongoing research and development programs related to geological modeling as well as process design and improvement.

Avalon recognizes the need to build the talent pools required not only to operate its own business but also to help grow downstream rare earth applications and the supply chain. As a company committed to responsible development, Avalon is also motivated to provide Canadian science and engineering students with opportunities to discuss the relevant business and social issues related to the creation of thriving rare earth supply chains. The following describes some of the projects, seminars and course material recently delivered under the Company's expanding University Outreach Program which is being led by Ian London, P. Eng., MBA, Avalon's Market Development and Energy Advisor.

University of Toronto - Chemical Engineering

Under the leadership of Professor Don Kirk, three teams, each comprised of six fourth-year students, designed different variations of Avalon's hydrometallurgy process for the recovery of rare earths as their graduating year Plant Design Project. Over the course of 12 weeks, the teams researched technical data, designed and costed alternative process and plant schemes, complete with project economic and environmental assessments. Avalon provided the overall project objectives, preliminary design considerations and regular oversight. The teams presented their final projects to Avalon and the Chemical Engineering faculty on December 1, 2011.

With the cooperation of Professor Charles Jia, Avalon also delivered a two-hour guest lecture to the second year Applied Chemistry I - Inorganic Chemistry class, attended by approximately 100 students. Under the banner *"What are the Rare Earths and How Chemistry Brings them to Life"*, the students were introduced to the rare earth elements, their current applications, the chemistry that underlies their unique properties, and processing parameters. The discussion also touched on developing the downstream infrastructure to support rare earth processing and materials manufacturing within Canada, and related environmental and human resource needs. In addition to the science behind magnetism and luminescence, the students were also interested in rare earth recycling, environmental regulations, and the utilization of rare earths in automotive and medical applications.

University of Waterloo - Waterloo Institute of Nanotechnology

With the inspiration and leadership of Professor Frank Gu, as part of the first-year *Introduction to Nanotechnology* course requirement, Avalon sponsored the "Grand Rare Earth-Nanotechnology Challenge", where teams of three or four students were asked to identify future applications that would utilize a rare earth element expected to be in surplus, or a solution to reduce the demand for a specific rare earth that may be in short supply. Given eight-weeks, the teams were asked to address the underlying science, environmental issues and anticipated commercial opportunities. In addition to the technical papers to be submitted, each team will be 'pitching' their ideas and taking questions before the full class, thereby also providing the opportunity to hone their presentation and communication skills. In support of the project, Avalon also delivered a one-hour lecture on the chemistry and physics of rare earth elements to the freshman class of 110 students enrolled in Waterloo's highly competitive Nanotechnology Engineering undergraduate program.

University of British Columbia - Mining Engineering

Invited by Professor Robert Hall, Avalon's Mining Engineer, Stanley Chan, delivered a presentation to UBC Engineering students on design criteria for mine ventilation and occupational health and safety. The assignment to the class of 25 students was to determine the total ventilation system head loss and fan power requirements for Avalon's Nechalacho rare earth mine. The students were also introduced to the rare earth elements and their use in a variety of clean technology and more traditional applications.

Canadian MBA Leadership Conference (CMLC) - Ivey School of Business

Hosted each fall at the Richard Ivey School of Business in London, Ontario, this year's CMLC was attended by 29 MBA student leaders from nine business schools across Canada: Ivey, Haskayne, HEC Montreal, Degroote, Queen's, Rotman, Schulich, Ted Rogers, and John Molson.

The theme of this year's conference (Nov 4-6) focused on the question "*What role will MBAs play in leading Canada Incorporated?*" Ian London, was invited to lead a two-hour breakout session focused on natural resources, with the key being "*What can the next generation of Canadian business leaders do to better leverage the nation's abundant natural resources?*" Using Canada's emerging rare earths production capability and the complex backdrop of international trade, technology, supply chain and economic development related to this sector, the delegates discussed strategies around entrepreneurship, public policy development, industry-government-academic partnerships, research, development and building the talented workforce within Canada.

On-going and future initiatives supported by Avalon include:

1. McGill University: Plant Design Course (Jan-Apr 2012);
2. Schulich School of Business:
 1. Women in Emerging Industries - Mining,
 2. Natural Resources Operations and Net Impact Club events,
 3. Supporting the International Corporate Social Responsibility Case Competition, and
 4. Guest lecture to the International MBA program;
3. Ryerson University: Case Study on Community Engagement; and
4. Technology Metals Summit (Feb 2012): Convening a Student Panel to discuss Canadian capabilities and interests in the rare metals sector.



ABOUT AVALON RARE METALS INC.

[Avalon Rare Metals Inc.](#) ([TSX](#) & [NYSE Amex](#): AVL) is a mineral development company focused on rare metals deposits in Canada. Its flagship project, the 100%-owned Nechalacho Deposit, Thor Lake, NWT, is emerging as one of the largest undeveloped rare earth elements resources in the world. Its exceptional enrichment in the more valuable 'heavy' rare earth elements, which are key to enabling advances in green energy technology and other growing high-tech applications, is one of the few potential sources of these critical elements outside of China, currently the source of 95% of world supply. Avalon is well funded, has no debt and its work programs are progressing steadily. Social responsibility and environmental stewardship are corporate cornerstones. Avalon's performance on community engagement in the north earned it the 2010 PDAC Environmental and Social Responsibility Award.