

2010
ASTeCH AWARDS
Call for Nominations

Who will be *inspired* this year?

Be Immortalized, Be Inspired!



The ASTeCh Foundation: The ASTeCh Foundation was established in 1989 as a private, not-for-profit organization. It is supported by patrons from Alberta's leading private and public sector organizations committed to recognizing innovation and research excellence.

Vision: Inspiring the next generation of innovation.

Mission: To inspire leadership and innovation by identifying and celebrating outstanding achievement within Alberta's science and technology community.

The ASTeCh Awards Gala: Award recipients are honoured at a Black-Tie Gala held in the fall of each year. The premiere event of its kind in Alberta, the ASTeCh Gala brings together leaders from government, industry, post-secondary institutions and media to celebrate the outstanding achievements of Alberta's leaders in science and technology. To learn more, please refer to www.astech.ab.ca

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ASTeCh
FOUNDATION

Celebrating innovation in Alberta

The ASTECH Awards

The ASTECH Awards are Alberta's most prestigious honours for leadership and excellence in science and technology innovation. Recognized nationally, these awards honour the most outstanding individuals, teams and organizations in Alberta who are inspiring the next generation of innovation. The impact of their leadership and dedication to excellence helps us enjoy a better quality of life, have access to well paying jobs and benefit from a more prosperous economy. ASTECH award recipients stand as testament to the global influence of Alberta's world class science and technology.

We are proud of our award recipients and our history of celebrating Alberta's innovation and research excellence. For a list of past award winners in each category, please visit www.astech.ab.ca/awards/past-recipients

We invite your nominations!

Each year the ASTECH Foundation invites nominations in several award categories described in the following pages. Consider nominating exceptional individuals, organizations and companies within Alberta's science and technology community. Nominations may be submitted any time up to the end of May to be considered for the current calendar year.

Nomination deadline: Monday May 31, 2010

ASTECH Awards Criteria



Outstanding Leadership in Alberta Science

This award salutes an individual or team of individuals who have played a leadership role in and made a contribution to a scientific innovation or breakthrough.

Award: The recipient receives \$10,000 and an ASTECH sculpture.

Written nomination submission should address the following criteria:

Overall impact of the contribution to science, medicine, mathematics or engineering

- Describe the contribution(s) the nominee has made in his/her discipline.
- What contributions are particularly noteworthy?

General contribution to knowledge

- How has the nominee advanced new knowledge in the field?
- What is the significance/importance of these advancements?
- Has it been an incremental change or a major leap forward for the discipline?

Solution of novel or practical problems

- Has the innovation or research resulted in a solution to a common or persistent problem in the field of science, medicine, mathematics or engineering? Describe the problem and the significance of the solution.

Overall impact of the innovation or research

- What is the overall impact of the research or innovation?
- Describe some of the benefits of the research or innovation, either actual or potential.

International peer recognition

- Describe how the nominee has been internationally recognized as a leading expert in his/her field. For example, is the nominee a recipient of major awards? Is their work cited by others in refereed journals and publications?



Outstanding Leadership in Alberta Technology

This award is presented to an individual or team of individuals who have played a leadership role contributing to a technological innovation or breakthrough in Alberta.

Award: The recipient receives \$10,000 and an ASTeCH sculpture.

Written nomination submission should address the following criteria:

Technological sophistication, innovation, patents or inventions

- Describe the technology in terms that can be understood by a non-expert in the field.
- What is the significance of this technology? How is it innovative or leading edge?
- What patents have been granted or other intellectual property created related to this innovation?

Commercialization Pathway

- Where does this technology fall in the commercialization continuum? Is it still in the proof of concept stage or is it ready to be launched in national and international markets?

Applicability to other industrial sectors

- Is the technology applicable to one particular niche market or can it be applied broadly to other sectors?

International peer recognition

- How is the nominee(s) recognized internationally as a leading expert in his/her/their field?

Demonstration of social and economic impact

- How does the technology or innovation contribute to improved quality of life?
- How does it enhance economic development? For example, does it create/and or retain high paying jobs?
- How does it further the growth and diversification of Alberta's economy?



SAIT Polytechnic Outstanding Achievement in Applied Technology and Innovation

This award is presented to an individual or team of individuals who have demonstrated leadership and innovation and have made a significant contribution through the discovery, application and/or implementation of technology products or processes.

Award: The recipient receives \$10,000 and an ASTeCH sculpture.

Written nomination submission should address the following criteria:

Overall impact of the contribution on industry and/or trade

- Describe the technology, product or process in terms that can be understood by a non-expert in the field.
- How has this technology, product or process changed the industry to which it is applied?
- What improvements has this brought to the industry or trade, and what is significant about these improvements?

Demonstration of the applicability to industry and/or trade

- In what industries or trades can this technology, product or process be applied?
- Is this application unique (i.e. niche market) or can it be broadly applied across several trades and industrial sectors?

Changes to the way we design, build or produce

- How has the technology, product or process changed the way things are currently done in the industry or trade?

Demonstration of social and economic impact

- How does the technology or innovation contribute to improved quality of life?
- How does it enhance economic development? For example, does it create/and or retain high paying jobs?
- How does it further the growth and diversification of Alberta's economy?

Demonstration of a novel approach to technology application and integration resulting in an innovative tool that changes and advances current practice

- Describe how the technology has been applied in a novel way that has resulted in innovative tools that changes current practice in an industry.



Outstanding Commercial Achievement in Alberta Science and Technology

This award is divided into two categories:

- **Businesses whose gross sales were less than \$25 million in the previous year; and**
- **Businesses whose gross sales were equal to, or exceeded \$25 million in the previous year.**

Award: The recipient receives an ASTeCH sculpture.

In each category, this award recognizes a company (sole proprietorship, partnership or corporation) that has demonstrated outstanding entrepreneurial achievement with measurable results in a science and technology related business. The science or technology need not have originated in Alberta, but there must be an Alberta connection to the development, enhancement, commercialization, marketing or other activity related to the science or technology.

Written nomination submission should address the following criteria:

Business growth in sales, earnings and employment

- Describe the company's core business, and how long it has been conducting business in Alberta.
- Identify how the company has grown its sales, earnings and the number of employees.

Uniqueness of technology, product or process

- Describe the technology, product or process and state what makes it unique.

Market penetration, expertise and customer service

- Describe how the company penetrated current markets. What sets the company apart from its competitors?
- What do customers say about the product, process and/or service?

Demonstration of social and economic impact

- How does the technology or innovation contribute to improved quality of life?
- How does it enhance economic development? For example, does it create/and or retain high paying jobs?
- How does it further the growth and diversification of Alberta's economy?

Management style or approach

- How has the management style and approach of the company contributed to its success?

Technological and financial risk taking

- What entrepreneurial risks has the company taken to be successful?

Financial reports

- The company must provide 10 copies of its financial statements for the previous year. All financial information received is held strictly confidential.



Leaders of Tomorrow sponsored by Alberta Advanced Education and Technology

This award is presented to an individual who is 30 years of age or less and has exemplified the qualities that are expected to make him/her a future leader in Alberta's science and technology community. The award recognizes an individual who shows leadership potential in the areas of science and technology teaching, research, entrepreneurship or a technology based business.

Award: The recipient receives \$10,000 and an ASTECH sculpture.

Written nomination submission should address the following criteria:

Entrepreneurship

- Describe how the nominee demonstrates entrepreneurial qualities. Factors to consider are: the nominee's ability to recognize an opportunity, lead the development of the opportunity and ultimately achieve a significant impact in his/her field.

Leadership potential

- What makes this nominee a leader? For example, are they the president of a student organization or club? Have they been involved in community service, led the publication of research results or patent applications?
- Describe some of the activities in which the nominee has led or participated that showcase Alberta science and technology talent.

Initiative

- How has the nominee demonstrated initiative and involvement in Alberta's science and technology community? Describe the activities or programs in which the nominee has led or participated.

Recognition by peers

- How has the nominee been recognized as a leader by his/her peers?
- What awards/accolades has the nominee received?

2010 ASTECH AWARDS Nomination Form

AWARD CATEGORY (SELECT ONE ONLY):

- Outstanding Leadership in Alberta Science
- Outstanding Leadership in Alberta Technology
- SAIT Polytechnic Outstanding Achievement in Applied Technology and Innovation
- Outstanding Commercial Achievement in Alberta Science and Technology
 - < 25 M
 - > 25M
- Leaders of Tomorrow sponsored by Alberta Advanced Education and Technology
- Outstanding Contribution to the Alberta Science and Technology Community
- Societal Impact Award

- Outstanding Achievement in Environmental Technology and Innovation sponsored by Agrium Inc.
- Innovation in Oil Sands Research sponsored by Syncrude Canada Ltd.
- Innovation in Agricultural Science sponsored by Dow AgroSciences Canada Inc.
- Innovation in Information and Communications Technology
- Excellence in Science and Technology Public Awareness

NOMINEE: (NAME OF INDIVIDUAL TEAM/PROJECT, OR ORGANIZATION)

(This is the name that will be used in announcements and appear on the formal certificates)

NAME OF NOMINEE REPRESENTATIVE: (SENIOR OFFICIAL FOR TEAMS OR ORGANIZATIONS)

MR MS MRS DR

*Nominee's Full Name: _____

Title and Company: _____

Address: _____

City: _____ Postal Code: _____

*Telephone: _____ Fax: _____

Cell Phone: _____ *Email: _____

*Nominee's Signature: _____

By my signature, I attest that:

- The information provided in the nomination is correct and does not contain any confidential or proprietary information. An exception to this requirement is any financial information needed for commercial award nominations, which will be kept strictly confidential.
- ASTech can use the information provided with the nomination form for publication, with the exception of financial information required for commercial awards.
- If requested, I will be available for interviews and will participate in the creation of a video clip.
- I hereby consent to the release of my name, company name, mailing address, phone number, email address and the use of my photographs by the Alberta Science and Technology Leadership Foundation (ASTech).
- If requested, I will attend the Awards Gala as a guest of the Foundation – Dates and locations available at www.atech.ab.ca.

NOMINATOR:

MR MS MRS DR

*Nominator's Full Name: _____

*Title and Company: _____

Address: _____

City: _____ Postal Code: _____

Telephone: _____ Fax: _____

Cell Phone: _____ *Email: _____

*Nominator's Signature: _____

4 – STEP CHECKLIST

- Nomination Form
- Written Nomination Submission (Up to five pages for each award)
- Supporting Letters (Two or three)
 - > Financial statements (for Commercialization Achievement Award)
- Submit original signed document to: #126, 3553 – 31 Street NW, Calgary, AB Canada T2L 2K7
 - Telephone: 403.220.9130
 - Email: info@astech.ab.ca

Deadline: Last day in May

* Indicates required information.

Nominations close: Last day of May

Completed nomination forms must be received or courier-stamped no later than the closing date. Nominations received after the deadline will be considered for the ASTECH Awards in the following year.

Copies of the nomination form, written nomination submission, and profiles of past recipients are available at: www.astech.ab.ca

Mail or Courier to:

ASTECH Foundation

Alastair Ross Technology Centre

#126, 3553-31 Street NW

Calgary, AB, T2L 2K7

To discover more about the ASTECH Awards or Gala, please contact:

Ms. Bev Jones

ASTECH Foundation

T 403.220.9130

F 403.220.9128

Email: info@astech.ab.ca



Celebrating innovation in Alberta



Outstanding Contribution to the Alberta Science and Technology Community

This award acknowledges an individual who has made extensive and tangible contributions to the Alberta science and technology community in one or more of the following areas:

- Education
- Public awareness
- Ambassadorship
- Fostering growth of the Alberta science and technology community in areas such as:
 - > Infrastructure development
 - > Finance and strategic partnering
 - > Technology transfer

Award: The recipient receives \$10,000 and an ASTECH sculpture.

Written nomination submission should address the following criteria:

How has the nominee been an ambassador for the Alberta science and technology community?

- Describe specific initiatives that showcase the nominee as an ambassador for Alberta's science and technology community.

How has he/she raised the profile of science and technology within Alberta, Canada and internationally?

- What activities have been undertaken by the nominee to raise the profile of science and technology in Alberta and beyond?

Nominee attributes

- How has the nominee been recognized nationally and internationally in his/her field?
- Highlight the life-time achievements of the nominee that have contributed to the science and technology community.
- Describe how the nominee has exemplified leadership, dedication and vision within Alberta's science and technology community.
- Describe the distinguished service of this individual to the science and technology community as well as to Albertans in general.



Societal Impact Award

This award is presented to an Albertan (individual or team) who has led, or significantly contributed to a technological innovation that has resulted in a positive impact on society.

Award: The award recipient will receive \$10,000 and an ASTECH sculpture.

Written nomination submission should address the following criteria:

Overall positive impact on society

- Describe the technological innovation and the results achieved.
- What is the magnitude of the impact on society?

The need being addressed by the innovation

- Identify what problem or societal need is addressed by the technological innovation.

Degree and type of societal benefits

- Describe the results achieved and the societal benefits that have been realized.

Sustainability and scalability

- Clearly address the scale and issue of sustainability of the innovation.

Demonstration of social and economic impact

- How does the technology or innovation contribute to improved quality of life?
- How does it enhance economic development? For example, does it create/and or retain high paying jobs?
- How does it further the growth and diversification of Alberta's economy?



Outstanding Achievement in Environmental Technology and Innovation Sponsored by Agrium Inc.

This award is presented to an individual, team or organization demonstrating leadership and innovation in the successful development and/or commercialization of novel technology or processes with significant environmental benefit.

Award: The recipient receives \$10,000 and an ASTeCH sculpture.

Written nomination submission should address the following criteria:

Novelty of the major new innovation

- Describe the technology in terms that can be understood by a non-expert in the field.
- What is the significance of the technology? How is it innovative or leading edge?

Demonstrated the ability to develop a new technology innovation from concept to application

- Describe how the technology was developed and how it is being commercially applied.
- How does the technology or innovation contribute to gains in operational efficiency and improvements?

Demonstrated positive impacts to environmental performance and sustainable development in areas such as reduced water use, reduced air emissions, enhanced energy efficiency, smaller land footprint and waste reduction

- Describe the environmental benefits of the technology and how the innovation is having a positive impact on the environment.

Demonstration of social and economic impact

- How does the technology or innovation contribute to improved quality of life?
- How does it enhance economic development? For example, does it create/and or retain high paying jobs?
- How does it further the growth and diversification of Alberta's economy?



Innovation in Oil Sands Research Sponsored by Syncrude Canada Ltd.

This award is presented to an individual or team working in academia, industry, or government. The recipient(s) must be currently active in a research group and have demonstrated exceptional research ability or have developed a technology of significance to the Alberta oil sands sector.

A nomination may be made in one of the following three areas, all of which are equally weighted:

- Significant research leading to an improved understanding of any process.
- Fundamental research leading to the advancement of knowledge.
- Development of novel processes or systems.

The nomination should describe the research or technology development ability of the nominee, as well as the advancement in fundamental and/or applied research. The recipient is judged according to the quality of the research/development program.

Award: In addition to an ASTeCH sculpture, the recipient receives \$10,000 to be directed towards further research.

Written nomination submission should address one or more of the following criteria:

Significant research leading to an understanding of any process

- Describe the research and how it is unique.
- How has the innovation advanced fundamental and/or applied research?

Fundamental research leading to the advancement of knowledge

- Describe how the research has advanced new knowledge.

Development of novel processes or systems

- Describe the uniqueness of the processes or systems.

Demonstration of social and economic impact

- How does the technology or innovation contribute to improved quality of life?
- How does it enhance economic development? For example, does it create/and or retain high paying jobs?
- How does it further the growth and diversification of Alberta's economy?



Innovation in Agricultural Science Sponsored by Dow AgroSciences Canada Inc.

This award recognizes an individual, team, or company that has demonstrated exceptional innovation or has developed a technology of significance to Alberta's agriculture, agrifood, or agrivalue™ industries. The recipient must be currently active in the scientific area for which they are being nominated.

A nomination may be made for any activity directed towards the development, production, processing, or other innovative use of agriculture food or fibre. Nominations may also recognize technological innovations with roots in other disciplines such as medicine, nutrition, biotechnology, or information technologies that impact the agricultural sector. All eligible areas receive equal weight.

The nomination should clearly describe the innovation, breakthrough, or advancement that has been made using existing or new technology including its impact on agriculture-related products and/or activities in Alberta.

All nominees must exemplify significant scientific contribution, industry initiative and commercial potential or success in enhancing the value provided by, and received for, agricultural products & services.

Award: In addition to an ASTeCH sculpture, the recipient receives \$10,000 to further the research and innovation which has been awarded.

Written nomination submission should address the following criteria:

Innovation, breakthrough or advancement using existing or new technology

- Clearly demonstrate how the innovation is a scientific breakthrough in the future development of value added agricultural products and services in Alberta.
- Describe the commercial opportunity for a range of applications using the innovation or scientific breakthrough.
- Explain how the research, entrepreneurial talent and expertise driving the innovation have been recognized internationally.

Demonstrable impact

- Clearly describe how the innovation has played a key role in growing the value of the nominee's business, or more broadly, the industry sector.
- Describe how the innovation provides a competitive advantage for Alberta's agriculture industry.
- Clearly describe the expected impact of the innovation and how it will attract substantial research and/or entrepreneurial expertise to Alberta industry in the next three years.
- How does the technology contribute to improved quality of life?
- How does it enhance economic development? For example, does it create and/or retain high paying jobs?
- How does it further the growth and diversification of Alberta's economy?



Innovation in Information and Communications Technology

This award is presented to an individual, team or organization that has demonstrated leadership and innovation resulting in the successful development and/or commercialization of a novel product or application of Information, Communications Technology (ICT), and that has had a significant impact in enabling applications in a sector. Nominations should demonstrate the translation of innovative concepts into successful applications or commercial products that substantially increase the overall efficiency and operational improvement in the chosen market sector of the application.

Award: The recipient receives \$10,000 and an ASTECH sculpture.

Written nomination submission should address the following criteria:

Novelty of innovation

- Describe the innovation and how it is unique.

Development of innovation

- Describe or demonstrate how the innovation has progressed from concept to application.

Demonstration of social and economic impact

- Describe how the application of the technology has created new more effective processes or changed the business model for doing business in an industry sector.
- How does the technology or innovation contribute to improved quality of life?
- How does it enhance economic development? For example, does it create/and or retain high paying jobs?
- How does it further the growth and diversification of Alberta's economy?



Excellence in Science and Technology Public Awareness

This award recognizes a recipient whose project, activity or organization increases public awareness of the benefits of science and technology, or enhances the understanding of science and technology in Alberta. Nominees are judged by a special panel, selected from print and broadcast journalists and from the science and technology public relations community.

Award: The recipient receives \$5,000 and an ASTECH sculpture.

Written nomination submission should address the following criteria:

- How has the nominee increased public awareness of the benefits of science and technology or enhanced the understanding of science and technology in Alberta?
- How have they demonstrated leadership and creativity in reaching a target audience?
- What is the impact of the project or activity? How have local communities and Albertans in general benefited?

The selection process

Each year, the ASTECH Foundation recruits an independent panel of judges for their expertise and depth of knowledge in the areas represented by the various award categories. They include leaders from industry, academia and the media. These judges review all nominations and select the award recipients.

In addition to the specific criteria identified for each award category, all nominations are reviewed for their overall presentation:

- Was it clear, concise and complete?
- Did it address the criteria of the award category?
- What was the overall impression of the nomination?

All nominees are notified in writing after the selection of award recipients is made. Nominees who are not an award recipient receive a certificate of nomination from the ASTECH Foundation.

How to nominate in 4 easy steps

Step 1 – Complete the Nomination Form

ASTECH Award Nomination Forms are available in paper format (included in this booklet) and online at: www.astech.ab.ca

Nominees may only be nominated for one category. Nominators may submit more than one nomination however may only nominate one nominee in any given category. Nominations may be moved to another category at the discretion of the judging panel.

Step 2 – Complete the Written Nomination Submissions

All nominations must address the criteria for each particular award, and not exceed five letter-size pages (8.5" x 11"). Nominations should be typed, not hand-written, and should be single-spaced with not more than six lines per inch. The body of the text should be at least a 12-point sans serif font such as Arial. Margins of one inch are recommended.

Step 3 – Include Supporting Letters

Two letters of support are recommended, and no more than three will be distributed to the judges. These letters should include:

- The letter writer's relationship to the nominee (the nature and length of the relationship; the letter writer's overall impression of the nominee's contribution); and
- A description of how the nominee meets the criteria of the specific award category for which they are being nominated.

It is preferred that letters of support be provided from both outside and within the nominee's organization.

Step 4 – Submit Completed Nomination

Once you have completed the first three steps, just submit your nomination online at www.astech.ab.ca or by mail to:

ASTeCH Foundation, Alastair Ross Technology Centre #126, 3553 - 31 Street NW Calgary, AB T2L 2K7

Deadline

Nomination deadline: Last day in May.

Nominations received after the deadline will be considered for the ASTeCH Awards in the following year.

What happens if you are selected?

ASTeCH award recipients are honoured each year at an Awards Gala where the recipients are announced.

The premiere event of its kind in Alberta, the ASTeCH Gala brings together leaders from government, industry, post-secondary institutions and media to celebrate the outstanding achievements of Alberta's leaders in science and technology.

In addition, all award recipients:

- Participate in the creation of a video;
- Enjoy considerable media profile through a variety of press releases and other media coverage; and
- Receive the right to display the ASTeCH logo in accordance with the guidelines of the Foundation.

Many past ASTeCH award nominees, recipients go on to achieve even greater heights. Some are recognized as Nobel Laureates or by other award programs including the Order of Canada. An ASTeCH award generates respect and approval from peers. For individual companies, it helps them launch into new markets and provides a great feeling of pride for employees.

"Receiving this ASTeCH award will greatly help our effort to move the Airdar invention forward. The recognition we have received from the ASTeCH awards has increased the credibility of our invention which will help us to raise more funds to continue moving the work forward. This increased credibility also helps us in marketing to new clients by providing exposure that we could not otherwise obtain."

Dennis Prince, Airdar Inc. 2009

Nomination forms available online

Please visit our website at www.astech.ab.ca to learn more about the guidelines for nominations, to download a nomination form or complete a nomination form online. (Written nomination submissions and supporting letters must be sent separately.) If you are unsure about which category to apply for, read about past award winners to see what made them extraordinary. You can also view a list of past award winners and get answers to frequently asked questions.

ASTeCH Patrons:





ASTeCh
FOUNDATION

Inspiring the Next Generation of Innovation



For more information on how you can participate, please contact:

ASTeCh Foundation
Alastair Ross Technology Centre
#126, 3553 – 31st Street NW
Calgary, Alberta T2L 2K7

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