

The INWES Education and Research Institute was formed in order to:

Advance education in the fields of science, technology, engineering and mathematics (STEM) worldwide through an international network of organisations, foundations and experts.

**2016  
ANNUAL  
REPORT**

# BOARD OF DIRECTORS

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 Carleton University  
 Ottawa, ON, Canada



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 University Laval  
 Quebec, QC, Canada



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## Directors



**Prof. Ruby Heap**  
 University of Ottawa  
 Ottawa, ON, Canada



**Dr. Mary Wells**  
 University of Waterloo  
 Waterloo, ON, Canada



**Dr. Uduakobong  
 Aniebiat OKON**  
 Uyo, Akwa Ibom State  
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**Gail G. Mattson, P.E.**  
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 Upton, NY, USA



**Dillip Pattanaik**  
 Mallick Complex  
 Odisha, India

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# MESSAGE FROM THE PRESIDENT

2016

Following the successful 2014 workshop: “Creating the Memories and Celebrating the Legacy of the Bold and the Brave: Building the Archives of Women Scientists and Engineers in Canada”, Ruby Heap, Claire Deschênes, and I established priorities to pursue this project: Collecting an inventory of archives of women in science and engineering; developing a manual on what to preserve and how to organize an archive; raising funds to support the action plan and activities as defined by the workshop in September 2014.

We will go ahead with this important Archive project, searching for new partners and funding. Our future plans are to expand the Archives Project to several regions in Canada and abroad. Our Board Members mention the project often as part of our invited talks, encouraging women in STEM fields to keep their papers and plan to organise them at some point. As President of the Institute, I am very fortunate to have competent, active, and enthusiastic Board Members. Together, we look forward to the development of education and research activities in Africa and Asia and continue to develop the archives project.

Kind regards! Hope you all enjoy reading this report!

Monique Frize, P. Eng., O.C., FIEEE

President, ERI

# STRUCTURE OF THE ORGANISATION

## Who We Are

The INWES Education and Research Institute (ERI) is a charitable organisation incorporated in Canada in November 2007 (Corporation number 445576-2) and registered as a Canadian Charitable organisation in February 2008 (BN 82690 2751 RR0001). The INWES Education and Research Institute was formed by the International Network of Women Engineers and Scientists (INWES) in order to: "Advance education in the fields of science, technology, engineering and mathematics (STEM) worldwide through an international network of organisations, foundations and experts." The ERI is governed by a Board of Directors and its processes are guided by the laws in Canada for charitable organisations. Registration as a Non-profit 501(c)3 organisation in the United States was granted in March 2010 [EIN 98-0623980] based on the reciprocity agreement between the USA and Canada regarding this tax exempt status. For more information visit the websites at: [www.inwes-eri.org](http://www.inwes-eri.org) and [www.inwes.org](http://www.inwes.org).

The Institute is governed by a Board of Directors. Its activities are planned and executed through five committees: programs, research, education communications, and fund development. Institute functions are administered by three committees: executive, finance and nominations.

## Our Programs

To achieve our objectives, the ERI has identified the following programs and potential projects/activities.

### ■ Best Practices Tool

(1) The Institute will develop a best practices tool which will provide a collection of evaluated proven best practices concerning the following: retention of children in schools through college; successful outreach strategies and activities for educating young women and underrepresented minorities about careers in STEM fields; and tools for raising the awareness of parents, educators, employers and the public of the importance for women to pursue and succeed in STEM careers. All of this data will be collected, researched, evaluated and made available through INWES's resource centre.

## Our Objectives

The primary objectives of the Institute are to advance education in the fields of science, technology, engineering and mathematics through the following programs:

1. create the archives of Canadian women in science, engineering, mathematics and technology;
2. carrying out research in both developed and developing countries concerning the fields of science, technology, engineering and mathematics, as both an educational and career choice and to make the results of that research available to the interested public;
3. acting as a resource centre and database for information concerning education in these fields and collecting best practices in encouraging students to stay in school through college and university; and
4. developing and maintaining a website to raise public awareness concerning these fields of study and to make the results of research available to the interested public.

The main objective of the project will be to provide, in one location, a collection of evaluated and proven best practices for ready access by various organisations that are interested in conducting programs that encourage the education, participation and retention of girls and underrepresented minorities in STEM. A best practices project team will be assembled with research staff to:

- Collect best practices;
- Evaluate and analyze best practices for validity and adaptability for use in multiple countries, and economic situations;
- Build a database collection of best practices and develop friendly interfaces integrated into the ERI website with a link to the INWES web portal so they become available to potential around the world.

(2) To act as a resource centre and database for information concerning education in these fields and best practices in encouraging students to stay in school through college and university.

The Institute will build knowledge by providing information about the fields of science, technology, engineering and mathematics as career choices to the interested public, and in particular to teachers, students, and other charities and governmental organisations. ERI will also function as a centre of information which will be available for those seeking to further enhance their knowledge concerning STEM as a career choice. All research and tools developed by ERI will be made available through its resource centre which will be open to any interested members of the public. As a result of educating the public, the Corporation hopes to encourage the increased participation in the fields of STEM.

3) Developing and maintaining a website to raise public awareness concerning these fields of study and to make the results of its research available to the public.

The Institute will develop an extensive and leading-edge website that will function as a virtual resource centre of information including multimedia; communications; online library resources and research reports available for teachers, students, and the public. The website will serve as a portal to gain access to:

- information and research gathered and prepared by INWES;
- related research reports and information available through other organisations;
- opportunities in the STEM field for scholarships, internships, and international studies;
- information regarding international workshops, conferences, and seminars; and
- information about upcoming workshops and seminars on leadership training, diversity awareness, and education for teachers in STEM.

It is anticipated that the interested public will make donations to the Institute to assist it in achieving its objectives.

## **INWES ERI Sponsorship Program**

### **BRONZE LEVEL (\$500 to \$1,000)**

Sponsor name is mentioned on the ERI website, in the program brochure for events, and in the Annual Report.

### **SILVER LEVEL (\$1,001 to \$2,500)**

Sponsor name and logo will be on the ERI website, in the program brochure where relevant, and a quarter-page ad in the Annual Report.

### **GOLD LEVEL (\$2,501 to \$5,000)**

Same benefits as Silver, except a half-page ad in the Annual Report. Workshop participation fee is waived for one person.

### **PLATINUM LEVEL (\$5,001 to \$10,000)**

Same benefits as Gold, except a full-page ad in the Annual Report. Workshop fee is waived for two persons. Sponsor will be mentioned in press releases, media information kits, and other publications.

All dollar amounts are in CAD \$.

# [www.inwes-eri.org](http://www.inwes-eri.org)

# COMMITTEE REPORTS

## Executive Committee – Anna Szemik-Hojniak, Secretary General

The Institute Board of Directors and Committee Chairs function primarily through virtual meetings via the internet. The Board meets in person once a year at the Annual Meeting to handle

organisational and structural changes, review program plans, and review the financial report and approve the budget for the subsequent year.

### Meetings held in 2016:

22nd March 2016 – Board Meeting  
23rd September 2016 – Board Meeting (AGM)

Minutes of all of these meetings are available upon written request.

## Research Committee – Ruby Heap, Committee Chair

### AFFESTIM Project Report on Promoscience by Emmanuelle Marcoux, Anne Roy and Claire Deschênes

In 2016, INWES-ERI supported a project de l'Association de la francophonie à propos des femmes en sciences, Technologies, ingénierie et mathématiques (AFFESTIM). This project, funded by the NSERC's Promoscience program, mainly aims to equip high school science teachers with means to engage girls in science. It is aligned with the recommendations that were drafted during the Canadian Committee on Women in Engineering +20 Workshop organised by INWES-ERI in April 2011 in Ottawa (<https://inwes-eri.weebly.com/2011-ccwe20.html>).

This report provides a short summary of the AFFESTIM's PromoScience project activities since its launching at the beginning of 2016. This project aims to offer a continuing training on the Socio-pedagogical Equity to teachers in Science and Mathematics at high school level through philosophical discussions (discussions à visée philosophique or DVP) in a forum.

Training sessions were needed to start the project. During the 2016 winter term, four training courses were done by virtual conference. Those four training courses respectively addressed: Project explanation and objectives, Socio-pedagogical equity, Reflecting on one's own teaching practice; Project presentation using a simulation situation, and Searching of philosophical questions. The simulation situations are scenarios presenting to the readers an issue from the Socio-pedagogical equity perspective.

Six simulation situations were held with the participants in fall 2016. The titles of the six simulation situations are: Team formation, Mathematic difficulties, Science capsules, Team training, Learning epicene writing, and Diversified and significant activities.

Other simulation situations are planned for 2017. A first one will be a discussion about the equity if the teacher stops a student after a certain number



Association de la francophonie à propos des femmes en sciences, technologies, ingénierie et mathématiques

of questions in a course, for which participants are currently in the process of formulating a philosophical question. A second one will be on the slide rule and the contribution of women using it for scientific research and at NASA. Moreover, nine short videos showing parts of a play called *Les femmes de génies sont rares?* (Are women geniuses rare?) have been prepared for special discussions on women in STEM issues to take place in 2017.



**Preservation of women in STEM achievements**



**Access to research and studies on women in STEM**



**Sharing of Best Practices in STEM outreach**

**INWES-ERI's objective is to advance education in the fields of science, technology, engineering and mathematics (STEM) through the following programs:**

- Create the archives of Canadian women in science, engineering, mathematics and technology
- Research on STEM careers in both developed and developing countries
- Resource centre to provide research, tools and information on STEM careers
- Website to raise public awareness and provide portal to resource centre



If you are interested in assisting the INWES-ERI in achieving its objectives by making a donation to fund a project in one of our program areas, please contact us at:

**[www.inwes-eri.org](http://www.inwes-eri.org)**

Designated charitable organisation in Canada. Registered 501(c)(3) organisation in U.S.

## ONGOING PROJECT BY INWES-ERI Creating the Canadian Archive of Women in STEM



The INWES Education and Research Institute is working to increase public access to records documenting the work and the history of women in Science, Technology, Engineering, and Mathematics (STEM). One of the main locations for these archives is at the University of Ottawa. Entitled **Creating the Canadian Archive of Women in STEM**, this project aims at preserving and providing access to professional material of women involved in STEM activities, artefacts and other digital objects. This resource will complement the current archival material collected at the University of Ottawa's Canadian Women's Movement Archives, which also includes material from engineers and scientists. Recovering material that defines the work and stories of women in STEM and preserving them for use by future generations is a main goal of the project. This goal is linked to a number of key objectives:

- 1) Discover the motivation of women who choose engineering and understand what their perspectives were on barriers to career advancement and retention.
- 2) Create a precious resource for historians who wish to write about women in STEM.
- 3) Offer critical insights into the past and current status and role of women in STEM.
- 4) Provide girls and women with role models who can inspire them to pursue such careers.

### Background

The history of women scientists and engineers in Canada is still in its infancy. This can be largely attributed to their invisibility in traditional and established archives, which collected the records of men and tended to privilege their life and work. Another major obstacle has been these professional women's inclination to underestimate their own accomplishments, with the result that most did not seek to preserve their papers, and neither did their family, friends, or colleagues. There is a pressing need to provide current and future women scientists and engineers in Canada, and in other countries, with an accurate and inspiring understanding of their past, to learn about the lives and accomplishments of those "who came before them".

Significant initiatives have recently taken place in Canada to recover and research the lives of women scientists and engineers. A key event was a two-day international and interdisciplinary workshop held in 2014 at the University of Ottawa, under the auspices of the INWES-ERI (Education and Research Institute) and of the NSERC Regional Chairs for Women and Engineering. INWES-ERI Board members Ruby Heap, Claire Deschênes and Monique Frize led the meeting which ended with the adoption of an action plan aimed at the creation of a National Archive of Women Scientists and Engineers.







### Priority Objectives of the Project:

1. Build an inventory of existing archives of women in Canadian STEM;
2. Develop a guide on how to collect, preserve and donate archives;
3. Run an internet campaign of awareness on the importance of planning the donation of archives;
4. Develop a web site and show examples of archives collected;
5. Run a follow-up workshop in 2019 to assess progress on primary objectives and develop the next steps.

### Nominations Committee –

Claire Deschênes, Committee Chair, Director

In 2016, INWES-ERI sadly accepted Julita Vasileva resignation as Board Director after serving for 6 years. Besides accepting the role of Director of Projects for a couple of years, Julita implemented the first INWES-ERI website on WordPress, as well as the site for the CCWE+20 workshop in April 2011. We thank her warmly for her active participation in our association!

During the Board meeting on April 6th, 2017, Mary Wells was nominated and elected as new INWES-ERI Director. Mary Wells was elected unanimously.

Dr. Mary Wells is a professor of materials engineering and a member of the University of Waterloo's Department of Mechanical and Mechatronics Engineering. In addition to her research and teaching responsibilities, Dr. Wells has served as the Faculty of Engineering's Associate Dean of Outreach since 2008, and is also chair of the Women in Engineering (WiE) committee.



### Treasurer's Report –

Claire Deschênes, Treasurer

(All amounts in \$CDN)

From January 1st to December 31st 2016

- The Financial Statements 2016 (file: INWES-ERI\_Financial-Statement\_2016.pdf) and the Tax Return to government 2015 (1144116.T16\_INWES-ERI\_Tax-return\_2016\_signed.pdf) were prepared by Michelle E. Huibers, CA, of Kelly Huibers McNeely Chartered Accountants as usual. No concern was raised.

- The year 2016 started with a net asset of 13 503,96 \$.

- From January 1st 2016 to December 31st 2016, INWES-ERI received no revenues and spent 1 924 \$: support to Affestim (\$1000) for an NSERC Promo Science project, Annual return (20 \$), and Professional fees (904 \$).

- On December 31st 2016, INWES-ERI Net Assets was 11 579,96 \$.

For future reference, from January 1st to September 1st 2017, the only expense made by INWES-ERI was \$275 paid to Diane Darby to cover expenses for the annual report 2015, le net asset of 11 304,96 \$.

# FINANCIAL REVIEW 2016



**KELLY HUIBERS McNEELY**  
PROFESSIONAL CORPORATION

## REVIEW ENGAGEMENT REPORT

To the Directors of  
INWES Education and Research Institute

We have reviewed the balance sheet of INWES Education and Research Institute as at December 31, 2016 and the statements of revenue and expenditures and net assets and cash flows for the year then ended. Our review was made in accordance with Canadian generally accepted standards for review engagements and accordingly consisted primarily of inquiry, analytical procedures and discussions related to information supplied to us by the Organization.

A review does not constitute an audit and consequently we do not express an audit opinion on these financial statements.

Based on our review, nothing has come to our attention that causes us to believe that these financial statements are not, in all material respects, in accordance with Canadian accounting standards for not-for-profit-organizations.

*Kelly Huibers McNeely  
Professional Corporation*

Authorized to practise public accounting by  
The Chartered Professional Accountants of Ontario

Stittsville, Ontario  
May 16, 2017

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**INWES EDUCATION AND RESEARCH INSTITUTE**

**BALANCE SHEET  
(Prepared without Audit)**

**As at December 31, 2016**

	<b>2016</b>	<b>2015</b>
<b>ASSETS</b>		
<b>CURRENT ASSETS</b>		
Cash	\$ 11,580	\$ 13,504
	<b>\$ 11,580</b>	<b>\$ 13,504</b>
<b>LIABILITIES</b>		
<b>CURRENT LIABILITIES</b>		
Accounts payable and accrued liabilities	\$ 1,025	\$ 750
<b>NET ASSETS</b>	10,555	12,754
	<b>\$ 11,580</b>	<b>\$ 13,504</b>

**STATEMENT OF REVENUE AND EXPENDITURES AND NET ASSETS  
(Prepared without Audit)**

**For the year ended December 31, 2016**

	<b>2016</b>	<b>2015</b>
<b>EXPENDITURES</b>		
Conference and travel	\$ -	\$ 309
Grant issued	1,000	-
Office expense	20	40
Professional fees	<u>1,179</u>	<u>1,804</u>
<b>NET EXPENDITURES</b>	(2,199)	(2,153)
<b>NET ASSETS - BEGINNING OF YEAR</b>	12,754	14,907
<b>NET ASSETS - END OF YEAR</b>	<b>\$ 10,555</b>	<b>\$ 12,754</b>

The accompanying notes are an integral part of these financial statements.

# INWES EDUCATION AND RESEARCH INSTITUTE

## STATEMENT OF CASH FLOWS (Prepared without Audit)

For the year ended December 31, 2016

	2016	2015
CASH PROVIDED BY (USED IN)		
OPERATING ACTIVITIES		
Net expenditures	\$ (2,199)	\$ (2,153)
Net change in non-cash working capital item:		
Accounts payable and accrued liabilities	<u>275</u>	<u>(1,245)</u>
NET CHANGE IN CASH	(1,924)	(3,398)
CASH - BEGINNING OF YEAR	13,504	16,902
CASH - END OF YEAR	<u>\$ 11,580</u>	<u>\$ 13,504</u>

## NOTES TO THE FINANCIAL STATEMENTS (Prepared without Audit)

December 31, 2016

### 1. NATURE OF ORGANIZATION

The INWES Education and Research Institute was incorporated without share capital on November 29, 2007 under the provisions of Part II of the Canada Corporations Act. Effective December 29, 2008 the Organization was granted charitable status under Sec 149(1)(f) and is exempt from income taxes. The Organization operates as an international education and research institute specifically focused on advancing education in the science, technology, engineering, and mathematics fields.

### 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

#### Basis of Presentation

These financial statements have been prepared in accordance with Canadian accounting standards for not-for-profit organizations. The principal accounting policies of the Organization are summarized as follows:

The accompanying notes are an integral part of these financial statements.

Revenue Recognition

Fundraising, grants and sponsorships are recognized as revenue when received or receivable if the amount to be received can be reasonably estimated and collection is reasonably assured.

Contributed Services

Volunteers contribute many hours per year to assist the Organization in carrying out its activities. These contributed services have not been recognized in the financial statements

Foreign Currency Translation

Monetary assets and liabilities in foreign currency are translated at the exchange rate in effect at the balance sheet date, whereas, other assets and liabilities are translated at the exchange rate in effect at the transaction date. Revenue and expenditures in foreign currency are translated at the average rate in effect during the year. Gains and losses are included in the earnings for the year.

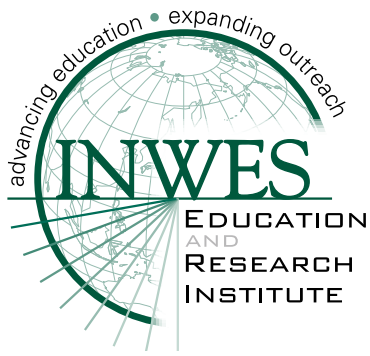
Accounting Estimates

The preparation of financial statements in conformity with Canadian generally accepted accounting principles requires Management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the dates of the financial statements and the reported amounts of revenues and expenditures during the reporting period. Actual results could differ from these estimates.

**3. FINANCIAL INSTRUMENTS**

Fair Value

The carrying values of cash and accounts payable and accrued liabilities approximate their fair value due to their short-term maturities.



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