

# SERG/GRES News

November 5, 2009

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## Looking forward to proposals for CSSE 2010

Following the success of last year's conference, we are eagerly awaiting proposals for SERG sessions at CSSE 2010 at Concordia University in Montreal, May 29 to June 1. The call for proposals has been posted at: [http://www.csse.ca/Conference/2010/2010\\_CSSE\\_Call\\_E.pdf](http://www.csse.ca/Conference/2010/2010_CSSE_Call_E.pdf)

Note that the **new deadline for submissions** is **November 13**. Don't forget to renew your CSSE and SERG memberships and to select SERG as the destination for your proposals. We will also be sending out a call for proposal reviewers in the coming weeks. Please consider volunteering to make this important contribution to the success of our meetings.

We look forward to receiving your proposals soon!

Sincerely,

Azza Sharkawy, Marie-Claire Shanahan, Trudy Bergere, Hagop Yacoubian,  
SERG Executive 2009-2010

### THE ATMOSPHERE.

FIG. 43.



Apparatus arranged to catch the O evolved from a sprig of leaves.

Après le succès de la conférence de l'année dernière, nous attendons ardemment vos propositions pour des sessions de GRES à SCÉÉ 2010 à l'université de Concordia à Montréal, du 29 mai au 1er juin. L'invitation à présenter des communications a été signalé sur le site Web de SCÉÉ à [http://www.scee.ca/Congres/2010/2010\\_CSSE\\_Call\\_F.pdf](http://www.scee.ca/Congres/2010/2010_CSSE_Call_F.pdf). La **nouvelle date-limite** pour vos soumissions est le **13 novembre**. N'oubliez pas de renouveler vos adhésions à la SCÉÉ et le GRES. Nous chercherons également des critiques de proposition en prochaines semaines.

Nous attendons avec intérêt vos propositions!

Sincèrement,

Azza Sharkawy, Marie-Claire Shanahan, Trudy Bergere, Hagop Yacoubian,  
Directeurs 2009-2010 de GRES

## An introduction to the SERG Executive 2009-2010

On behalf of the Science Education Research Group's 2009 Executive, I would like to convey my warmest welcome to all those who have recently joined SERG and to all returning members. A hearty welcome too, to our two newest Executive members: Trudy Bergere (Secretary/Treasurer) and Hagop Yacoubian (Graduate Student Representative).

One of the most recent SERG projects has been our evolving website. We are very grateful to Roland van Oostveen for designing an initial DRAFT of a website. Please have a look at the current draft (<http://www.sergcanada.ca/>) and post your suggestions/feedback in a Knowledge Forum database that has been set up for this purpose. We want to make the site as responsive as it can be to the needs of SERG members. In order to do this we need as much information from you as possible. In addition, the Executive worked hard this summer to carefully consider the criteria and wording of the graduate student awards and bursary. However, we do consider this our first draft and look forward to feedback from the membership (at the AGM and via the SERG website) that will help us further refine it.

Finally, I would like to take this opportunity to thank our Past President, Wendy Nielsen, for her energetic and enthusiastic work over the past year. I am grateful for this opportunity to work with SERG and wish you a productive and fulfilling year ahead.

Azza Sharkawy, President, [sharkawa@queensu.ca](mailto:sharkawa@queensu.ca)

Hello SERG members! It is a pleasure to again be serving SERG, this year as Vice President. I thoroughly enjoyed all of our sessions in Ottawa in the spring and am looking forward to the opportunity to contribute to building the program for this year's conference. I will be in touch through the listserve very shortly looking for generous members willing to act as proposal reviewers. I look forward to hearing from you soon!

Best wishes, Marie-Claire Shanahan, Vice President, [mcshanahan@ualberta.ca](mailto:mcshanahan@ualberta.ca), 780-492-0870

This year I am delighted to be serving in the role of SECRETARY/TREASURER on the SERG Executive. The duties of the Secretary involve preparing and distributing the minutes from our Annual Meeting at CSSE and, according to our constitution, for maintaining an updated list of members and facilitating communication between the members, along with taking care of the SERG finances.

My interest in serving our SIG stem from the positive, engaging, and enjoyable interactions I have had with colleagues from across Canada and around the globe. Currently, my interest in science education research involves working with Anthony Clarke and Samson Nashon at UBC to understand the experiences of students on career tracks to becoming elementary science teachers. I juggle this research program with my responsibilities as Science Faculty Team Leader in Georgian College's University Partnership Centre, where I teach science to Laurentian University undergraduate students. Goals for my SERG work this year include being a positive and productive contributor to the Executive, and to hone my typing skills so I am able to capture the rich, enthusiastic conversations that will surface at our Annual Meeting.

Looking forward to re-connecting with friends and meeting new colleagues in May at CSSE 2010.

Trudy Bergere, Secretary/Treasurer, [tbergere@georgianc.on.ca](mailto:tbergere@georgianc.on.ca), 705-728-1968 ext. 1487

Greetings from Edmonton! It is my pleasure to serve SERG this year as a graduate student representative on the executive. It has only been slightly over a year since I moved to Canada and started my doctoral studies in the Department of Secondary Education at University of Alberta. Last May was the first time I participated in the CSSE / SERG annual conference. I'm glad that the enriching experience that I gained through becoming part of this community continued with an equally enriching one of serving the same community. I'm excited for taking this responsibility and working with dedicated members of the executive team. I hope fellow graduate students consider becoming members of the SERG if they are not already part of this community. Looking forward to seeing you all in Montreal in 2010.

Hagop Yacoubian, Graduate student representative, [hagop.yacoubian@ualberta.ca](mailto:hagop.yacoubian@ualberta.ca).

## Message from the Past President

Taking a new post across the ocean has been an exciting adventure. I landed in the middle of the southern hemisphere 'winter' in the Faculty of Education at the University of Wollongong [UOW] where my office looks out on a courtyard filled with gum trees and noisy and colorful birds. No snow in winter around here! We recently had a visit from the research officers at the Canadian High Commission (they called it "Canada Day at UOW"), where the officers were promoting research in and about Canada, by describing the pots of federal money that could potentially be accessed by researchers from other countries. As a Canadian, I found this promotional effort interesting.

I teach primary science methods subjects, work with a new research group and carry on with research projects begun while at UBC. My new research group at UOW has various interests in professional learning and using technology in teaching. We are currently working on a case study with a group of three pre-service teachers who together created a slowmation (see [www.slowmation.com.au](http://www.slowmation.com.au) for other examples). We are studying how slowmation, or 'slow motion animation' is a form of multimodal representation, where research, storyboarding, construction and reconstruction phases contribute to building understanding of a science topic. As is commonly the case with pre-service primary teachers, our students have weak background knowledge, and like science educators everywhere, we strive for opportunities to help them develop understanding. Slowmation is one of the approaches we use in our first year science methods subject. A new project in the works will develop teaching resources for other science educators to use the teaching approach of slowmation in their methods courses.

Another new project for me involves working with Grade 9 science teachers around New South Wales as they adapt to the pervasive presence of laptop computers in their classrooms. The Department of Education and Training has begun issuing all Grade 9 students with their own wireless-enabled laptops. My study will attend to how teachers are picking up the possibilities and opportunities presented by this new and widespread access to the internet and on-line resources.

Life on the other side of the planet is presenting some interesting and wonderful opportunities for me, even as I look forward to an upcoming visit to North America. To all of my friends and colleagues in Canada, I extend a most hearty "g'day."

Wendy Nielsen  
Past-President, SERG  
Lecturer in Science Education  
University of Wollongong

## SERG Graduate Student Awards

SERG is sponsoring three graduate student awards to support registration for CSSE 2010. The award will cover the CSSE and Congress registration costs for each of the winners. These one-time awards will be adjudicated on the basis of the comments and rankings generated by the SERG review process. All first authors self-identified as graduate students, and whose papers are accepted for a SERG paper presentation, roundtable or poster will be considered for the award. Papers in either English or French are encouraged and both will be given full consideration. The paper awards will be adjudicated by the SERG executive and will be presented at the SERG AGM at CSSE 2010.

In addition, SERG will also sponsor one graduate student travel bursary for a student who is attending CSSE for the first time. The award will cover registration fees for both CSSE and the Congress. All first-time attendees who are members of SERG are eligible for this bursary (presenters and non-presenters). Supervisors may nominate students for this award and students are also encouraged to self-nominate. Nominations will be submitted through the SERG website (pending completion) by March 31, 2010. The recipient will be notified six weeks prior to the start of the conference.

In any given year an individual may only receive a paper award or the travel bursary.

Given SERG's commitment to diversity, the Executive especially welcomes applications from Francophone scholars, visible minority group members, women, Aboriginal persons, persons with disabilities, persons of any sexual orientations or gender identity and others who may contribute to the diversification of the SERG community.

## Prix du GRES pour des étudiants diplômés

Le GRES commandite trois prix destinés aux étudiants diplômés en vue d'inciter ces derniers à s'inscrire au congrès 2010 de la SCÉÉ. Ces prix ponctuels seront accordés en fonction des commentaires et des évaluations issus du processus d'examen du GRES. Tous les premiers auteurs qui s'identifient comme des étudiants diplômés et dont les projets de communication sont acceptés par le GRES en vue d'un exposé, d'une table ronde ou d'une présentation visuelle seront admissibles. Il peut s'agir de communications en français ou en anglais. Les prix seront décernés par le bureau de direction du GRES lors de l'AGA du GRES au congrès 2010 de la SCÉÉ.

Le GRES commanditera également une bourse de voyage pour un étudiant diplômé ou une étudiante diplômée qui assiste pour la première fois à un congrès de la SCÉÉ. La bourse couvrira les frais d'inscription pour le congrès de la SCÉÉ et le Congrès des sciences humaines. Toutes les personnes qui en sont à leur premier congrès et qui sont membres du GRES sont admissibles, qu'elles présentent ou non une communication. Les superviseurs peuvent proposer des noms d'étudiants et les étudiants peuvent aussi proposer leur propre candidature. Les candidatures doivent être soumises par le biais du site Web du GRES (en voie d'être terminé) d'ici le 31 mars 2010. Le ou la récipiendaire sera avisé/e six semaines avant le début du congrès

Au cours d'une année donnée, on ne peut recevoir qu'un seul type de prix : bourse pour une communication ou bourse de voyage.

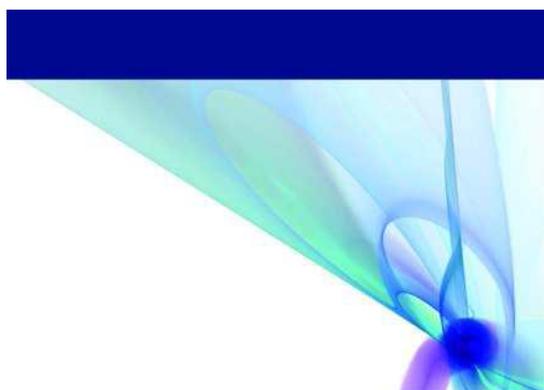
Étant donné l'importance accordée par le GRES à la diversité, le bureau de direction souhaite tout particulièrement recevoir des demandes de la part d'étudiants francophones, de personnes faisant partie de minorités visibles, de femmes, d'autochtones, de personnes handicapées et de personnes pouvant contribuer à enrichir la diversité au sein du GRES, peu importe leur orientation sexuelle ou leur identité sexuelle.

## Announcements from SERG members

### Journal of Activist Science & Technology Education (JASTE)

The community-reviewed journal, JASTE, has published its first issue and is now putting together its second one to complete volume 1 (2009). The first issue was quite successful, in that we were able to attract some wonderful authors, including: Derek Hodson, Wolff-Michael Roth, Michael Tan, Leo Elshof, Lyn Carter, Shiv Shopra and Sheliza Ibrahim. Steve Alsop and Larry Bencze also were contributors. The journal contents are available at: <http://www.wepaste.org/journal.html>

We hope that members of the science and technology education community will visit PASTE/JASTE, contribute to the online forum and make suggestions for future journal contributions. We have a proposal from a group interested in contributing to a thematic issue focusing on sustainable agriculture and healthy foods and beverages. Please consider proposing other such critical themes and contributions.



Isha DeCoito

### Improving Teachers' and Students' Nature of Science Conceptions

Using Reading and Writing Activities to Reflect on the Nature of Science



### Improving Teachers' and Students' Nature of Science Conceptions Using Reading and Writing Activities to Reflect on the Nature of Science

By Isha Decoito, York University

The nature of science (NOS) and its role in science education is complex, as is the goal of helping teachers and students attain a desired understanding of NOS. NOS issues could be tackled through writing in science and has implications for the kinds of writing tasks assigned in science. Research is warranted on these writing tasks and their effectiveness in promoting more desired views of NOS. This book is unique as it reports on teachers' and students' NOS views and the links between their views and diversified writing tasks in science, an area that lacks attention as a means for teaching about NOS. Different genres of scientific writing are seen as effective means of doing science and informing students about NOS, and the complexity of relationships between students' views of NOS and writing in science is highlighted. The analysis should be beneficial in developing and implementing diversified writing activities that have the potential to realistically portray science to students, and should be especially useful to professionals in curriculum development, instruction, and student learning in science.

### AVAILABLE AT:

Amazon.com, Amazon.co.uk, as well as via all British, American and German bookstores.

ISBN 978-3-8383-0008-5, 68 euros

## Important Dates and Deadlines

<b>CSSE/SERG Proposal submission deadline</b>	November 13, 23:59 (EST)
<b>Acceptance/Rejection decisions sent</b>	February 12 (tentative)
<b>Draft program published</b>	March 12 (tentative)
<b>CSSE early registration deadline</b>	March 31
<b>SERG Graduate Student Travel Bursary Nominations Due</b>	March 31
<ul style="list-style-type: none"> <li>• Submit through SERG website</li> <li>• Note: no application needed for the SERG Graduate Student Paper Award</li> </ul>	
<b>CSSE/SERG Montreal</b>	May 29 – June 1

NOVEMBER 2009						
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MARCH 2010						
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<b>30</b>	<b>31</b>	<b>1</b>				



Transferring gases.