

PERSPECTIVES

THE NEWSLETTER OF CSBE Summer 2007 Été LES NOUVELLES DE SCGAB

A Few Words From President Robert Kok

Robert Kok

tel: 514-398-7775; fax: 514-398-8387
eml: robert.kok@mcgill.ca



Challenges and Opportunities for CSBE/SCGAB

Although this summer we did not hold a separate annual meeting, instead joining ASABE in Minneapolis for their 100th anniversary, we did take one lunch hour period to discuss the Society's future.

The discussion was free and fairly unstructured, and allowed many of the members to express their opinions which were often stated in terms of questions. As is to be expected from a diverse group of people, a wide range of concerns and issues were touched upon, with much discussion being oriented to how the Society might adapt to ensure its survival. Should we mainly address our agricultural engineering legacy, should we only keep that legacy alive as a branch of the larger bioengineering tree, should we deal with it in a very much-modified form, or should we let it wither altogether? Should we move into the bio-medical and biomechanical engineering fields, or are those already dealt with by other groups? Having already embraced sub-disciplines like food engineering, bio-fuel production, composting, etc., over the past thirty or forty years, how should we proceed next? How much can we absorb, how much can we evolve, and how much can we expand without losing our identity?

Of course, the shifts in thought and orientation of members during the recent past are not only reflected in their work orientation, but also in the flurry of name changes we have undergone. The society itself is now an organization that addresses "bioengineering" and many of us now refer to ourselves as biosystems engineers, bioresource engineers, or simply bioengineers. The fact that no one seems to know exactly what these terms mean and where the society is heading is, at the same time, a cause for worry and a cause for joy. One measure of aliveness is how flexible and how capable of change a system is.

We are obviously very much alive! The dynamic tension inherent in our own un-knowing allows us to search for new directions, to investigate new options, and to adapt and evolve. In response to forcing functions that are applied to us by a large number of external agents, we are growing in directions that are governed by those pressures as well as by our innate abilities to respond. At the same time, we do have some degree of control over how we grow, and what we grow into. Thus, as a technical society we constitute a composite life form that is able to influence its own destiny. Now, what is more appropriate for a group of bioengineers than to engineer their own bio-group?

These were some of the thoughts that ran through my mind at that lunchtime workshop and I hope we will be able to address these issues in greater depth over the next year. I invite you to write me about any of these. I hope to visit most of our CSBE/SCGAB chapters during the year that I am president and thus have the opportunity to discuss them

Inside this issue: Dans ce numéro:

<i>President's message</i>	1, 2, 3
<i>Un mot du président</i>	
<i>Message from Past President Sokhansanj</i>	4
<i>Annual Awards</i>	5
<i>Pictures of Awardees 2007</i>	6, 12
<i>Student Awards 2007</i>	7, 8
<i>In Memoriam</i>	8
<i>AGM 2007 minutes</i>	9-11
<i>News Coast to Coast - BC News</i>	12-22 12
<i>Alberta News</i>	13
<i>Saskatchewan News</i>	14-16
<i>Manitoba News</i>	17, 18
<i>Ontario News</i>	19, 20
<i>Nouvelles du Québec</i>	21, 22
<i>International News</i>	24
<i>Notices, Calls for Papers</i>	23-28
<i>Coming events</i>	29
<i>CSBE/SCGAB Council for 2007-2008</i>	30

(suite de la page 1)

with you on a one-to-one basis.

Now for some more immediate issues and accomplishments: First of all, CSBE/SCGAB will be celebrating its 50th anniversary in Vancouver next year. You are strongly encouraged to attend! Intent can be forged into action by putting it on your calendar now ... Since the summer meeting we have officially joined the Engineering Institute of Canada (EIC). We are in the process of updating and re-working the cooperative agreement that was signed between CSBE/SCGAB and ASABE about ten years ago. We are re-examining what our relationship with AIC might be. We are actively working on re-vamping the Society's journal and website. We are further developing a strategic plan that will embody the central philosophy of the society as well as the longer-term goals and plans, hopefully without limiting its future growth and potential.

I would also be delighted to receive your opinions on any of these issues at Robert.Kok@McGill.ca.

Un mot du Président

Possibilités et Défis de la CSBE/SCGAB

Cet été, nous n'avons pas eu de congrès annuel puisque nous nous sommes joints au congrès ASABE à Minneapolis pour les festivités du centenaire. Néanmoins nous y avons partagé une heure de dîner pour discuter de l'avenir de la société. La discussion s'est faite à bâtons rompus ce qui a permis à de nombreux membres de s'exprimer librement et à formuler leurs opinions sous forme de questions. Il en est ressorti un large éventail de préoccupations et d'enjeux qui ont dirigé la discussion sur les défis d'adaptation et de survie auxquels la société fait face. Devons nous nous attarder à maintenir les leçons du passé en génie rural, ou pouvons nous les intégrer au sein du plus large réseau du génie biologique, ou bien encore devons nous changer complètement notre approche et possiblement abandonner nos racines en génie rural ? Devrions nous nous orienter dans les domaines bio-médicaux et bio-mécanique, ou empiétons nous dans des réseaux d'expertises appartenant à d'autres groupes ? Nous avons, au cours des trente à quarante dernières années, élargie nos champs d'activités en englobant le génie alimentaire, la production de bio-carburants, le compostage, etc., quelle serait aujourd'hui la marche à suivre ? Combien de disciplines et de champs d'activités devons nous rassembler sans risquer de perdre notre identité ?

L'évolution de la pensée et de l'orientation de nos membres, au cours des dernières années, s'est exprimée non seulement dans la pratique de la profession mais aussi dans la kyrielle de changement de noms des programmes. La société elle-même est un organisme centré sur la "bio-ingénierie", et nombre d'entre nous se présentent comme des ingénieurs des bio-systèmes, des ingénieurs des bio-ressources ou tout simplement des bio-ingénieurs. Il est intéressant de noter que nul ne sait exactement ce que ces appellations peuvent bien signifier, ou vers quoi la société se dirige, ce qui peut amener à la fois une source d'insécurité et une source de stimulation. La vivacité d'un système se mesure à sa flexibilité et à sa capacité d'adaptation aux changements. Nous sommes donc très vifs ! Les tensions maintenues par nos incertitudes nous permettent de chercher de nouveaux buts, d'étudier de nouvelles options et de nous adapter tout en évoluant. C'est en réponse aux nombreuses contraintes extérieures qui nous sont soumises, que nous évoluons vers de nouvelles orientations régies par ces pressions externes et par notre propre capacité à y répondre. En même temps, nous avons un certain degré de contrôle sur la manière d'évoluer et sur ce que l'on devient. Ainsi, à titre de Société, nous sommes un organisme complexe apte à influencer sa propre destinée. Alors, ne serait il pas des plus approprié qu'un groupe de bio-ingénieurs conceptualise son propre bio-regroupement ?

Voici donc quelques unes des idées qui me sont venues à l'esprit lors de cette rencontre et je souhaite que nous puissions nous pencher sur ces questions au cours de l'année. Je vous invite à m'écrire à ce sujet. J'espère effectuer la visite de la plupart des sections régionales de la Société CSBE/SCGAB au cours de mon mandat à titre de président
(à suivre en page3)

(Continued from page 2)

Et maintenant quelques nouvelles à rapporter: La Société CSBE/SCGAB célébrera son cinquantième anniversaire à Vancouver en 2008. Nous vous encourageons fortement à participer au congrès annuel ! Écrivez le dès maintenant à votre agenda. Depuis le congrès de l'été nous sommes devenus membre de l'Institut canadien des ingénieurs. Nous travaillons également à la reformulation de l'entente coopérative signée entre la Société CSBE/SCGAB et ASABE il y a dix ans. Nous examinons aussi notre relation avec l'Institut Agricole Canadien. Nous travaillons à améliorer la qualité de notre site web et de notre journal scientifique. Nous formulons également un plan stratégique capturant la philosophie de la société et énonçant les plans et objectifs à long terme tout en laissant la porte ouverte pour une croissance future.

Je serais très heureux de recevoir vos commentaires à Robert.Kok@McGill.ca.

FIFTY YEARS OF CSBE/SCGAB

President Robert Kok has reminded us that in 2008 it will be 50 years since CSBE/SCGAB (then CSAE/SCGR) was initiated. The Society was incorporated in 1977.

So how do you think the Society should celebrate the big ...

FIVE ZERO!?

North Vancouver should be a nice setting to celebrate the 50th anniversary at the AGM & Technical Conference (see page 5). But do you have any special ideas or projects that you think are worthy of consideration for such an event as 50 years of existence for the Society?

Send your suggestions to President Kok or the Secretary (see last page for contact info). Thank you for your thoughts.

2008 CSBE FELLOW NOMINATION

On behalf of the Fellows Committee, I invite nominations for electing the 2008 CSBE Fellows. Please consider nominating outstanding candidates for this highest recognition of our professional society. Please follow the instructions available on the society's website with diligence. Thank you.

Deadline for submitting the nomination: Jan. 31, 2008

Warm Regards, Vijaya Raghavan

MISE EN CANDIDATURE 2008 DES FELLOWS DE LA SCGAB

C'est au nom du comité de sélection des Fellows, que je vous invite à proposer des lauréats pour les Fellows 2008 de la SCGAB. Veuillez mettre en nomination des candidats exceptionnels pour la plus haute distinction remise par notre société professionnelle. Veuillez prendre note des instructions à suivre pour la mise en candidature qui sont disponibles sur le site internet de la société. Je vous remercie à l'avance.

La date limite de mise en candidature: 31 janvier 2008

Bien à vous, Vijaya Raghavan

A Message (and Challenge) from Past President Shahab Sokhansanj!

Shahab Sokhansanj

tel: 604-904-4272; fax: 604-822-6003

eml: shahabs@chml.ubc.ca



As you may know the CSBE/SCGAB presented a proclamation plaque to the ASABE to commemorate the 100th anniversary of the ASABE. Then President Shahab Sokhansanj presented the plaque to Charles Sukup, the ASABE President during the June ASABE meeting in Minneapolis.

Ms. Melissa Moore, Executive Vice President ASABE, has sent a letter directed to the president of the CSBE/SCGAB which reads

“Dear Shahab:

On behalf of the ASABE, thank you for the proclamation in honor of our 100th Anniversary. The Society appreciates the many invaluable contributions of the Canadian Society for Bioengineering (CSBE/SCGAB) to the public’s health, safety, and welfare.

Please accept this special 100 Year Anniversary crystal as a token of our appreciation. We look forward to continuing our relationship with CSBE/SCGAB as we head into a new century; one that is sure to present us with many exciting challenges and rewards.”

Along with the letter was a beautiful commemorative crystal weighing 916 g etched with the 100th Anniversary Logo. Luckily, Shahab had received the same piece of art as part of the gala dinner in Minneapolis. So, he is prepared to part with one of these prized possessions. Please let him know if you would like to have the piece; but please read on.

The lucky recipient will be a member of the CSBE/ASABE who will have recruited the largest number of non-student members to the Society from the date of publication of this announcement until next year’s AGM & Technical Conference (July 13-17, 2008) to be held in North Vancouver. The prize will be presented to the lucky winner during the Society’s annual banquet.

Remember next year we are also celebrating the 50th anniversary of the CSBE/SCGAB. The annual meeting will be held at the Lonsdale Quay Hotel at the foot of the North Shore mountains overlooking the ocean.

Notice about Journal Publication

An ad hoc committee of CSBE/SCGAB Council has been set up to investigate the future operation of the Journal. The committee would like to receive comments and suggestions about the Journal, i.e., format, need, quality, material included, accessibility, etc., etc.

Send your comments to Past-President Shahab Sokhansanj at shahabs@chml.ubc.ca or Secretary Townsend.

AWARDS 2007 AWARDS 2007 AWARDS 2007 AWARDS 2007

The following CSBE/SCGAB members were honored in 2007 for their achievements in their fields of expertise over many years of service:

CSBE/SCGAB FELLOWS FOR 2007 (See picture on page 12)

Suzelle F. Barrington
Daniel I. Massé
Neil B. McLaughlin
William E. Muir
Shiv Om Prasher
Philippe Savoie
James S. Townsend

CSBE/SCGAB INDUSTRIAL AWARD FOR 2007 - IPEX Inc.

CSBE/SCGAB GLENN DOWNING AWARD FOR 2007 - Roger Thériault

CSBE/SCGAB JOHN CLARK AWARD FOR 2007 - Stephen P. Clarke

CSBE/SCGAB YOUNG ENGINEER OF THE YEAR FOR 2007 - Satyanarayan Panigrahi

CSBE/SCGAB MAPLE LEAF AWARD FOR 2007 - Digvir S. Jayas

CSBE/SCGAB 2008 Annual General Meeting 2008 07 13-17

Theme: Bioengineering Pacific – Fiftieth Anniversary for CSBE/SCGAB!

Highlights:

Sunday Workshop
Poster sessions
Concurrent sessions
Harbour Cruise



Location: Lonsdale Quay Hotel
Web site: www.lonsdalequayhotel.com

A quiet boutique hotel centrally located on the North Vancouver side of Burrard inlet, fifteen minutes by Sea Bus from downtown Vancouver.

AWARDS 2007

PICTURES

AWARDS 2007



INDUSTRIAL AWARD FOR 2007
IPEX Representative accepting for IPEX Inc.



GLENN DOWNING AWARD FOR 2007
Roger Thériault



**YOUNG ENGINEER
OF THE YEAR FOR 2007**
Satyanarayan Panigrahi

(Photo credits: Yves Choinière)



MAPLE LEAF AWARD FOR 2007
Digvir S. Jayas

STUDENT AWARDS 2007

Laval University

CSBE/SCGAB Undergraduate Design Project Award (\$100 or \$50 per person)

Louis Bellerive, Antoine Martel and Guillaume Paradis

Mécanisation de la manipulation des récipients d'arbres à la pépinière de St-Modeste.

(Mechanical handling of tree pots at the St-Modeste nursery)

Faculty Advisor: Mohamed Khelifi

CSBE/SCGAB Graduate Thesis Award (M.Sc. Category) (\$200)

Frédéric Lavoie

Conception d'une récolteuse de saules en rotation courte (Design of a harvester for short-rotation willow)

Faculty Advisor: Philippe Savoie

University of Manitoba

CSBE/SCGAB Undergraduate Design Project Award (\$100 or \$50 per person)

Marcus Nolting

Design of a Soil Bin Carriage

Faculty Advisor: Y. Chen

CSBE/SCGAB Undergraduate Thesis Award (\$100 or \$50 per person)

Nathan Wrana

Comparison of hydrogen production and end-product formation between Clostridium thermocellum and Clostridium termitidis

Faculty Advisor: D. Levin

CSBE/SCGAB Graduate Thesis Award (M.Sc. Category) (\$200)

Sarah Kelso

Development and validation of a hazard self-assessment worksheet for tractors with modified controls.

Faculty Advisor: D. Mann

University of Saskatchewan

CSBE/SCGAB Undergraduate Design Project Award (\$100 or \$50 per person)

Paul Hildebrand and Lyndon Graff

Design of an Automated Rock Locator for Tillage Equipment.

Faculty Advisor: Trever Crowe

CSBE/SCGAB Undergraduate Thesis Award (\$100 or \$50 per person)

Sana Talebi, Jeffrey Ruzicka and Garth Printz

Elevation Assist for Manual Cherry Tree Picking.

Faculty Advisor: Trever Crowe

(Continued on page 8)

(Continued from page 7)

CSBE/SCGAB Graduate Thesis Award (M.Sc. Category) (\$200)

Adefemi Farinu

Heat and Mass Transfer Analogy under Turbulent Conditions of Frying.

Faculty Advisor: Oon-Doo Baik

McGill University

CSBE/SCGAB Undergraduate Thesis Award (\$100 or \$50 per person)

Nicolas Francoeur-Leblond

Design of a Field Robot for weeding purposes

Faculty Advisors: Robert Kok and Ning Wang

CSBE/SCGAB Undergraduate Design Project Award (\$100 or \$50 per person)

Elyann Periard-Fournier, Terrence Sauvé and Elsie Torresan

Lab-scale Evaluation of the Land Reclamation of Cleared Anti-personnel Landmine Fields.

Faculty Advisors: Vijaya Raghavan and Ted McKyes

CSBE/SCGAB Graduate Thesis Award (M.Sc. Category) (\$200)

Jagadeesh Linggowdaru

Effect of UV-C homesis on quality attributes of tomatoes.

Faculty Advisors: Vijaya Raghavan and Marie-Therese Charles

IN MEMORIAM

MCFADDEN

ALLAN ROBERT "AL" MCFADDEN of Surrey, BC, beloved husband of the late Marjorie Lenore "Lennie" McFadden, passed away in Surrey, British Columbia, on July 29, 2007 at the age of 88 years. Born in Fort Macleod December 11, 1918 he lived with his parents Archie and Louise McFadden in Fort Macleod, Lethbridge, Lacombe and Bluffton Alberta until 1938, at which time he came to Lethbridge to work at the Research Station. Al was a member of CSBE/SCGAB.

Predeceased by his parents, Archibald and Louise McFadden, and his loving wife Lennie in January 2005. A memorial service for both Lennie and Al was held at 11:00 AM on Saturday, August 4, 2007 at MARTIN BROS RIVERVIEW CHAPEL, 610 - 4 Street South, Lethbridge. In lieu of flowers memorial donations may be made to a charity or organization of one's choice.

WITZ

Richard L. Witz, PE, 91, of Fargo, ND died June 15, 2007. He was professor emeritus of agricultural engineering at North Dakota State University, retiring in 1983. Witz also conducted research in the application of electricity, automatic controls, and instrumentation in agriculture. He had been a member of ASABE for 64 years.

Witz received a bachelor's degree in agricultural engineering from the University of Wisconsin and a master's degree from Purdue University. He is survived by his wife Marjorie and a son, John. Memorials may be made to the Witz Memorial Scouting Fund, Fargo ND 58103.

A few words from your CSBE/SCGAB Society Secretary/Manager Un mot du directeur-général/secrétaire de la CSBE/SCGAB



James S. Townsend, PEng

Tel: 204-233-1881

Fax: 204-231-8282

Email: bioeng@shaw.ca

Your new Council for 2007-2008 is listed on the last page of this newsletter. Check them out! A special welcome to Stéphane Lemay, President-Elect, Stefan Cenkowski, VP (Technical), and Venkatesh Meda, Regional Director for Saskatchewan.

Minutes of the Annual General Meeting of Members of

The Canadian Society for Bioengineering La Société Canadienne de Génie Agroalimentaire et de Bioingénierie

held 2007 06 18 Monday 13 45 to 14 30 CDT in Room M101-C, D, E in the Convention Center, Minneapolis MN.

PARTICIPANTS

Call to order (President Shahab Sokhansanj)

Greetings and introductions

Participants list attached.

CHAIRMAN AND SECRETARY OF THE MEETING

Upon motion made (Hodgkinson) and duly seconded (Kok), it was unanimously resolved to appoint President Sokhansanj and James Townsend as chairman and secretary of the meeting, respectively. **Approved.**

NOTICE OF MEETING

The Notice of Meeting requirement (14 days) was met.

QUORUM (Twenty-five members including at least 5 officers of Council)

The quorum requirements were met.

APPROVAL OF MINUTES OF PREVIOUS MEETING 2005 06 27 (AS PRESENTED)

Upon motion made (Madramootoo) and duly seconded (Raghavan), it was unanimously resolved to accept the minutes as distributed. **Approved.**

ADDITIONS TO THE AGENDA

None

CORRESPONDENCE

Jimmy Butt, Sally Humphreys, Marc Winkler

SUMMARY ANNUAL REPORTS

Brief oral reports, supplemented by written reports as distributed, were given by some members of the 2006-2007 Council. (See written reports as distributed and/or published in Perspectives Newsletter, Spring 2007).

(à suivre en page10)

(Continued from page 9)

UNFINISHED BUSINESS

Townsend reported that **EIC membership** is currently under negotiation and that our application could be considered at a June 2007 EIC Board meeting.

Townsend reported that **AIC membership** considerations are currently on hold but that Tom Beach of AIC will be contacted for more details on AIC affiliation benefits. There was some sentiment expressed that CSBE/SCGAB should be more involved if the Society wishes to have any influence on engineering concerns in Canadian agricultural matters. **Action by: Townsend**

NEW BUSINESS

The **2007 Student Awards** were distributed. The list of winners is presented elsewhere in this newsletter.

The **Budget for 2008** was included in the handout material. Upon motion made (Kok) and duly seconded (Hodgkinson) the budget for 2008 was **approved**.

Appointment of Auditor for 2007. Upon motion made (Britton) and duly seconded (Dunmade), it was unanimously resolved to reappoint Thornton & Co. as auditors for 2007. **Approved**.

Bylaw changes. Upon motion made (Feddes) and duly seconded (Kushwaha), the changes to the Bylaws as indicated in the attachment were presented for consideration. **Approved as corrected**. Corrected copy of Bylaw changes is attached.

The **Foundation report** was included in the handout package (and in the previous newsletter).

The report on the plans for the **2010 CIGR/CSBE-SCGAB** was distributed. Savoie indicated that between 400 and 800 attendees are anticipated.

President Sokhansanj asked for **2009 AGM site** suggestions. There were no suggestions from the floor.

President Sokhansanj reminded the members present about the **Strategy Workshop** to be held the next day. All were welcomed to participate.

ANNOUNCEMENTS

Townsend reported that the new recruiting brochures (English and/or French) are now available.

ADJOURNMENT

President Sokhansanj called for adjournment at 14 30 CDT. Upon motion made (Kushwaha) and duly seconded (Feddes), it was unanimously resolved to adjourn. **Approved**.

Minutes recorded by:

J.S. Townsend
Secretary

Date of approval: _____

The formal transfer of the President's gavel took place as incoming 2007-2008 President Robert Kok was welcomed. See the last page of this Perspectives Newsletter for a listing of Council.

(Continued on page 11)

*(Continued from page 10)***MEMBERSHIP SUMMARY 2006, 2007**

Type	2006 count	2007 count
Nonresident	3	7
Full member	474	466
UG Student	211	183
Grad Student	<u>61</u>	<u>90</u>
Totals	750	746

AGM PARTICIPANTS 2007

James Townsend
Yves Choiniere
Clement Vigneault
Daniel Masse
Dennis Hodgkinson
Naveen Patni
Gerry Zoerb
Shahab Sokhansanj
John Feddes
Grant Clark

Robert Kok
Lawrence Papworth
Mark Lefsiad *
Ron Britton
Reed Turner
Lope G. Tabil
Bernardo Predicala
Anthony Opoku *
Laurin Kassama
Amadesu Thiam *

Israel Dunmade
Mark Shaw
Neil McLaughlin
Ali Madani
Manasah M Khalela *
Stephane Godbout
Frederic Pelletier
Martin Belzila *
Lorie Hamelin *
John Ogilvie

Frederic Lavoie
Erin Cortus
Jan Jofriet
Qiang Zhang
Jianbo Lu
Satyanarayanden R. Sivaramakrishnan
Vijaya Raghavan
Chandra Madramootoo
Ron Fleming
W.E. Muir

R. Sri Ranjan
Staefan Cenkowski
Danny Mann
Jude Liu
Digvir Jayas
Roger Theriault
Luc d'Amours
Philippe Savoie
Etienne Cormier
Ron MacDonald

Mozammel Hoque
Ladan Naimi
Lam Pak Sui
Pradeep Goel
Amajot Singh
Ramesh Rudra
Shiv Prasher
R. Lal Kushwaha
Jim Henry
Dave Hundebly

* visitor (?)

COAST TO COAST/D'UN OCÉAN À L'AUTRE

British Columbia Regional News

Anthony K. Lau

tel: 604-822-3476; fax: 604-822-6003
eml: aklau@chml.ubc.ca



The Resource Management Branch of the BC Ministry of Agriculture and Lands is heavily involved in the *Canada – British Columbia Specified Risk Material (SRM) Management Program*, a program announced on April 12, 2007 and supported by \$7.5 million in federal monies to assist the cattle industry in meeting the enhanced feed ban regulations which came into effect on July 12 of this year. The SRM Program is closely linked to the \$5 million *Livestock Waste Tissue Initiative*, a provincially-funded program coordinated through the BC Investment Agriculture Foundation.

The SRM Program will be funding projects that contribute to the separation, storage, destruction and containment of SRM from source to final disposition. Key players include ruminant-based service providers, slaughter establishments, local governments, Agriculture and Agri-Food Canada, the Canadian Food Inspection Agency, the Ministry of Environment, the Ministry of Agriculture and Lands, and other industry stakeholders. **John Luymes**, Farm Structures Engineer with the BC Ministry of Agriculture and CSBE Member, is one of four staff within the Resource Management Branch charged with the design, implementation and administration of the program which expires on March 31, 2009.

Destruction or containment options can manifest themselves in a variety of forms such as land filling, incineration, composting, rendering or other innovative technologies that contribute to the appropriate handling and disposition of SRM waste that satisfies Canadian Food Inspection Agency protocols and ensures that the material is traceable from cradle to grave.

For more information about this program: http://www.agf.gov.bc.ca/resmgmt/SRM_Program/index.htm

CSBE/SCGAB FELLOWS 2007



Bill Muir, Shiv Om Prasher, Daniel Massé, Presenter President Sokhansanj, Neil McLaughlan, Suzelle Barrington, Philippe Savoie, James Townsend (Photo credit: Yves Choinière)

Alberta Regional News

Len Ring

tel: 403-381-5176; fax: 403-382-4406

eml: len.ring@gov.ab.ca



Grant Clark is moving from Edmonton to Montreal to take up a position in Ecological Engineering with the Department of Bioresource Engineering at McGill University's Macdonald Campus. Grant took a cooperative Agricultural Engineering degree at the University of Alberta while working in a variety of industrial and research settings, including the Agricultural Technology Centre in Lethbridge, Millar Western Pulp, and Husky Oil. After completing his graduate studies in Biosystems Engineering at McGill, he returned to the University of Alberta to work with the bioresource engineering group in the Department of Agricultural, Food and Nutritional Science, where he currently holds an assistant professorship in Agri-Food Waste Management. Grant's research in the engineering of ecosystems ranges from optimizing microbial processes in industry, to managing the environmental impacts of agricultural production systems.



On August 11, 2007, the Historic Sites and Monuments Board of Canada held a public ceremony at the Nobleford High School to commemorate the designation of **Charles S. Noble** as a "Person of National Historic Significance". The plaque unveiled at that ceremony reads as follows:

CHARLES S. NOBLE (1873 – 1957)

This noted farmer, inventor, and entrepreneur played a key role in demonstrating the agricultural potential of the drought-prone Palliser Triangle. During the Great Depression, Noble worked closely with the Dominion Experimental Farm to promote the latest dry-land farming techniques. In 1936 he invented the Noble Blade, a cultivator that cut weeds off at the roots without disturbing the soil surface, significantly reducing erosion. Noble's implement company became the largest of its kind in Alberta, and produced much of the specialized machinery for dry-land farming in the second half of the 20th century.

This well-deserved recognition falls closely on the 2005 ceremony held in Nobleford when the American Society of Agricultural and Biological Engineers (ASABE) designated the Noble Blade Cultivator as a "Historic Landmark of Agricultural Engineering". That ceremony was held in conjunction with the joint ASABE/CSBE joint Pacific-Northwest Regional Meeting held in Lethbridge that year. These two events are both of very significant importance in the history of agricultural engineering in Canada.

Notice about Journal Publication

An ad hoc committee of CSBE/SCGAB Council has been set up to investigate the future operation of the Journal. The committee would like to receive comments and suggestions about the Journal, i.e., format, need, quality, material included, accessibility, etc., etc.

Send your comments to Past-President Shahab Sokhansanj at shahabs@chml.ubc.ca or Secretary Townsend.

Saskatchewan Regional News

Venkatesh Meda

tel.: (306) 966-5309; fax: (306) 966-5332

eml: venkatesh.meda@usask.ca



Welcome to our new Regional Director and Councilor, **Venkatesh Meda**

WELCOME AND CONGRATULATIONS TO DR. JANUSZ KOZINSKI, NEW DEAN OF ENGINEERING, University of Saskatchewan! Welcome to the CSBE community.

Dr. **Janusz Kozinski** has been appointed dean of the College of Engineering at the University of Saskatchewan for a five-year renewable term.

He was born and raised in Poland where he received PhD in Energy & Environmental Engineering from AGH – University of Science & Technology in Krakow. He obtained postdoctoral training at the Massachusetts Institute of Technology (MIT) prior to becoming a full-time faculty member at McGill University. He left McGill, where he was Sir William Dawson Scholar and Associate Vice-Principal (Research & International Relations), for Europe where he accepted the first International Chair in Bioenergy at the Institute for Advanced Studies and Centre National de la Recherche Scientifique in France. Dr. Kozinski has created multidisciplinary research program which includes projects related to sustainable energy systems, bioenergy, environmental impact of energy technology, hydrogen economy, pathogen and mutagen destruction, greenhouse gas mitigation, fabrication of novel nanomaterials, public security in buildings immune to bioterrorism, and Mars exploration.

Welcome

Mr. **Guanghui (Steven) Wang** has joined the Department of Agricultural and Bioresource Engineering at the University of Saskatchewan as Visiting Scholar for 1 year starting April 25, 2007. Steven is a 2nd year Ph.D. student and staff of the Department of Agricultural Engineering at China Agricultural University in Beijing, China. While at the



University of Saskatchewan, he is supervised by **Dr. Lope Tabil**. His research is on the physical and functional characterization of biological materials, specifically timothy hay. He works with Dr. Tabil in the area of timothy hay compression.

This year's CSBE/SCGAB AGM&TC was held in conjunction with the ASABE Annual International Meeting in Minneapolis, June 17-20, 2007. ABE Department was represented by faculty members Drs. **Tabil, Meda, Kushwaha** and **Panigrahi**, Research engineers Dr. **Liu** and **Opuku, Wang** (graduate student) and Dr. Guo's visiting scientist **Xiaowei**, from China. In total, there were 7 papers from the Bioprocessing group, 2 from Machinery Systems and 1 from natural resources/environmental stream.

Congratulations:

At the Annual General Meeting of CSBE held on June 18, 2007 during the ASABE Annual International Meeting in Minneapolis, MN, the following students from the University of Saskatchewan received CSBE Awards:

1. **Adefemi Farinu** for the CSBE Graduate Thesis Award (M.Sc.) (\$200) with thesis on "Heat and Mass Transfer Analogy under Turbulent Conditions of Frying". His advisor is Dr. **Oon-Doo Baik**.
2. **Paul Hildebrand** and **Lyndon Graff** for the CSBE/SCGAB Undergraduate Design Project Award (\$50 per student) with the design project titled "Design of an Automated Rock Locator for Tillage Equipment". Faculty advisor is **Trever Crowe**.

(Continued on page 15)

(Continued from page 14)

3. **Sana Talebi, Jeffrey Ruzicka and Garth Printz** for the CSBE/SCGAB Undergraduate Thesis Award (\$50 per student) with their project titled "Elevation Assist for Manual Cherry Tree Picking". Faculty advisor is **Trever Crowe**.

Dr. Satya Panigrahi has received the Canadian Society for Bioengineering (CSBE) 2007 Young Engineer of the Year Award for his exceptional contribution to the agricultural materials utilization and fiber processing research. Panigrahi is a Saskatchewan Agricultural and Food Research Chair in the College of Engineering, where he develops bio-based materials. His research focuses on biofibre, composites, and value-added feedstock. He was instrumental in developing and establishing five new Canadian companies that use agricultural fibres for building materials, automotive industry components, and various other purposes. **Congratulations to Panigrahi!**



Congratulations to Dr. Trevor Crowe (co-author) for winning the 2007 ASABE Paper Award for his contribution to Transactions of the ASABE Vol. 49(2) article entitled "Direct nozzle injection of pesticide concentrate into continuous flow for intermittent spray applications".

Congratulations to Profs Oon-Doo Baik and Huiqing Guo for their tenure status and also being promoted as Associate Professor, effective July 01, 2007.

Congratulations to Liu and Priyashantha!

Lifang Liu successfully defended his Ph.D. thesis on June 7, 2007. His thesis was titled "Scouting algorithms for field robots using triangular mesh maps". Dr. Trevor Crowe and Dr. Karen Schwartzkopf-Genswein, jointly supervised his studies. **Lifang** is now a postdoctoral fellow in ABE Dept., U of S

Sumith Priyashantha has successfully defended his PhD. Thesis on June 16, 2007. His thesis was titled "Identification of Critical Source Areas which contributes nutrients to Snowmelt Runoff". Prof. Charles Maule and Dr. Jane Elliott (National Water Research Institute, Saskatoon) jointly supervised his studies. Sumith is now a postdoctoral fellow at the Dept. of Civil and Geological Engineering, University of Saskatchewan.

On July 01, 2007, ABE Ph.D. student **Joy Agnew** has been named a **recipient of the Engineers Canada-Manulife Financial Scholarship** (\$10,000). She has been invited to attend the National Scholarship reception and dinner in Ottawa on October 4th. This prestigious scholarship is awarded annually to three Canadian professional engineers returning to school after working for at least 3 years. **Congratulations** to Agnew for this splendid recognition.

Dr. Lal Kushwaha was recognised by the President Citation for Distinguished Service, American Society of Agricultural and Biological Engineers (ASABE): For distinguished service to the Society and exceptional execution of responsibilities to investigate potential limitations on non-engineer members within ASABE relating to obtaining the Grade of Fellow. June 20, 2007.



Dr. Lal Kushwaha attended the Joint North America, Asia-Pacific ISTVS Conference and Annual Meeting of the Japanese Society of Terramechanics, Fairbanks, Alaska, 23-26 June 2007. He moderated the Welcome and Introduction sessions and chaired a session on "Modeling and Simulations". He also participated in the meeting of the ISTVS Board as the Canadian Secretary and the Editor-in-Chief of the Journal of Terramechanics.

Dr. Satya Panigrahi was invited to speak at PECPITA 07 (Expo on R & D: World Innovation Forum on Commercialization, the Last Mile of Research), held in Kuala Lumpur, Malaysia during August 10-12, 2007. This event brought together 24 institutions (worldwide) of higher learning and various industry players, creating a market place of innovations.

He was also invited by UPM (Universiti Putra Malaysia) on August 15, 2007 to speak at a seminar on *(Continued on page 16)*

(Continued from page 15)

'Commercialiation Industrialization of Biocomposite R & D'.

Prof. Venkatesh Meda was invited to speak on fruit dehydration and value-added processing by CSIDC, Outlook, SK on July 12, 2007.

Prof. Venkatesh Meda was invited to chair a technical session at the 41st Annual International Symposium of IMPI, held in Vancouver, Aug. 1-3, 2007. ABE Dept. was well represented by Baik, Meda, Schleicher, Opuku, Rana, and Mishra. There were three technical posters and 4 paper presentations from the bioprocessing group.

University of Saskatchewan Sled Dogs 1/4 Scale Tractor Design Team

The University of Saskatchewan Sled Dogs 1/4 Scale Tractor Design Team competed for their sixth year at the 2007 ASABE International Quarter Scale Tractor Design Competition in Peoria, Illinois. After placing 11th overall at the 2006 competition, the UofS team was looking to improve in all categories. This year's team put in a tremendous effort that paid off with **two first place achievements as well as receiving Best Appearance** as voted on by the other teams. The first place achievements came in Manoeuvrability competition and Serviceability judging.

This year's tractor was a three engine unit with a hydraulic drive system. The three engines drove a hydraulic pump via a serpentine belt system and the hydraulic pump powered two wheel motors that also acted as the rear axle assembly. 2007 rules indicated unlimited motors but less than 900lbs total weight of the unit. During competition pulling the UofS team was consistently in the top 10 and finish 6th overall in the pulling portion of the competition. Overall the U of S team finished 6th in the competition which is their best placing to date and are looking forward to improving their performance at the 2008 competition.



U of S Sled Dogs 1/4 Scale Tractor Team at the 2007 ASABE competition and Awards Night in Peoria, Illinois, June 2007

Manitoba Regional News

Danny Mann

Tel: 204-474-7149 FAX: 204-474-7512

Email: danny_mann@umanitoba.ca



Classes are once again about to begin. The summer months saw university professors attend various conferences to share the research being done at the University of Manitoba. There was also time for vacation. But now, the first lecture is just a few days away ... Where did the summer go?

Some "old" news – **Ray Hoensen** has completed his secondment to the NSERC-Prairies office as of January 31, 2007. Ray was primarily responsible for overseeing the opening of the NSERC regional office and working with community colleges in the region who were looking for entry into NSERC's programs. Ray has now returned to his position as Director, Applied Research & Commercialization at Red River College in Winnipeg.

Stefan Cenkowski attended the 3rd International Seabuckthorn Association Conference in Quebec City (Aug 12-16).

The Canadian Design Engineering Network (CDEN) met for its 4th annual conference in Winnipeg, July 22-24, 2007. The conference was a joint meeting between CDEN and the Canadian Congress on Engineering Education (CCEE). The University of Manitoba hosted the conference. This conference has become an excellent resource for anyone teaching design, particularly capstone design courses. Papers presented at the conference are available for viewing at <http://cden2007.eng.umanitoba.ca>.



The weekend of August 10-12th was the first ever Agricultural / Biosystems Engineering class reunion held at the University of Manitoba campus. The weekend included a gathering at Wise Guys on Friday evening, a tour of the newly-constructed/renovated Engineering and Information Technologies Complex (i.e., the engineering buildings) on Saturday morning, a lunch hosted by the Dean of Engineering on Saturday, a barbeque behind the Agricultural Engineering Building on Saturday evening, and a boat cruise down the Red River on Sunday afternoon. A special thanks to Kelly Lund for spear-heading this initiative. Hopefully, the next reunion will be even bigger.

A relaxing time at the BBQ. Unfortunately, it was not "secret recipe" chicken – the BBQ was catered so that all could enjoy the food and fellowship!

Samuel Ima received a fellowship for the Japan Society for the Promotion of Science (JSPS) Summer Program and he has just returned from his 2-months internship summer graduate research internship fellowship in Japan.

It is a program organized between the government of Japan through the Japan Society for the promotion of Science (JSPS) and the governments of five countries: Canada, USA, Germany, UK, and France to provide graduate students in science and engineering with a hands-on international research experience and an introduction to a different culture, language, and university research system. 10 students were selected from Canada out of more than 100 fellows from the five participating countries. During the first week, they were subjected to intensive Japanese language to learn the fundamentals of speaking and writing Japanese. They were also exposed to basic Japanese culture like experiencing a stay with a Japanese host family for three days.

He did his internship at Ritsumaikan University, Biwako-Kusatsu Campus, Shiga and his host researcher was **Dr. Takashi Higuchi**, a Professor at the Environmental Systems Engineering Department. He worked on a biofiltration project aimed at treating toluene-contaminated air using a newly developed rotary-type biofilter with a highly porous packing material. Apart from research, he had the opportunity to try out different Japanese foods, attend some festi-

(Continued from page 17)

vals and visit quite some places like the Kinkakuji golden temple which is just one of the many beautiful temples in Kyoto.



Samuel and the biofiltration unit.



The Kinkakuji golden temple.

To learn more about this program: http://www.nserc.ca/sf_e.asp?nav=sfnav&lbi=2c_1

Notice to members from Manitoba: If you have any comments or news items that you would to be included in the next issue of Perspectives, please send it to Danny_Mann@umanitoba.ca.

CSBE/SCGAB MEMBERS HONORED AT ASABE AIM 2007



Ron MacDonald (right)
ASABE STANDARDS DEVELOPERS
AWARD 2007



Clément Vigneault (right)
ASABE FELLOW 2007

(Photo credits: Yves Choinière)

Ontario Regional News

Jake DeBruyn

tel: 519-826-4584; fax: 519-826-3259

eml: jake.debruyn@ontario.ca



ASABE Certificate of Appreciation for Ron MacDonald, AgViro Inc.

Ron MacDonald, principle of AgViro Inc, a Guelph based agricultural engineering electrical consulting group, received the "Certificate of Appreciation in Recognition of Outstanding Service" at the ASABE Annual General Meeting in Minneapolis, MN in July, 2007. The award was granted for Ron's work on revising ANSI/ASABE EP 364.3 Installation and Maintenance of Farms Standby Electric Power. This standard is often referred to during construction of new livestock barns. The original standard had not been revised for many years. It was upgraded to reflect the many changes that have occurred with standby generators including connections issues that became apparent during the Ice Storm of 1998. Significant additions were also made in the area of generator setup, maintenance and operations.



Ron MacDonald, AgViro Inc. receives the Certificate of Appreciation in Recognition of Outstanding Service from ASABE President Charles E. Sukup.

Neil McLaughlin was recently appointed adjunct professor, Northeast Institute of Geography and Agro-Ecology (NEIGAE), Chinese Academy of Science, Changchun, China. He is presently supervising a Chinese Ph.D. student studying in Canada under the 2006 Chinese Ministry of Education – Agriculture and Agri-Food Canada Ph.D. Research Scholarship program and will be hosting a second student under the 2007 program. Both students are from NEIGAE. Neil travelling to China in fall 2007 to work with NEIGAE in a conservation agriculture research program. The institute is researching adoption of western technology for no-till and conservation-till crop production in China. The technology must be adapted to very small scale farms in China. Plant residue from corn production is traditionally used for heating homes, and is not available to replenish soil organic matter. The institute is studying systems to use a portion of the plant residue for maintaining soil organic matter. Neil will be providing assistance on machinery aspects in the research program.



Ontario to Fund Biogas Systems: the Ultimate Bio-Engineering System

The Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) announced the Ontario Biogas Systems Financial Assistance Program. The Program is developed to support the deployment of agri-food biogas systems. The \$9 million program will provide up to \$400,000 per project. The program supports construction and commissioning costs, providing matching dollars at 40% on eligible costs. Feasibility and design costs can be funded at 70% up to \$35,000. Eligible systems must use at least 75% agricultural or food based products or byproducts as inputs, must fully utilize the biogas for electricity, heat or natural gas production, and must manage the nutrients in the digestate in an agricultural manner.

Agricultural and biosystems engineers are ideally suited to participate in the growing biogas marketplace, since biogas systems integrate structural, electrical, mechanical and biological systems, and are typically located at farms or food processing facilities. This fund is designed to provide a jump-start to the biogas marketplace in order to capture benefits from renewable energy, reduced climate change emissions, and environment benefits such as odour and pathogen control.

For more information, visit the program website: www.ontario.ca/biogas

(Continued on page 20)

(Continued from page 19)

Engineers Involved with Mass Disposal of Poultry

The recent experience with Avian Influenza (AI) outbreaks in 2004 in British Columbia and around the world has increased the focus on on-farm biosecurity and emergency disaster preparedness. A number of trials have been undertaken to investigate safe, effective and humane ways of depopulating barns and managing the mass disposal of poultry carcasses.

Engineers, veterinarians and researchers from the Ontario Ministry of Agriculture, Food and Rural Affairs, the University of Guelph, and the Canadian Food Inspection Agency have been working collaboratively to evaluate different mass disposal techniques for poultry.

Different depopulation trials were undertaken over the past year to compare the practicality of method, effectiveness, and humaneness of the techniques. Initially the trials involved use of liquid CO₂, injected into a sealed portable chamber (a mobile trailer unit), or into the sealed barn space. This summer, a second series of trials have been expanded to test several different compressed gases mixtures in the mobile trailer unit. Gas mixtures tested include welding gas (25% CO₂, 75% argon), and beer gas (30% CO₂, 70% nitrogen). Gas monitoring equipment has been used to validate lethal dose concentrations and to ensure worker safety.

During each trial a number of birds have been instrumented. Remote telemetry equipment was used to record body temperature, bird brain activity, (electroencephalogram -EEG), and bird heart activity, (electrocardiogram – ECG), before, during and after the euthanasia from gas inhalation.

Following depopulation, a number of compost recipes and windrow building techniques have been investigated. Different substrates have been tested in the trials to evaluate their effectiveness and availability. Substrates have included sawdust, wood shavings, straw, bedded horse manure and com silage.

For more information, contact **Dan Ward**, P.Eng., Poultry Structures and Environment Engineer, Ontario Ministry of Agriculture, Food and Rural Affairs, daniel.ward@ontario.ca



Windrow composting of carcasses using low-carbon composting techniques and Sittler compost turner.



Windrow composting of carcasses using wood shavings and Brown Bear compost turner



John Ogilvie, Jan Jofriet and Ross Irwin presented a poster and paper on "Engineering at the University of Guelph 1874 to 2007" for the recent Northeast Agr & Bio Eng'g Conference (NABEC) held at Wooster Ohio Jul 29th - August 1, 2007. The paper can be viewed on line at <http://www.uoguelph.ca/~jogilvie/NABEC2007.pdf> for those interested.

Quebec Regional News / Nouvelles régionales du Québec

Stéphane Godbout

tel: 418-646-1075; fax: 418-286-3597
 eml: stephane.godbout@irda.qc.ca



Un nouveau centre de conditionnement du foin de commerce a été construit durant l'été 2007 par La Coop fédérée et une coopérative locale à Saint-Alexandre-de-Kamouraska, près de Rivière-du-Loup. Il sera officiellement inauguré le 6 septembre 2007 et sera accessible au public lors des journées portes ouvertes de l'UPA le 9 septembre. Le centre a une capacité de séchage de foin en balles de plus **de 2000 tonnes par an**, valorisant ainsi les cultures fourragères dans la région du Bas-Saint-Laurent.

On y utilise une technologie de séchage bidirectionnel développée par **Philippe Savoie** (Agriculture et Agroalimentaire Canada, Québec) et **Sébastien Descôteaux** (brevet U.S. 6,988,325). <http://v3.espacenet.com/textdoc?DB=EPODOC&IDX=US2005210699&F=0> .

René Morissette, à l'emploi d'Agriculture et Agroalimentaire Canada, est chargé de projet pour collaborer avec La Coop fédérée afin d'implanter un système d'automatisation et de contrôle du procédé de séchage du foin en balles. La technologie a été décrite avec la collaboration de **Hugues Joannis** dans la revue scientifique de la société (Vol. 48: 3.53-3.59). <http://enrwww.usask.ca/oldsite/societies/csae/protectedpapers/c0614.pdf> (3.74 MB)

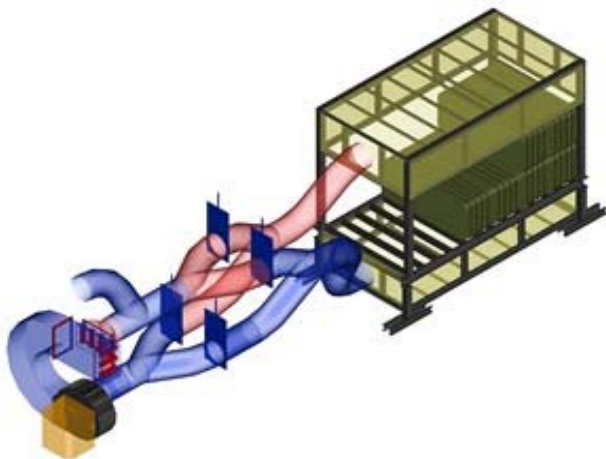


Figure basée sur le brevet
 Schematic view based on patent



Photo du nouveau centre de conditionnement construit à l'été 2007.
 Picture of commercial dryer constructed in summer 2007.

A new commercial hay processing plant was built during the summer of 2007 by La Coop fédérée and a local cooperative in Saint-Alexandre-de-Kamouraska, near Rivière-du-Loup (Quebec). It is being inaugurated officially on September 6; it will be open to the public on September 9 during the provincial farmers' union (UPA) open house day. The plant has a capacity to dry 2000 tons of baled hay per year, thereby providing a commercial outlet for the abundant forage crop of the Lower Saint-Lawrence region

The plant includes a bidirectional hay dryer technology developed by **Philippe Savoie** (Agriculture and Agri-Food Canada, Quebec City) and **Sébastien Descôteaux** (U.S. patent 6,988,325). <http://v3.espacenet.com/textdoc?DB=EPODOC&IDX=US2005210699&F=0> .

(Continued on page 22)

(Continued from page 21)

René Morissette, employed by Agriculture and Agri-Food Canada, is responsible for developing an automation system to control the drying process. The technology was described with the collaboration of **Hugues Joannis** in the Society's journal (Vol. 48: 3.52-3.59). <http://engrwww.usask.ca/oldsite/societies/csae/protectedpapers/c0614.pdf> (3.74 MB)

Offres d'emploi / Job opportunities

Les Consultants Yves Choinière Inc. est une firme de génie agricole conseil située au Québec. Nous désirons combler trois postes : **un ingénieur, un dessinateur et un technicien**. Pour plus de détails sur la firme et sur le poste d'ingénieur, visitez le site web suivant: www.yveschoiniere.com. Pour plus de détails sur les deux autres offres d'emploi, visitez le site web d'Emploi Québec. Pour visionner l'offre de dessinateur, inscrire le # 1338624 et pour visionner l'offre de technicien, inscrire le # 1338672.

Les Consultants Yves Choinière Inc. is an agricultural engineering consulting firm. We wish to hire three persons: **an engineer, a draftsman and a technician**. For more details on our firm and about the engineer position, visit the website: www.yveschoiniere.com. For more info about the two other job offers, visit the Emploi Quebec website. The reference # for the draftsman is 1338624 and the reference # for the technician is 1338672.

À Minneapolis, durant le Dairy Housing Tour, Yves Choinière et Christian Lemay ont visité plusieurs étables sur régime de litière compostée. En fait, la surface de litière est brassée tous les jours.

In Minneapolis during the Dairy Housing Tour, Yves Choinière and Christian Lemay visited many compost bedded pack barns. In fact, the bedded pack is aerated daily.



In fact, the bedded pack is aerated daily.

Photo: Étable sur litière compostée.
Compost bedded pack barn.

Ils ont aussi visité des étables laitières avec litière de sable. Suite à l'évacuation, une séparation solide/liquide est réalisée dans un décanteur passif.

They also visited sand based freestalls. Following the evacuation, a solid/liquid separation is completed with a passive sedimentation basin.



Décanteur pour une ferme de 200 vaches.
Sedimentation basin for a 200 cows farm.

ASABE's Meetings Council is pleased to announce the Call for Papers (CFP) for the 2008 Annual International Meeting June 29 – July 2, 2008 Providence, Rhode Island

To see the official CFP visit <http://www.asabe.org/meetings/aim2008/index.htm>. This document will help explain, in detail, the various traditional and new session types; provide an outline of the presentation topics; discuss the abstract submission requirements and format and much, much more. Please note all presentation abstracts should be submitted electronically, no hard copy or fax copies will be accepted. A template for support is located at <http://www.asabe.org/pubs/template/annualmeetingpapertemp.doc>.

Important Dates for Authors and/or Presenters:

- ... **October 26, 2007 – Presentation Abstracts Due**
- ... November 9, 2007 – Session Organizers To Notify Authors of Acceptance Only
- ... November 16, 2007 – International Authors and/or Presenters should begin requesting Visa Invitation Letters to attend AIM at mtgs@asabe.org or visit <http://www.asabe.org/meetings/visa/visainfo.htm> to print your own visa letter. If an original visa letter is required by the US Consulate or Embassy in your country please send an email request to mtgs@asabe.org. A staff member will send you a response with a request for your personal information; a letter will be sent to you within 2 business days upon receipt of the personal information requested by staff. Please note ASABE will no longer overnight letters.
- ... **March 30, 2008 - Deadline for Corrections** to presentations – in 2008 this deadline will be strictly adhered.
- ... **April 18, 2008 – Presenter/Author Registration Deadline**
- ... April 18, 2008 – Full Papers are due to ASABE
- ... **June 29 – July 2, 2008 – Annual International Meeting in Providence, Rhode Island**

New for 2008: No paper number or presentation will be assigned until Presenter/Author is registered for the Annual International Meeting.

Call for Papers in Watershed Technology

An invitation is extended to professionals working in watershed technology and related areas to submit an abstract for consideration to be presented during the Watershed Technology Conference in Concepción, Chile from March 29th through April 3rd, 2008. (Workshops begin April 27th).

The Conference will provide a forum for agricultural related professionals to exchange information on science, applications and developments in the use of watershed science and technology. It will cover a wide array of topics. These include new applications of well-established and understood technologies to innovative and entrepreneurial applications of emerging technologies.

For more information please see <http://watershedtech.org>



INTERNATIONALLY EDUCATED ENGINEERS: LICENSED, MOBILE, EMPLOYABLE

Of the thousands of immigrants arriving in Canada annually, many identify themselves as engineers. In 2001, of the 44 percent of skilled workers who identified an intended occupation at the time of immigration, 63 percent indicated engineering. These international engineering graduates may be seasoned engineering professionals, recent engineering graduates or have worked in jobs that would be considered technologist, technician, architect or scientist positions in Canada. Regardless of which group they fall into, some arrive in Canada expecting to begin work as engineers but are unable to find engineering employment.

The Canadian engineering profession has updated its licensing system to help the international engineering graduates integrate into the workforce and profession without compromising public safety or lowering professional standards. At the provincial/territorial level, examples include a new way of assessing academic qualifications in Saskatchewan that eliminated their backlog of applicants and a new method of assessing experience in New Brunswick that reduced applicants' waiting time. In Manitoba, applicants with more than 10 years of experience can do an interview as part of their academic assessment and thus not have to write exams, while in Ontario, new Canadians who apply for licensing within six months of their landing date, can do so at no cost.

At the national level, Engineers Canada (Engineers Canada is the business name of the Canadian Council of Professional Engineers) is leading the establishment of an accurate, current database of recognized international degrees and institutions to be used consistently by the provincial and territorial licensing bodies. It is expected that the database will reduce duplication of effort, resulting in a reduced processing time for international engineering graduates' applications.

Canadian companies make hiring decisions every day. Each is looking for the best minds in the country to help build their businesses, expand knowledge and solve problems. That person may be an engineer, licensed in Canada but trained internationally. Licensed international engineering graduates are assessed to the same standards as each of Canada's 160,000 professional engineers, and they are mobile, able to work in any part of the country. Employers can hire these professionals with confidence, knowing that having a P.Eng. (or ing.) license means that the Canadian engineering system has validated their academic qualifications, experience and character.

For more information, contact:
Robyn Osgood, Blueprint Public Relations
(613) 237-7400 Ext. 25
cell (613) 863-2049

International News

From the Mekong to the Nile: John Metzger recently completed nearly 5 years with the Mekong River Commission Secretariat based in Vientiane, Laos. He is continuing as an international consultant on water management issues and is presently on short-term assignment with the Nile Basin Initiative in its headwaters in the Kagera River Basin (Burundi, Rwanda, Tanzania and Uganda). He can be contacted through: jfmetzger@gmail.com.

International Conference on Agricultural Engineering & Industrial Exhibition AGENG2008

CALL FOR ABSTRACTS!

Following earlier notices regarding the **AGENG 2008 Conference - Agricultural & Biosystems Engineering for a Sustainable World**, which will be held on the island of **Crete, 23 - 25 June 2008 at Knossos Royal Village Conference Centre**, we would like to inform you that the **conference website is ready to provide on-line Registration and Abstract Submission to participants.**

Interested contributors are kindly asked to **submit their abstracts** electronically to: (<http://www.ageng2008.com>) by **1st October 2007**. All abstracts will be reviewed and authors will be **notified about acceptance** of their paper by **14th December 2007**. Kindly be informed that the deadline for the **full paper submission is 14th March 2008**.

For detailed information about this conference (topics, committees, venue, registration) please visit the conference web site <http://www.ageng2008.com>. **You can download the 1st Announcement of the Conference at:** (www.vougas.gr/files/Image/AgEng2008%201st%20Announcement.pdf)

AgEng2008 Secretariat

Vougas Associates

29, Sinopis Street I GR-11527 Athens, Greece

Phone: +30 2107799261 | Fax: +30 2107711768

E-mail: secretariat@ageng2008.com

Website: <http://www.ageng2008.com>



PO Box 102100, Moreleta Plaza, 0167, South Africa
wcap2008@icon.co.za www.wcap2008.co.za
t: +27 12 420 3270 f: +27 12 420 3290

23 to 28 November 2008

The 42nd South African Society for Animal Science Congress/The 5th All-Africa Conference on Animal Production

LETTER OF INVITATION

The World Association of Animal Production, the South African Society for Animal Science and the All-Africa Association of Animal Production cordially invite you to participate in the 10th World Conference on Animal Production, to be held in association with the 42nd Congress of the South African Society for Animal Science and the 5th All-Africa Conference on Animal Production. The World Conference on Animal Production is a trend-setting conference that examines the scientific progress in livestock production and the effects that these have on the environment, economies and the quality of life of people.

The theme of the conference, **New World; Future World**, takes in the philosophy of the World Association for Animal Production, conceptualising the place of animals in our daily existence. **Go to: www.wcap2008.co.za**

**Science and Technology Awareness Network (STAN)
4th Annual STAN Conference
Monday, October 29 and Tuesday, October 30, 2007
Ottawa Marriott Hotel, Ottawa, ON**

Monday, October 29, 2007

This Preconference session will provide opportunities for you to have greater input on the future role of STAN and help to guide the organization as we move forward. The meeting will be held at the Ottawa Marriott Hotel. Special conference rates are available at the hotel.

10:30 – 2:00 (Includes lunch) – STAN Business Meeting

- ... Review of the year, STAN incorporation
- ... STAN advocacy campaign and strategic planning

2:00 – 4:30 – Workshop and Small Group Discussions

- ... Examination of policy, practice, measurement of Science and Technology in other countries
- ... Review of Canadian organizations already implementing S&T policy effectively
- ... Role of STAN in driving Science and Technology onto the national agenda

Tuesday, October 30, 2007

The theme of the conference is ““Prosperity through Knowledge: The Silent Revolution”. Guest speakers include Mark Romoff, Sara Diamond, and leaders of International and Canadian Science and Technology organizations.

For more information about the conference, registration and accommodation, please visit the Science and Technology Awareness Network (STAN) website at: <http://www.scienceandtechnologynetwork.ca> or contact Sheila Rhodes (see below) (info@scienceandtechnologynetwork.ca). Secure online registration is now available at: https://www.scienceandtechnologynetwork.ca/main/conference_registration.php

Please distribute this notice to others you think would be interested in the conference. Student rates are available.

Sheila Rhodes, STAN Coordinator
sheila.rhodes@sympatico.ca
sheila.rhodes@uoit.ca
Tel: 905-542-1656
Cell: 416-560-6237

**Canadian Engineering Memorial Foundation
Fondation commémorative du génie canadien
has announced the 2008
Scholarships for Women in Engineering
Bourses d'études 2008 à la intention des femmes en génie**

Go to www.cemf.ca or www.fcgc.ca for more information on these 16 scholarships.

Note

All applications must be postmarked no later than 2008 01 18

Toutes les demandes doivent être expédiées à la FCGC au plus tard 2008 01 18, le cachet de la poste faisant foi

Agricultural Film 2008

18-20 February 2008, Fira Palace Hotel, Barcelona, Spain

Speakers are being recruited for a new international conference on Agricultural Film. There will be an opening reception on the first evening and registration, followed by 2 days of expert presentations. The conference language is English.

Does your workplace have a particular expert in agricultural film uses, markets or technology, or could you recommend an expert in this field as a possible speaker? Can you recommend any journals that carry articles on agricultural and horticultural films (all languages)?

If you would like to offer a paper, please send details as soon as possible. Further details can be found on the web site at: <http://www.amiplastics.com/ami/AMIConference.asp?EventID=114>

Possible topics include:

1. Trends in agricultural films – technology and markets
2. Property requirements (such as impermeability, anti-drip, high tear strength or biodegradability), applications and case studies (e.g., mulch film, tunnel film, greenhouse film, silage film, fumigation film)
3. Materials and additives
4. Manufacturing
5. Regulations, testing, environmental considerations, etc.

If you are interested in this event, contact:

Dr Sally Humphreys, Business Development Manager

Applied Market Information Ltd, 45-47 Stokes Croft, Bristol, BS1 3QP, UK

Tel: +44 (0) 117 924 9442 (switchboard) Tel: +44(0) 1743 873955 (direct line) Fax: +44 (0) 117 311 1534

Mobile: 0795 806 1159, Email: sh@amiplastics.com, Web site: www.amiplastics.com

2007 FARM COMPUTER GUIDE

Internet Directory by the Western Producer

Canada's largest farm newspaper, *the Western Producer*, will once again be publishing "THE FARM COMPUTER GUIDE/Internet Directory." in the fall of 2007.

This special interest glossy magazine will be inserted into the Western Producer and delivered to over 70,000 Western Canadian farmers, ranchers and ag businesses with residual distribution in Eastern Canada and the United States. This year's issue will once again be the only publication in Canada devoted exclusively to being the "**agricultural only**" source of information on owning and operating computers, related agriculture software and internet use on the farm.

Once again an exciting and very useful feature to the FARM COMPUTER GUIDE will be a very extensive "**Directory of Agricultural Websites.**" In last year's issue, this directory was 21 pages in length. If you would like any further information on this opportunity or a free copy of last year's FARM COMPUTER GUIDE please reply to:

Dennis Eklund

The Western Producer - Specialty Advertising

Email: dennis eklund@producer.com

Phone Toll Free: 1-888-820-8555

NOTICES TO MEMBERS

From time to time various agencies request that the CSBE/SCGAB office supply the list of members for the distribution of certain products. Your Secretary, James Townsend, is reluctant to do so since we all have too much spam as it is. My approach will be to list the agencies, and their products, in each Perspectives Newsletter so that members can make personal contact with the agencies if they so wish.

- ... **UNESCO-EOLSS Reference Encyclopedia.** This virtual dynamic library has been posted to the web at the onset of the 60th Anniversary of the UN and UNESCO and to lead off the Decade of Education for Sustainable Development. Visit at: www.eolss.net
- ... **Urban Agriculture News.** This publication is updated daily from the world's news resources for relevant articles and can be viewed at www.urbanagriculture-news.com.
- ... **The Second International Virtual Agricultural Exhibition.** You can visit the exhibition by signing on to the internet at: www.agriahead.com. Have a nice tour!

Notice for the latest CIGR Newsletter

You can view the latest CIGR Newsletter at: www.cigr.org/newslett/nl77.htm

FreeFind Search Engine on CSBE/SCGAB Website

Readers are reminded that there is a search engine on the website (www.bioeng.ca) for their use. The FreeFind search engine is very efficient and is there for your use. Just look to the right hand side of your screen while on the website homepage. **Good hunting!**



For members of the Canadian Society for Bioengineering/La Société Canadienne de Génie Agroalimentaire et de Bioingénierie

Today's Urban Agriculture News is available as a live feed on our website. A review of the day's news is posted hourly on our site. Access to this news service is 100% free. We hope that you will visit our new site at: <http://www.urbanagriculture-news.com>.

See latest newsletter at www.urbanagriculture-news.com/urbanagriculture/archive/2007.09.html

Notice about Journal Publication

An ad hoc committee of CSBE/SCGAB Council has been set up to investigate the future operation of the Journal. The committee would like to receive comments and suggestions about the Journal, i.e., format, need, quality, material included, accessibility, etc., etc.

Send your comments to Past-President Shahab Sokhansanj at shahabs@chml.ubc.ca or Secretary Townsend.

Coming Events

... **2007**

- ... **International Symposium on Air Quality and Waste Management for Agriculture**, 2007 09 15-19, Broomfield, Colorado. More information at www.asabe.org/resource/asabevents.html.
- ... **CSBE/SCGAB-ASABE North Central Intersectional Conference**, 2007 10 12-13, Fargo ND. More information from Dean Steele at 701-231-7268 or dean.steele@ndsu.edu.
- ... **The 50th Anniversary Meeting of the Korean Society of Agricultural Engineers**, 2007 10 18-22, Seoul, Korea. Contact In-Hoe Lee for more information at iblee@snu.ac.kr.
- ... **11th National Symposium on Individual and Small Community Sewage Systems**, 2007 10 20-24, Warwick RI. More information at www.asabe.org/resource/asabevents.html.
- ... **International Agricultural Engineering Conference**, 2007 12 03-06, Bangkok, Thailand. For abstract submission contact aaae@ait.ac.th immediately, (or emann@ait.ac.th).

... **2008**

- ... **AgEng2008 International Conference on Agricultural Engineering & Industry Exhibition**, 2008 06 23-25, Hersonissos, Crete, Greece. More information at www.ageng2008.com/index.html.
- ... **ASABE Annual International Meeting**, 2008 06 29 to 2008 07 02, Providence, Rhode Island, USA. More information at www.asabe.org.
- ... **CSBE/SCGAB AGM & Technical Conference**, 2008 07 13-17, Vancouver BC. More details to follow at www.bioeng.ca.
- ... **CIGR International Conference of Agricultural Engineering**, 2008 09 01-07, Rio 2008, Brazil. More information at www.acquacon.com.br/cigr_rio2008.
- ... **10th International Conference on Mechanization and Energy in Agriculture**, 2008 10 14-17, Antalya, Turkey. More information at: www.akdeniz.edu.tr/ageng2008

... **2009**

- ... **ASABE Annual International Meeting**, 2009 06 28—2009 07 01, Reno, Nevada. More information at www.asabe.org.

... **2010**

- ... **The XVII CIGR World Congress 2010**, 2010 06 16-23, Quebec City, QC Canada. More information at www.bioeng.ca/Events/CIGR/index.htm.

... **2014**

- ... **The XVIII CIGR World Congress 2014**, 2014 09 ??, The Beijing International Convention Center, Beijing China. More information to follow.

Send in your news for Perspectives!

The next deadline for news from members will be the **2007 11 30**. Nevertheless you can send them as soon as ready to your regional directors:

Atlantic bonnie.robertson@gnb.ca
 Québec stephane.godbout@irda.qc.ca
 Ontario jake.debruyne@ontario.ca
 British Columbia aklau@chml.ubc.ca
 Looking to hearing from you.

Manitoba danny_mann@umanitoba.ca
 Saskatchewan venkatesh.medala@usask.ca
 Alberta len.ring@gov.ab.ca
 Outside Canada: lacasseb@agr.gc.ca

CSBE/SCGAB Council 2007-2008

<p>President: Robert Kok McGill University, 21111 Lakeshore Road Ste-Anne-de-Bellevue QC H9X 3V9 tel: 514-398-7775; fax: 514-398-8387 eml: robert.kok@mcgill.ca</p>	<p>Vice-President (Regional): Benoît Lacasse A et A Canada, 430, boul. Gouin St-Jean-sur-Richelieu QC J3B 3E6 tel: 450-515-2105; fax: 450-346-7740 Eml: lacasseb@agr.gc.ca</p>
<p>Past-President: Shahab Sokhansanj 350 East 20th Street North Vancouver BC V7L 3A7 tel: 604-904-4272; fax: 604-822-6003 eml: shahabs@chml.ubc.ca</p>	<p>Vice-President (Technical): Stefan Cenkowski Biosystems Engineering, University of Manitoba Winnipeg MB R3T 5V6 tel: 204-474-6293; fax: 204-474-7512 eml: stefan_cenkowski@umanitoba.ca</p>
<p>President-elect: Stéphane Lemay Centre de Recherche, 2700 rue Einstein Québec QC G1P 3W8 tel: 418-646-1073; fax: 418-644-6855 eml: stephane.lemay@irda.qc.ca</p>	<p>Vice-President (Industry): Dennis Hodgkinson DGH Engineering, 12 Aviation Blvd St Andrew MB R1A 3N5 tel: 204-334-8846; fax: 204-334-6965 eml: dhodgkinson@dghengineering.com</p>
<p>Secretary: James S. Townsend 446 Kingston Crescent, Winnipeg MB R2M 0T9 tel: 204-233-1881; fax: 204-231-8282 eml: bioeng@shaw.ca</p>	<p>Treasurer: John Morgan 979 Shavington Street, North Vancouver BC V7L 1K6 tel: 604-987-5142; fax: 604-987-5143 eml: john_morgan@telus.net</p>
<p>Vice-President (Membership): Grant Clark Bioresource Eng'g, McGill U, 21111 Lakeshore Road Ste-Anne-de-Bellevue QC H9X 3V9 tel: 780-492-0107; fax: 780-492-4265 eml: grant.clark@mcgill.ca</p>	<p>Webmaster: Wayne E. Coates Office of Arid Land Studies, University of Arizona, PO Box 506, Sonoita AZ 85637 tel: 520-455-5050; fax: 520-455-5533 eml: wcoates@u.arizona.edu</p>
<p>Editor and Regional Directors</p>	
<p>Journal Editor: (Ranjan) R. Sri Ranjan tel: 204-474-9344; fax: 204-474-7512 eml: ranjan@cc.umanitoba.ca</p>	<p>Manitoba: Daniel D. Mann tel: 204-474-7149; fax: 204-474-7512 eml: danny_mann@umanitoba.ca</p>
<p>Atlantic: Bonnie J. Robertson tel: 506-453-3018; fax: 506-453-7406 eml: bonnie.robertson@gnb.ca</p>	<p>Saskatchewan: Venkatesh Meda tel: 306-966-5309; fax: 306-966-5334 eml: venkatesh.med@usask.ca</p>
<p>Québec: Stéphane Godbout tel: 418-646-1075; fax: 418-286-3597 eml: stephane.godbout@irda.qc.ca</p>	<p>Alberta: Len Ring tel: 403-381-5176; fax: 403-382-4406 eml: len.ring@gov.ab.ca</p>
<p>Ontario: Jake DeBruyn tel: 519-826-4584; fax: 519-826-3259 eml: jake.debruyn@ontario.ca</p>	<p>British Columbia: Anthony K. Lau tel: 604-822-3476; fax: 604-822-6003 eml: aklau@chml.ubc.ca</p>

Volume 29, No. 4 2007
 CSBE-SCGAB
 PO BOX 23101 RPO MCGILLIVRAY
 WINNIPEG MB R3T 5S3
 CANADA
 Phone: 204-233-1881; Fax: 204-231-8282
 Email: bioeng@shaw.ca Web: www.bioeng.ca