



**The Science Teachers' Association of Manitoba
(STAM) presents:**

Science SAG 2009

Friday, October 23, 2009

Location: St. John's-Ravenscourt School, 400 South Drive, Winnipeg

Program

IMPORTANT: View new sessions on the STAM website. For complete session descriptions, details on new sessions, session cancellations, and full sessions visit the STAM website at: www.stam.mb.ca

Off-site Sessions

Times vary

Full Day Sessions

Times vary

Morning Sessions

9:00-10:15 9:00-11:30 10:45-12:00

Lunch

11:30-1:00

Afternoon Sessions

1:00-2:15 1:00-3:30 2:30-3:45

**Manitoba Association of Physics Teachers
(MAPT)**

Annual General Meeting 8-9 a.m.

MAPT invites all physics teachers to
attend the annual general meeting.

Breakfast provided.

Publishers' Display in the gym

Nutrition Break in the gym

**Special Pre-Conference Session
Thursday, October 22nd, 2009
9:00 – 3:30**

**Location: Inner-City Science Centre
Niji Mahkwa School, 450 Flora Avenue**

SC01 Manipulation of Genetic Materials

**Dr. Francis Amara, Associate Professor and
Educational Specialist, Faculty of Medicine**

Level: 9-12

Upon completion of this workshop, participants will be
able to:

1. Describe the structure and function of DNA
2. Describe the nature and type of DNA sequence
3. Describe what restriction enzymes are
4. Conduct hands-on activity on how to digest DNA
5. Carry out hands-on activity on how to separate DNA by gel electrophoresis

Come out and explore the Biomedical Youth Program's
Inner-City Science Centre. This centre is equipped with the
latest scientific and research instruments, and core facilities
to provide and enhance biological, medical and human
health science activities, and to meet any curriculum
demands from kindergarten to Grade 12 and beyond.

Cost: \$25 for STAM members
\$40 for non-STAM members

**Participants must pre-register - On-site registration
NOT available**

LUNCH

Join Us For Lunch!

11:30-1:00

Enjoy a fabulous catered lunch. Tickets must be purchased in advance.

SC02-SC12

Off-Site Sessions (Check times and locations)

*Times and locations vary

**Catered lunch NOT available

***Participants must pre-register for off-site sessions
(Registration NOT available at off-site sessions)

SC02 Sustainability Challenge (10:00 - 3:30)

Location: Meet your guide at Oak Hammock Marsh Interpretive Centre at 10:00 a.m. Cafeteria available. Dress for the weather.

Level: General

Participate in this exciting challenge covering concepts of sustainability in a fun and interactive way. Test your skills at various stations. Note: 10 am start at the Oak Hammock Marsh Interpretive Centre.

SC03 Project WET Workshop (10:00 - 3:30)

Location: Meet your guide at Oak Hammock Marsh Interpretive Centre at 10:00 a.m. Cafeteria available.

Level: General

Project WET (Wetland Education for Teachers) is an activity guide featuring over 90 experiments, games and activities for K-12. Notes: This course begins at 10am at the Oak Hammock Marsh Interpretive Centre. \$25 fee for guide to be collected by presenter.

SC04 The Changing Face of Zoo Education (9:30 – 11:30)

Scott Gray and Christina Jones, Assiniboine Park Zoo/Zoological Society of Manitoba - zooeducation@zoosociety.com

Location: Assiniboine Park Zoo Classroom Outpost

Level: General

The zoo is a living classroom that engages you in science, social studies, phys. ed., language, art and geography. Our year-round programs provide a variety of ways to enhance learning in a unique environment. Let your learning come alive!

SC05 Sparking Kids' Creative Learning (9:30-11:30)

Sara Hancheruk and Corinne Gueret, Manitoba Children's Museum - shancheruk@childrensmuseum.com

Location: Meet at the Manitoba Children's Museum (9:30-11:30)

Level: K-4

The Manitoba Children's Museum is a place for children of all ages to play, laugh, learn, and grow. Join us on a tour of our galleries and sample our curriculum based school programs as we reveal how much science there is to experience at the MCM.

Repeated Session

SC06 Sparking Kids' Creative Learning (1:30-3:30)

Sara Hancheruk and Corinne Gueret, Manitoba Children's Museum - shancheruk@childrensmuseum.com

Location: Meet at the Manitoba Children's Museum (1:30-3:30)

Level: K-4

The Manitoba Children's Museum is a place for children of all ages to play, laugh, learn, and grow. Join us on a tour of our galleries and sample our curriculum based school programs as we reveal how much science there is to experience at the MCM.

Repeated Session

SC07 Exploring the Sea with IMAX 3D (9:00 – 12:00)

Brendene Barkley, River East Transcona School Division

Location: IMAX Theatre, Third Floor Portage Place (9:00 – 12:00)

Level: K-7

Grade 2 Growth and Changes in Animals, Grade 4 Habitats, Grade 6 Diversity of Living Things, Grade 7 Interactions of Ecosystems – includes hands-on activities

SC08 Life's Great Outdoors - Free School Programs in Your Favourite Park (1:00-3:30)

Morgan Hallett, Lindsey Mitton and Madelyn Robinson, Manitoba Conservation – Manitoba Provincial Parks - Morgan.Hallett@gov.mb.ca

Location: Meet at Birds Hill Provincial Park Interpretive Workshop (1:00 – 3:30)

Level: K-8

Explore the opportunities for enrichment within Manitoba's Provincial Parks across the province. Take a hike in the woods, play nature games, get ideas, and be inspired by nature - all with an interpreter to be your personal guide. This offsite session will be a combination of activities, both indoors and out. Coffee and Tea will be provided (please help the environment and bring your own mug). Parks that will be hi-lighted include: Birds Hill, Spruce Woods and Whiteshell. Other parks that will be mentioned include: Grand Beach, Hecla/ Grindstone, Lockport, St. Malo, St. Norbert, Turtle Mountain, and Paint Lake. Please come dressed appropriately for the weather.

SC09 The Relationship Between the Human Body and Health: Test Your Lungs (1:00 – 3:30)

Dr. Francis Amara, Associate Professor and Educational Specialist, Faculty of Medicine

Location: Inner-City Science Centre, Niji Mahkwa School, 450 Flora Avenue

Level: 4-6

After this session, the participants will be able to:

1. Describe the structure and function of the lungs
2. Describe normal and abnormal lungs
3. Describe the principles involve in spirometry
4. Relate lung capacity to diseased lungs
5. Interpret spirometric data

SC10 Creek Stewardship (9:30 – 12:00)

Amber Wiegand, Assiniboine Watershed Network

awiegand@winnipeg.ca

Location: Grants Old Mill, 2777 Portage. Dress for the weather.

Level: 5-12

SC11 Differential Staining and Digital Imaging of Human Cancer Cells (9:00 – 11:30)

Dr. Francis Amara, Associate Professor and Educational Specialist, Faculty of Medicine

Location: Inner-City Science Centre, Niji Mahkwa School, 450 Flora Avenue

Level: 7-9

At the end of this session, participants will be able to:

1. Describe the different types of cell stains
2. Identify the specific staining activity
3. Process cells for staining
4. Mount cells
5. Capture and analyze cellular images by digital microscopy

SC12 GPS, GIS and Geocaching (10:00 – 3:30)

Location: Meet your guide at Oak Hammock Marsh Interpretive Centre at 10:00 a.m. Cafeteria available. Dress for the weather.

Level: 9-12

Join this interactive presentation with a session that integrates the basics of GPS, how and why GIS is used, as well as the sometimes addictive world wide scavenger hunt called Geocaching!

SC13-SC22

9:00-11:30

SC13 Overlapping Interests: When Art and Science Meet

Barbara McMillan and David McMillan, University of Manitoba

Level: General

David McMillan's Winnipeg and Chernobyl photographs will be shown and, although created for very different purposes, will be discussed as examples of how cameras in the hands of teachers and students can be used to enhance understanding in/of science. **Please bring a digital camera.**

SC14 Robotics and Curriculum

Melanie Meade, Spectrum Educational - mmeade@spectrumed.com

Level: General

Hands on workshop with Lego NXT, WeDo, Tetrax want to know how to bring together, math, science and language arts then join us while we explore and share knowledge.

Repeated Session

SC15 The Story of Wind

Don Metz, University of Winnipeg, and Kim Rapko, Lord Selkirk School Division

d.metz@uwinnipeg.ca

Level: K-8

In this workshop for grade six teachers we will investigate the development of renewable energies and present activities that teacher can do in the classroom to support instruction. Teachers will have the opportunity to participate in the design process and construction of a KidWind model wind generator. Numerous outcomes from the grade six electricity unit and cluster 0 will be met with these hands-on, student centered activities.

SC16 Grade 8 Lake Winnipeg Water Stewardship Unit

Cheryl Boguski and Vera Tardiff, Charleswood Junior High

Level: 5-8

An introduction to the new supplemental unit from MECY that parallels the existing Grade 8 Water System Cluster but with a Lake Winnipeg Water Stewardship emphasis. Sample teaching strategies, experiments and activities will be covered in the session.

NEW SESSION SC100 Space Academy for Educators

Maria Nickel, Woodlands Elementary - marianickel@shaw.ca

Level: 5-8

Overview of the Honeywell Space Academy for Educators scholarship program. On to Mars This workshop contains an activity on designing the perfect Mars Lander as well as the activity Toys in Space.

Repeated Session

SC17 Build a Competitive Mini Sumo Robot

Herb Reynolds, Manitoba Robot Games - herb@mbrobotgames.ca

Level: 6-12

Participants will build a Mini Sumo robot for competition in the Manitoba Robot Games. \$25 fee for robot kit will be collected by presenter.

SC18 The Woodland Caribou of Eastern Manitoba - Using Science and Education to Help a Threatened Species in the Boreal Forest

Bob Austman and Brian Kotak, Manitoba Model Forest - baustman@granite.mb.ca

Level: 9-12

In this session, participants will be involved in an overview of Woodland Caribou biology, and gain insight into science used in their management. Equipment used in the conservation work will be displayed. In the second half of the session, teachers will receive a curriculum package applicable to Science in the Grade 7, Senior 2, or Senior 4 Biology (Human Impact) curricula, as well as a DVD on Woodland Caribou conservation. The curriculum package includes handouts, games, and a variety of other activities designed to appeal to all ability levels.

Repeated Session

SC19 A Demo A Day Keeps the Students at Bay

Matthew Wiebe, Lord Selkirk School Division

Level: 10-12

A session geared to Chemistry 30S and 40S teachers. Newer teachers will benefit from the acquisition of a wide variety of teacher-led demonstrations that enhance student comprehension. All teachers are encouraged to bring any demonstrations they use in their day-to-day teaching to share with the group.

SC20 An Introduction to Medical Physics

Dr. Daniel Rickey, CancerCare Manitoba - daniel.rickey@cancercare.mb.ca

Level: 9-12

Discussed in this presentation are the roles medical physics plays in radiation therapy and diagnostic imaging. Emphasis is placed on an overview of imaging and therapy with the aim of providing some advice on course content.

SC21 Science & Robotics

Robert Clarke, Intelitek - rclarke@intelitek.com

Level: 9-12

Using the VEX Robot as a Science LAB Activity with a Comprehensive, Multimedia Curriculum and Standards Based Assessment. The robot is an engaging hands-on experience as an application of a science, technology, engineering & math.

Repeated Session

SC22 Telescope Make and Take

Dan Wright and Jen Piasecki, Fort Richmond Collegiate

Level: 9-12

Come and make your own telescope to use on your own and with your students! Materials will be provided.

SC23-SC29

9:00-10:15

SC23 Real Science

Helaine Becker - helbeck@rogers.com

Level: General

Science is the “art of curiosity.” In this very creative workshop, designed to spark the spirit of scientific inquiry in young minds, you will find out how to present science as a way of looking at the world. Convey the idea that science is something that all students, of all ages can actively engage in, and you will create independent, critical thinkers while building true scientific literacy. In this hands on 50 minute workshop, you’ll do experiments drawn from Ms. Becker’s books that will show you how you can be a scientist today, right here and now, without a science degree or any special knowledge. All you’ll need is a sense of wonder and some scientific principles and language. Take-aways from this workshop include worksheets and a copy of *The Insecto-files*, *Are You Psychic?* or *Science on the Loose*, all of which will be used during the workshop.

Repeated Session

SC24 Climate Matters: The Scoop on Climate Change

Curt Hull, Climate Change Connection - curt@climatechangeconnection.org

Level: General

Climate change presentation discussing (1) how we know the climate is changing? (2) why the climate is changing? (3) impacts of warmer temperatures; and (4) what can we do about it? Discuss free resources and events from Climate Change Connection

Repeated Session

NEW SESSION SC101 Periscope and Anemometer Design Process

Norma Michaud, Services Éducatifs NM Educational Services - educnm@shaw.ca

Level: K-8

Come and receive a hands-on experience while designing your own periscope and anemometer. This session follows the Grades 4 & 5 curriculum guides (Light and Weather) but all are welcome! All materials and activity sheets are provided.

SC25 Slow the Flow and other middle years programs at FortWhyte Alive

Katrina Froese, FortWhyte Alive - kfroese@fortwhyte.org

Level: 5-8

'Slow the Flow' is a FortWhyte outreach program run in conjunction with the City of Winnipeg. This in class resource includes lesson plans on water conservation. Plus, learn of the other program opportunities at FortWhyte for your middle years class

SC26 Using Computer Animations to Model Particle Behaviour in Chemistry

Harvey Peltz, River East Transcona School Division, and Paul Dyrland, St. James School Division

Level: 9-12

Animations of particles are an excellent way to model and explain behaviours in Chemistry. We will take a tour of many animations on the net and some favourites on files. Bring along a USB key if you wish to make a copy.

SC27 Genes in a Bottle

Tumay Basar and Kelty Findlay, Bio-Rad Laboratories - tumay_basar@bio-rad.com

Level: 9-12

In this hands-on workshop you will extract the DNA from your own cheek cells, then watch it precipitate from solution as floating white strands. Collect and transfer the DNA strands to create a fashionable necklace.

SC28 Engineers Without Borders Workshop: Water for the World

Kelsey Hargreaves, Engineers Without Borders, University of Manitoba - kelseyhargreaves@yahoo.ca

Level: 7-12

1) Presentation: local/global water issues

2) Activity: Students are separated into countries (groups) which are provided with differing amounts of information and money. The goal is to build a water filter with materials available for purchase.

SC29 PALCIK Lab Safety

James Palcik, PALCIK Educational Products Ltd. – jamespalcikeducational.com

Level: 9-12

This is a must-attend session designed to be informative and interactive. We will examine lab safety and discuss chemical storage, disposal, usage, and inventory management. Refresh yourself with solutions to everyday situations in your school.

SC30-SC38

10:45-12:00

SC30 It's Magic! Astounding Tricks that Teach Math and Science

Helaine Becker – helbeck@rogers.com

Level: General

Pick a card, any card...and hook your students with these jaw-dropping, eye-popping tricks all based on scientific and mathematical principles. The tricks are easy to perform using simple materials. By the end of this hands-on workshop, you'll have mastered several tricks that teach about probability, number patterns, geometry, air pressure, magnetism, electricity, inertia, light or sound. Takeaway worksheets will be based on *Shazam!*, scheduled for publication in 2010.

Repeated Session

SC31 Climate Matters: The Scoop on Climate Change

Curt Hull, Climate Change Connection - curt@climatechangeconnection.org

Level: General

Climate change presentation discussing (1) how we know the climate is changing? (2) why the climate is changing? (3) impacts of warmer temperatures; and (4) what can we do about it? Discuss free resources and events from Climate Change Connection

Repeated Session

SC32 EdGEO: Workshops for Grades 4 and 7

Jeff Young, Department of Geological Sciences, University of Manitoba

Level: K-8

EdGEO is a national workshop program of Earth Science education developed to meet the curriculum needs of teachers. Example lesson plans will be used to explain the workshops.

Repeated Session

SC33 Parks Canada's Science Educational Resources

Lise Boiteau, Parks Canada - lise.boiteau@pc.gc.ca

Level: 5-8

Explore the wide range of education resources available to MB Science teachers on our website. Along with an excellent understanding of these web resources, take away FREE maps, DVD's, posters and pamphlets for use in the classroom.

SC34 Programme for international student assessment (PISA) – Results for Manitoba in Science

Ken Clark, Manitoba Education, Citizenship and Youth

Level: 9-12

In December 2007 results from a major international study of science context and learning for 15-year-olds were released. A summary of these results will be presented. (Note - similar to presentation given at the MERN Forum, Feb. 6, 2009)

SC35 Chemistry: Matter and Change 2008 ~ An Overview of Resources

Sid Greenstone, Steinbach Regional Secondary School/McGraw Hill Ryerson

Level: 9-12

This session will introduce the 2008 version of Glencoe's Chemistry: Matter and Energy along with the resources that available to the classroom teacher. A correlation of curriculum outcomes and textbook references will be provided to attendees.

SC36 Physics Teachers "Bear Pit" Session

Brian Dentry, River East Transcona School Division

Level: 9-12

A chance for physics teachers to gather and discuss some of the current/ controversial issues in teaching high school physics.

SC37 Manitoba Envirothon - Environmental Education in Action!

Lisa Tack, Manitoba Forestry Association - envirocoordinator@mts.net

Level: 9-12

Often called the "Environmental Olympics", the Manitoba Envirothon combines teamwork, training, and hands-on environmental learning. Test your skills and find out what students will experience in this 'mini' version of Envirothon.

SC38 pGLO Bacterial Transformation Kit

Tumay Basar and Kelty Findlay, Bio-Rad Laboratories - tumay_basar@bio-rad.com

Level: 9-12

In this hands-on workshop, you will create your own genetically modified organisms and designer proteins and explore the mechanisms of gene expression and genetic selection. You will transform bacteria with a bioluminescent jellyfish gene.

SC39-SC43

1:00-3:30

SC39 Robotics and Curriculum

Melanie Meade, Spectrum Educational - mmeade@spectrumed.com

Level: General

Hands on workshop with Lego NXT, WeDo, Tetrax want to know how to bring together, math, science and language arts then join us while we explore and share knowledge.

Repeated Session

SC40 Flight! - A Historical Scientific Approach

Christopher Neufeldt and Barbara McMillan, University of Manitoba

ckneufeldt@shaw.ca

Level: 5-8

This workshop discusses the science of flight utilizing a historical scientific approach. Incorporation of drama and literature with scientific exploration to address outcomes in the grade six Manitoba science curriculum will be emphasized.

NEW Session SC102 Space Academy for Educators

Maria Nickel, Woodlands Elementary - marianickel@shaw.ca

Level: 5-8

Overview of the Honeywell Space Academy for Educators scholarship program. On to Mars This workshop contains an activity on designing the perfect Mars Lander as well as the activity Toys in Space.

Repeated Session

SC41 The Woodland Caribou of Eastern Manitoba - Using Science and Education to Help a Threatened Species in the Boreal Forest

Bob Austman and Brian Kotak, Manitoba Model Forest - baustman@granite.mb.ca

Level: 9-12

In this session, participants will be involved in an overview of Woodland Caribou biology, and gain insight into science used in their management. Equipment used in the conservation work will be displayed. In the second half of the session, teachers will receive a curriculum package applicable to Science in the Grade 7, Senior 2, or Senior 4 Biology (Human Impact) curricula, as well as a DVD on Woodland Caribou conservation. The curriculum package includes handouts, games, and a variety of other activities designed to appeal to all ability levels.

Repeated Session

SC42 Teaching The Particle Model of Electricity for Grade Nine

Don Metz, University of Winnipeg, and Cliff Dann, Dakota Collegiate

d.metz@uwinnipeg.ca

Level: 9-12

In this workshop for grade nine teachers we will develop the particle model of electricity as outlined in the grade nine electricity unit through an activity based approach. Starting with electrostatics, participants will build, with simple materials, the apparatus they need to investigate static electricity. The particle model of electricity will be extended to current electricity through an investigation with simple circuits.

SC43 Science & Robotics

Robert Clarke, Intelitek - rclarke@intelitek.com

Level: 9-12

Using the VEX Robot as a Science LAB Activity with a Comprehensive, Multimedia Curriculum and Standards Based Assessment. The robot is an engaging hands-on experience as an application of a science, technology, engineering & math.

Repeated Session

SC44-SC50

1:00-2:15

SC44 Testing Spaghetti Bridge Structures

Lindsay Gigian, Don Spangelo and Glenn Penner, Manitoba Hydro/ Association of Professional Engineers and Geoscientists of Manitoba (APEGM) - lgigian@hydro.mb.ca

Level: General

Building and breaking spaghetti bridges is a fun and interactive way to learn about forces, the design process and the strength and stability of different structures.

SC45 Real Science

Helaine Becker - helbeck@rogers.com

Level: General

Science is the “art of curiosity.” In this very creative workshop, designed to spark the spirit of scientific inquiry in young minds, you will find out how to present science as a way of looking at the world. Convey the idea that science is something that all students, of all ages can actively engage in, and you will create independent, critical thinkers while building true scientific literacy. In this hands on 50 minute workshop, you’ll do experiments drawn from Ms. Becker’s books that will show you how you can be a scientist today, right here and now, without a science degree or any special knowledge. All you’ll need is a sense of wonder and some scientific principles and language. Take-aways from this workshop include worksheets and a copy of *The Insecto-files*, *Are You Psychic?* or *Science on the Loose*, all of which will be used during the workshop.

Repeated Session

NEW SESSION SC103 Solid Dihydrogen Oxide Breakers

Marshall Carroll, Vincent Massey Collegiate - mcarroll@peminatrails.ca

Level: General

Ready for Speed Circles and Name Seven? Use icebreakers to introduce and review Science units. Sample new activities and share with others.

SC46 EdGEO: Workshops for Grades 4 and 7

Jeff Young, Department of Geological Sciences, University of Manitoba

Level: K-8

EdGEO is a national workshop program of Earth Science education developed to meet the curriculum needs of teachers. Example lesson plans will be used to explain the workshops.

Repeated Session

SC47 Education for Sustainable Development – Kindergarten to Grade 12

Anne MacDiarmid, Manitoba Education, Citizenship and Youth

Level: K-12

For all grades - a general ESD presentation including ESD posters and teachers guides/activities, ESD toolkit, ESD website, Eco-Globe recognition program, grant programs, and ESD Curriculum developers guide. **For K-4** - ESD centre activities and learning experiences, Kindergarten ESD toolkit template, Little Earth Charter DVD, and poster and activities, **For Middle Years and Senior Years** - poster and teacher guide, The Earth Charter, and responsible consumption.

SC48 Blood Groups Make and Take

Dave Shoemith and April Tremblay, Westwood Collegiate

Level: 9-12

Repeated Session

SC49 Physics Mystery Equipment

Heidi Werner, St. James Collegiate, and Cliff Dann, Dakota Collegiate

Level: 9-12

There are some strange, ancient, or puzzling pieces of physics equipment lurking in the back of our classroom cupboards all over the province! Come and be a part of unravelling the mystery - bring your own if you wish and feel free to swap!

SC50 Using Manipulatives in Chemistry to Simulate Grade 11 and 12 Chemistry Concepts

Gayle Peters, College Sturgeon Heights Collegiate, and Brian Hayward, St. James Collegiate

gpeters@sjsd.net

Level: 9-12

This session will focus on the use of manipulatives in chemistry - ideal for those without regular access to a science lab. Topics will include colligative properties, electrolysis, isotopes and hydrocarbons.

This is a repeat session from SAG 2007.

SC51-SC57

2:30-3:45

SC51 Severe Weather in Manitoba

Dale Marciski, Meteorological Service of Canada - Environment Canada - dale.marciski@ec.gc.ca

Level: General

Every year Manitoba has blizzards and freezing rain, severe thunderstorms and tornadoes. This session will deal with the what, where, when and why of severe weather that occurs in the province and some precautions to take if severe weather threatens.

SC52 Science Assessment in the St. James School Division

Jason Braun, St. James School Division

Level: General

An overview of assessment in the sciences in St. James School Division in response to the MECY document *Communicating Student Learning*.

SC53 Glencoe Biology 2009: An Overview of the Textbook and Its Resources

Sid Greenstone, Steinbach Regional Secondary School/McGraw Hill Ryerson

Level: 9-12

This session will introduce the 2008 version of Glencoe Biology along with the resources that available to the classroom teacher.

SC54 It's Magic! Astounding Tricks that Teach Math and Science

Helaine Becker – helbeck@rogers.com

Level: General

Pick a card, any card...and hook your students with these jaw-dropping, eye-popping tricks all based on scientific and mathematical principles. The tricks are easy to perform using simple materials. By the end of this hands-on workshop, you'll have mastered several tricks that teach about probability, number patterns, geometry, air pressure, magnetism, electricity, inertia, light or sound. Takeaway worksheets will be based on *Shazam!*, scheduled for publication in 2010.

Repeated Session

SC55 Blood Groups Make and Take

Dave Shoemith and April Tremblay, Westwood Collegiate

Level: 9-12

Repeated Session

SC56 Physics Teachers' Favourites

Rob Striemer, Shaftesbury High School

Level: 9-12

SC57 Safety and Storage in the Chemistry Lab

Catherine Sperling Dreyer, Boreal Northwest, Sargent-Welch, Wards Natural Science - catherine_dreyer@vwreducation.com

Level: 9-12

Refresh your safety consciousness & review basic lab safety & storage practices. Brief introduction to Scholar's Online Chemical Inventory Database. Each school will receive a WHMIS compliant colour-coded system for their chemical storage room.

IMPORTANT: View new sessions on the STAM website.

For complete session descriptions, details on new sessions, session cancellations, and full sessions, visit the STAM website at: www.stam.mb.ca

Enjoy a nutrition break while visiting the Publishers' Displays in the gym.

Reception

3:30-4:30 p.m.

Meet science colleagues from across the province.

Be on hand for door prize draws at 4:00!

REGISTRATION/MEMBERSHIP INFORMATION

*****PLEASE READ CAREFULLY*****

Note: Sessions are reserved at the time of registration. A limited number of spaces for sessions may be available for STAM members only at the registration desk (St. Johns'-Ravenscourt School only) on Friday, October 23rd, 2009. If you would like to attend a particular session, please register early. Changes to the program may be viewed on the STAM website: www.stam.mb.ca

STAM Membership 2009-2010*

| | |
|---------|---------|
| General | \$20.00 |
| Student | \$20.00 |

**Please note membership fees may be paid in conjunction with the conference fee.*

Membership includes:

- Access to online journals
- reduced SAG conference fees
- reduced science workshop/in-service fees

Special Pre-Conference Session - Thursday, October 22nd, 2009

Full Day Workshop Fees

| | |
|-----------------------|-------------------------------------|
| STAM Member | \$25.00 |
| Non-Member | \$40.00 |
| *Student (non-member) | \$20.00 (free with STAM membership) |

Friday, October 23rd, 2009

Full Day Conference Fees

| | |
|-----------------------|-------------------------------------|
| STAM Member | \$30.00 |
| Non-Member | \$49.00 |
| *Student (non-member) | \$25.00 (free with STAM membership) |

*NOTE: There is no charge for students who are STAM members (including those who pay for their membership at time of registration). Please show student card.

Half Day Conference Fees

| | |
|----------------------|---------|
| STAM Member | \$15.00 |
| Non-Member | \$34.00 |
| Student (non-member) | \$15.00 |

Lunch (not available at off-site sessions) \$14.00

(Lunch tickets will **NOT** be available for purchase at the conference. Tickets must be pre-ordered with your conference registration.)

NOTE: For regular members, your total cost for the conference, including a STAM membership, is \$50.00 (\$64.00 with lunch). For students who pay for a STAM membership, your total cost is \$20.00 (for the STAM membership – no charge for conference).

Late and On-Site Registrations

Registrations postmarked after **October 1st** or completed on-site will be assessed a \$10.00 fee. On-site registration is available for STAM members only. (Memberships may be purchased on-site.)

How to Register:

- ◆ Please complete the registration form and return with cheque or money order payable to the Science Teachers' Association of Manitoba (STAM).
- ◆ Include stamped, self-addressed envelope to receive confirmation of your registration through the mail. E-mail confirmations will be sent to all other participants. E-mail address must be included on registration form.
- ◆ Registration must be post-marked by October 1st to ensure receipt of a confirmation.
- ◆ Registration is not confirmed until payment is received. Late registrants will receive their session information at the conference registration desk.
- ◆ Late registrants will be charged a \$10.00 administration fee.
- ◆ Write only one cheque to cover the cost of the conference and the STAM membership fees (if required).
- ◆ Faxed registrations will not be accepted.
- ◆ *REMEMBER: Registration is on a first-come basis and some sessions fill up quickly. Please provide a second and third choice of session. Check the STAM website (www.stam.mb.ca) for updates on new sessions, full sessions and cancelled session.*

Mail registrations to:

STAM SAG Conference Coordinator
3 Davis Place
St. Andrews, MB R1A 2X1