

## Canadian Technical Asphalt Association

#### Items of interest

- Conference Details
- Program Summary
- Tentative Conference Program
- Abstracts (enclosed or as a link below)
- Guest Program

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#### Conference Links

◆ Conference Registration Form (online)

English French (to fax or mail)

- ◆ <u>Tentative Conference</u> <u>Program</u>
- ♦ <u>Abstracts</u> (English only)
- ◆ 2017 Call for Papers
  English French
- ◆ Proposed <u>CUPGA</u> Program
- ♦ Nomination Form 2017-18 - (requires login on Member's Page)
- ♦ <u>Hotel Reservation Link</u>
- ♦ <u>Transportation</u>
- Guest Program

## **CONFERENCE 2016**

The 61<sup>st</sup> Annual Conference and Annual General Meeting will be held in Banff, Alberta at the Fairmont Banff Springs Hotel.

The technical course, Paving for Smoothness presented by Todd Mansell, will be offered on Sunday morning and the CUPGA sessions will be on Sunday afternoon. The Contractors' Workshop, held on Tuesday afternoon, is a joint effort of the CUPGA Management Committee, the CTAA Board, and the Local Arrangements Committee.

This year's technical program as always promises to deliver interesting and varied content. Abstracts of all the papers to be presented are included with the mail out and for those receiving the Newsletter electronically click on the links found in the "Conference Links" box on this page.



Canada's women's hockey team takes the stage at Saturday's Block Party Olympian send-off party in downtown Banff. (2014) Courtesy of Craig Douce, Rocky Mountain Outlook / Calgary Herald

The Sunday Welcome Reception will be held at the hotel this year. As always there will be sufficient food and beverages to satisfy evening meal requirements.

The Annual General Meeting will be held on Monday morning and will be combined with breakfast. This joint effort has been instrumental in increasing attendance at the AGM.

The Local Arrangements Committee for Banff wish to advise that a jogging and fast walking morning session will be available for people who want to get some exercise and at the same time explore Banff.

See you in BANFF!

## Nominations

In accordance with By-Law No. 1, Section 5.02 the Nominating Committee, appointed by the Board of Directors following the 2015 Annual General Meeting, has proposed the following list of candidates for election to the Board of Directors for 2016-2017

2nd Vice-President:Réne DufresneBritish Columbia:Jason HerringPrairies & Territories:Rielle HaichertQuébec:Véronique SzaboRoxana Balba

The current Directors for Alberta, Ontario, and Atlantic regions are Roman Stefaniw, Michael Esenwa and Ryan Clark, respectively.

If you are able and willing to serve on the CTAA Board of Directors from November 2016 to November 2017 you can nominate yourself or any member in good standing who resides in the region open for election.

(cont'd. on page 2)

## New Conference App

At the spring meeting the Board agreed to pursue the use of a conference app to enhance the conference experience for delegates and members. Since then we have explored a vendor and built a 'mock-up' of the app and have now purchased a licence for the Banff conference.

The app will run on an Apple, Android or Blackberry smart phone, tablet or PC.



In the left screen the App logo is shown on the bottom right of the iPhone and appears as any other type of app or bookmark. Android or Blackberry smart phone, tablet or PC

The right screen shows the home page of the conference App.

# SO HOW WILL IT BE IMPLEMENTED FOR THE CONFERENCE?

- The Technical Program will be detailed via the App there is also the potential to link to the actual papers <u>and</u> presentations for each session.
- For the AGM for example, all the minutes and financials will be available on the app, and once a delegate has



access to the app they can see whatever is posted, as soon as it is available which will be in advance of the meetings.

- The App will show a separate agenda just for the accompanying persons to help them navigate their activities
- There is the ability to add specific sessions to your own conference calendar in the app making sure you can highlight sessions of particular interest
- Banner ads a new way to help recognize our platinum and partner level sponsors these sponsors have contributed at least \$10,000 to the conference and you will see their logos at various places in the App.
- A sponsor tab so all sponsors are recognized and can be easily recognized
- An attendee tab so once you are registered your colleagues can communicate with you and you can communicate with your colleagues (email or instant messaging through the app)
- Your own profile once you are registered, add your photo to your profile and a little about yourself
- A speaker tab see the bio for the speaker right on the app
- Ability for the Association to send broadcast messages that let everyone know if something has changed (i.e. room change or time change) we can also update the schedule to reflect the change so everyone has up-to-date information
- Ability to do our surveys right on the app so our conference survey would be via the app as could the CUPGA survey
- Ability for delegates to ask questions via the app feel a little nervous asking in front of your peers? This functionality can allow you to type the question in and have a moderator pose the question.

(cont'd on next page)

#### **Accompanying Guest Program 2016**

#### Saturday, November 12th 2016

16:00 – 18.30 Accompanying Guest Registration

#### Sunday, November 13th 2016

08:30 – 17:00 Accompanying Guest Registration

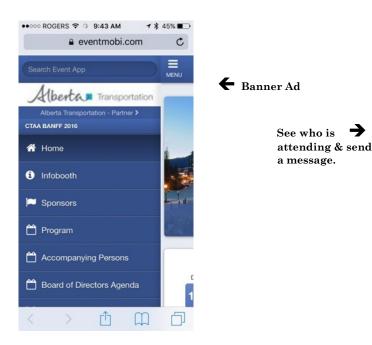
National Park"

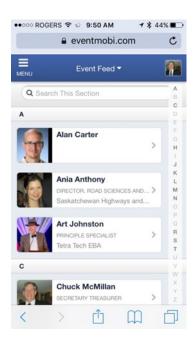
(cont'd on page 8)

# 2017 - Halifax, NS 2018 - Regina, SK 2019 - Montreal, QC 2020 - Kelowna, BC

## New Conference App (cont'd. from page 2)

Oh, and the other interesting thing, what we would implement isn't an app that has to be downloaded from the app store, it runs on the web through your browser, but looks like any other app.





## 2016 CTAA Course

## Planning and Paver Setup to Achieve Smoothness Bonuses

Sunday November 13, 2016 8:30 am to 12:00 pm

Workshop Fee of \$65.00 includes coffee break before session starts.

In this course, Todd Mansell will present proper paver setup and planning for achieving exceptional smoothness results. Todd brings practical experience working for a Ministry of Transportation, an engineering consulting firm, a paving contractor and two equipment manufacturers to relate smoothness specifications and results to equipment capability and recommended paver setup to achieve the desired smoothness results. The principles of how a paver and screed work and their proper setup for a smooth transverse joint will be covered, followed by the fundamentals of automatic grade and slope controls and setup to achieve smoothness on mainline paving. Factors that affect smoothness such as paver speed, operator technique, trucking and other aspects of construction practices and equipment will be covered. Rollers are the final piece of equipment that can affect smoothness. How the compaction process affects smoothness will also be covered. The session will wrap up with a high level overview of some different smoothness specifications from across Canada and the US with some things to consider when including, modifying or writing smoothness specifications. Some case studies with results will be presented and the session will conclude with a checklist for troubleshooting smoothness results.

This short course will be of interest to anyone interested in the practical aspects of pavement (Cont'd. on page 4)

## 2016 CTAA Course (Cont'd.)

smoothness from specification writers to paving crew members. Sharing of experiences and open questions throughout the short course is encouraged.

- Principles of how a paver and screed work
- Proper paver setup for taking off and achieving a smooth transverse joint every time
- Fundamentals of Automatic Grade & Slope controls
- Proper setup of automatic grade control systems to achieve desired results
- How paver speed, trucking, equipment selection and other logistics operations affect smoothness results
- How Compaction Affects Smoothness
- High level overview of some different smoothness specifications across North America
- Things to consider when including, modifying or writing smoothness specifications
- Field measured results a few case studies of specs and results
- Troubleshooting smoothness

# **TODD MANSELL -Training Consultant Caterpillar Global Paving Products**

Todd is a civil engineer who graduated from Lakehead University in Thunder Bay, Ontario and later obtained his MBA from Santa Clara University in California. Mr. Mansell is currently employed by Caterpillar Global Paving Products in Maple Grove, Minnesota, where he provides asphalt paving and compaction training for Caterpillar customers.

Over the past several years, Todd has been involved in the application and development of asphalt compaction and smoothness specifications and has worked closely with the Federal Highway Administration (FHWA) in the US with the development and advancement of intelligent compaction specifications and equipment. Work experience since 1987 includes asphalt laboratory testing and mix design, density testing, rolling patterns, field inspection and QA/QC testing and management. Past employers include the Ontario Ministry of Transportation, EBA Engineering Consultants, Grubbs, Hoskyn, Barton & Wyatt Inc., Granite Rock Company and Sakai America.

Todd is a member of the American Association of Asphalt Paving Technologists (AAPT), National Asphalt Pavement Association (NAPA), International Society for Asphalt Pavements (ISAP), and the Canadian Technical Asphalt Association (CTAA).

## Transportation to the Hotel

**Promotional Code: CTAA2016** 

The Local Arrangements Committee has negotiated a 25% discount for travel from the Calgary Airport to the Banff Springs Hotel - door-to-door service.

Book on-line at <u>Brewster Travel Canada</u> or by calling their toll-free line at 1-866-606-6700. In order to get the 25% discount on-line, enter the following under the promo code when you "check out": CTAA2016. (**Note it is case sensitive - use caps**) If you are calling in and speaking to one of the agents, you also need to identify yourself as being with CTAA2016 in order to get the 25% discount. The promo code is valid for shuttle travel from *November 1*, 2016 to *November 30*, 2016 but can be booked anytime..

There are several additional benefits of taking the shuttle to Banff. You avoid the National Park fee and you avoid parking costs - which can add significant costs. Still want to travel a bit when in the park - car rentals are available at the hotel.

## Nominations (cont'd. from page 1)

In accordance with By-Law No. 1, Section 5.04, nominations are made by petition to the Board of Directors (c/o the CTAA Office) endorsed by at least ten Association members in good standing and must be made within thirty days of the mailing / posting of this Newsletter.

Ballots will be sent out in August, by mail to those receiving the Newsletter electronically and with the August Newsletter to those receiving the Newsletter by mail.

## **Delinquent Members**

Members who have not paid their **2016** annual dues are reminded that all those persons whose dues are in arrears on **July 31**, **2016**, will have their names placed on the **delinquent** membership list. They will cease to be eligible for membership privileges such as receiving copies of the 2016 Conference Proceedings and having their names published in the 2016 Conference Proceedings and in the Conference Program Booklet in the app during the conference **Payment** can be made online at ctaa.ca.

Any member whose dues for 2015 and 2016 remain unpaid on July 31, 2016, will be considered suspended; they will have their name removed from the membership list and will cease to be a member. Suspended members will also cease to receive CTAA mailings and their names will not be printed in the lists of members in the 2016 Conference Proceedings nor the Program Booklet.

## **Conference Registration**

#### Registration

Conference registration form has been posted on the web site. Please follow the link in the email advising members of this Newsletter and process accordingly. This form is included with the Newsletter for those receiving same by mail. Please note that the conference registration form and payment are to be directed to the Victoria office of the Canadian Technical Asphalt Association. Once the form has been received and documented the pertinent information will be forwarded to the Local Arrangements Committee.

PLEASE note that there will be one registration fee for the conference, plus a fee for the course. There is no fee for CUPGA. The annual conference fee therefore includes the CUPGA session on Sunday afternoon, lunch on Sunday and the complete Association conference, Sunday night to Wednesday afternoon. There will be a small fee, as usual, for the course on Sunday morning.

Registration for the conference can be made by mail, fax or on-line. The direct link for making a hotel reservation is available on the web site.

#### Young Members' Reception

There will be a reception on Monday evening from 5 p.m. to 6 p.m. for members who are 30 years of age or younger. The Board hopes that those attending will see the benefits of one day becoming involved in the Association and Board of Directors' affairs. For those interested in attending there is a check box on the Conference Registration form.

#### Students

CTAA continues its strong commitment to student engagement by offering free membership with the Association and greatly reduced Conference fees. This approach is working with many students becoming Full Members upon graduation.

#### **Proceedings**

The cost of the Proceedings has been included in non-member's registration fees. Regular membership dues include the Proceedings. Remember that the registration fee for non-members includes membership in the Association for the year 2016. Hopefully new members signed up in this fashion will then decide to continue to enjoy the benefits of membership in the CTAA.

#### Membership Fees

Members, whose **2016** dues of \$185.00 plus applicable provincial/federal taxes are *paid up by the 21st of October 2016*, will be eligible for the member's discount conference fee rates. Sustaining members may appoint a delegate to attend the conference in the place of the person named on the membership. When registering, please be sure to notify Head Office that an alternate will be attending the conference in lieu of the named representative.

#### **Conference Fees**

The conference registration form provides an outline of the fees for this year's conference. Please note that registration fees will be *increased* by \$50 for those registering on line after October 21, 2016. For those registering by mail the envelope must be postmarked October 21, 2016 or earlier. Faxes must be received by October 21st.

#### **PAYMENTS**

CTAA is accepting secure online payments for conference registrations; membership renewals and membership applications. Scholarship donations can be made as part of a conference registration or membership renewal. Making your payment to CTAA by cheque is still accepted.

### PROPOSED 2016 PROGRAM SUMMARY

Saturday - November 12th, 2016		Tuesday - November 15th, 2016	
08:00 - 16:00 $12:00 - 13:00$ $16:00 - 18:30$ $19:00 - 22:30$	CTAA Board Breakfast / Meeting CTAA Board Lunch Registration Desk CTAA Board Dinner	07:00 - 08:00 07:00 - 09:00 07:30 - 17:00 08:30 - 10:00	Jogging and Fast Walk Delegate Breakfast Registration Desk Technical Sessions
Sunday - Novel 07:30 - 17:00 08:30 - 12:00 10:00 - 12:00 12:00 - 13:00 13:00 - 16:30 19:00 - 21:00	nber 13th, 2016  Registration Desk Technical Course CUPGA Management Meeting - TBD Delegate Lunch CUPGA Seminar CTAA Welcome Reception	10:00 - 10:30 $10:30 - 12:00$ $12:00 - 13:30$ $12:00 - 13:30$ $13:30 - 15:00$ $15:00 - 15:30$ $15:30 - 16:30$ $18:30 - 19:30$	Refreshment Break Technical Sessions Delegate Lunch Past Presidents' Lunch Contractor's Workshop Refreshment Break Contractor's Workshop cont'd. Pre Banquet Reception
Monday - November 14th, 2016		19:30 – 23:00 Hospitality Su	Banquet ite - Following Banquet
$\begin{array}{c} 07:00-09:00\\ 07:30-17:00\\ 08:30-10:00\\ 10:00-17:00\\ 10:00-12:00\\ 12:00-13:30\\ 13:30-15:00\\ 15:00-15:30\\ 15:30-17:00\\ 17:00-18:00\\ 21:00 \end{array}$	Delegate Breakfast Registration Desk Annual General Meeting CTAA Board Meeting Technical Sessions Delegate Lunch Technical Sessions Refreshment Break Technical Sessions CTAA Young Members Hospitality Suite	Wednesday – 07:00 – 09:00 07:30 – 13:00 08:30 – 09:30 09:30 – 10:00 10:00 – 11:00 11:30 – 12:00 12:00 – 13:30  13:30 – 15:00 15:00 – 15:30 15:30 – 17:00	November 16th, 2016  Delegate Breakfast Registration Desk Technical Sessions Refreshment Break Technical Session Awards Reception Awards Lunch — Delegates & Accompanying Guests Technical Sessions Refreshment Break Technical Sessions

## Tentative CUPGA Program

#### **CUPGA 2016 WORKSHOP PROGRAM**

Sunday, November 13, 2016

- 12:00 Lunch and Networking
- 13:00 Welcome & Introduction:

Rielle Haichert, CUPGA Chair

13:10 Cold in Place Recycling - The State of Practice Across Canada

Session Chair: Selena Lavorato, CUPGA 2nd Vice

Reports from Regional Directors (10 minutes each)

British Columbia – Jason Herring Alberta – Roman Stefaniw

Prairies Provinces & Territories – Rielle Haichert

Ontario - Michael Esenwa Quebec – René Dufresne Atlantic – Ryan Clark

- 14:15 Refreshments and Networking Break
- 14:30 <u>Updates to Asphalt Cement Specifications: MSC R</u> (20 minute presentation, 10 minute discussion each)

Session Chair - Frank Liu, CUPGA 3rd Vice

- ♦ MSCR Implementation into specification, Consultant Perspective Abdul Elkadri
- Experience with MSCR Implementation into specification, Agency Perspective Pamela Marks
- Binder Modification and MSCR specification, Supplier Perspective Brent Lambden
- 16:00 Closing Comments Nawaz Panhwer, Incoming CUPGA Chair
  - Introduction of next year's CUPGA Executive,
  - Collection of Survey Forms.

## TENTATIVE 2016 CTAA CONFERENCE PROGRAM (Abstracts included with mailing or can be found on the web site.)

#### Monday, Nov. 14th, 2016 Morning Session: 10:00

- 1. New Technology Uses Renewable Resources to Improve Asphalt Paving Preservation Sustainability Everett Crews
- Mechanistic Evaluation  $\mathbf{of}$ Warm Mix Additives on Strength and Durability of Typical Ontario Superpave Surface Mixtures
  - Sina Varamini, Susan L. Tighe
- Understanding Physical Hardening in Asphalt Materials and Pavements - a literary review Steve Manolis, Anton S. Kucharek, W. Keith MacInnis, Alexander (Sandy) Brown
- 4. Using Asphalt Binder Properties as an Indicator of Oxidative Aging and the proper timing of preventative maintenance for asphalt pavements

R. Michael Anderson, Phillip B. Blankenship, Gayle N. King

#### Monday, Nov. 14th, 2016 Afternoon Session: 13:30

- 5. Determination of Mixing and Compaction Temperatures of Modified Asphalt Cements and a Limited Investigation of the Effect on Superpave Volumetric Mix Design Properties Alexander (Sandy) Brown
- 6. An Evaluation of Asphalt **Binder Content** Bill Pine, Gerald Huber
- 7. A paving solution to minimize airport down time while providing resistance to surface deformation: Calgary Airport Simon Pianarosa, Curt Slawinsky,

Jean-Martin Croteau, Ted Harrison, A.G. (Art) Johnston, Florence Leroy-Mallol

8. Case Study on Six Year Performance of Pavement Constructed with Modified Binder Meeting Extended BBR and DENT Criteria

> Steve Manolis, Salman Bhutta, Vince Aurilio, Selena Lavorato, Garry Bates

A Novel Approach to Mitigating **Studded Tire Abrasion** 

Tonya Burritt, Bob Kluttz, Chris Lubbers

10. Chemical bonded asphalt for improved adhesion performance

> Geoffrey M. Rowe, Ajay Ranka, Tom Dziedziejko, Jerry Thayer, Doug Zuberer

#### Tuesday, Nov. 15th, 2016 Morning Session: 08:30

- 11. Top-down longitudinal cracking phenomenon detection with thermal imaging Martin Lavoie, Félix Doucet
- 12. It's not the Asphalt, it's YOUR Fault: Quality and Innovative Asphalt Paving at Petersburg, Alaska airport Amanda Gilliland, Robert Trousil
- 13. Impact of Bonus/Penalty Clauses on Future Pavement Performance British Columbia Ministry of Transportation and Infrastructure Standards Specification for Highway Construction - End Product Specification SS502

John Laxdal, Daryl Finlayson, Garrett Therrien

- 14. Non-Destruction Testing of Cold In-Place Recycled Materials at Very Young Age Quentin Lecuru, Alan Carter,
  - Yannic Ethier
- 15. Alberta Transportation's Experience with Cold-In-Place Recycling

Mohammad Karim, Dominique Grell, Kimberley Edmunds, Jim Gavin

16. Comparison between lab and field performance of Cold In-Place Recycling (CIR) and Cold-In-Place Recycling with Expanded Asphalt Mixture (CIREAM)

> Janki Bhavsar, Susan Tighe, Michael Esenwa, Amma Wakefield, Dave Anderson

Tuesday, Nov. 15th, 2016 Contractor's Workshop **13:30 - 16:30.** 

#### Wednesday, Nov. 16th, 2016 Morning Session: 08:30

- 17. Understanding Frost Heave Cycles on Flexible Pavements: A case study of Montreal Hala Zalouk, Bissan Eid, Mohamad-Kenan Al-Rijleh, Luis Amador Jimenez
- 18. The Importance of Asphalt Mixes Air Voids on the Damage **Evolution During Freeze-Thaw** Cycles Saeed Badeli
- 19. Pavement Distress Forecasting and Performance Model Development for the Concession of the South Fraser **Perimeter Road** Bryan Palsat, Alan Reggin, Martina Riessner, Ian Galsworthy
- 20. Innovative Testing of Ontario's **Asphalt Materials** Pamela Marks, Seyed Tabib, Anne Holt, Imran Bashir

#### Wednesday, Nov. 16th, 2016 Afternoon Session: 13:30

- 21. Customized Municipal Asphalt Specifications - Experience with the First Year of **Implementation** Ludomir Uzarowski, Gary MacDonald, John Rizzo, Dan Waechter, Vimy Henderson
- 22. High Float Emulsion Residue: Its Unique Rheology and Microstructure Justin Suda, Anthony Yeung

23. Comparative Study of the Laboratory Performances Hot Mix Asphalt with 10% Glass Aggregates

Alexandre T. Bachand, Éric Lachance-Tremblay, Michel Vaillancourt, Daniel Perraton

24. Laboratory Evaluation Moisture Susceptibility  $\mathbf{of}$ Different Cold Patching **Materials** 

> Md Hasanuzzaman. Leila Hashemian, Alirez Bayay

## **CTAA Scholarships**

The Canadian Technical Asphalt Association is proud to announce the addition of a third scholarship to its offerings. Applications complete with posters are sent to over **50 universities and colleges** in the Spring and this year we had **18 submissions**. Evaluation of the submissions is underway and results will be published in the August Newsletter.

The scholarships are described below.

# CTAA Graduate Scholarship \$2,000

The CTAA Graduate Scholarship will be presented to a student who has been admitted into, or is currently enrolled in, a Canadian university program leading to a post-graduate degree which contributes to advances in any facet of asphalt technology. Eligible fields of study include chemistry, chemical engineering, and construction or civil engineering. Other areas of study may be considered provided the applicant clearly notes the relevance of his/her curriculum towards asphalt technology.

# CTAA Undergraduate Scholarship \$2.000

The CTAA Undergraduate Scholarship will be presented to a student who has been admitted into, or is currently enrolled in a Canadian university program leading to an undergraduate degree which contributes to advances in any facet of asphalt technology. Eligible fields of study include chemistry, chemical engineering, and construction or civil engineering. Other areas of study may be considered provided the applicant clearly notes the relevance of his/her curriculum towards asphalt technology.

# CTAA Applied Technology Scholarship \$2.000

The CTAA Applied Technology Scholarship will be presented to a student who has been admitted into, or is currently enrolled in, Canadian technical college or a community college program leading to a diploma which contributes to advances in any facet of asphalt technology. Eligible fields of study include chemistry, chemical engineering, and construction or civil engineering technology. Other areas of study may be considered provided the applicant clearly notes the relevance of his/her curriculum towards asphalt technology. Applicants with industrial experience in asphalt technology are encouraged to apply.

Information regarding our scholarships, eligibility and the application process can be viewed on our website.

Members are asked to pass this information on to students they know or meet who are studying asphalt technology at the graduate, undergraduate or college level.

#### Accompanying Guest Program 2016

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Monday, November 14th 2016		14:30 - 16:00	Banff Upper Hot Springs
07:30 - 09:00	Accompanying Guest Private Breakfast	16:00	Board Bus
07:30 - 17:00	Accompanying Guest Registration	16:30	Arrive at Banff Springs Hotel
09:00 - 12.00	Board Bus to Johnston Canyon for Short	18:30 - 19:30	Pre-Banquet Reception
	Hike with Guide	19:30 - 23:00	Banquet with Featured Entertainment
12:00 - 14:00	Lunch at Lake Louise	Hospitality Suite - Following Banquet	
14:00 - 15:00	Lake Louise Wander	Wednesday, November 16th 2016	
15:30	Board the Bus	07:30 - 08:30	Accompanying Guest Private Breakfast
17:00	Arrive at Banff Springs Hotel	08:30	Board Bus for
21:00	Hospitality Suite	08:30 - 11:00	Board Bus for Cave and Basin Historic Site
Tuesday, November 15th 2016		11:00	Board Bus
07:30 - 09:00	Accompanying Guest Private Breakfast	11:30	Arrive at Banff Springs Hotel
09:00 - 12:00	Board Bus for Banff Tour (Surprise Corner,	11:30 - 12:00	Awards Reception
	Lake Minnewanka & Hoodoos	12:00 - 13:30	Awards Lunch - Delegates and Accompany-
12:00 - 14:30	Gondola Ride up Sulphur Mountain for		ing Guests
	Lunch & Interpretive Centre	14:00 - 15:00	Banff Springs Hotel Tour (Optional)
NO FURTHER ACTIVITIES SCHEDULED.			