

ASHRAE Ottawa Valley Chapter

Chapter Meeting # 7 April Approved



Meeting Date:	Tuesday April 16, 2002
Location:	Capone's Restaurant, 1701 Woodroffe Avenue, Nepean
Presiding Officer:	President Frank Bann
Attendance:	Total: 61 Guests: 12 Students: 1
Theme Night:	Research
Technical Session:	Wind tunnel tours, Uplands Campus of the NRC
Table Top:	Walmar – Brian Eustace Dynamic – Maurice Lachance MTI – Maurice Lachance Vulcain – Maurice Lachance
Program:	Photonic activities at the National Research Council of Canada – Dr. Sylvain Charbonneau
Prepared by:	Jason MacMurdo/Patric Renault – April 24, 2002

Technical Session (3:00-4:45)

- Two wind tunnel tours at NRC's Uplands Campus were well received and attended by approximately 15 members.

Social (5:30 – 6:30)

Business Session (6:30 – 6:45)

- President Frank Bann introduced our evening's speaker Dr. Sylvain Charbonneau.
- Frank Bann introduced the OVC 2001/2002 Executive and the Board of Governors.
- Cathy Godin introduced the guests.
- Frank Bann requested a minute of silence to reflect on the passing of ASHRAE Society Past President and fellow Canadian (????), Don Holte.

Dinner (6:45-7:35)

Business Session-Continued (7:35-8:00)

- President Frank Bann informed membership of upcoming program on the History Channel entitled "Fire and Ice" which recounts the History of HVAC Systems.
- Manufacturer's representatives, Brian Eustace (Walmar) for Neptronic Humidifiers and Maurice Lachance (Dynamic) for Dynamic Air Cleaners, MTI Magnets and Vulcain Gas Detection Systems, summarized their product offerings and encourage the OVC membership to visit the tabletops during the break.
- Past President Mike Swayne encouraged the membership to read the President's message in the Capital Communique. He went on to explain how research is an important part of the HVAC Industry. The OVC Research Campaign's goal is \$16,000. With 2-2/2 months left in the campaign, we have reached approximately 25% of our goal. The research committee members are: Joel Primaeu, Dale Gaudet, Karen Peck, Gemma Kerr, David Eastwood, Ross

McIntyre, Neil Armstrong, Byron Landry and Paul Baker.

- TEGA Committee Chair, Kevin Courneya and TEGA Committee Awards Chair, Frank Vaculik presented President Frank Bann with a 1st Place Award for new Health Care for his design of the Hill Lodge Long Term Care Facility. A 1st Place Award was also presented to Marc Carriere for new Institutional for his design of ??????. In addition, a 1st Place Award was presented to RJ McKEE Engineering for a design build project at JDS Uniphase. Chris Frauley, who accepted this award, thanked Modern Mechanical, Trane and ICS for their help on the project and expressed that this award is to be shared equally by the design team in this collaborative effort.
- David Eastwood, chair of the Nominating Committee introduced its members, Frank Bann, Ross McIntyre, Cynthia Gilles, and Bob Kilpatrick. The Nominating Committee presented the following nominations for the OVC 2002/2003 BOG and Chapter Executive: President – Lan Chi Nguyen Thi, President-Elect – Jason MacMurdo, Secretary – Cathy Godin, Treasurer – Jay Doshi, Governors – Tony Doyon, Ron Drummond, Don Johnson, Robert Lefebvre, Stewart Woermke. Nominations were closed by Glenn MacLean and John ?????.
- Bill deGagne informed the membership on the OVC CRC 2002 progress and requested the membership get involved and support the event.
- Alan Donnley from ASPE reported on the upcoming ASPE sponsored seminar on Energy Efficiency through Optimized Design to take place April 25, 2002 at Capone's on Industrial Avenue.
- President Frank Bann requested the membership confirm the roster information as the Membership Roster is to be mailed out in May. In addition, Frank reminded the members that May's meeting is History Night, past President's Night and Companion's Night.

Evening Program (8:20-8:50)

Topic: Photonic activities at the National Research Council of Canada.

Speaker: Dr. Sylvain Charbonneau, Ph.D.
Director, Application Technologies
Institute for Microstructural Sciences.

Frank Bann introduced the speaker.

Sylvain discussed the announcement of the Federal Government in December 2001 for the construction of a new photonics research facility to be located at the Montreal Road Campus of the NRC. The Campus currently has a group doing photonics research and this research is closely related to the telecommunications industry. Many collaborative R&D agreements are in place with Canadian based firms or consortiums to develop emerging technologies. The NRC, a government agency, employs 3,800 full-time employees and 1000 guest workers in 19 research institutes across Canada.

With the advancements in photonics, telecommunications have gone from using copper wires carrying 1,000 phone calls at a time in 1984 to fibre optics with the possibility to carry 10,000,000 phone calls simultaneously in 2002. WDM transmission systems have permitted this expansion in bandwidth by being able to separate the light signal on the optic fibre into different

colours for the transmission and then re-assembling the different colours at the other end. Optical switches have been developed to direct rays of light onto different paths using electrodes which permits to send the light signal to different locations.

Sylvain also discussed the advent of organic materials in the photonics industry. The progress of organic materials since 1990 has been phenomenal in the efficiency of light emitting diodes (LED's). Organics has permitted the creation of OLED's that are flexible compounds that have developed into thin film technologies.

The establishment of a photonic fabrication centre will permit the development of highly qualified personnel for R&D fabrication. It will also permit to provide prototyping services for industries of various sizes. For example:

- small firms: low-volume production, proof of concept, design.
- medium firms: low-volume production runs to test manufacturability & designs.
- large firms: fast turnaround, novel runs to test proof of concept.

Business Session-Continued (8:50-9:00)

- ??? thanked the speaker and presented a gift.

Meeting was adjourned at 9:00. Motion moved by Don Johnson, seconded by Dalton McIntyre. All in favor.

Distribution:

Board of Governors

All RVCs

DRC

Gabriel Laszlo

Please review the minutes. Any errors or omissions shall be communicated in writing to Jason MacMurdo.