

ASHRAE Ottawa Valley Chapter

Chapter Meeting #3 November 15th, 2005 (5:30 p.m.)



Meeting Date: Tuesday, November 15th, 2005
Location: La Contessa Banquet Hall, 156 Cleopatra Dr., Nepean, ON
Presiding Officer: President: Jay Doshi
Attendance: Total: 74 Guests: 35 Students: 14
Theme Night: Research Promotion
Technical Tour: N/A
Table Top: Ingenia - Trane
Program: Fuel Cell Technology
Speaker(s): Dr. Mike Hamilton, Ph.D. – National Research Council

Prepared by: Robert Lefebvre, P.Eng. – April 12, 2006

Technical Tour: N/A

Social (5:30 – 6:55)

Business Session (6:55 – 7:05)

- Jay Doshi opened the meeting and welcomed members, guests and students
- Jay introduced the Board of Governors
- Francois Belair introduced the guests and students
- Cathy Godin talked about the benefits of investing in ASHRAE Research Promotion and recognized last years contributors.

Dinner (7:05 – 7:45)

Business Session-Continued (7:45 – 7:55)

- Frank Vaculik advised the membership of an upcoming steam seminar at a local distributor.
 - The table top presenters were invited to summarize their displays and members were encouraged to visit the various displays during the break.
 - Jay Jayaraman identified an opportunity for the membership to participation in an ASHRAE Technical Committee on Cogeneration systems.
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Evening Program (8:10 - 9:05)

Program: Fuel Cells: Progress & Future Implications
Speaker: Dr. Mike Hamilton, Ph.D. from the National Research Council (NRC)

Jay Doshi introduced the evening speaker.

Dr. Hamilton introduced the organization of NRC.

Due to the exponential rise in CO₂ since the industrial revolution, a new energy source is needed. Hydrogen is a good energy source as the resultant produced is water. Hydrogen fuel cells are currently used for buses, stationary electric power, and portable generators.

The hydrogen fuel cell was invented by Sir William Grove in 1839 and refined by Geoff Ballard in the early 1980s. Fuel cells convert the energy of the hydrogen & oxygen reaction into electrical energy. There are two main types of fuel cells: Permeable Membrane Fuel Cell (PMFC) & Solid Oxide Fuel Cell (SOFC). The Hydrogen is derived from water through electrolysis. Canada is a leader in fuel cell technology.

Several different system architectures for delivery & operation of integrated hydrogen systems were introduced as well as methods for hydrogen storage. It was estimated that within 40 years there will be a fully established market available to consumers. More information can be found at the Hydrogen Economy Web Site: www.hydrogeneconomy.gc.ca

- Jay Doshi thanked our guest speaker for his presentation and presented him with a gift.
- Jay thanked all for attending and announced the next meeting theme was January – LEED Design
- With no other business at hand, Jay adjourned the meeting at 9:05pm.

Distribution

Board of Governors

All RVCs

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