

THE UNIVERSITY OF BRITISH COLUMBIA**Publications Record**

SURNAME: Laval

FIRST NAME: Bernard
MIDDLE NAME (S): EdmondInitials: 
Date: Apr. 11, 2011

- An asterisk indicates those publications considered to be of primary importance.
- Authors who were students or technicians supervised by me are indicated with bold typeface.
- Presenters of conference papers are indicated with italic typeface.

1. REFEREED PUBLICATIONS**(a) Journals**

1. **Forrest, A**, H O Andradottir, B Laval. *Wind regime reconditioning of an underflow in a subarctic lake*. Accepted subject to revision Aquatic Science. Nov 2010.
2. Darlene S. S. Lim, A L Brady, A F Abercromby, D T Andersen, M Andersen, R R Arnold, J S Bird, H R Bohm, S L Cady, Z Cardman, A M Chan, O Chan, C Chénard, B R Cowie, A Davila, M C Deans, W Dearing, M Delaney, M Downs, T Fong, **A Forrest**, M L Gernhardt, J R Gutsche, C Hadfield, A Hamilton, I Hawes, J Hansen, J Heaton, **Y Imam**, B Laval, D Lees, L Leoni, C Looper, S Love, M M Marinova, D McCombs, C P McKay, G Mullins, S H Nebel, P Nuytten, R Pendery, **W Pike**, S B Pointing, J Pollack, N Raineault, M Reay, D Reid, T Sallstedt, D Schulze-Makuch, M Seibert, R Shepard, G F Slater, D Y Sumner, C A Suttle, A Trembanis, C Turse, M Wilhelm, N Wilkinson, D Williams, D M Winget, C Winter. *A Historical Overview of the Pavilion Lake Research Project – Analog Science and Exploration in an Underwater Environment*. Geological Society of America Special Issue: Analogs for Planetary Exploration In press March 2011.
3. Brady, A L, G F Slater, C R Omelon, G Southam, G Druschel, D T Andersen, I Hawes, B Laval and D S S Lim. (2010) *Photosynthetic isotope biosignatures in laminated micro-stromatolitic and non-laminated nodules associated with modern, freshwater microbialites in Pavilion Lake, B.C.* Chemical Geology. 274(1-2): 56-67.
4. Lim, D S S, G L Warman, M L Gernhardt, C P McKay, T Fong, M M Marinova, A Davila, D Andersen, A Brady, Z Cardman, B Cowie, M D Delaney, A Fairen, **A L Forrest**, J Heaton, B E Laval, R Arnold, P Nuytten, G Osinski, M Reay, D Reid, D Schulze-Makuch, R Shepard, G F Slater, D Williams. (2010) *Scientific Field Training for Human Planetary Missions*. Planetary and Space Science. 58: 920-930. doi:10.1016/j.pss.2010.02.014.
5. **Forrest, A**, B Laval, D S S Lim, D R Williams, A C Trembanis, M M Marinova, R Shepard, A Brady, G Slater, M Gernhardt, C P McKay. (2010) *Performance evaluation of underwater platforms in the context of space exploration*. Planetary and Space Science. 58(4): 710-716. doi:10.1016/j.pss.2009.08.007.
6. Brady, A L, G Slater, B Laval, D S S Lim. (2009) Constraining carbon sources and growth rates of freshwater microbialites in Pavilion Lake using ¹⁴C analysis. Geobiology. 7:544-555.
7. Doble, M J, **A Forrest**, P Wadhams, B Laval. (2009) *Through-ice AUV deployment: Operational and technical experience from two seasons of Arctic fieldwork*. Cold Regions Science and Technology. 56: 90-97.
8. Lim, D S S, B Laval, G Slater, D Antoniadis, **A Forrest**, **W Pike**, R Pieters, M Saffari, D Reid, D Schulze-Makuch, D Andersen, C P McKay. (2009) *Limnological of Pavilion Lake, BC, Canada – Characterization of a microbialite forming environment*. Fundamental and Applied Limnology. 173(4): 329-351.
9. **Forrest A**, B Laval, R Pieters, D Lim. (2008) *Seasonal thermal structure heterogeneity of a temperate lake during evening cooling*. Limnology and Oceanography. 53(5 part 2): 2321-2332.
10. **Sentlinger, G I**, S Hook, B Laval. (2008) *Sub-pixel water temperature estimation from thermal-infrared imagery using vectorized lake features*. Remote Sensing of Environment. 112: 1678-1688.

11. Laval, B, J Morrison, **D J Potts**, E C Carmack, S Vagle, **C James**, F A McLaughlin, M Foreman. (2008) *Wind-driven summertime upwelling in a fjord-type lake and its impact on downstream river condition: Quesnel Lake and River, BC, Canada*. Journal of Great Lakes Research. 34:189-208.
 12. Pawlowicz, R, S A Baldwin, A Muttray, J Schmidtova, B Laval, **G Lamont**. (2007) *Physical oceanography of Nitinat Lake, BC*. Limnology and Oceanography. 52(3): 1002-1017.
 13. Hodges, B R, B Laval, B Wadzuk. (2006) *Numerical error assessment and a temporal horizon for internal waves in a hydrostatic model*. Ocean Modelling, 13(1): 44-64.
 14. * Laval, B, J Imberger, A N Findikakis. (2005) *Dynamics of a large tropical lake*. Aquatic Sciences, 67(3): 337-349.
 15. * Laval, B, J Imberger, A N Findikakis. (2003) *Mass transport between a semi-enclosed basin and the ocean: Lake Maracaibo*. Journal of Geophysical Research, 108(C7): 3234
doi:10.1029/2002JC001571.
 16. * Laval, B, J Imberger, B R Hodges. (2003) *Modeling circulation in lakes: spatial and temporal variability*. Limnology and Oceanography. 48(3): 983-994.
 17. Laval, B, B R Hodges, J Imberger. (2003) *Reducing numerical diffusion effects with a pycnocline filter*. ASCE Journal of Hydraulic Engineering. 129(3): 215-224.
 18. * Laval, B, S L Cady, J C Pollack, C P McKay, J S Bird, J P Grotzinger, D C Ford, H R Bohm. (2000) *Unique assemblage of modern freshwater microbialites, Pavilion Lake, British Columbia, Canada*. Nature 407: 626-629. Cover photo
 19. Laval, B, J S Bird, P D Helland. (2000) *An autonomous underwater vehicle for the study of small lakes*. Journal of Atmospheric and Oceanic Technology 17(1): 69-76.
 20. Hurd, C L, C Stevens, B Laval, G Lawrence, P J Harrison. (1997) *Visualisation of seawater flow around morphologically distinct forms of the giant kelp, *Macrocystis integrifolia*, from wave sheltered and exposed sites*. Limnology and Oceanography 42(1): 156-163.
 21. Hurd, C L, M Quick, C Stevens, B Laval, P J Harrison, L D Druehl. (1994) *A low volume flow tank for measuring nutrient uptake by large macrophytes*. Journal of Phycology 30: 892-896.
- (b) *Conference Proceedings[†] (abstract refereed, with manuscript)*
1. **Forrest, A**, B E Laval, and R Pieters. (2009) *Under-ice convection in a temperate lake*. 33rd IAHR congress. Vancouver, BC. 8 pages.
 2. **Imam, Y**, B E Laval. (2009) *Wind-driven flow between basins in a small multi-basin lake*. 33rd IAHR congress. Vancouver, BC. 8 pages.
 3. **Imam, Y**, B E Laval, D S S Lim, G F Slater. (2009) *Summertime inter-hypolimnetic thermal differences in a small multi-basin lake*. 13th Workshop on Physical Processes in Natural Waters, Palermo, Italy. 10 pages.
 4. **Andradóttir, H Ó**, **A L Forrest**, B E Laval. (2009) *Fate of groundwater inflow in Lake Thingvallavatn during early spring ice-breakup*. 13th Workshop on Physical Processes in Natural Waters, Palermo, Italy. 11 pages.
 5. **Forrest, A**, B E Laval, M.J. Doble, E Magnusson, and R. Yeo. (2008) *AUV measurements of under-ice thermal structure*. Oceans 2008 IEEE/MTS. Quebec City, PQ, Canada. 10 pages.
 6. **Sentlinger G I**, B Laval, S J. Hook, E C Carmack, J Morrison, S Vagle, F A McLaughlin, M Foreman. (2007) *Characterising lake dynamics in a deep fjord lake using sub-pixel temperatures derived from MODIS imagery*. International Symposium on Environmental Hydraulics V. Tempe, Az, USA. 6 pages.

[†] It is often difficult to determine the level of peer review of conference proceedings. I have listed all conference proceedings that include written manuscripts here, and those with presentation and abstract, but no written manuscript in section 2(b) below.

7. Carmack E, S Vagle, J Morrison, F McLaughlin, B Laval, D Potts and C James. (2007) *Seasonal convective deep water renewal in a deep fjord lake: Quesnel Lake, British Columbia*. International Symposium on Environmental Hydraulics V. Tempe, Az, USA. 5 pages.
8. Imam, Y, B Laval, R Pieters, G Lawrence. (2007) *Characterizing the internal wave field for a cold-water release facility in a larger reservoir*. International Symposium on Environmental Hydraulics V. Tempe, Az, USA. 6 pages.
9. Nassar, Y, R Pieters, B Laval, G Lawrence. (2007) *Response of the Nechako Reservoir to spring winds*. International Symposium on Environmental Hydraulics V. Tempe, Az, USA. 6 pages.
10. Forrest, A, H Bohm, B Laval, E Magnusson, R. Yeo, M. J. Doble. (2007) *Investigation of under-ice thermal structure: small AUV deployment in Pavilion Lake, BC, Canada*. Oceans 2007 IEEE/MTS. Vancouver BC, Canada. 9 pages.
11. Forrest, A, B Laval. (2007) *Charting lacustrine environments with UBC-GAVIA*. AUV Science in Extreme Environments, Scott Polar Research Institute, Cambridge, UK. 7 pages.
12. Forrest, A, B Laval. (2007) *Seasonal thermal structure of Pavilion Lake*. AUV Science in Extreme Environments, Scott Polar Research Institute, Cambridge, UK. 7 pages.
13. North, R, B Laval, and M Isaacson. (2005) *Implications of non-uniform wind stress on lake circulation*. CSCCE 17th Canadian Hydraulics Conference. Edmonton, Alberta. 10 pages.
14. Laval, B and R Stocker. (2004) *Wind-driven under-ice circulation in partially ice-covered lakes*. ASCE-Engineering Mechanics. Newark, DE, USA. 8 pages.
15. James, C, B Laval, E Carmack, and R Pieters. (2004) *Analysis of water samples for determining salinity from CTD measurements in Quesnel Lake, BC*. ASCE-Engineering Mechanics 2004. Newark, DE, USA. 8 pages.
16. Potts, D, B Laval, J Morrison, and E Carmack. (2004) *Two-way flow over a sill in Quesnel Lake, BC*. ASCE-Engineering Mechanics 2004. Newark, DE, USA. 8 pages.
17. Lamont, G, B Laval, R Pawlowicz, R Pieters, and G Lawrence. (2004) *Physical mechanisms leading to upwelling of anoxic bottom water in Nitinat Lake, BC*. ASCE-Engineering Mechanics 2004. Newark, DE, USA. 8 pages.
18. Horn, D A, B Laval, J Imberger and AN Findikakis. (2001) *Field study of physical processes in Lake Maracaibo*. XXIX International Association of Hydraulic Research Congress, Beijing, China.
19. Hodges, B R, J Imberger, B Laval, J Appt. (2000) *Modeling of the hydrodynamics of stratified lakes*. Hydroinformatics 2000 Conference, Iowa City, IA, USA.
20. Laval, B, B R Hodges, J Imberger. (2000) *Numerical diffusion in stratified lake models*. Fifth International Symposium on Stratified Flows, Vancouver, BC, Canada. pp: 343-348
21. Laval, B, J S Bird, P D Helland. (1997) *Observations of the spatial structure of internal waves in a small mid-latitude lake*. IEEE/MTS Oceans '97, Halifax, NS, Canada.
22. Bird, J S, J Ferguson, B Laval, and P D Helland. (1997) *AUV development for coastal marine science*. Tenth International Symposium on UUST, Durham, NH, USA.

(c) Other

2. NON-REFEREED PUBLICATIONS

(a) Journals

1. Forrest, A, B Laval (2009). *From Oceans to Lakes - Applying New Tools in Limnology*. Journal of Ocean Technology. 4(1): 37-45 (Invited editorial – not refereed). Cover photo.
2. Horn, D A, P Yeates, B Laval, J Imberger, A N Findikakis (2001) *Lake Maracaibo, Venezuela*. Journal of the Australian Water Association 28(2): 41-45.

(b) Conference Presentations[§] (abstract refereed, no manuscript submitted)

1. **Forrest, A L**, H Andradottir, B E Laval. (2010) Modeling underflows in Lake Thingvallavatn in varying surface shear conditions. 14th Workshop on Physical Processes in Natural Waters, Reykjavik, Iceland.
2. **Forrest, A L**, M Wittmann, B Allen, V Schmidt, N Raineault, **W Pike**, **A Hamilton**, L P Kost, B E Laval, A C Trembanis G Schladow. (2010) *Benthic imagery survey of Asian clam in Lake Tahoe*. 14th Workshop on Physical Processes in Natural Waters, Reykjavik, Iceland.
3. **Lim, D S S**, A L Brady, R Shepard, M M Marinova, **A Forrest**, M Wilhelm, Z Cardman, B Cowie, O Chan, B Laval, G F Slater, A Trembanis, D Y Sumner, I Hawes, D Andersen, M Gernhardt, R Arnold, D Reid, C P McKay. (2010) *Pavilion Lake Research Project: Understanding the Conditions for Microbialite Growth and Development in Pavilion Lake, Canada*. Astrobiology Science Conference 2010, League City, TX.
4. **Lim, D S S**, M Gernhardt, R Shepard, A L Brady, M M Marinova, M Wilhelm, **A Forrest**, Z Cardman, A Abercromby, M Deans, D Lees, B Cowie, G F Slater, B Laval, C P McKay. (2010) *Informing Lunar and Martian Science Operations Scenarios through Underwater Analog Mission Activities at Pavilion Lake, Canada*. Astrobiology Science Conference 2010, League City, TX.
5. **Turse, C**, D Schulze-Makuch¹, D S S Lim, B Laval, and L Irwin. *The Rise of Complexity: Cell Signaling Compounds in Pavilion Lake Microbialites and Temperate Zone Microbial Community Ecosystems*. (2010) Astrobiology Science Conference 2010, League City, TX.
6. **Schladow, S G**, M Wittmann, **A Forrest**, F J Rueda, J E Reuter, S Chandra, T E Steissberg, V Schmidt, N Raineault, B Laval and A C Trembanis. (2010) *The Role of Physical Limnology in the Observed Distribution and Future Spread of Invasive Species in Lake Tahoe*. 5th Biennial Lake Tahoe Basin Science Conference. Incline Village, NV.
7. **Marinova, M M**, B Laval, C P McKay, R Shepard, D S Lim, **A Forrest**, D Andersen, R Arnold, A L Brady, Z Cardman, M Gernhardt, G F Slater, M Wilhelms. (2009) *Physical influences on microbialite morphological variation and distribution in Pavilion Lake, British Columbia, Canada*. EOS Trans. AGU, 90(52), Fall Meet. Suppl., Abstract B21A-0320.
8. **Lim, D S S**, A L Brady, Z Cardman, B R Cowie, **A Forrest**, M Marinova, R Shepard, B Laval, G F Slater, M Gernhardt, D T Andersen, I Hawes, D Y Sumner, A C Trembanis, C P McKay. (2009) *Pavilion Lake Research Project - using multi-scaled approaches to understanding the provenance, maintenance and morphological characteristics of microbialites*. B.C. EOS Trans. AGU, 90(52), Fall Meet. Suppl., Abstract B21A-0317.
9. **Brady, A L**, G F Slater, C Omelon, G Southam, G Druschel, D Andersen, I Hawes, D Y Sumner, B Laval, D S Lim. (2009). *Biosignatures of photosynthetic influences on carbonate precipitation in surface nodules associated with modern, freshwater microbialites in Pavilion Lake, B.C.* EOS Trans. AGU, 90(52), Fall Meet. Suppl., Abstract B21A-0315. **Invited**.
10. **Cowie, B R**, D S Lim, R Pendery, B Laval, G F Slater, A L Brady, W L Dearing, M Downs, A Forrest, D S Lees, R A Lind, M Marinova, D Reid, M A Seibert, R Shepard, D Williams. (2009) *Education and Public Outreach at The Pavilion Lake Research Project: Fusion of Science and Education using Web 2.0*. EOS Trans. AGU, 90(52), Fall Meet. Suppl., Abstract ED14A-05.
11. **Forrest, A**, B Laval, R Smith. (2009) *Charting discharge plumes with an Autonomous Underwater Vehicle*. 10th CAWQ Western Canadian Symposium on Water Quality Research, Penticton, BC.
12. **Forrest, A**, B Laval, D S S Lim, R Shepard, A Trembanis, C P McKay, R Yeo, E Magnusson. (2008) *Underwater manned and robotic platforms as analogues for space exploration*. 6th Canadian Space Exploration Workshop, Montreal, Qc.

[§] It is often difficult to determine the level of peer review of conference proceedings. I have listed all conference proceedings that do not include written manuscripts here, and those with presentation, abstract, and written manuscript in section 1(b) above.

13. Laval, B, **A Forrest**, D S S Lim, G F Slater, R Pieters, A Brady, **W Pike**, D Reid. (2008). *Source water distribution of a groundwater-fed, but otherwise (physically) unremarkable lake*. 12th International Workshop on Physical Processes in Natural Waters (PPNW). Lake Tahoe, NV.
14. **Forrest, A**, B Laval. (2008). *Variation in Penetrative Convection Driven by Ice-Cover Heterogeneity in a Temperate Lake*. 12th International Workshop on Physical Processes in Natural Waters (PPNW). Lake Tahoe, NV.
15. Brady, A, G F Slater, B Laval, D S S Lim. (2008). *Investigating the potential for microbial isotopic biosignatures associated with freshwater microbialites and carbonate precipitating microbial mats*. Geochimica et Cosmochimica Acta 72 (12): A109 Suppl.
16. **Forrest, A**, B Laval, D S S Lim, E Magnusson, R Yeo, C McKay, D Andersen, D Reid, M Doble, G F Slater, A Brady. (2008) *Autonomous Underwater Vehicles: Robotic analogues for space exploration*. Astrobiology Science Conference 2008, Santa Clara, CA.
17. **Pike, W**, D S S Lim, B Laval, G Slater, D Reid, C McKay. (2008) *Kelly Lake microbialites, another discovery in the Pavilion Lake region*. Astrobiology Science Conference 2008, Santa Clara, CA.
18. Lim, D S S, B Laval, D Andersen, D Reid, G Slater, P Nuytten, D Williams, M Gernhardt, **A Forrest**, A Brady, C McKay. (2008) *DeepWorker Submersibles at Pavilion Lake: A stepping-stone to the human exploration of the Moon, Mars and beyond*. Astrobiology Science Conference 2008, Santa Clara, CA.
19. Turse, C, D Schulze-Makuch, D Lim, B Laval, L Irwin. (2008) *The rise of complexity: Evidence from cell signaling compounds for Pavilion Lake microbialites and temperate zone microbial community ecosystems*. Astrobiology Science Conference 2008, Santa Clara, CA.
20. Chan, O, S Pointing, B Laval, G Slater, D Lim. (2008) *Molecular ecology of freshwater microbialite structures in Pavilion Lake, British Columbia, Canada*. Astrobiology Science Conference 2008, Santa Clara, CA.
21. Brady, A, G Slater, B Laval, D S S Lim. (2008) *Constraining the metabolic and isotopic variability in modern microbialite and microbial mat communities in British Columbia, Canada*. Astrobiology Science Conference 2008, Santa Clara, CA.
22. **Forrest, A**, B Laval, R Smith, **H Bohm**, **B McFadden**. (2007) *A view from the bottom: Two case studies in AUV photography*. 5th Biannual NRC-IOT Workshop on Underwater Vehicle Technology. St John's, Nfld., Canada.
23. Slater, G, A Brady A, B Laval B, D S S Lim. (2007) *Constraining carbon sources and growth of microbialites in Pavilion Lake, BC using ¹⁴C*. Geochimica et Cosmochimica Acta 71 (15): A948 Suppl.
24. **Lim, D S S** and B Laval. (2007) *Pavilion Lake, Canada: a window into early planetary aquatic systems*. Geological Society of America Denver Annual Meeting. Denver, CO, USA.
25. **Forrest, A** and B Laval. (2007) *Lacustrine growth conditions of modern microbialites: an AUV perspective*. 2nd International Workshop on Exploring Mars and its Earth Analogues. Trento, Italy.
26. **Laval, B**, D S S Lim, D Reid, G F Slater, C P McKay. (2007) *Pavilion Lake Research Projec: merging science and exploration to meet analogue research objectives*. 2nd International Workshop on Exploring Mars and its Earth Analogues. Trento, Italy.
27. **Slater, G F**, A Brady, B Laval, D S S Lim. (2007) *Isotopes and biosignatures at Pavilion Lake*. 2nd Analogue Research Workshop. McMaster University, Hamilton, Ontario, Canada.
28. **Laval, B**, D S S Lim, G F Slater, **A Forrest**, A Brady. (2007) *An investigation of potentially unique freshwater microbialites and a window into early earth systems*. 2nd Analogue Research Workshop. McMaster University, Hamilton, Ontario, Canada.
29. **Forrest, A**, **Bohm, H**, Laval, B, Reid, D, Andersen, D, Magnusson, E, and Doble M, (2007) *Small AUV deployment under ice: Pavilion Lake, B.C., Canada (a case study)*, European Geosciences Union, Vienna, Austria.

30. Carmack E C, S Vagle, J Morrison, F McLaughlin, B Laval, **D Potts, C James**. (2007) *Dynamics and thermodynamics of seasonal convective overturn in a very deep lake*. ASLO 2007 Santa Fe, NM, USA.
31. Laval, B, D Reid, D S S Lim. (2006) *Site protection issues of the Pavilion Lake Research Project in Marble Canyon Provincial Park, BC*. British Columbia Protected Areas Research Forum. Victoria, BC, Canada.
32. **Forrest, A** and B Laval. (2006) *Saturation indices and equilibrium speciation in Pavilion Lake*. 1st Analogue Research Workshop, NASA Ames Research Center, Moffat Field, CA, USA.
33. Lim, D S S, B Laval, G F Slater, D Andersen, A Airo, G Mullins, D Schulze-Makuch, S Cady, C P McKay. (2005) *Pavilion Lake, British Columbia, Canada: an investigation of potentially unique freshwater microbialites, and their application to Mars exploration*. EOS Trans. AGU, Fall Meet. Suppl., Abstract P42B-06.
34. Schulze-Mackuch, D, B Laval, D S S Lim, L N Irwin. (2005) *The rise of complexity: do the Pavilion Lake Microbialites suggest a way to build a macroorganism?* EOS Trans. AGU: 86 (52), Fall Meet. Suppl., Abstract B13A-1053.
35. Slater, G F, D S S Lim, B Laval, D Schulze-Makuch. (2005) *Microbialite formation across chemical and photosynthetic gradients in Pavilion Lake, BC*. EOS Trans. AGU: 86 (52), Fall Meet. Suppl., Abstract B23C-02.
36. Lim, D S S, A Airo, B Laval, S Cady, C P McKay. (2005) *Pavilion Lake, B.C., Canada: investigating microbialite morphogenesis*. NAI 2005 Biennial Meeting, Boulder, Co, USA.
37. Laval, B, **C James**, E Carmack. (2005) *Estimating stability in deep temperate lakes*. ASLO 2005, Salt Lake City, UT, USA
38. Lim, D S S, C P McKay, B Laval, J Bird and S Cady. (2004) *Freshwater microbialites of Pavilion Lake, British Columbia, Canada: a limnological investigation*. Second Conference on Early Mars, Jackson Hole, Wyoming, USA.
39. Laval, B and A Forrest. (2003) *Wind driven circulation in partially ice-covered lakes*. ASLO 2003 Salt Lake City, UT, USA.
40. Bang, B, R G Ingram, B Laval. (1996) *On the estimates of dynamics terms from nearshore flow measurements*. EOS, Trans. Am. Geophys. Union 76(3), 1996/supplement, Ocean Sciences Meeting, San Diego, CA, USA.
41. Laval, B, B Bang, P G Archambault, R G Ingram. (1995) *The modification of tidal currents by a small bay in the St. Lawrence Estuary*. CMOS Congress. Kelowna, BC, Canada.
42. Bang, B, R G Ingram, B Laval. (1995) *Heterogeneity of tidal flow structure near a promontory*. CMOS Congress. Kelowna, BC, Canada.
43. Stevens, C, C L Hurd, B Laval, G Lawrence, P J Harrison (1994) *Fluid flow around morphologically distinct forms of *Macrocystis integrifolia**. EOS, Trans. Am. Geophys. Union 75(3), Ocean Sciences Meeting, San Diego, CA, USA.
44. Laval, B, R G Ingram. (1994) *Harmonic analysis of current data at L'Anse du Petit Mitis*. Forum Québécois en Sciences de la Mer. Foret Mont-Morency, Qc, Canada.
45. Laval, B, C L Hurd, C Stevens, P J Harrison, G Lawrence. (1993) *Flow visualisation around morphologically distinct forms of *Macrocystis integrifolia* from sheltered and exposed sites*. ASLO 1993. Edmonton, Ab, Canada.

(c) Other

1. Lawrence, G A, R Pieters, B Laval, **Y Nassar, Y Imam**, S Li. (2007) *Hydrothermal characteristics of the Nechako Reservoir*. Prepared for the Nechako Enhancement Society, Vancouver, BC.
2. Laval, B and B R Hodges. (2000) *The CWR estuary and lake computer model: user guide*.

3. Laval, B, D A Horn, J Imberger (1999) *Processing and interpretation of the hydrodynamic field data*. In A N Findikakis et al., Integral Study for the Remediation of Lake Maracaibo: Environmental Interim Prefeasibility Report. CWR Contribution ED-1430.4-PY
4. Laval, B (1997) *The feasibility of the Buntzen hydro-electric generating station discharge plume as an AUV study*. Underwater Research Lab, School of Engineering Science, Simon Fraser University, Burnaby, BC.
5. Laval, B (1997) *Temperature and salinity field mapping in the vicinity of the Burrard Thermal Generating Station, using the autonomous underwater vehicle ARCS: Data Report*. Underwater Research Lab, School of Engineering Science, Simon Fraser University, Burnaby, BC.

3. **BOOKS - AUTHORED**

4. **BOOKS - EDITED**

5. **CHAPTERS IN BOOKS**

6. **PATENTS**

7. **SPECIAL COPYRIGHTS**

8. **ARTISTIC WORKS, PERFORMANCES, DESIGN**

9. **OTHER WORKS**

10. **WORK SUBMITTED (including publisher and date of submission)**

1. Omelon, C R, A L Brady, G F Slater, B Laval, D S S Lim, G Southam. *Microstructure variability due to phototrophic and heterotrophic metabolism in calcite microbialites, Pavilion Lake, Canada*. Submitted to Geology. January 2011.

11. **WORK IN PROGRESS (including degree of completion)**

1. Imam, Y, B Laval, R Pieters, G Lawrence. Thermocline response to wind in a large branched reservoir. For submission to Limnology and Oceanography. 95% complete
2. Laval, B, D J Potts, E C Carmack, J Morrison, C James, S Vagle, G I Sentlinger, F A McLaughlin and, M Foreman. *Bathymetric controls on the dynamics of fjord-lakes: Quesnel Lake, BC, Canada a case study*. For submission to the Canadian Journal for Great Lake Research 95% complete
3. Forrest, A and B Laval. *A Rossby adjustment gyre during winter stratification of a small dimictic lake*. For submission to Limnology and Oceanography. 90% complete
4. Imam, Y, B Laval, R Pieters, G Lawrence. Wind-induced baroclinic dynamics in a branched multi-basin reservoir. For submission to Aquatic Sciences. 85% complete
5. Imam, Y, and B Laval. The baroclinic response to wind of a bowl-shaped basin. For submission to Ocean Modeling. 85% complete
6. Imam, Y, B Laval, G Lawrence. The baroclinic response to wind of a small multi-basin lake. For submission to Aquatic Sciences. 85% complete
7. Lim, D S S, G Slater, B Laval, R Pieters, D Reid, D Andersen, M Macri, C P McKay. *Geochemical investigation of microbialite morphogenesis in Pavilion Lake, British Columbia*. For submission to Palaios. 75% complete
8. Forrest, A, V O'Connor, B Laval, D Andersen, C McKay. *Mixing induced by sampling techniques on perennially ice-covered lakes*. For submission to Water Research. 80% complete

9. Laval, B, J Bird. *Size bounds and survey limits of autonomous underwater vehicles and marine mammals.* For submission to Journal of Atmospheric and Oceanic Technology. 75% complete
10. **Nasser, Y**, G Lawrence, R Pieters, B Laval. *Conditions leading to deep seasonal thermoclines.* For submission to Limnology and Oceanography. 75% complete
11. Laval, B, D S S Lim, C P McKay, G S Slater. *Constraining mass flux through a groundwater-fed, dimictic lake.* For submission Water Research. 30% complete