

# CURRICULUM VITAE

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## I. BIOGRAPHICAL INFORMATION

Born on March 12, 1948 (Québec, Canada). Married, three children.

### Degrees (all in mathematics)

Ph.D. (mathematical logic), 1976, Université de Montréal; M.Sc., 1973, Université de Montréal; B.Sc., 1971, Université Laval. (Also B.A., 1967, Université Laval.)

### Positions

Currently « Professeur titulaire » of mathematics, Université Laval. I have been at the Department of Mathematics and Statistics of Université Laval since 1975, except for two years, one as a Visiting Associate Professor in computer science at the University of Toronto (1981-82) and one as a Visiting Researcher at the Centre de recherches mathématiques de l'Université de Montréal and at the Université de Nice – Sophia Antipolis, France (1988-89).

## II. PUBLICATIONS

More than 65 papers in mathematical logic, theoretical computer science and mathematics education. Selected list:

1. B.R. Hodgson, "On direct products of automaton decidable theories." *Theoretical Computer Science* 19 (1982) 331-335. (MR 83m:03046)
2. B.R. Hodgson and C.F. Kent, "A normal form for arithmetical representation of NP-sets." *Journal of Computer and System Sciences* 27 (1983) 378-388. (MR 85m:68011)
3. C.F. Kent and B.R. Hodgson, "Extensions of arithmetic for proving termination of computations." *Journal of Symbolic Logic* 54 (1989) 779-794. (MR 90g:03058)
4. B.R. Hodgson, "Regards sur les Études de la CIEM." *L'Enseignement Mathématique* 37 (1991) 89-107. (Invited 45-minute talk, ICM 90, Kyoto)
5. B.R. Hodgson, "On some number sequences related to the parity of binomial coefficients." *The Fibonacci Quarterly* 30 (1992) 35-47. (MR 93b:11013)
6. B.R. Hodgson, "The roles and needs of mathematics teachers using information technology." In: D. Watson and D. Tinsley, eds., *Integrating Information Technology into Education*. (Proceedings of the IFIP TC3/WG3.1 Working Conference, Barcelona, 1994) Chapman & Hall, 1995, pp. 27-37.
7. J. Desharnais, B.R. Hodgson and J. Mullins, "Linear logic." In: C. Brink, W. Kahl and G. Schmidt, eds., *Relational Methods in Computer Science*. (Advances in Computing Science Series) Springer-Verlag, 1997, pp. 106-114.
8. K.-D. Graf and B.R. Hodgson, "Computer technology and the teaching of geometry: the computer as a context for new possible geometrical activities." In: C. Mammana et V. Villani, eds., *Perspectives on the Teaching of Geometry for the 21st Century — An ICMI Study*. Kluwer, 1998, pp. 144-158.

9. M. de Guzmán, B.R. Hodgson, A. Robert and V. Villani, "Difficulties in the passage from secondary to tertiary education." In: G. Fischer and U. Rehmann, eds., *Proceedings of the International Congress of Mathematicians*. (Berlin, 1998) *Documenta Mathematica*, Extra Volume ICM 98, volume III, pp. 747-762.
10. B.R. Hodgson, "The mathematical education of school teachers: role and responsibilities of university mathematician." In: D. Holton, ed., *The Teaching and Learning of Mathematics at University Level — An ICMI Study*. Kluwer, 2001, pp. 501-518.

### III. PROFESSIONAL ACTIVITIES

My professional interests, with respect to both my teaching tasks and my research work, can be seen under two headings: mathematical logic and theoretical computer science on the one hand, and mathematics education on the other. The following remarks concern mainly the latter.

An important part of my work in mathematics education is related to the mathematical preparation of teachers, both in a preservice and in an inservice context. I see mathematicians as having a specific and essential contribution to bring to the education of primary and secondary school teachers (see item 10 in the above list of publications).

I have been involved over the years in various activities pertaining to mathematics education at the international level, especially in the context of activities under the responsibility of ICMI. I have participated in eleven of the fifteen ICMI Studies that have taken place up to now, and I was invited to report on the ICMI Study programme in a 45-minute talk at ICM 90 in Kyoto (see item 4 in the above list of publications).

I was the president of the Canadian National Committee for the 7th International Congress on Mathematical Education (ICME-7), organized on behalf of ICMI and which in 1992 gathered at Université Laval 3407 participants from 94 countries. I also served on the Executive Committee, on the Finance Committee and on the Local Organizing Committee of ICME-7. I was a member of the International Programme Committees for ICME-8, ICME-9 and ICME-10.

I was an invited speaker at ICM 98 in Berlin in a panel session on the difficulties in the passage from secondary to tertiary education (see item 9 in the above list of publications).

I chaired or was a member of many committees in my university. I was the chair of my department from 1983 to 1986.

I was the chair of the International Programme Committee of a Working Conference of the International Federation for Information Processing (IFIP) on *Secondary school mathematics in the world of communication technologies: learning, teaching and the curriculum* (Villard de Lans, France, 1997). I was from 1994 to 1996 a member of the Education Committee of the Canadian Mathematical Society and was Vice-President of CMS from 2001 to 2003. I chaired a Committee on the World Mathematical Year 2000 set up by CMS. I was president of the Canadian Mathematics Education Study Group in 1997-1998.

I am the current Secretary-General of ICMI.