

Paula M. Wood-Adams
Curriculum Vitae

EMPLOYMENT HISTORY

- 2013-** CONCORDIA UNIVERSITY, Montreal, Quebec, **Professor** of mechanical engineering.
- 2012-** CONCORDIA UNIVERSITY, Montreal, Quebec, **Interim Dean** of Graduate Studies.
- 2010 -2012** CONCORDIA UNIVERSITY, Montreal, Quebec, **Associate Dean** of School of Graduate Studies.
- 2006 -** CONCORDIA UNIVERSITY, Montreal, Quebec, **Associate Professor** of mechanical engineering.
- 2006 - 2010** CONCORDIA UNIVERSITY, Montreal, Quebec, **Graduate Program Director** of mechanical and industrial engineering
- 2006** KASETSART UNIVERSITY, BANGKOK, Thailand, **Visiting Professor** of chemical engineering
- 2001 - 2006** CONCORDIA UNIVERSITY, Montreal, Quebec, **Assistant Professor** of mechanical engineering
- 1998 - 2001** MCGILL UNIVERSITY, Montreal, Quebec, **Assistant Professor** of chemical engineering (3 year ETA)
Industrially funded position that included teaching and sole supervision of graduate students. NSERC Discovery and FQRNT team grant funding obtained.
- 1993 - 1998** MCGILL UNIVERSITY, Montreal, Quebec, **Research Assistant** in chemical engineering
- 1990 - 1993** DOW CHEMICAL CANADA, Fort Saskatchewan, Alberta, **Research Engineer** in Polyethylene R&D

ACADEMIC BACKGROUND

Education

- 1999** **Ph.D., Chemical Engineering**, McGill University, Thesis title: *The Effect of Long Chain Branching on the Rheological Behavior of Polyethylenes Synthesized using Constrained Geometry and Metallocene Catalysts*
- 1996** **Certificate of Competence in French**, McGill University School of Continuing Education
- 1995** **M.Eng. in Chemical Engineering** (Dean's Honor List) McGill University, Thesis title: *Determination of Molecular Weight Distribution from Rheological Measurements*
- 1991** **B.Sc. in Chemical Engineering** with Distinction, University of Alberta

Honors and Awards

- Concordia University Research Chair, 2006-2016
- Petro Canada Young Innovator Award, 2005
- NSERC University Faculty Award, 2001-2006

SERVICE AND ADMINISTRATIVE CONTRIBUTIONS

Membership on external committees and boards

- Membre des comités d'évaluation de subventions FRQNT Nouveaux chercheurs et Projet de recherche en équipe, 2013.

These committees consider the chemistry, physics and materials grant applications for the two programs. Over both competitions I reviewed about 25 applications, the majority of which were written in French. The final evaluation and rankings were done in committee meetings (in French, one by teleconference and the other in person).

- Sauvé Scholars Foundation Selection Committee, since 2011.

The Sauvé Scholars Program (<http://www.sauvescholars.org/>) was established to "equip, empower and enable emerging leaders to address critical global challenges in their respective communities and countries". Each year, up to 14 remarkable young people are invited to come to Montreal for the academic year. They live together in the Sauvé House, enjoy unlimited access to academic partners' programs and other resources – including lectures, conferences and events suited to the advancement of their individual professional and intellectual goals – while working on individual research or development projects with the help of a mentor. Under my leadership, this year Concordia signed an MoU with the Sauvé Scholars foundation and we have officially welcomed this year's group of scholars who are now attending our courses, workshops and working with our faculty members. As a part of my role in this initiative, I joined the selection committee of the foundation in 2011 and helped them to choose the current 12 scholars from amongst about 50 applications that had been preselected from hundreds that were received from all over the world.

- Member of NSERC Discovery grant review committee for Chemical and Metallurgical Engineering, 2008-2011.

This committee considers all of the Discovery and Research Tools and Instrumentation grant applications in the field of materials and chemical engineering. It consists of consists of researchers from Canadian and international institutions who are recognized as strong researchers. The role of these committees is vital; they shape the course of fundamental research at Canadian universities and impact the progression of individual research programs. During my 3 years on this committee I reviewed and rated more than 150 Discovery grant applications and participated in the nomination of several Accelerator Supplement recipients.

- Member of the editorial board of the Journal of Applied Polymer Science since 2002.

My role on this board involves helping the editor to investigate/evaluate suspected cases of scientific misconduct with respect to articles submitted for publication.

- Member of the Advisory Board to the EJLB Foundation (private charitable foundation) for the following grant: "The Environmental Impact of Building Materials", Concordia University, 2001-2003

Administrative Activities

- Interim Dean of Graduate Studies, since 2012.

As the Interim Dean of Graduate Studies, I serve as the administrative and academic head for the School of Graduate Studies, and as Chair for its Council. My mandate is to provide effective strategic and operational direction and coordination with respect to the legislative, advisory, monitoring/analysis, training, processing, and liaison/promotion functions of the School of Graduate Studies. My personal goal is to position the School of Graduate Studies as a facilitator for all aspects of graduate education at Concordia and thus to help Concordia expand its influence in the Canadian graduate education sector. During this interim year, I created a new leading role for the School in graduate recruiting, developed a process for integrating each cohort of Sauvé Scholars into the Concordia community, improved the efficiency of the graduate awards process, started a university wide conversation about the teaching of research integrity to future researchers, began to make a network of contacts in the Quebec higher education sector and effectively recruited new (replacement) academics and senior staff. I have also played an active role representing the interests of graduate education at university level committees: Academic Cabinet, Academic

Planning and Priorities Committee, Senate, Enrollment Management and Recruitment Committee and once by invitation the President's Executive Group.

- Associate Dean of School of Graduate Studies, 2010-2012.

My portfolio comprised curriculum and academic programs, graduate student recruitment and communications. My key achievements in this position include an analysis of the state of the master's degree at Concordia University as compared to other Canadian universities, the creation of a curriculum development unit within the school of graduate studies, a reduction in the publication cycle of the Graduate Calendar from 1 year to 4 months, an expansion of Concordia's graduate student recruitment efforts at Canadian universities, and a complete revision and redesign of the Graduate Viewbook and Graduate Student Handbook. My academic program analysis efforts have led to significant curriculum revisions in several masters programs the Faculty of Fine Arts and in the clinical psychology MA, diploma and PhD programs. In 2012, I was invited to speak on this subject at the Academic Programs Committee, the Council of the Faculty of Fine Arts and the department council of Creative Arts Therapies.

- Member of the Academic Plan Working Group 2010-2012

This working group developed Concordia's current Academic Plan in consultation with the senior administration and considering feedback solicited from the Concordia community. This document outlines our academic priorities for the next 5 years in terms of specific milestones. It includes a strong focus on research and graduate studies and promises to further advance our profile in these domains.

- Graduate Program Director for Mechanical and Industrial Engineering, 2006-2010.

My responsibilities in this position included admissions and other student affairs related issues for PhD students, graduate awards, and all graduate curriculum revisions for the department's programs. Every semester I held an information session for all new PhD students and initiated a practice of having evening gatherings of the faculty members and PhD students once or twice per year to foster communication. In 2010, I helped to overall renew the comprehensive exam procedure within the department leading to a more pedagogical exercise.

- Member of the Joint Employment Equity Committee governing academic hires at Concordia University 2009/10.
- Member of the Council of the School of Graduate Studies since 2006 and the Council of the Faculty of Engineering and Computer Science 2006-2010.
- Chair of the Department Graduate Studies Committee, 2006-2010.
- Member of the Review Committee of the School of Graduate Studies, 2007.

RESEARCH CONTRIBUTIONS

Publications

Journal Articles

(Students' and pdf's names are in bold. * indicates corresponding author. In all cases, the order of the authors represents their relative contribution to the work.)

1. J-S Hébert, PM Wood-Adams, M-C Heuzey, C Dubois and J Brisson*, "Morphology of Polylactic Acid Crystallized during Uniaxial Deformation", 51, 430-440, J. of Polymer Science, Polymer Physics, **2013**.
2. **S. Chaichian**, PM Wood-Adams*, SV Hoa, "In situ polymerization of polyester-based hybrid systems for the preparation of clay nanocomposites", 54, 1512-1523, Polymer, **2013**.
3. **Satu Strandman**, David G. Lessard, Dagmar van Dusschoten, Manfred Wilhelm, Paula M. Wood-Adams, Hans W. Spiess, X.X. Zhu*, "Two-dimensional Fourier Transform Rheological Study on Thermosensitivity of Poly(N,N-Diethylacrylamide) in Aqueous Solutions", Polymer, 53, 4800-4805, **2012**.

4. **V. Shaayegan**, PM Wood-Adams*, NR Demarquette “Linear Viscoelasticity of Immiscible Blends: The Application of Creep”, *Journal of Rheology*, 56, 1039-1056, **2012**.
5. **NC. Najafi**, M-C. Heuzey*, P.J. Carreau, P.M. Wood-Adams, “Control of thermal degradation of polylactic acid (PLA)-clay nanocomposites using chain extenders”, *Polymer Degradation and Stability*, 97, 554-565, **2012**.
6. **Y. Yuryev**, PM. Wood-Adams*, “Crystallization of poly(L-/D-lactide) in the presence of electric fields”, *Macromolecular Chemistry and Physics*, 213, 635–642, **2012**.
7. **T.-D. Ngo***, P.M. Wood-Adams, S. V. Hoa, M.-T. Ton-That, “Modeling the delamination process during shear pre-mixing of nanoclay/thermoset polymer nanocomposites” *J. of Appl. Polym. Sci.* 122, 561–572, **2011**.
8. **Y Yuryev**, PM Wood-Adams*, “Effect of Surface Nucleation on Isothermal Crystallization Kinetics: Theory, Simulation and Experiment”, *Polymer*, 52, 708-717 **2011**
9. **N Subramanian**, R Schmidt, PM Wood-Adams*, CE DeWolf*, Space-filling trialkoxysilane: synthesis and self-assembly into low-density monolayers, 26, 18628–18630, *Langmuir*, **2010**.
10. **Y Yuryev**, P Wood-Adams*, “A Monte-Carlo Simulation of Homogeneous Crystallization in Confined Spaces: Effect of Crystallization Kinetics on the Avrami Exponent”, *Macromol. Theory Simul.*19, 278–287, **2010**.
11. **R. Motamedi**, P Wood-Adams*, “Measurement of fluid properties using an acoustically excited AFM micro-cantilever”, *J. Rheol.* 54(5), 959-980, **2010**.
12. **Y Yuryev**, P Wood-Adams*, “Rheological Properties of Crystallizing Polylactide: Detection of Induction Time and Modeling the Evolving Structure and Properties”, *Journal of Polymer Science: Part B: Polymer Physics*, Vol. 48, 812–822, **2010**
13. **R Motamedi**, PM Wood-Adams*, “Influence of Fluid Cell Design on the Frequency Response of AFM Microcantilevers in Liquid Media” *Sensors*, 8, 5927-5941, **2008**.
14. **Y Yuryev**, P Wood-Adams*, M-C Heuzey, C Dubois, J Brisson, “Crystallization of polylactide films: An atomic force microscopy study of the effects of temperature and blending”, *Polymer*, 49, 2306-2320, **2008**.
15. **C Huang**, PM Wood-Adams*, TP Karjala, P Ansems, LL Ionescu-Vasii, “Rheological behavior of filled propylene/ethylene copolymers”, 47, 33-48 **Rheologica Acta**, **2008**.
16. **A Arzpeyma, Shan Bhaseen**, A Dolatabadi*, PM Wood-Adams, “A coupled electro-hydrodynamic numerical modeling of droplet actuation by electrowetting”, *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 323, 28–35, **2008**.
17. **L Ionescu-Vasii**, P Wood-Adams*, E Duchesne, G L’Espérance, TP Karjala, P Ansems, “Morphological analysis of highly filled propylene/ethylene copolymers”, 105, 3757-3772 *J. Appl. Polym. Sci.*, **2007**.
18. **W. Xu**, PM Wood-Adams*, CG Robertson, "Measuring local viscoelastic properties of complex materials with tapping mode atomic force microscopy", *Polymer*, 47, 4798–4810, **2006**.
19. **H Wang**, SV Hoa*, PM Wood-Adams, "A new method to synthesize clay/epoxy nanocomposites", *J. Appl. Polym. Sci.*, 100, 4286-4296, **2006**.
20. **S Anantawaraskul**, JBP Soares*, PM Wood-Adams, "Fractionation of Semicrystalline Polymers by Crystallization Analysis Fractionation and Temperature Rising Elution Fractionation", *Adv. Polym. Sci.*, 182, 1-54, **2005**.

21. **C He***, **S. Costeux**, PM Wood-Adams, "A technique to infer structural information for low level long chain branched polyethylenes", *Polymer*, 45, 3747-3654, **2004**.
22. M Heuzey*, PM Wood-Adams, **D. Sekki**, "Simplified Theory for Linear Rheology of Monodisperse Linear Polymers" *Journal of Applied Polymer Science*, 94, 569-586, **2004**.
23. **C He**, PM Wood-Adams, JM Dealy*, "Broad Frequency Range Characterization of Molten Polymers", *Journal of Rheology*, 48(4) 711-724, **2004**.
24. **S Anantawaraskul**, JBP Soares*, PM Wood-Adams, "Co-crystallization of blends of ethylene/1-olefin copolymers: An investigation with crystallization analysis fractionation (Crystaf)", *Macromolecular Chemistry and Physics*, 205(6), 771-777, **2004**.
25. **S Anantawaraskul**, JBP Soares*, PM Wood-Adams, "An experimental and numerical study on crystallization analysis fractionation (CRYSTAF)", *Macromolecular Symposia*, 206, 57-68, **2004**.
26. **S Anantawaraskul**, JBP Soares*, PM Wood-Adams, "Chemical composition distribution of multicomponent copolymer chains", *Macromolecular Symposia*, 206, 69-77, **2004**.
27. **NN Liu***, PM Wood-Adams, "Simulation of gel permeation chromatography measurement for long chain branched metallocene polyethylenes", *Macromolecular Symposia*. 206, 419-431, **2004**.
28. **C He***, **S Costeux**, PM Wood-Adams, JM Dealy, "Molecular structure of high melt strength polypropylenes and its application for polymer design", *Polymer*, 44(23) 7181-7188, 2003.
29. **S Anantawaraskul**, JBP Soares*, PM Wood-Adams, "Effect of Operation Parameters on Temperature Rising Elution Fractionation (Tref) and Crystallization Analysis Fractionation (Crystaf)", *Journal of Polymer Science Part B: Polymer Physics*, 41 (14): 1762-1778, **2003**.
30. **S Anantawaraskul**, JBP. Soares*, PM Wood-Adams, B Monrabal, "Effect of Molecular Weight and Average Comonomer Content on the Crystallization Analysis Fractionation (Crystaf) of Ethylene a-olefin copolymers", *Polymer*, 44, 2393-2401, **2003**.
31. **S Anantawaraskul**, JBP Soares*, PM Wood-Adams, "Chemical Composition Distribution in Multi-component Copolymers", *Macromolecular Theory and Simulations*, 12 (4): 229-236, **2003**.
32. **S Costeux***, **S Anantawaraskul**, PM Wood-Adams, JBP Soares, "Distribution of Longest Ethylene Sequence in LLDPE Synthesized with Single-site-type Catalysts", *Macromolecular Theory and Simulations*, 11, 326-341, **2002**.
33. **S Costeux**, PM Wood-Adams*, D Beigzadeh, "Molecular Structure of Metallocene Catalyzed Polyethylene: Branching Architecture in Single Catalyst and Blended Systems", *Macromolecules*, 35, 2514-2528, **2002**.
34. M Heuzey*, PM Wood-Adams, A Fortin "Using Truncated Relaxation Spectra in the Simulation of Viscoelastic Flows", *Canadian Journal of Chemical Engineering*. 80, 443-455, **2002**.
35. PM Wood-Adams*, **S Costeux**, "Thermorheological Behavior of Polyethylene: Effects of Microstructure and Long Chain Branching", *Macromolecules*, 34, 6281-6290, **2001**.
36. PM Wood-Adams*, "The Effect of Long Chain Branches on the Shear Flow Behavior of Polyethylene", *The Journal of Rheology*, 45, 203-210, **2001**.
37. PM Wood-Adams, JM Dealy*, AW deGroot, OD Redwine, "Effect of Molecular Structure on the Linear Viscoelastic Behavior of Polyethylene", *Macromolecules*, 33(20) 7489-7499, 2000.
38. PM Wood-Adams and JM Dealy*, "Inferring the Level of Long Chain Branching in mPE Using Rheological Data", *Macromolecules*, 33, 7481-7488, **2000**.

39. PM Wood-Adams and JM Dealy*, "Use of Rheological Measurements to Estimate the MWD of Linear Polyethylene", *Journal of Rheology*, 40, 761-778, 1996.

Refereed Conference Proceedings

Chaeichian S., Wood Adams P., and Hoa S.V., *Synthesis of thermoplastic/thermoset hybrid systems for the preparation of clay nanocomposites based on unsaturated polyester resin*, Proc. 15th European conference on composite materials, Venice, Italy, June, 2012.

E. Rezabeigi, R. Drew, P. Wood-Adams, P. Proa-Flores, "A Novel Nitrate Free Solgel Process for Production of Bioglass® 45S5", 26th ASC Technical Conference (2nd joint US-Canada conference on composites), Montreal, September 2011.

V Shaayegan, P Wood-Adams, NR Demarquette and AM. Souza, "Rheological behavior and relaxation phenomena of immiscible blends: Application of creep, Proceedings of the 26th Annual Meeting of the Polymer Processing Society, Banff, July, 2010.

Y. Yuryev, PM Wood-Adams, *A Monte-Carlo Simulation of Homogeneous Crystallization in Confined Spaces: Effect of Crystallization Kinetics on the Avrami Exponent*, 37th Annual Conference of the North American Thermal Analysis Society, Lubbock, Texas, September 2009.

Y Yuryev, PM Wood-Adams, *Crystallization of polylactide observed by rheological measurements*, World Congress of Chemical Engineering, Montreal, Canada, August 2009.

PM Wood-Adams, A Fatseyeu, C Huang, T Karjala and P Ansems, *Rheology and structure of filled propylene/ethylene copolymers*, Society of Plastics Engineers ANTEC, May 2008.

A Arzpeyma, A Dolatabadi, PM Wood-Adams, *A 3-D numerical modeling of droplet actuation via electrowetting in microchannels*, 5th Joint ASME/JSME Fluids Engineering Conference, San Diego, California, July 2007

A Arzpeyma, A Dolatabadi, PM Wood-Adams, Numerical investigation of electrowetting phenomena in microchannels, Annual Conference of the CFD Society of Canada, Toronto, May 2007.

Y Yuryev, P Wood-Adams, M-C Heuzey, C Dubois, J Brisson, *Application of AFM for the study of crystallization kinetics and morphology of polylactide in thin films*, BioPlastics, 65-66, 2006

W Xu and PM Wood-Adams, *Effect of local material properties on tapping mode atomic force microscopy*, Computer Methods and Experimental Measurements for Surface Effects and Contact Mechanics VII, Editors: JTM De Hossen, CA Brebbia, SI Nishida, Bologna, Italy, WIT Press, 151-160, 2005.

J Burlet, MC Heuzey, C Dubois, P Wood-Adams, *Thermal stabilization of high molecular weight L-polylactide*, S.P.E. ANTEC Tech. Paper, vol. 50, 2004.

H. Wang, PM Wood-Adams, SV Hoa, *Micro- and nano-structure study of Epon 828 / Epi-cure 3046 system and its clay/epoxy nanocomposite*, Polymer Nanocomposites 2003.

H. Wang, PM Wood-Adams, SV Hoa, *The effect of multi-functional-organoclay on the properties of clay/epoxy nanocomposites*, Cancom 2003.

P.M. Wood-Adams, S. Costeux, *Temperature Sensitivity of the Linear Viscoelastic Properties of Long Chain Branched Metallocene Polyethylene*, S.P.E. ANTEC Tech. Paper, vol. 48, 2002.

S. Depire, M. Heuzey, P.M Wood-Adams, C. He; *Spectrum Determination for a Very Broad Molecular Weight Distribution Polyethylene*, S.P.E. ANTEC Tech. Paper, vol. 48, 2002

C. He, P.M. Wood-Adams, R.L. Sammler, T.P. Karjala, *Viscoelasticity of New Molecularly Designed Polypropylenes*, S.P.E. ANTEC Tech. Paper, vol. 48, 2002

P.M. Wood-Adams, S. Costeux, J.M. Dealy, *Linear Viscoelasticity of Substantially Linear Polyolefins: Molecular Structure Effects*, *Polymeric Materials: Science and Engineering*, vol. 84, 2001.

C. He, S. Costeux, P.M. Wood-Adams, *Theoretical Validation of Long Chain Branching Quantification Technique for Polyethylene*, S.P.E. ANTEC Tech. Paper, vol. 47, 2001

M. Heuzey, P.M. Wood-Adams, *Using Truncated Relaxation Spectra in the Simulation of Viscoelastic Flows*, S.P.E. ANTEC Tech. Paper, vol. 47, 2001

P.M. Wood-Adams and J.M. Dealy, *Relationship Between Structure and Rheology of Constrained Geometry Catalyzed and Metallocene Polyethylenes* S.P.E. ANTEC Tech. Paper, Vol. 45, p. 1205, 1999

Other Conference Presentations

M. Sabzevari, PM Wood-Adams, *Effect of liquid surface tension and viscoelasticity on dewetting of polybutadiene thin films*, The XVIth International Congress on Rheology, Lisbon, Portugal, Aug. 2012

Y. Yuryev, P. Wood-Adams, *Observation of rheological properties of polylactide during crystallization: modeling quiescent and field induced crystallization*, 7th Annual European Rheology Conference, Suzdal, Russia May, 2011.

V Shaayegan, P. Wood-Adams, and NR Demarquette, *Interfacial relaxation phenomena in immiscible blends of polypropylene/polystyrene*, The Society of Rheology 82nd Annual Meeting, Santa Fe, October, 2010

Y Yuryev, K Jolley, RS Graham, and P Wood-Adams, *Flow induced crystallization of polylactide: experiment and simulation*, The Society of Rheology 82nd Annual Meeting, Santa Fe, October, 2010

Y. Yuryev, PM Wood-Adams, *Flow induced crystallization of polylactide: Accurate determination of induction time*, 81st Annual Meeting of The Society of Rheology, Madison, Wisconsin, October 2009.

N Samadi, A Dolatabadi, P Wood-Adams, *Dynamics of DNA Solutions*, Polymers and Organic Chemistry 2009, Montreal, July 2009.

N Subramanian, P Wood-Adams, Christine DeWolf, Rolf Schmidt, *Synthesis of alkyltriethoxysilane derivatives for self assembly of switchable monolayers on glass substrates*, Polymers and Organic Chemistry 2009, Montreal, July 2009.

R. Motamedi, PM Wood-Adams, *Micro-cantilever based rheology*, XVth International Conference on Rheology, Monterey, California, August 2008.

R. Motamedi, PM Wood-Adams, *Micro-cantilever based rheology*, 79th Annual Meeting of the Society of Rheology, Salt Lake City, October 2007.

PM Wood-Adams, R Motamedi, MC Heuzey, *Estimation of molecular weight distribution from viscoelastic behavior of polymer solutions*, European Rheology Conference, Naples, Italy. April 2007.

C Huang, PM Wood-Adams, T Karjala, P Ansems, *Rheology of highly filled propylene-ethylene copolymers*, Annual European Rheology Conference, Hersonosis, Greece, April 2006.

L Ionescu-Vasii, PM Wood-Adams, E Duchesne, *Microscopic Study of Composites Based on Propylene-Ethylene Copolymers*, AVS Science and Technology of Materials, Interfaces and Processing 52 International Symposium and Exhibition, Boston, USA, November 2005.

C Huang, PM Wood-Adams, T Karjala, P Ansems, *Rheology of highly filled propylene-ethylene copolymers*, Annual Meeting of The Society of Rheology, Vancouver, Canada, October 2005.

- A Fatseyeu, P Wood-Adams, L Ionescu-Vasii, *Nanoindentation of viscoelastic materials*, Annual Meeting of The Society of Rheology, Vancouver, Canada, October 2005
- A Dolatabadi, K Mohseni, P Wood-Adams, *Modeling Electrowetting-based Droplet Actuation in Microchannel*, CanCAM, Montreal, Canada, June 2005
- K Zhu, PM Wood-Adams, *The activation energy spectrum and thermorheologically complex materials*, Annual European Rheology Conference, Grenoble, France, April 2005
- N Liu, PM Wood-Adams, *Molecular weight distribution of long chain branched metallocene polyethylene*, Polymer Reaction Engineering Conference, Quebec City, Canada, May 2003.
- S Anantawaraskul, JBP Soares, PM Wood-Adams, *Chemical composition distribution in multicomponent random copolymers*, Polymer Reaction Engineering, Quebec City, May 2003.
- S Anantawaraskul, JBP Soares, PM Wood-Adams, *Crystallization analysis fractionation (CRYSTAF): crystallization kinetics and co-crystallization effects*, Polymer Reaction Engineering Conference, Quebec City, Canada, May 2003.
- MC Heuzey, PM Wood-Adams, *Quantitative model for the structural dependence of the zero-shear viscosity of entangled linear homopolymers*, Meeting of the Canadian Society of Chemical Engineering, Vancouver, Canada, October 2002.
- C He, S Costeux, PM Wood-Adams, *Theoretical analysis of a long chain branching quantification for metallocene polyethylene*, European Conference on Rheology, Erlangen, Germany, Aug. 2002.
- PM Wood-Adams, C He, JM Dealy, TP Karjala, RL Sammler, *Probing the slow relaxation processes of branched polypropylene melts*, The Royal Society Discussion Meeting on Slow Dynamics in Soft Matter, London, England, September 2002.
- PM Wood-Adams, N Lui, J Vera, *Molecular weight distribution of long chain branched polyethylene*, European conference on the reaction engineering of polyolefins, Lyon, France, June 2002
- PM Wood-Adams, S Costeux, *Temperature Sensitivity of the Linear Viscoelastic Properties of Long Chain Branched Metallocene Polyethylene*, Timely Topics in Thermal Analysis - Mini-Symposium and kick-off meeting of The Texas and South West Thermal Analysis Forum, San Antonio, USA, June 2002. Invited presentation
- MC Heuzey, PM Wood-Adams, A Fortin, *Using Truncated Relaxation Spectra in the Simulation of Viscoelastic Flows*, meeting of the Polymer Processing Society, Montreal, Canada, June 2001.
- PM Wood-Adams, S Costeux, D Beigzedeh, *Branching Structure and Rheological Behavior of Metallocene Polyethylene*, The Society of Rheology Annual Meeting, Hilton Head Island, South Carolina, USA, October 2001.
- S. McGlashan, PM Wood-Adams and JM Dealy, *The Effect of Pressure on the Viscosity of Long Chain Branched Polyethylenes*, The Society of Rheology Annual Meeting, Madison, WI, USA, Oct. 1999.
- PM Wood-Adams and JM Dealy, *The Effect of Molecular Structure on the Rheology of Metallocene Polyethylenes*, International Symposium on Rheology – Chain Structure Relationships in Polymers, Amsterdam, The Netherlands, April 1999.
- PM Wood-Adams and JM Dealy, *The Effect of Long Chain Branching on the Rheological Behavior of Metallocene Polyethylenes*, The Society of Rheology Annual Meeting, Monterey, California, Oct. 1998.
- JM Dealy and PM Wood-Adams, *Rheological Properties of Metallocene Polyethylenes*, Meeting of the Polymer Processing Society, Toronto, Canada, 1998. Invited presentation

PM Wood-Adams and JM Dealy, *Determination of MWD by Rheological Measurements*, Conference of the Canadian Society of Chemical Engineers, Quebec City, Canada, 1995

PM Wood-Adams and JM Dealy, *Determination of MWD by Rheological Measurements; Theory and Practice*, The Society of Rheology Annual Meeting, Philadelphia, USA, October 1994.

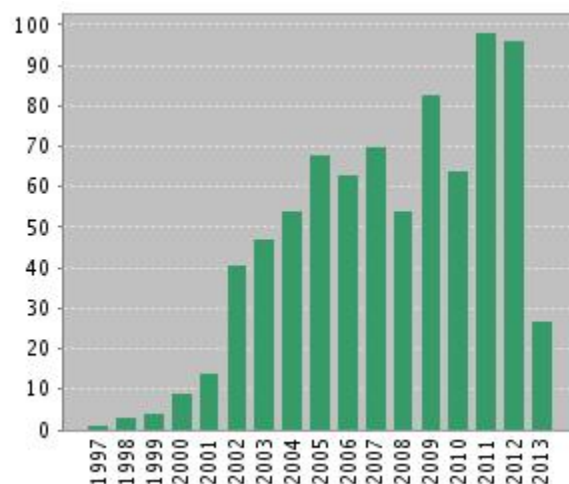
Evidence of Impact

Invited Lectures

- *A microfluidics study of the effect of polydispersity on wall slip of polybutadiene*, Novel Trends in Rheology V, Tomas Bata University, Zlin, Czech Republic, July 2013.
- *Crystallization of polylactide*, Annual Colloquium of the Centre of Applied Research on Polymers and Composites (CREPEC), École Polytechnique de Montréal, December 2010.
- *Rheology and structure of filled propylene/ethylene copolymers*, 7th Annual Polymer Colloquium, University of Wisconsin-Madison, May 2008.
- *Rheology and structure of filled Versify propylene/ethylene copolymers*, The Dow Chemical Company, Freeport, Texas, October 2007.
- *Measuring local viscoelastic properties of complex materials with atomic force microscopy and nanoindentation*, Department of Mechanical Engineering, University of Alberta, September 2005.
- *Rheology and structure of long chain branched polyolefins*, Department of Chemical Engineering, McMaster University, October 2004.
- *Molecular modeling of the viscoelastic behavior of metallocene polyethylene*, The Rheology Research Center, University of Wisconsin-Madison, March 2002.
- *Linear Viscoelastic Characterization of High-Melt-Strength Polypropylenes over a Broad Range of Frequencies*, NIST, Washington, DC, June 2002.

Citations

Following is a summary of the citations per year of my published journal articles according to the ISI Web of Science on April 15, 2013. According to this database my h-index is 14.



Research Funding**Individual grants from external sources**

Funding Agency	Type of Grant	Title of Project	Total Amount	Years
NSERC	Discovery	The structure and dynamic properties of polymers at interfaces	170,500	2012 to 2016
The Dow Chemical Company	Operating	Mechanisms of Haze Formation of LLDPE/LDPE Blends and their Relationships to Fundamental Rheological Properties	22,000	2010
NSERC	Discovery (extension)	Molecular characterization and modeling of physical properties of polymers	76,800	2009 to 2011
Taiho Kogyo Tribology Research Foundation	Operating	Characterization of damage related mechanical properties of thin polymer films on hard substrates	22,000	2007
PetroCanada	Young Innovator Award	Development of foaming technology for polylactide	10,000	2006
Novelis Inc.	Contract	Nanoindentation of polymer films on aluminum	6090	2005
NSERC	CRD	Rheology and interfacial phenomena of highly filled propylene-ethylene co-polymers	64,000	2005-2006
Taiho Kogyo Tribology Research Foundation	Operating	Length scales in the nanoindentation of polymer films	22,000	2005
The Dow Chemical Company	Operating	Novel Versify* plastomers and elastomers and Affinity polyethylenes in highly filled applications	44,000	2005-2006
NSERC	Discovery -UFA	Molecular characterization and modeling of physical properties of polymers	128,000	2004 to 2008
Taiho Kogyo Tribology Research Foundation	Operating	Nanoindentation of thin polymer films	25,000	2003
Canada Foundation for Innovation	Infrastructure (New Opportunities)	Laboratory for the physics of advanced materials	214,800	2002
MDEIE matching funds for CFI grant	Infrastructure	Laboratory for the physics of advanced materials	214,800	2002
FQRNT	New Researcher	Rheological studies of molten polymer/solid particle composites	45,000	2002 to 2004
FQRNT	New Researcher Equipment	Stress controlled rotational rheometer for polymer melts	50,000	2002
NSERC	Operating	Molecular modeling of metallocene polyethylene	76,500	2001-2003
NSERC	Operating	The rheology and processability of metallocene polyethylenes	50,400	1999-2000
Total individual grants			\$1,241,890	

Fellowships from external sources

Funding Agency	Type of Grant	Title of Project	Total Amount	Years
NSERC	University Faculty Award Salary Support	Molecular modeling of metallocene polyethylene	200,000	2001 - 2005
The Dow Chemical Co.	Salary support for ETA appointment at McGill	Rheology and structure of polyolefins	135,000	1998 - 2000
Total Fellowships			\$335,000	

Shared grants from external sources

Funding Agency	Applicants	Type of Grant	Title of Project	Total Amount	Years
FQRNT	R. Wuthrich + 3 others	Partnership grant	Development de catalyseurs sans platine pour la production electrochimique de l'hydrogene	217,000	2010-2012
NSERC-NRC-BDC	P. Carreau + 11 others	Partnership grant	Polyester nanocomposites for greener transportation, construction and packaging	1,410,000	2008 to 2010
CFI and MDEIE	SV Hoa + 5 others	Infrastructure	Infrastructure for development of advanced composites and nanocomposites	2,096,680	2009
FQRNT	PM Wood-Adams + 4 others	Team grant	Electrowetting-based actuation of discrete droplets of model biological fluids in microchannels	178,977	2006 to 2008
CFI and MDEIE	A Dolatabadi + 2 others	Infrastructure	Infrastructure for Advanced Coating Technologies	680,000	2007
NSERC	PM Wood-Adams + 1 other	RTI	Electrorheological and small angle light scattering devices	70,500	2005
NSERC	SV Hoa + 2 others	Equipment	Microfluidizer for the dispersion of nanoparticles in polymers	60,000	2003
NSERC	JM Dealy (McGill) +1 other	Collaborative R&D Grant	Rheology and structure of metallocene polyethylenes	288,000	2001 to 2003
The Dow Chemical Company	JM Dealy (McGill) +1 other	unrestricted research grant	Structure and Rheology of Polymers made with CGCST	294,000	2001 to 2003
FQRNT	AD Rey (McGill) + 3 others	Team Grant	Étude fondamentale de procédés industriels de transformation de matériaux plastiques	94,500	1999 to 2002
Total team grants				\$5,319,157	
Amount allocated to my research				\$1,515,406	

Internal Grants

Type of Grant	Title	Total Amount	Years
CURC	Polymer interfaces: structures and properties	150,000	2006 to 2015
VPRGS funding for SGS Associate Deans	Research in applied polymer science	37,500	2010 to 2012
VPRGS Seed Funding	Rapid prototyping for the manufacture of functional parts from thermosetting polymers	12,750	2012
VPRGS Seed Funding	Sum Frequency Generating Spectroscopic Analysis of Polymer-metal Nanocomposites	15,000	2009
Total Internal Grants			\$215,250

TEACHING CONTRIBUTIONS**Course Instruction**

Year	Winter	Fall
2011	•MECH 221 Materials Science	•MECH 691G Polymer Science and Engineering
2010		
2009		•ENCS 8011 PhD seminar
2008	•MECH 221 Materials Science •ENGR 6291 Rheology	•ENCS 8011 PhD seminar •MECH 221 Materials Science
2007	•MECH 221 Materials Science	•ENCS 8011 PhD seminar
2006	•ENGR 6291 Rheology	•ENCS 8011 PhD seminar •MECH 351 Thermodynamics 2
2005		•MECH 351 Thermodynamics 2
2004	•ENGR 6291 Rheology	•MECH 351 Thermodynamics 2 •MECH 221 Materials Science
2003	•ENGR 6291 Rheology	Maternity leave
2002	•ENGR 244 Mechanics of Materials	•MECH 221 Materials Science
2001	•Process Control (McGill U., undergrad.)	•MECH 221 Materials Science
2000	•Process Control (McGill U., undergrad.)	•Computer Apps in Chem. Eng. (McGill U., undergrad.)
1999	•Process Control (McGill U., undergrad.)	•Computer Apps in Chem. Eng. (McGill U., undergrad.)
1998		•Intro to Chemical Engineering (McGill U. undergrad, 1/3 of course) •Polymer engineering laboratory (McGill U., graduate, 1/4 of course)

Graduate Students and Post-Doctoral Researchers Supervised and Co-supervised

S/C*	Student	Program	Project title	Status
C	Ehsan Rezabeigi	PhD	Nanocomposite scaffolds for bone healing	In progress
S	Kayla Shedlack	PhD	Failure of adhesively bonded joints in composite materials	In progress
S	Mostafa Sabzevari	PhD	Effect of MWD on slip and dewetting of polymers	In progress
C	Sina Chaiechian	PhD	Hybrid thermoset/thermoplastic based nanocomposites	In progress
S	Wasef Bzeih	MASc	SFG studies of polystyrene	In progress
C	Nithya Subramanian	PhD	Switchable surface development	In progress
C	Niyusha Samadi	PhD	Electrowetting of biological polymer solutions	In progress
S	Yury Yuryev	PhD	Reptation dynamics of polylactide	Graduated 2012
S	Vahid Shaayegan	MASc	Creep behavior of polymer blends	Graduated 2010
S	Salomon Vasquez	PDF	SFG studies of thin polymer films	Completed 2010
S	Ramin Motamedi	PhD	Oscillating cantilever based micro-rheology	Graduated 2009
S	Nicolas Burger	Intern.	Diffusion in polymer melts	Completed 2009
C	Alborz Arzpeyma	MASc	CFD simulation of electrowetting based actuation	Graduated 2007
S	Yury Yuryev	MASc	Crystal structure in thin films of polylactide	Graduated 2006
S	Cheng Huang	MASc	Rheology of highly filled olefin copolymers	Graduated 2006
S	Luminita Ionescu-Vasii	PDF	Structure of highly filled olefin copolymers	Completed 2006
S	Arkadz Fatseyeu	MASc	Nanoindentation of polymers	Graduated 2006
S	Wensheng Xu	MASc	AFM of viscoelastic surfaces	Graduated 2005
C	Heng Wang	MASc	Epoxy/clay nanocomposites	Graduated 2004
C	Siripon Anantawaraskul	PhD	Chemical composition distribution of binary and multi-component copolymers	Graduated 2004 (McGill)
S	Kang Zhu	MASc	Thermorheology of polyethylene	Graduated 2003
C	Nannan Liu	MASc	Molecular weight distribution of polyethylene	Graduated 2003 (McGill)
C	Chunxia He	PhD	Molecular structure and properties of polypropylene	Graduated 2003 (McGill)
C	Stephane Costeux	PDF	Thermorheology and structure of mPE	Completed 2002 (McGill)
C	Magda Jaklewicz	PDF	Polymer derived ceramics	Completed 2002
S	Yufeng Ye	MASc	Slow relaxation behavior of polyethylene	Graduated 2001 (McGill)

*S indicates (only) supervisor, C indicates co-supervisor