THE UNIVERSITY OF BRITISH COLUMBIA



Department of Chemical & Biological Engineering c/o Pulp and Paper Centre

2385 East Mall Vancouver, B.C. V6T 1Z4

Tel: (604) 822-8561 Fax: (604) 822-8563

22 July 2008

Re: Nomination of Andy Garner for H.L. Joachim Distinguished Service Award

Dear Mr. Bohanaa:

Attached is my nomination of Andy Garner for the above award.

Some places in the combined nomination form are not clear as to whether the requested information pertains to this award, so I have left these blank. However, I believe that all the necessary information has been provided in the filled-in parts and the supplement. If this is not the case, please do let me know.

Thanks for your attention.

Sincerely,

Richard Kerekes Professor Emeritus

Common Nomination Form

TO: TAPPI Board Nominating/Honors Committee

From: (Sponsor Name) Richard Kerekes	
Sponsor Address: 2385 East Mall, The University of British Colum	bia, Vancouver, BC, V6T 1Z4, Canada
Telephone: 604-822-8561	Fax: 604-822-8563
Email: kerekes@chml.ubc.ca	<u>'</u>
The undersigned Sponsor nominates the Nominee listed you wish to nominate for) and has personal knowledge support of this nomination.	
X Herman L. Joachim Distin	guished Service Award
TAPPI Fellow	
Gunnar Nicholson Gold Mo	edal Award
Paul W. Magnabosco Local	Section Member Award
Nominee Andrew Garner	
Title Principal Company Andre	w Garner and Associates Inc
Company Address 3927 West 37th Ave.	
City Vancouver State/Provin	nce BC Postal Code V6N 2W4
Country	
Telephone 604-264-8573 Fax	604-264-8583
Email andygarner@telus.net	
Sponsor Signature Richard Kerekes Option by Richard Kerekes Option of the Conflict Acceptance of the C	tre, ou=The University of University of July 23, 2008
To be completed by TAPPI h	leadquarters
Nominee's Member # Join Date	Membership Grade

Required for Gunnar Nicholson Award, Herman L. Joachim Award, TAPPI Fellow, Paul W. Magnabosco Award

Biographical Data (2.0) for

Nominee's Name	me Andrew Garner			
Education				
College/University	University of Liverpool			
Degree	BSc	Date	Jan 1, 1968	
College/University	The University of British Columbia			
Degree	PhD	Date	Jan 1, 1974	
College/University				
Degree		Date		
Employment Histo	ory			
Company	Alcan Industries			
Position Held	Engineer	Date	1968-69	
Company UBC and Placer Development				
Position Held	Post doctoral fellow and research engineer	Date	1974-78	
Company Pulp and Paper Research Institute of Canada				
Position Held	Director, Process Physics; Director, Vancouver Laboratory	Date	1978-2004	
Memberships in Professional Societies				
Society	Institute of Materials (UK)			
Member Grade (if	known) Fellow	Date		
Society PAPTAC, NACE (National Association of Corrosion Engineers)				
Member Grade (if l	known) Member	Date		
Society TAPPI				
Member Grade (if l	known) Member, Fellow	Date	1979, 2007	

Biographical Data (2.1) for

Nominee's Name	Andrew Garner			
TAPPI Local Sect	ion Offices			
Section Name				
Office Held			Date	
Section Name				
Office Held			Date	
Section Name				
Office Held			Date	
Other TAPPI Offic Responsibilities	ces of	TAPPI Engineering Division Council, succ TAPPI Engineering Division, Chair 1996- TAPPI Corrosion and Materials Engineer 1981-1987; Chair, 1987-89 Chair, 5th International Conference on C (sponsored by TAPPI, PAPTAC, NACE), Va	1998 ing Committee, su Corrosion in the Pu	ccessive offices
Specific TAPPI Co	ontributions	 Fostered introduction of 2 new comm Training and Development (1997). Strongly supported joint conferences TAPPI divisions, starting in 1990s. Chaired the largest ever TAPPI technica and Papermakers Conference, Nashville. As Chair of Corrosion and Material Eng reorganized the subcommittees to form Equipment Repair and Inspection. 	between Engineer al conference th , TN, October 1997 ineering Committe	ring Division and other e Joint Engineering 7. ee, simplified and

Professional	Fields of Specialization	Andy is a world-ranking corrosion engi	neer in the pulp an	d paper industry.
Publications				
Title	47 journal technical pu	blications (sole-authored and co-author	ed)	
Publication	See Supplemental Data	Э.	Date	1974-2007
Title				
Publication			Date	
Title				
Publication			Date	
Patents				
Title	13 patents, 1979-preser	nt (sole-authored and co-authored)		
Number	See Supplemental Data	ì.	Date	1979-present
Title	1 chapter , Metals Handl	oook , 9th edition		
Number			Date	Jan 1, 1987
Title				
Number			Date	

Required for Gunnar Nicholson Award, Herman L. Joachim Aeard, TAPPI Fellow, Paul W. Magnabosco

Biographical Data (2.1) for

Nominee's Name Andrew Garner			
Professional Society Activities			
Office held			
Contributions	Date		
Office held			
Contributions	Date		
Office held			
Contributions	Date		
Public Service			
Office held			
Contributions	Date		
Office held			
Contributions	Date		
Office held			
Contributions	Date		
Professional Honors Received			
Title: I.H. Weldon Gold Medal			
Grantor: PAPTAC	Date .	Jan 1, 1984	
Title: Engineering Division Award and Beloit Prize / TAPPI Fellow			
Grantor: TAPPI	Date 2	2002, 2007	
Title: Silver Medal for Innovation / University-Industry Synergy Award			
Grantor: Canada Awards for Excellence / NSERC, Canada	Date	1985, 1998	

Contribution Form for

Nominee's Name	Andrew Garner	
1) What specific an contributions have demonstrably cont advancement of the the nominee for the	significantly and ributed to the e Association qualify	Andy Garner has provided significant leadership to TAPPI at the Committee, Divisional, and inter-Divisional levels. As described previously, at each level he introduced initiatives that improved the organization, initiatives that are carried on to this day; for example, the subcommittee structure of the Corrosion Committee and combined divisional conferences.
2) Specifically, how contributions accordingly		Andy's accomplishments are due to his unique combination of vision, ability, and tactfulness. He brings out the best in others by generously sharing credit, often avoiding the limelight to do so.
3) In what areas of the nominee made contributions?	f the Association has definite	Described above.
services to member the nomineemade? For example, public training seminars,	ontributions to direct is and industry has cations, conferences, home study courses, al Section activities,	Described above.

Required for Herman L. Joachim Award, Paul W. Magnabosco

5) Have the contributions of the nominee favorably affected the number and involvement of members? How?	
6) Has the organizational structure of the Association been improved by the achievements of the nominee? How?	Described above.
7) Has the nominee made definite contributions to the management of the associations? What are they?	Described above.
8) Have the contributions of the nominee demonstrably improved the Associations' finances? How?	Not known.

Required for Herman L. Joachim Award, Paul W. Magnabosco

9) Have the contributions of the nomine improved the public image of the Association?	
For example, through communication with members and potential members, general public, industry, government, or academe in the United States and other countries.	Andy's primary contributions have been to TAPPI and its members.
Please explain.	

Supplemental Data Sheet for

Nominee's Name	Andrew Garner	
Text		
See attached pa	es.	



Andrew Garner, Ph.D., P.Eng.

1.1 Company Profile: Andrew Garner and Associates Inc

Andrew Garner and Associates Inc (AG&A) is a consulting company incorporated in British Columbia in 2005. It has a focus on strategic planning, economics and engineering projects for the forest sector. Its Principal and sole employee is Andrew Garner who has 32 years experience in the forest and engineering sectors.

1.2 Andrew Garner: curriculum vitae

Andrew Garner is Principal of Andrew Garner and Associates Inc., an engineering consultancy. He graduated with a BSc in Metallurgy from Liverpool University, UK and with a PhD in Metallurgy from the University of British Columbia, Canada. He spent 27 years with the Pulp and Paper Research Institute of Canada (Paprican), a not-for-profit research institute, first as Head of the Corrosion Group and later as the Director of the Vancouver Laboratory. Prior to working at Paprican, he was employed by Placer Development, a Canadian mining company, the University of British Columbia, and Alcan Industries in the UK. He is a Fellow of the Institute of Materials (UK) and an active member of NACE International. He has received the Engineering Division Technical Award and Beloit Prize from the Technical Association of the Pulp and Paper Industry, and the I H Weldon Gold Medal from the Pulp and Paper Technical Association of Canada. His recent consulting work has included economic analysis and cost benchmarking for mill closure decisions, and analysis of transformative technologies for the Forest Products sector. He has advised on equipment repair and replacement in the Forest Products sector. He has led large consortium research projects in the Pulp and Paper Industry. He has coauthored chapters in the American Society for Metals (ASM) Metals Handbook.



2.0 Publications:

- 1. A. Garner, "Global Forest and Paper Industry Conference" Pulp and Paper Canada 108(7/8):26 (2007).
- 2. A. Garner, "Biorefinery Symposium Maps out a Green Future" Pulp and Paper Canada 108(6):13 (2007).
- 3. A. Garner and R.J. Kerekes, "Transformative Technologies for the Forest Products Sector" Pulp and Paper Canada 107(6):17 (2006).
- 4. A. Garner and D.L. Singbeil, "Materials Challenges in Pulp and Paper Processing", Proc. CORROSION 2005 Research Topical Symposium: Corrosion Resistant Materials for Extreme Conditions. NACE (Houston).
- 5. M. Bradley and A. Garner, "Kyoto and What it means for the Forest Sector" Pulp and Paper Canada 106(4):10 (2005).
- 6. A. Garner, "Thiosulphate and Paper Machine Corrosion: Is the Problem Solved?" Pulp and Paper Canada 106(4):10 (2005).
- 7. C.B. Thompson and A. Garner, "Paper-Machine Corrosion and Progressive Closure of the White-Water System" Tappi J 50(4):683 (1996).
- 8. A.H. Tuthill and A. Garner, "Evaluation of Bleach Plant Piping Materials" Tappi J., p147, June 1990.
- 9. D.L. Singbeil and A. Garner, "Lower Furnace Corrosion in Kraft Recovery Boilers" Tappi J. 72(6):136 (1989).
- 10. R.C. Newman, W.P. Wong, H. Ezuber and A. Garner, "Pitting of Stainless Steels by Thiosulphate Ions" Corrosion 45(4):282 (1989).
- 11. R.J. Brigham, M. McLean, V.S. Donepudi, S. Santyr, L. Malik and A. Garner, "Evaluation of Weld-Zone Corrosion of Shipbuilding Steel Plates for use in the Arctic Environment" Canadian Metallurgical Quarterly, 27(4):311 (1988).
- 12. A. Garner, "Chlorination Washer Corrosion Resurveyed" Pulp & Paper Canada 89:8, 1988.
- 13. C.B. Thompson and A. Garner, "The Resistance of Refiner Plate Alloys to Bar Rounding" Tappi J., p95, June 1988.
- 14. A. Garner, "Survey of Roll Cover Failures" Pulp and Paper Canada 89(5):T149 (1988).
- 15. A. Garner, "Thiosulphate Pitting of Austenitic Stainless Steels" Corrosion Australasia, pl6, Feb., 1988.
- 16. D. Singbeil and A. Garner, "A Test Method to Evaluate Stress Corrosion Cracking in Pressure Vessels" Materials Performance 27(2):38 (1988).
- 17. C.B. Thompson and A. Garner, "Wear Characteristics of Refiner Plates" Pulp and Paper Canada 88(8):T294 (1987).



- 18. A. Garner, T. Hakura, A. Mori, and K. Nakano, "Electrochemical Corrosion Protection of Bleached Pulp Washers" Japan Tappi 41(4):24 (1987).
- 19. D. Singbeil and A. Garner, "Anodic Protection to Prevent the Stress Corrosion Cracking of Pressure Vessel Steels in Alkaline Sulphide Environments" Materials Performance 26(4):31 (1987).
- 20. C.B. Thompson and A. Garner, "Identification and Control of Wear in the Pulp and Paper Industry" Pulp and Paper Canada 87(2):T71 (1986).
- 21. C.B. Thompson and A. Garner, "Electrochemical Corrosion Protection of Process Plant Equipment" B. Corr. J. 21(4):235 (1986).
- 22. R.C. Newman, W.P. Wong and A. Garner, "A Mechanism of Microbial Pitting in Stainless Steel" Corrosion 42(8):489 (1986).
- 23. A. Garner, "Corrosion of Weldments in Pulp Bleach Plants" Weld. J. 65(9):39 (1986).
- 24. D. Singbeil and A. Garner, "Cracking in Kraft Continuous Digesters" Pulp and Paper Canada 87(3):T93 (1986).
- 25. L. Boulton and A. Garner, "Electrochemical Corrosion Protection" Chem. in N.Z. 49(2:31):p33 (1985).
- D. Singbeil and A. Garner, "Electrochemical and Stress Corrosion Cracking Behaviour of Digester Steels in Kraft White Liquors" Corrosion 41(11):634 (1985).
- 27. D. Singbeil and A. Garner, "Potential Dependent Cracking of Kraft Continuous Digesters" Tappi J. 68(4):112 (1985).
- 28. A. Garner, "Corrosion Control in the Bleach Plant" Pulp and Paper Canada 86(12):T419 (1985).
- 29. D. Singbeil and A. Garner, "Caustic Stress Corrosion Cracking of Pressure Vessel Steels in Dilute Alkaline Sulphide Solutions" Mater Perform. 24(10):9 (1985).
- 30. A. Garner, "Thiosulphate Corrosion in Paper Machine White Water" Corrosion 41(10):587 (1985).
- 31. L. H. Bolton and A. Garner, "Electrochemical Corrosion Protection, an Overview Chemistry in New Zealand", April 1985.
- 32. A. Garner, "How Stainless Steel Welds Corrode" Metal Prog. April, 1985.
- 33. A. Garner, "Suction Roll Failures in Canada" Pulp and Paper Canada 86(3):T62 (1985).
- 34. A. Garner, "Sources of Thiosulphate in Paper Machine White Water, Part II: Thiosulphate Formation During Sodium Hydrosulphite Brightening", J. Pulp Paper Sci. 10(5):J5I (1984).



- 35. A. Garner, "Pitting Corrosion of High Alloy Stainless Steel Weldments in Oxidizing Environments", Weld. J. 62(1):27 (1983).
- 36. A. Garner, "Materials Selection for Bleached Wood Pulp Washing Filters", Acciaio Inossidabile 49(1):3 (1982).
- 37. A. Garner, "Corrosion of High Alloy Austenitic Stainless Steel Weldments in Oxidizing Environments", Mater. Perform. 21(8):9 (1982).
- 38. A. Garner, "Sources of Thiosulphate in Paper Machine White Water", Pulp and Paper Canada 83(10):20 (1982).
- 39. A. Garner, "Electrochemical Protection of Stainless Steels in Oxidizing Acid Chloride Environments", Mater. Perform. 21(5):43 (1982).
- 40. L.H. Laliberte and A. Garner, "Corrosion Protection of Bleach Plant Washers by Electrochemical Potential Control", Tappi 64(1):47 (1981).
- 41. A. Garner, "Material Selection for Bleached Pulp Washers", Pulp and Paper Canada 82(12):T414 (1981).
- 42. A. Garner, "Crevice Corrosion of Stainless Steels in Sea Water: Correlation of Field Data with Laboratory Ferric Chloride Test", Corrosion 37(3):178 (1981).
- 43. A. Garner, "The Effect of Autogenous Welding on Chloride Pitting Corrosion in Austenitic Stainless Steels", Corrosion 35(3):108 (1979).
- 44. A. Garner and D. Tromans, "Direct Observation of Intergranular Corrosion in Al 4 Weight Percent Cu Alloy", Corrosion 35(2):55 (1979).
- 45. A. Garner, "The Use of Free Corrosion Potential Time Transients to Distinguish between Pitting and Crevice Corrosion after Potentiostatic Tests", Corrosion 34(A):285 (1978).
- 46. A. Garner, "Molybdenum in Stainless Steels", The Metallurgical Society of CIM, Annual Volume, p1, 1977.
- 47. A. Garner and T.H. Alden, "Temperature Dependence of Slip Line Length in Copper Single Crystals", Phil. Mag. 29: p323 (1974).

2.2 Patents Awarded

- 1. Garner, "Monitor Assembly for Electrochemical Corrosion Protection of Stainless Steel Bleach Plant Washers". Japanese Patent 1464865.
- 2. Garner and L.H. Laliberte, "Electrochemical Protection of Stainless Steel Bleach Plant Washers". Japanese Patent 1464864.
- 3. Garner, "Papritection The System". Brazilian Patent Pl 8101634, 1988.
- 4. Garner, "Anordning for overvakning av korrosionsskydd". Swedish Patent A101752 7, 1987.



- 5. Garner and D. Singbeil, "Monitor Assembly for Monitoring Anodic Corrosion Protection of Carbon Steel Vessels". Canadian Patent 1218112, 1987.
- 6. A. Garner, "Monitoriyksikko valkaisimoiden ruostumattomien teraspesurien sallkokemiallista korroosiosuojausta varten Monitorenhet for att pa elektro kemisk vag skydda tvattanordningar av rostfritt stal pa ett blekeri mot korrosion". Finnish Patent 68682, 1987.
- 7. Garner and D. Singbeil, "Monitor Assembly for Monitoring Anodic Corrosion Protection of Carbon Steel Vessels" US Patent 4627905, 1986.
- 8. Garner and L.H. Laliberte, "Electrochemical Corrosion Protection of Stainless Steel Bleach Plant Washers", Canadian Patent 1148498, 1983.
- 9. Garner, "Monitor Assembly for Electrochemical Protection of Stainless Steel Bleach Plant Washers", Canadian Patent 1126691, 1982.
- 10. Garner and L.H. Laliberte, "Electrochemical Corrosion Protection of Stainless Steel Bleach Plant Washers", US Patent 4285787, 1981.
- 11. Garner, "Monitor Assembly for Electrochemical Corrosion Protection of Stainless Steel Bleach Plant Washers", US Patent 4285232, 1981.
- 12. R.J. Brigham, G.V. Sirianni and A. Garner, "Process for the Production of Ferromolybdenum in an Electric Arc Furnace", US Patent 4160661, 1979.

2.3 Book Publication

Metals Handbook 9th Edition, Volume 13, American Society for Metals (1987); edited and co-authored chapter on Corrosion in the Pulp and Paper Industry, co-authored chapter on Corrosion of Weldments.