

Full name / Position

Wojciech (Voytek) Stanislaw Gutowski / CSIRO Fellow & CSIRO Chief Research Scientist



Position: CSIRO Fellow, CSIRO Division of Materials Science & Engineering, Melbourne, Australia

Education: 1971 MSc in Mechanical Engineering, Technical University of Szczecin, Poland
1975 PhD in Materials Science, Technical University of Szczecin, Poland

Work: 1971-1981 Tutor & Assistant Professor: Technical University of Szczecin & University of Szczecin / Poland
1982-1983 Lecturer at Western Australian Institute of Technology, Perth / Australia
1983-now Senior Research Scientist / Chief Research Scientist, CSIRO / Australia

Current function: Research Manager of approx. 45 scientists in Sustainable Polymeric Composites Theme

Key role: developing and commercially implementing technologies requiring multi-functional interphases on polymeric materials and composites for automotive; aerospace, energy production & storage; packaging: (GM, Ford, Toyota, Mitsubishi, Boeing, Boise Cascade, Vestas, Orica, Minova, CAP-XX, Bostik-Finley, 3M, Dow Corning, Dulux, etc)

Industrial technology track record:

- **General Motors (GM)/Australia** (1997+): adhesive bonding PP body components
- **ASA/Australia** (2003): adhesion of slip coatings to new generation (foamed PP) closures for wine bottles
- **Toyota & Mitsubishi/Japan & Australia**(2003+): manufacture of integrated instrument panels & air bags
- **Boise Cascade (BCC)/USA** (2002-03): manufacturing plant built in the US in 2004 (US\$ 110 Mln) in Alexandria-Washington: composite surface engineering re adhesion of exterior paints adhesion
- **Masonite/Premdor/US** (2003) Surface treatment of PP for assembly & finishing GF/PP composite doors
- **Ford/Australia & EGR** (2004+): adhesion of exterior paints to PP-based exterior vehicle components.
- **GM & CME/Australia** (2006+): surface treatment PP-GF composites for assembly of vehicle components
- **Bostik-Finley/Global** [globally 3rd largest adhesives manufacturer] (2008+): license agreement for surface modification of cellulose-based materials & products (global license).
- **Orica-Dulux/Global** (2007+): Adhesion of powder coatings to polymers and composites.
- **Vestas/Global** (2010): Advanced bonding technology for composite wind turbine blades assembly.
- **Minova/Global** (2011): Electro-conductive woven polymeric fabrics.
- **Boeing/Global** (2011+): In-mould coating aircraft composite structures.
- **CME/Global & Australia** (2012+): electrostatic powder-coating of polymeric solar cell casings

Major awards

- (2012) Eureka Prize for Commercialisation of Innovation for the development and commercialisation of breakthrough innovations creating significant value within Australia in last 10 years

- (2011) Sir Ian McLennan Achievement for Industry Award: for outstandingly effective interactions with global industry and creating innovative solutions with worldwide industrial and environmental impacts, delivering significant national benefits to Australia
- (2010) Victoria Prize: Government prize for outstanding innovations & science advancements
- (2008) Banksia Eco-Innovation Award: Australian Prime Minister patroned award for outstanding achievements (technology) resulting in significant waste reductions
- (2008) The Premier's Sustainability Award: Victorian Premier's Award for outstanding contributions to a sustainable environment.
- (2008) Society of Plastics Engineers (SPE) 'Process Innovation Award' for development of 'Zero-waste technology for plastics surface finishing'.
- (2008) Triennial SPE Innovation Award for outstanding innovations in the period 2005-2008
- (2000) International "Plueddemann Prize" for Excellence in Interface Science
- (1998) Montell Worldwide Innovation Award for the development of novel surface engineering technology for polyolefines (Brussels/Dusseldorf 1998).
- (1998) Australian Technology Award (High Commendation) for SICOR development.

Brief Background

Dr Voytek Gutowski works in CSIRO since 1983. Currently he is a Team Leader of 'Functional Interphases & Coatings' Team and Stream Leader, 'Clean Technologies' Stream. His research covers: adhesion science, intelligent multi-functional interphases through molecular manipulation of interactions between functional molecules and polymeric surfaces. The key drivers for his Team's work are the development of transformational, next generation clean coatings technologies and scaling these up to industrial applications in the automotive, aerospace, renewable energy platforms (large-size wind turbines, polymeric solar cells) & others.

Voytek's contributions to the science of adhesion and multi-functional interphases received broad acclaim by international and Australian scientific and industrial peers leading to numerous prestigious awards received by Voytek and his Team, eg: Montell Innovation Award/1997; Australian Technology Award (Commendation)/1998; International Plueddemann Science Prize/2000); in 2008 - Premier Sustainability Innovation Award; Banksia Eco-Innovation Award sponsored by the Prime Minister, and two SPE (Society of Plastics Engineers Awards) and in 2012: Victoria Prize.

He is a member of Editorial Board of 5 international journals: *Composite Interfaces*, *J.Adhesion Science & Technology*, *J.Natural Fibres*, *Reviews of Adhesion & Adhesives*, and *International Journal of Automotive Composites*. His publications record includes: 75 generic patents and patent applications (excluding multiple registrations); 22 book chapters and 120 fully refereed papers (79 – in journals; 41 in conference proceedings).

Research Activities

Dr Gutowski is working on multi-functional interphases on polymeric materials and composites focusing on: (i) adhesion science & technology in applications to bonding and coating of low-surface energy polymers for automotive, aerospace, construction, packaging and other industries, and (ii) management and commercial implementation of technologies. His current projects address eco-sustainable zero waste coating technologies and functional coatings.

In 2000, he initiated research on multifunctional interphases of synthetic and natural polymers, targeting interphase multi-functionality re. simultaneous enhancement of adhesion, electrical charge conductivity and bio-compatibility. This work produced interphases exhibiting surface conductivity increases of initially non-conductive polymers (polyolefines) and cellulose-based substrates by up to billion-fold with adhesion strength improved by up to 100 to 1000-fold depending on the polymer type. He and his team have devised the application of multi-functional interphases in electrostatic coating of polymeric or wood-based materials and composites by a 100% solid powder coating resins, which do not contain volatile solvents. This work led to the development of globally first eco-sustainable 'zero-waste' coating technologies which completely

eliminated wastes, such as solids, slurry and volatile organic compounds (VOCs) from surface finishing of plastics and composite materials.

Dr Gutowski's patent "Surface Treatment of Polymers" (US 5,922,161) protecting his widely used SICOR process is cited by 82 patents (evaluated by EPO Espacenet database). This makes it the 3rd most cited patent published by CSIRO since 1971 (after US 4,581,429 and WO 1999031144) and the most cited CSIRO downstream technology patent. This patent citations by commercially important organizations e.g.: Johnson & Johnson Vision Products, Seagate Technology, Bridgestone Corporation, IBM, Bio-Layer, Solvay, Henkel Corporation, Battelle Memorial Institute, Proctor & Gamble, and Advanced Cardiovascular Systems, Schott Glas, demonstrate the value and broad implications of its inherent Intellectual Property.

Publications List

Books & Book Chapters

1. **W.S. Gutowski**, Hanna Dodiuk (co-editors), "Recent Advances in Adhesion Science and Technology", Proceedings of Special Symposium of 240th American Chemical Society Meeting in Boston, Aug. 22-26, 2010, Taylor & Francis/CRC Press (publication date: 1st November 2012),
2. **W.S. Gutowski**, A. Cerra. "Adhesion Testing of Sealants", Invited Chapter in: "Handbook of Sealants Technology", Eds. Mittal and Pizzi, Taylor and Francis/CRC, (2009), ISBN-10: 0849391628, ISBN-13: 978-0849391620,
3. **W.S., Gutowski**, S, Li, P., Widsten, B., Ozarska, G., Daian, M. Spicer, S. Molenaar: "Novel Surface Modification Processes for High Value Softwood Products". FWPA/FWPRDC, Melbourne (2008), p.1-59.
4. G. Daian, B. Ozarska, A. Ammala, C. Bell, **W.S. Gutowski**, M. Spicer. "Mitigation of the UV-Driven Discolouration of Reconstituted and Dyed Veneers". FWPA/FWPRDC, Melbourne, p.1-104. (2007)
5. Bilyk, A., Li, S., **Gutowski**, W.S., Espiritu, M. & Burgar, I.: "Adhesion failure of paints on thermoplastic polyolefin substrates". Invited Chapter in 'Polymer Surface Modification: Relevance to Adhesion', (Ed) K.L. Mittal, VSP-BV, Utrecht & Boston, Chapter 2, p. 379-390, (2004).
6. **Gutowski**, W., Li, S., Petinakis, S.: "Theory and Technology of Surface Engineering of Thermoplastic Olefines for Adhesion Enhancement." ECM Inc, Plymouth, (2004), 89-111.
7. **W.S. Gutowski**, D.Y. Wu, S. Li, A.P. Cerra, S. Petinakis, L. Russell, C. Filippou. "Novel Technology for Durable Adhesion of Structural Sealants, Self-Adhesive Tapes and Adhesives". In 'Durability of Building and Construction Sealants'. (Ed.) A.T. Wolf, ASTM STP. American Society for Testing and Materials, Philadelphia (2004).
8. **W.S. Gutowski**, S. Li, L. Russell, C. Filippou, M. Spicer, "Molecular Brushes in Surface Engineering of Polymers for Enhanced Adhesion of Adhesives and Coatings". Invited Chapter in: 'Adhesive Joints: Formation, Characteristics and Testing'. Vol. 2. (Ed) K.L. Mittal, VSP, Utrecht & Boston, (2003), Chapter 1, p. 3-48.
9. A. Bilyk, S. Li, **W.S. Gutowski**, M. Espiritu, I. Burgar.: "Adhesion between hydroxyl graft modified polypropylene and polycarbonate films", (Ed) K.L. Mittal, in 'Polymer Surface Modification', Vol. 3 (ISBN 90-6764-403-X), VSP, p. 450 (2004).
10. **W. Gutowski**. "Thermodynamics of adhesion". In *Fundamentals of Adhesion*, L.H. Lee (Ed.), Plenum Press, New York, London, (1990), Ch. 2, p. 87-135.
11. **W. Gutowski**. "Effect of fibre-matrix adhesion on mechanical properties of composites". In *Controlled Interphases in Composite Materials*, H. Ishida (Ed.), Elsevier Science Publishing, New York, Amsterdam, London, (1990), p. 505-520.
12. **W. Gutowski**. "A thermodynamic model of the matrix-reinforcement interface". In *Composite Interfaces*. H. Ishida (Ed), Elsevier Science Publishing, New York, Amsterdam, London, (1988), p. 735-746.
13. S. Li, H.J. Griesser, D.Y. Wu, **W.S. Gutowski**. "Adhesive Bonding and Surface Interfacial Properties of Polyolefines and Fluoropolymers Modified by Plasma Polymerised Ultra-thin Coating". In "Silanes and Other Adhesion Promoters" (K.L. Mittal – Ed.), VSP, Utrecht, the Netherlands, (2001).
14. **W.S. Gutowski**, A. Cerra, S. Petinakis. "Sealant Diagnostics through Dynamic Solids Rheometry", Monograph: *Durability of Building Sealants*, A.T. Wolf (Ed), Chapman & Hall, London (2000).

15. **W.S. Gutowski**. “Molecular Design of Interfaces for the Control of Matrix-Filler Interactions and Maximised Adhesion”. In “Advancing with Composites”, Italian Plastics & Rubber Processing Machinery and Moulds Manufacturers Association, Milan, (2000), p. 277– 287.
16. **W.S. Gutowski, L. Russell, P. Christodoulou**. “Effects of Joint Geometry on the Engineering Properties of Elastomeric Structural Sealants and Adhesives”, *Monograph Durability of Building Sealants*, A.T. Wolf (Ed), Chapman & Hall, London (2000).
17. **A. Cerra, W.S. Gutowski**. “Further Development of a Universal Test Standard for Sealant Durability and In-service Strength”, Monograph: *Durability of Building Sealants*, A.T. Wolf (Ed), Chapman & Hall, London (2000).
18. **A. Cerra, W.S. Gutowski**. “Performance-Based Testing of Structural Sealants”, in Science and Technology of Building Seals, Sealants, Glazing and Waterproofing. Fifth Volume. M.A. Lacasse, (Ed.), ASTM STP 1271, American Society for Testing and Materials, Philadelphia, (1995), p. 209–225.
19. **W.S. Gutowski, P. Lalas, A. Cerra**. “Structural Silicones in Curtain Walls”, in *Science and Technology of Building Seals, Sealants, Glazing and Waterproofing*. Fifth Volume, M.A. Lacasse, (Ed.), ASTM STP 1271, American Society for Testing and Materials, Philadelphia, (1995), p. 97-112.
20. **W.S. Gutowski, A.P. Cerra & L. Russell**. “The influence of gloss level in polyester-powder coatings on the adhesion of silicone sealants”. In: *Science and Technology of Building Seals, Sealants, Glazing & Waterproofing*, J.S. Klosowski, (Ed.), ASTM STP 1200, Vol. 2, Philadelphia, (1992), p. 117–125.
21. **W.S. Gutowski, L. Russell & A.P. Cerra**. “New tests for adhesion of silicone sealants”. In *Science and Technology of Building Seals, Sealants, Glazing & Waterproofing*, J.S. Klosowski, (Ed). ASTM STP 1200, Vol. 2, ASTM, Philadelphia, (1992), p. 87–104.
22. **W.S. Gutowski, L. Russell, A.P. Cerra**. “Adhesion of silicone sealants to organic coated aluminium”. In *Science and Technology of Building Seals, Sealants, Glazing & Waterproofing*, J.S. Klosowski (Ed), ASTM STP 1200, Vol. 2, ASTM, Philadelphia, (1992), p. 144–159.
23. **W. Gutowski**. “*Adhesive properties of silicone sealants*”. In *Materials Properties & Performance*, T. O'Connor (Ed.), American Soc. for Testing & Materials, ASTM STP 1069, Philadelphia, (1990), p. 174-192.

Patents

1. **S. Li, W. Gutowski, W. Yang, M. Spicer, Wei Dong Yang, M. Spicer, C. Filippou**. “Composition and Method for Preparation of Electro-Conductive Polymer Surfaces”,
 - US Patent 020 6856 A1, 25 Aug 2011
 - European Patent EP 2334442 A1 (22 June 2011)
2. **S. Li, W. Gutowski, W. Yang, M. Spicer, S. Molenaar**. “The Method and Composition for Priming Wood and Natural Fibres” (2007).
 - *European Patent EP1989261 (12 Nov 2010)*
 - *US Patent 7459185*
3. **S. Li, W. Gutowski, W. Yang, M. Spicer**. Composition and Method for Preparation of Electro-Conductive Polymer Surfaces, *NZ Patent 591555* (2008).
4. **W.S. Gutowski, Russell, A. Bilyk, L. P. Hoobin, S. Li, C. Filippou, M. Spicer**: “Treatment of Natural Polymer Materials and the Products Based Thereon” (2004)
 - *Australian Patent 783,446*
 - *US patent 6,830,784*
 - *Canadian Patent CA 2398973*
 - *New Zealand Patent No. 520290*
 - *European Patent EP1253999*
5. **W.S. Gutowski, L.J. Russell, A. Bilyk, P.M. Hoobin, S. Li, C. Filippou, M. Spicer**: “Treatment of natural polymer based materials and the products based thereon”.
 - US Patent 7,459,185 (2008)
6. **W.S. Gutowski, S. Li A. Bilyk, M. Spicer**: “Treatment of Natural Polymer Based Materials”. US Patent No 6,830,784 (2007).
7. **C. Filippou, W.S. Gutowski, M. Spicer, D. Proctor**: “Method and Apparatus for Surface Engineering”. USA Patent No. 20020018860(2004).

8. *D.Y. Wu, S. Li, W.S. Gutowski*: “Improved Surface Treatment of Polymers”. European Patent No. 0835,279 (17th Dec 2003)
9. *W. Gutowski A. Bilyk, S. Li, W. Yang, P. Hoobin*.: “Preparation of Functional Polymeric Interface”.
 - US Pat. 6,800,331 (5th Oct 2004);
 - Aust. Pat. 666 705
 - European Patent EP 1242516
 - Korean Patent KR 1020027004980 (5 June 2002)
10. *C. Filippou, W.S. Gutowski, M. Spicer, D. Proctor*: “Method for Surface Engineering”. US Patent No. 6706320 (2004).
11. *D.Y. Wu, S. Li, W.S. Gutowski*. “Method for Modifying at Least a Part of a Polymer and its Uses”. Taiwanese Patent No. 117,435 (2002).
12. *W.S. Gutowski, D.Y. Wu, S. Li*. “Surface Treatment of Polymers” (**24 citations**)
 - Australian Patent 680716
 - USA Patent 5,879,757 (9th March 1999),
 - European Patent 95906221 (18th May 2001),
 - Mexican Patent 96 2811 (21st August 2001),
13. *D.Y. Wu, S. Li, W.S. Gutowski*. “Method for Modifying at Least a Part of a Polymer”. Taiwanese Patent 117,435 (8th May 2001).
14. *D.Y. Wu, S. Li, W.S. Gutowski*. “Surface Treatment of Polymers”. (**82 citations**)
 - USA Patent 5,922,161 (13th July 1999),
 - Singapore Patent 48,647 (20th July 1999),
 - Russian Patent 2,163,246 (2nd October 2001),
 - Chinese Patent 1,192,224 (14th March 2002).
 - Hong Kong Patent 1005512
15. *W.S. Gutowski, D.Y. Wu, S. Li*. “Treatment of Rubber and Rubber Based Products”.
 - USA Patent No. 5,872,190 (16th February 1999),
 - Mexican Patent 199,879 (18th September 2001),
16. *W.S. Gutowski, D.Y. Wu, S. Li*. “Treatment of Rubber and Rubber Based Products”.
 - USA Patent No. 5,872,190 (16th February 1999),
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 - South African Patent No. 95/0549.
17. *W. Gutowski and D.Y. Wu*. “Improved Surface Treatment of Polymeric Materials”.
 - Canadian Patent CA 2224780
 - Aust. Patent Application No. PM3490/94.
18. *W. Gutowski, D.Y. Wu and S. Li*. “Surface Treatment of Rubber and Rubber-Based Materials”.
 - European Patent EP 0741750
 - Canadian Patent 2,181,556
 - European Patent Application No. 95906847.9
 - United States Patent Application No. 08/676,327
 - Japanese Patent Application No. 519259/95
 - South Korean Patent Application No. 96-703859
 - Brazilian Patent Application No. PI9506643-8.
19. *D.Y. Wu, S. Li, W. Gutowski*. Improved Surface Treatment of Polymers.
 - Canadian Patent No. CA 2224780
 - Singapore Patent SG 97054506
 - Chinese Patent CN 96195875
 - Aust. Patent Application No. PN3866/95
 - International Patent Application PCT/AU96/00407 (28 June 1996)
 - European Patent Application: No. unknown
 - United States Patent Application No. 08/894054
 - Japanese Patent Application: No. unknown
 - Argentina Patent Application No. 337,308
 - Chilean Patent Application: No. 1166-96.

20. *S. Li, D.Y. Wu, W. Gutowski*. "Process for Chemical Modification of Polymer Surfaces".
 - Hong Kong Patent 1002392
 - Aust. Patent Application No. PO4343.
21. *W. Gutowski, D.Y. Wu, S. Li*. "Improved Surface Treatment of Rubber Materials". Canadian Patent CA 2181556
22. *W. Gutowski and D.Y. Wu*. "Surface Treatment of Rubber".
 - South African Patent 95/0549.
23. *W. Gutowski and Andrzej Drotlew*. "Pump for fluidised granular materials, particularly mortars, concrete and moulding mixtures". Polish Patent 126 769. (04.08.1981).
24. *R. Olszanowski, G. Wronowski, J. Cieplowski, W. Gutowski*. "Cement core and moulding mixture". Polish Patent 122 313, 15.12.1983.
25. *J.A. Zapalski, W. Gutowski, A. Kwasek, A. Bledzki, W. Krolikowski, R. Chudzikiewicz*. "Moulding and Core Mixture". Polish Patent No. 117 082 (26.10.1983).
26. *W. Gutowski, G. Wronowski, R. Olszanowski, R. Chudzikiewicz, M. Hajdasz*, "Core and moulding mixture". Polish Patent No.115 177, (18.03.1983).
27. *W. Gutowski, A. Bledzki, G. Wronowski, R. Olszanowski, R. Chudzikiewicz*. "Self-hardening mixture with silicate binders for the manufacture of foundry cores & moulds". Polish Patent 118 898 (2.05.1983).
28. *W. Gutowski, K. Pomorski, G. Wronowski, R. Olszanowski, R. Chudzikiewicz*. "Apparatus for Electronic Control of the Curing Progress of Self-hardening mixtures with silicate binders ". Polish Patent 118 898 (15.09.1979).
29. *R. Olszanowski, G. Wronowski, W. Gutowski, J. Cieplowski*. "Core and moulding mixture". Polish Patent 212 340, 22.12.1978.
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31. *A. Bledzki, W. Gutowski, A. Kwasek, J. Zapalski*. "Core and moulding mixture". Polish patent 202514, 28.11.1978. Polish Patent No.113 270.
32. *A. Bledzki, W. Gutowski, R. Chudzikiewicz, W. Krolikowski*. "Core and moulding mixture". Polish Patent No.113 123 (28.09.1982)
33. *A. Bledzki, W. Gutowski, W. Krolikowski, A. Kwasek*. "Core and moulding mixture". Polish Patent No.109017.
34. *W. Gutowski*. "Mixture for the core and mould manufacturing". Polish Patent No.108 248 (16.03.1978).
35. *A. Bledzki, W. Gutowski, R. Chudzikiewicz, W. Krolikowski, J. Zapalski*. "Core and moulding mixture". Polish Patent (number unknown - decision of the Polish Patent's Office based on patent appl. P-202 515, 28.11.1978).
36. *W. Gutowski, A. Bledzki, A. Kwasek, J. Zapalski*. "Self hardening core and moulding mixture".
37. *W. Gutowski, R. Chudzikiewicz*. "Core and moulding mixture manufacturing". Polish Patent (number unknown - decision of the Polish Patent's Office based on patent appl. P-202512, 28.11.1978).
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41. *W. Gutowski*. "Mixture for the core & mould manufacturing". Polish Patent No.100898.
42. *W. Gutowski*. "Cement mixture for foundry cores and moulds". Polish Patent No.86 263 (20.10.1978).
43. *W. Gutowski, M. Krysiak, T. Wasag, R. Chudzikiewicz*. "Cement mixture for cores and moulds". PRL Patent No.93 260 (6.02.1978).
44. *W. Gutowski, R. Chudzikiewicz*. "Fast-setting cement mixture for foundry cores and moulds". PRL Patent No.90 201 (10.01.1978).

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52. **W. Gutowski**. "A method of protecting pipeline elbows in pneumatic transport systems. PRL Patent No.92 823 (18.01.1978).
53. **W. Gutowski**, *S. Mazuryk*. "A method of a continuous fluid dosing and devices for thereof". PRL Patent No.88 383 (15.11.1977).

Refereed Journal Articles

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2. *B. Kuys, W.S. Gutowski*, "Enhanced Adhesion From Surface Modified Timber Resulting in a Sustainable Industrial Design Outcome". *Proceedings of Advanced Materials Conference*, Melbourne (2010).
3. **W.S. Gutowski**, *B. Kuys, L. Anderson, S. Jackson*, "An inter-disciplinary approach to design", *Proceedings of International Design Conference*, Soul (Nov 2010).
4. **W.S. Gutowski**, *W. Yang, P. Casey, S. Li*. "Multi-Functional Nanomaterials for Advanced Automotive Applications". *Nanocomposites-Enabling Technologies*. San Diego, 15-17 September (2008), p. 160-171.
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6. *P. Widsten, W.S. Gutowski*. "Hybrid Barrier Coatings for Minimizing Moisture Sorption of Natural Materials, Global Congress 'Wood Plastic Composites & Wood', Kassel, 18-19 June 2008, (2008), p. 251-256.
7. *K. Dean, M.D. Do, W.S. Gutowski, A. Scully, E. Petinakis, L. Yu, X. Zhang*. "Biopolymer Blends and Composites", *Global Congress 'Wood Plastic Composites & Wood', Kassel, 18-19 June 2008, (2008), p. 41-47.*
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9. **Gutowski, W.S.**, *Li, S, Widsten, P. M. Spicer, S. Molenaar*: "Improving Hardwoods Adhesion", *Australian FWPRDC & CRC Wood Innovation Seminar: 'Sticking Together*, Melbourne, 23 May 2006, p. 1-32.
10. *Widsten, P., Gutowski, W.S., Li, S., Cerra, A., Molenaar, S. & Spicer, M.*: "Relevance of wood extractive content to surface inactivation and adhesive bonding of wood", *Proc. Pre-Symposium of the 13th ISWFPC Symposium on the Chemistry and Performance of Composites Containing Wood and Natural Plant Fibres, Rotorua, New Zealand, 12-13 May 2005*, pp. 81-86.
11. **Gutowski, W.S.**, *Li, S, Molenaar S.*: "Surface Engineering for Improved Bondability". *Australian FIAA Conference - Melbourne*, 28 April 2005, p.35-47.
12. **W.S. Gutowski**, *S. Li, L. Russell, P.Hoobin, C. Filippou, A. Bilyk*. "A Novel Technology for Enhanced Adhesion of Paints and Adhesives to Automotive TPO's". *Proceedings of International Conference: 'TPO's in Automotive 2000'*. ECM, Novi/USA, (2000), p. 1-16.

13. *J. Gassan, F. Manzke, W.S. Gutowski*. “UV-Treatment zur Verbesserung der Faser-Matrix Haftung in Naturfaserverbunden”. Proceedings of 3rd International Congress “Materials from Renewable Resources”, Erfurt, 5 – 6th September (2001), p. 1 – 6.
14. *W. Yang S.Li, W.S. Gutowski, A.W.H. Mau, R. Chaplin*. “Simulation of Chemical Reactions on Polymers with Self-Assembled Monolayers (SAM’s)”. Proc. of 24th Australian Polymer Symposium, Royal Australian Chemical Institute, Polymer Division, Beechworth, Feb. 4th – 8th, (2001), p. 33/1 – 2.
15. *P. Chandranupap, S.N. Bhattacharya, W.S. Gutowski*. “Surface Properties of MAH- Grafted LLDPE”. Proc. of 23rd Australian Polymer Symposium, Royal Australian Chemical Institute, Polymer Division, Geelong, Nov. 28th – Dec 2nd 1999, (1999), p. 2/42.1 – 2.
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