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## **STATUS**

Professor  
Department of Mechanical and Industrial Engineering Tenured, Full-Time

## **DEGREES**

- Ph.D., Mechanical Engineering, University of Toronto, Toronto, Ontario, 1976
- M.A.Sc., Mechanical Engineering, University of Toronto, Toronto, Ontario, 1973
- B.Sc., Mechanical Engineering, California State University, San Luis Obispo, 1971

## **DATE OF APPOINTMENT TO CONCORDIA UNIVERSITY**

- *September 1977*

## **POSITION HELD AT CONCORDIA UNIVERSITY**

- *June 2003-May 2007*: Chair, Department of Mechanical and Industrial Engineering
- *July 1994-June 2000*: Chair, Department of Mechanical Engineering
- *May 1993- to date*: Director, Concordia Centre for Composites
- *1986-to date*: Professor of Mechanical Engineering
- *1981 - May 1986*: Associate Professor of Mechanical Engineering
- *1977 – 1981*: Assistant Professor of Mechanical Engineering

## **PROFESSIONAL REGISTRATION(S)**

- *1981 - to date*: Ordre des ingénieurs du Québec

## **PROFESSIONAL & SCIENTIFIC SOCIETY MEMBERSHIP(S)**

- Member, Canadian Association for Composite Structures and Materials
- Member, American Society of Mechanical Engineers
- Member, Society for Advancement of Materials and Process Engineering
- Member, Canadian Society for Mechanical Engineering
- Member, American Society for Composites

## **INITIATION AND FORMATION OF ASSOCIATION AND RELATIONSHIP:**

1. Initiated and formed the Canadian Association for Composite Structures and Materials (CACCSMA), 1988.
2. President of CACCSMA from 1998 to 1991, and from 1999 to 2014,
3. Co-chairs CANCOM conferences in 1991 (Montreal), 1993 (Ottawa), 2001 (Montreal).
4. Initiated the series of Canada Japan workshops on composites.
5. Co-chairs of Canada Japan workshops on composites in 1996 (Kyoto), 1998 (Montreal), 2000 (Vancouver), 2002 (Kyoto), 2004 (Yonezawa), 2006 (Toronto), 2008 (Tokyo), 2010 (Montreal), 2012 (Kyoto), 2014 (Vancouver), and 2016 (Ho Chi Minh city ..Vietnam)

### **SCHOLARLY & PROFESSIONAL ACTIVITIES**

1. Chair, 3rd Canadian International Conference on Composites, Montreal, *August 2001*.
2. Co-chair, 3rd Canada-Japan workshop on Composites, Kyoto, Japan, *March 2000*.
3. Co-Chair, 5th Canada-Japan workshop on Composites, Yonezawa, Japan, *September 2004*.
4. Co-chair, 6th Canada-Japan workshop on Composites, Toronto, Canada, *August 24-26, 2006*.
5. Co-chair, first US/Canada conference on composites, University of Delaware, *September 2009*.
6. Co-chair, second US/Canada conference on composites, Montreal, Canada, *September 2011*.
7. Chair, Symposium on Automated Composites Manufacturing, Montreal, *April 2013*.
8. Chair, 19th International Conference on Composite Materials, (ICM 19), Montreal, *July 2013*.
9. Chair, First International Symposium on Automated Composites Manufacturing, Montreal, *April 2013*.
10. Chair, Second International symposium on Automated Composites Manufacturing, Montreal, *April 2015*.
11. Chair, International workshop on mechanical behavior of thick composites, Montreal, *March 2016*.
12. Chair, Canada Japan Vietnam workshop on composites, Ho Chi Minh city, Vietnam, *August 2016*.

### **Journal editorial activities:**

1. Member of the Editorial Board, Journal Composites Science and Technology.
2. Member of the Editorial Board, Journal of Thermoplastic Composites.
3. Member of the Editorial Board, Journal of Composite Materials.
4. Member of the Editorial Board, Journal of Sandwich Structures.
5. Editor in Chief, Journal of Science and Engineering of Composite Materials.

### **INVITED and KEY NOTES**

1. Second Conference on Emerging Technologies for Manufacturers, Natural Resources Canada, *February 2001*.
2. Canada-France meeting on Composites at Les Journees Europeennes des Composites, *April 2002*.
3. International conference on Nanotechnology, Kyoto, Japan, *February 2003*.
4. International Conference on Industrial Applications of Nanomaterials and Advanced Composites, Hong Kong, *February 2004*.
5. American Society for Composites annual conference, Drexel University, Philadelphia, *September 2005*
6. West Virginia University (USA), Department of Chemical Engineering, *October 2005*.
7. International Forum on Nanocomposites and Spring-8 (Synchrotron radiation facility), Harima International Forum, Center for Advanced Science and Technology, Hyogo, Japan, *January 27, 2006*.
8. Polymer Nanocomposites Research in Canada, Joint ASC/SAMPE conference, Memphis, Tennessee, *September 2008*.
9. High Performance Materials Institute, Department of Materials and Manufacturing Engineering, Florida State University, *Spring 2013*.
10. 4th International conference on recent advances in composite materials conference, Goa, India, *February 2013*.
11. 17th International conference on Composite Structures, Porto, Portugal, *June 2013*.
12. Shanghai Aircraft Manufacturing company Ltd., *November, 2013*.
13. Dong Hua University, Department of Textile Engineering, *November 2013*.
14. Fujian Institute of Research on the Structure of Matter, Chinese Academy of Sciences, Fujian, China, *November 2013*.
15. Nanyang lecture, Xiamen University, China, *November 2013*.
16. Third International Symposium on Advanced Textile Science and Technology, Zhejiang Sci-Tech University, Hangzhou, China, *November 2013*.
17. 4th American Helicopter ARF conference, Bangalore, India, *2015*.
18. The 4th International conference on Engineering Mechanics and Automation, Hanoi, Vietnam, *August 2016*.

## **AWARDS AND DISTINCTION**

1. Winner of Ralph R. Teetor Award, Society of Automotive Engineers, *1980*.
2. Founder, First President, First Chair of the Board and Fellow, Canadian Association for Composite Structures and Materials, CACSMA, *1988-91* and President: *1999-2014e*.
3. Fellow, Canadian Association for Composite Structures and Materials, *1992*.
4. Fellow, American Society of Mechanical Engineers, *1996*.
5. Winner of the G.H. Duggan medal for Advanced Materials, Canadian Society for Mechanical Engineering, *1996*.
6. Fellow, Canadian Society for Mechanical Engineering, *1997*.

7. Honorary Advisory Professor, Shanghai University of Technology, Shanghai, China, 1990-1995.
8. Concordia University Research Fellow, 2001.
9. Concordia University Research Chair in Materials and Composites, 2001-2015.
10. Winner of the **NSERC Synergy Award for Innovation**, October 2006.
11. Winner of the Prize Partenariat of the Association des Directeurs de Recherche Industrielle du Quebec (ADRIQ), November 2006.
12. Fellow, Engineering Institute of Canada (ECI), 2007.
13. Recipient of the NanoAcademia award from Nanoquebec, 2008.
14. Recipient of the title Research Fellow, Pratt & Whitney Canada Ltd., 2008
15. Winner of the Prize Partenariat of the Association des Directeurs de Recherche Industrielle du Quebec (ADRIQ), 2009.
16. Recognition of excellence, Association des Directeurs de recherche industrielle du Quebec (ADRIQ), 2010.
17. Recipient of Agora trophy, Palais des Congres Montreal, October 2011.
18. Destech Award, American Society for Composites, September 2011.
19. NSERC Industrial Chair on Automated Composites Manufacturing, 2012-2017
20. Fellow, Canadian Academy of Engineering, 2013.

## **PUBLICATIONS**

Total number of refereed journal publications: **193**

Total number of refereed conference proceedings and presentations: **349**

Total number of patents: **8**

Total number of code and standard contributions: **3**

Total number of books: **6**

Total number of conference proceedings edited: **20**

Code and Standard: **3**

Total number of commercialized computer programs: **2**

## **A. LISTING OF REFEREED JOURNAL PUBLICATIONS**

1. Tabarrok, B. and Hoa, S.V., "Thermal Stress Analysis of Plates and Shallow Shells by Hybrid Finite Element Method", Journal of Strain Analysis, Vol. 9, No. 3, 1974, pp. 152-158.
2. McCammond, D. and Hoa, S.V., "Craze and Creep Resistance of High Impact Polystyrene in Alcohols", Polymer Engineering & Science, Vol. 17, No. 12, December 1977, pp. 869-872.
3. McCammond, D. and Hoa, S.V., "Effects of some Liquids on the Creep Behaviour of High Impact Polystyrene", Polymer Engineering & Science, Vol. 18, No. 11, August 1978, pp. 917-920.
4. Hoa, S.V., "Vibration of Curved Beam with Tip Mass", Journal of Sound and Vibration, 61(3), 1978, pp. 427-436.

5. Hoa, S.V., "Vibration of a Rotating Beam with Tip Mass", *Journal of Sound and Vibration*, 67(3), 1979, pp. 369-381.
6. Hoa, S.V. and Sankar, S., "A computer Program for Automatic Generation of Stiffness and Mass Matrices in Finite Element Analysis", *Computers and Structures*, Vol. 11, No. 3, 1980, pp. 147-161.
7. Sankar, S. and Hoa, S.V., "Finite Element-Extended Transfer Matrix Method for Free Vibration of Plates", *Journal of Sound and Vibration*, Vol. 70, No. 1, 1980, pp. 205-211.
8. Hoa, S.V., "Relative Influence of the Mobility and the Solubility Parameters of Fluids on the Mechanical Behaviour of High Impact Polystyrene", *Polymer Engineering & Science*, Vol. 20, No. 17, 1980, pp. 1157-1160.
9. Hoa, S.V., Hodges, D.H., and Rutkowski, M.J., "Comments on Vibration of a Rotating Beam with Tip Mass", *Journal of Sound and Vibration*, Vol. 72, No. 2, 1980, pp. 547-549.
10. Hoa, S.V., "Effects of Liquid on the Stress Rupture Lives of Fiber Glass Reinforced Plastics", *ASTM Special Technical Publication 734, "Test Methods for Fibrous Composites"*, 1981, pp. 411-419.
11. Hoa, S.V., "Vibration Frequency of a Curved Blade with Weighted Edge", *Journal of Sound and Vibration*, Vol. 79, No. 1, November 8, 1981, pp. 107-119.
12. Hoa, S.V. and Ouellette, P., "Liquid Absorption of a Sheet Molding Compound", *Polymer Composites*, Vol. 2, No. 4, October 1981, pp. 167-170.
13. Hoa, S.V., "Notched Strength of Sheet Molding Compounds", *Polymer Composites*, Vol. 2, No. 4, October 1981, pp. 145-148.
14. Hoa, S.V., Ngo, A.D. and Sankar, T.S., "Fatigue Crack Propagation of Sheet Molding Compounds in Various Environments", *Polymer Composites*, Vol. 2, No. 4, October 1981, pp. 162-166.
15. Hoa, S.V. and Feldman, D., "Joining Strength of Sheet Molding Compounds", *Polymer Composites*, Vol. 3, No. 1, January 1982, pp. 48-53.
16. Hoa, S.V., Ngo, A.D. and Sankar, T.S., "Effect of Water and Isoctane Absorption on the Flexural Fatigue Strength of a Sheet Molding Compound", *Polymer Composites*, Vol. 3, No. 1, January 1982, pp. 44-48.
17. Hoa, S.V., "Strain Analysis of Dual Laminate Cylindrical Fiber Reinforced Plastic Vessel", *Journal of Reinforced Plastics and Composites*, July 1982, pp. 242-253.
18. Hoa, S.V. and Nguyen, Q.B., "Temperature Increase of SMC-R65 in Flexural Fatigue Test", *Polymer Composites*, Vol. 4, No. 2, April 1983, pp. 85-89.
19. Hoa, S.V. and Ouellette, P., "Stress Corrosion Cracking of Polyvinylidene Fluoride in Sodium Hydroxide", *Polymer Engineering & Science*, Vol. 23, No. 4, March 1983, pp. 202-205.
20. Hoa, S.V., Sankar, T.S., and Bargiora, R., "Tensile Behaviour of Laminates Used for Making Fiber Reinforced Plastic Vessels", *Journal of Reinforced Plastics and Composites*, Vol. 2, No. 2, April 1983, pp. 118-129.

21. Feldman, D., Hoa, S.V., and Coriary, E., "Bonding Strength of Sheet Molding Compounds", *Polymer Plastics Technology and Engineering*, Vol. 23, No. 1, 1984, pp. 99-118.
22. Lucking, W.M., Hoa, S.V. and Sankar, T.S., "The Effect of Geometry on Interlaminar Stresses of [0/90] Composite Laminates with Circular Holes", *Journal of Composite Materials*, Vol. 18, March 1984, pp. 174-188.
23. Hoa, S.V. and Ouellette, P., "Damping of Composite Materials", *Polymer Composites*, Vol. 5, No. 4, Oct. 1984, pp. 334-338.
24. Hoa, S.V. and Maji, J., "Two-dimensional Bending and Extension of Cross-ply Laminates with Different Moduli in Tension and Compression", *Composite and Structures*, Vol. 20, No. 6, 1985, pp. 921-928.
25. Ngo, A.D., Hoa, S.V., and Sankar, T.S., "Mechanisms of Fatigue Failure of Sheet Molding Compounds in Different Environments", *High Modulus Fiber Composites in Ground Transportation and High Volume Applications*, ASTM Special Technical Presentation #873, 1985.
26. Hoa, S.V., Yu, C.W. and Sankar, T.S., "Analysis of Filament Wound Vessel Using Finite Elements", *Composite Structures*, Vol. 3, No. 1, 1985, pp. 1-18.
27. Hoa, S.V., Sankar, T.S., and Berczynski, W.S., "Buckling of Hand Lay Up Composite Cylindrical Vessel", *Journal of Reinforced Plastics and Composites*, Vol. 4, No. 2, April 1985, pp. 162-172.
28. Ouellette, P. and Hoa, S.V., "Creep of Fiberglass Reinforced Plastic Pressure Vessels", *Journal of Reinforced Plastics and Composites*, Vol. 4, No. 3, July 1985, pp. 287-296.
29. Ouellette, P., Hoa, S.V., and Sankar, T.S., "Buckling of Composite Cylinders under Internal Pressure", *Polymer Composites*, Vol. 7, No. 5, Oct. 1986.
30. Natarajan, R., Hoa, S.V., and Sankar, T.S., "Stress Analysis of Filament Wound Tanks Using Three-Dimensional Finite Elements", *International Journal for Numerical Methods in Engineering*, Vol. 23, 1986, pp. 623-633.
31. Ouellette, P. and Hoa, S.V., "Fatigue of Glass Fiber Reinforced Polyester Laminates", *Polymer Composites*, Vol. 7, No. 1, February 1986.
32. Blach, A.E. and Hoa, S.V., "Bolted Flange Connections for Glass Fiber Reinforced Plastic Pipes and Pressure Vessels", *Design Engineering*, UK, May 1987.
33. Hoa, S.V., Di Maria, A., and Feldman, D., "Aluminum Inserts for Sheet Molding Compounds", *Composite Structures*, Vol. 8, No. 4, 1987.
34. Hoa, S.V., Daoust, J., Du, B.L., and Vu-Khanh, T., "Interlaminar Stresses in a Tapered Laminate", *Polymer Composites*, Vol. 9, No. 5, October 1988.
35. Blach, A.E. and Hoa, S.V., "The Effects of Pull-Back on Stresses in FRP Flanges", *Experimental Techniques*, Nov. 1988.
36. Hoa, S.V. and Li, L., "Acoustic Emission during Quasi-Static Loading/Hold/Unloading in Notched Reinforced Fiber Composite Materials", *Journal of Acoustic Emission*, Vol. 7, No. 4, March 1989, pp. 145-160.

37. Hoa, S.V., Lin, S. and Chen, J., "Effects of Moisture Content on the Mechanical Properties of Polyphenylene Sulfide Composite Materials", Special Technical Publication on Thermoplastic Composites, American Society for Testing and Materials, ASTM-STP 1044, 1989.
38. Hoa, S.V. and Mannarino, G., "Twisting of Filament Wound Cylinders under Internal Pressure", Journal of Reinforced Plastics and Composites, Vol. 8, No. 1, January 1989, pp. 212-231.
39. Daoust, J. and Hoa, S.V., "Parameters Affecting Interlaminar Stresses in Tapered Laminates under Static Loading Conditions", Polymer Composites, Vol. 10, No. 5, October 1989, pp. 374-83.
40. Daoust, J. and Hoa, S.V., "A Comprehensive Technique for Determination of Safety Factors in Composites," Journal of Reinforced Plastics and Composites, Vol. 8, No. 6, November 1989, pp. 584-600.
41. Hoa, S.V., Journeaux, B., and Di Lalla, L., "Computer Aided Design for Composite Structures", Composite Structures, Vol. 13, February 1989, pp. 67-79.
42. Blach, A.E., Hoa, S.V., Kwok, C.K., and Ahmed, A.K.W., "Rectangular Pressure Vessels of Finite Length", ASME Journal of Pressure Vessel Technology, Vol. 112, Feb. 1990, pp. 50-56.
43. Lucking, W.M., Hoa, S.V. and Sankar, T.S., "A Boundary Collocation Method for Stress Analysis of Laminated Edges", Computers and Structures, Vol. 34, No. 4, 1990, pp. 655-662.
44. Beshay, A. and Hoa, S.V., "Reinforcement of Polyvinyl Chloride (PVC) and Polystyrene (PS) with Cellulosic Fibers Treated with Silane", Journal of Thermoplastic Composite Materials, Vol. 3, No. 4, October 1990, pp. 264-74.
45. Ouellette, P., Hoa, S.V., and Li, L., "A Procedure for Acceptance Testing of FRP Balsa Wood Core Pressure Vessels", Journal of Acoustic Emission, January-March 1990, pp. 37-43.
46. Xiao, X.R. and Hoa, S.V., "Effect of Melting History on the Crystallographic Characteristics of Poly (ether ether ketone) Aromatic Polymer Composites", Journal of Theoretical and Applied Fracture Mechanics, Vol. 14, No. 1, 1990, pp. 49-56.
47. Ouellette, P., Hoa, S.V., and Li, L., "Nondestructive Evaluation of Fiberglass Reinforced Plastic Road Tankers Subjected to Internal Pressure Using Acoustic Emission Monitoring", Journal of Hazardous Materials, Vol. 25, 1990, pp. 49-60.
48. Hoa, S.V. and Daoust, J., "An Analytical Solution for Anisotropic Plates Containing Triangular Holes", Composite Structures, Vol. 19, No. 2, 1991.
49. Mazumdar, S. and Hoa, S.V., "On the Kinematics of Filament Winding on Non-axisymmetric Cylindrical Mandrels. Part I: A Generalized Model", Composites Manufacturing, Vol. 2, No. 1, 1991.
50. Mazumdar, S. and Hoa, S.V., "On the Kinematics of Filament Winding on Non-axisymmetric Cylindrical Mandrels. Part II: For Convex Polygonal Cross Section", Composites Manufacturing, Vol. 2, No. 1, 1991.

51. Beshay, A. and Hoa, S.V., "Improved Interface Bonding between Cellulosic Fibers and Thermoplastics", *Science and Engineering of Composite Materials*, Vol. 2, No. 2, 1992.
52. Hoa, S.V., Lin, S., and Chen, J., "Hygrothermal Effect on Mode II Interlaminar Fracture Toughness of a Carbon/Polyphenylene Sulfide Laminate", *Journal of Reinforced Plastics and Composites*, Vol. 11, No. 1, January 1992.
53. Xiao, X.R., Hoa, S.V., and Street, K.N., "Processing and Modeling Resistance Welding of APC-2 Composite", *Composite Materials*, Vol. 26, No. 7, 1992.
54. Ouellette, P. and Hoa, S.V., "Acoustic Emission Signal Trends during High Cycle Fatigue of FRP/Balsa Wood Core Vessels", *Journal of Acoustic Emission*, Vol. 11, No. 2, 1993.
55. Mazumdar, S.K. and Hoa, S.V., "Kinematics of Filament Winding during Starting and Reversal Process for Complex Composite Components", *Transactions of the CSME*, Vol. 17, No. 4A, 1993.
56. Han, J. and Hoa, S.V., "A Three Dimensional Multilayer Composite Finite Element for Stress Analysis of Composite Laminates", *International Journal for Numerical Methods in Engineering*, Vol. 36, pp. 3903-3914, 1993.
57. Hojjati, M. and Hoa, S.V., "Curing Simulation of Thick Thermosetting Composites", *Composites Manufacturing*, Vol. 5, No. 3, 1994, pp. 159-169.
58. Smith, C. and Hoa, S.V., "Utilization of PVDF Sensors to Determine Impact Damage in Graphite/Epoxy Plates by Acousto-ultrasonic Technique", *Journal of Reinforced Plastics and Composites*, Vol. 13, February 1994.
59. Mazumdar, S.K. and Hoa, S.V., "Algorithm for Filament Winding of Non-axisymmetric Tapered Composite Components Having Polygonal Cross Section on Two-axes Filament Winding Machine", *Composites Engineering*, Vol. 4, No. 3, pp. 343-359, 1994.
60. Mazumdar, S.K. and Hoa S.V. "Analytical Models for Low Cost Manufacturing of Composite Components by Filament Winding. Part I. Direct Kinematics", *Composite Materials*, Vol. 29, No. 11, 1995, pp. 1515-1541.
61. Hojjati, M. and Hoa, S.V. "Model Laws for Curing of Thermosetting Composites", *Composite Materials*, Vol. 29, No. 13, 1995, pp. 1741-1761.
62. Mazumdar, S.K. and Hoa, S.V., "Analytical Models for Low Cost Manufacturing of Composite Components by Filament Winding, Part II. Inverse Kinematics", *Composite Materials*, Vol. 29, No. 13, 1995 pp. 1762-1788.
63. Xie, M., Hoa, S.V. and Xiao, X.R., "Bonding Steel Reinforced Concrete with Composites", *Journal of Reinforced Plastics and Composites*, Vol. 14, September 1995, pp. 949-964.
64. Kim, Y.S. and Hoa, S.V., "Buckling of Composite Plate under Biaxial Loading Conditions", *Composite Structures*, Vol. 31, No. 4, September 1995, pp. 247-252.

65. Hojjati, M. and Hoa, S.V., "Some Observations in Curing of Thick Thermosetting Laminated Composites", *Science and Engineering of Composite Materials*, Vol. 4, No. 2, 1995, pp. 89-108.
66. Xiao, X.R., Lin, S. and Hoa, S.V., "Scale Relations for Mold Filling Simulation in Resin Transfer Molding", *Science and Engineering of Composite Materials*, Vol. 4, No. 2, 1995, pp. 131-141.
67. Hoa, S.V., "Creep of a Composite Box Beam", *Journal of Reinforced Plastic and Composites*, Vol. 14, February 1995, p. 128.
68. Hoa, S.V., "Biaxial Bearing Bypass Testing of Graphite/epoxy Plates", *Journal of Composite Technology and Research*, Vol. 17, No. 2, April 1995, pp. 123-131.
69. Mazumdar, S.K. and Hoa, S.V., "Manufacturing of Non-Axisymmetric Thermoplastic Composite Parts by Tape Winding Technique", *Materials and Manufacturing Processes*, Vol. 10, No. 1, 1995, pp. 47-56.
70. Hojjati, M., Safavi, A.V., and Hoa, S.V., "Design of Domes for Polymeric Composite Pressure Vessels", *Composites Engineering*, Vol. 5, No. 1, 1995, pp.51-59.
71. Mazumdar, S.K. and Hoa, S.V., "Application of Taguchi Method for Process Enhancement of On-line Consolidation Technique", *Composites*, Vol. 26, No. 9, 1995, pp. 669-673.
72. Hoa, S.V. and W. Feng, "Application of global/local finite element model to composite laminates", *Science and Engineering of Composite Materials*, Vol. 5, No. 3-4, 1996.
73. Feng, W. and Hoa, S.V., "A partial hybrid degenerated plate/shell element for the analysis of laminated composites", *International Journal for Numerical Methods in Engineering*, Vol. 39, 1996, pp. 3625-3639.
74. Mazumdar, S.K. and Hoa, S.V., "Determination of manufacturing conditions for hot gas aided thermoplastic tape winding", *Journal of Thermoplastic Composite Materials*, Vol. 9, January 1996, pp. 35-53.
75. Feng, W., and Hoa, S.V., and Huang Q., "Classification of stress modes in assumed stress fields of hybrid finite elements", *International Journal for Numerical Methods in Engineering*, Vol. 40, 1997, pp. 4313-4339.
76. Qian, G.L., Hoa, S.V., and Xiao, X.R., "A vibration method for measuring mechanical properties of composites: Theory and Experiment", *Composite Structures*, Vol. 39, No. 1-2, 1997, pp. 31-38.
77. Qian, G.L., Hoa, S.V., and Xiao, X.R., "A new rectangular plate element for composite laminates", *Trans. ASME Journal of Sound and Acoustics*, Vol. 120, January 1998, pp. 80-86.
78. Jarrah, M.A. and Hoa, S.V., "Characteristics between a base laminate and a repair laminate subjected to variations in pressure in the repair curing cycle", *Journal of Reinforced Plastics and Composites*, Vol. 17, No. 6, 1998.

79. Zhang, C., Hoa, S.V., and Ganesan, R. "Approximate solutions for stresses around a pin-loaded holes in symmetric composite laminates", *Journal of Reinforced Plastics and Composites*, Vol. 17, No. 9, 1998.
80. Zhang, C., Hoa, S.V., and Ganesan, R., "Edge effects of laminated composite with pin loaded holes", *AIAA*, Vol. 36, No. 10, October 1998, pp. 1883-1893.
81. Wang, Y., Hoa, S.V., and Osman, M., "Cutting behavior of composite prepregs", *Journal of Reinforced Plastics and Composites*, Vol. 17, No. 12, 1998, pp. 1119-1134.
82. Chen, J., Hoa, S.V., Jen, C.K., Viens, M., and Monchalain, J.P., "Ultrasonic evaluation of graphite/epoxy composites with different curing conditions", *Polymer Composites*, Vol. 19, No. 3, June 1998, pp. 225-232.
83. Feng, W. and Hoa, S.V. "Partial hybrid finite elements for composite laminates", *Finite Elements in Analysis and Design*, Vol. 30, No. 4, October 15, 1998.
84. Chen, J.Y., Hoa, S.V., Jen, C.K. and Wang, H., "Fiber-optic and ultrasonic measurements for in-situ monitoring of graphite/epoxy composites", *Journal of Composite Materials*, Vol. 33, No. 20, 1999.
85. Balike, M., Rakheja, S., and Hoa, S.V., "Study of an energy dissipating under-ride guard for enhancement of crash worthiness in a car-truck collision", *International Journal of Vehicle Design*, Vol. 22, No. 1/2, 1999, pp. 29-53.
86. Zhao, J., Hoa, S.V., Xiao, X.R., and Hanna, I., "Partial hybrid finite element analysis of stress fields in composite laminates with delamination crack under out of plane loading", *Journal of Reinforced Plastics and Composites*, Vol. 18, No. 9, 1999, pp. 827-843.
87. Naji, M. and Hoa, S.V., "Experimental and theoretical investigation of the curing process of thermosetting composite structures with angle bend", *Journal of Composite Materials*, Vol. 18, No. 8, 1999, pp. 702-723.
88. LeVan, M., Rutinduka, E., Detellier, C., Gougay, P., Hascoet, V., Tavakoliyan, S., Hoa, S.V., and Matsuura, T., "Mechanical and pore characteristics of zeolite composite membranes", *Journal of Materials Chemistry*, 9, 1999, pp. 783-788.
89. Naji, M. and Hoa, S.V., "Modeling of autoclave curing of composite laminates with angle bend", *Journal of Reinforced Plastics and Composites*, Vol. 18, No. 8, 1999.
90. Balike, M., Rakheja, S. and Hoa, S.V., "Study of an energy dissipating under-ride guard using hardware-in-the-loop simulation", *Trans. of CSME*, Vol. 23, No. 2, 1999, pp. 307-320.
91. Amiouny, S.V. and Hoa, S.V., "Combinatorial optimization for angles of wrap in filament wound cylinders", *Journal of Reinforced Plastics and Composites*, Vol. 18, 1999.
92. Zhang, C., Ganesan, R., and Hoa, S.V., "Effects of friction on three dimensional contact stresses in pin-loaded composites", *J. Composite Materials*, Vol. 34, No. 16, 2000.
93. He, K., Hoa, S.V., and Ganesan, R., "The study of tapered laminated composite structures. A review", *Composites Science and Technology*, 60, 2000, pp. 2643-2657.

94. Hoa, S.V. and Kim, Y.S., "Buckling of composite plates under biaxial loading conditions", *Trans. of CSME*, Vol. 24, No. 1, April 2000.
95. Naji, M. and Hoa, S.V., "Curing of thick angle bend thermoset composite part: Curing process modification for uniform thickness and uniform fiber volume fraction distribution", *Composite Materials*, Vol. 34, No. 20, 2000, pp. 1710-1755.
96. Kim, K.J., Sham, M.L., Hamada, H., Hoa, S.V + 13 other authors, "Effect of surface treatment on mode I interlaminar fracture behavior of plain glass woven fabric composites. Part I: Report of the 2nd round robin test results", *Composite Interface*, Vol. 7, No. 3, 2000, pp. 227-242.
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