

CURRICULUM VITAE

Suong V. Hoa

Department of Mechanical and Industrial Engineering

Concordia University

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STATUS:

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

Concordia University Research Fellow, 2001

Concordia University Research Chair in Materials and Composites (2001-2007)

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 at San Luis Obispo, 1971.

DATE OF APPOINTMENT TO CONCORDIA UNIVERSITY:

September 1977.

POSITIONS HELD AT CONCORDIA UNIVERSITY:

July 1994 -June 2000 Chair, Department of Mechanical Engineering.

May 1993 - date Director, Concordia Centre for Composites

1986 date Professor of Mechanical Engineering

1981 - May 1986 Associate Professor of Mechanical Engineering

1977 - 1981 Assistant Professor of Mechanical Engineering

POSITION AT OTHER UNIVERSITIES:

1995 - date Adjunct Professor, École de Technologie Supérieure, Quebec

1991 - 1999: Honorary Professor, Shanghai University of Technology.

PROFESSIONAL REGISTRATION(S):

1981 to date - Order of Professional Engineers in Quebec

1976 to 1983 - Association of Professional Engineers in Ontario

PROFESSIONAL & SCIENTIFIC SOCIETY MEMBERSHIP(S):

Member, Society of Plastics Engineers (1977-1987)

Member, American Society for Materials (1978-1989)

Member, American Society for Nondestructive Testing (1988-94)

Member, American Society for Testing and Materials (1978-date)

Member, Canadian Association for Composite Structures and Materials (1988-date)

Member, American Society of Mechanical Engineers (1978-date)

Member, Society for Advancement of Materials and Process Engineering (1990-date)

Member, Canadian Society for Mechanical Engineering (1977-date)

SCHOLARLY & PROFESSIONAL ACTIVITIES:

Editor, North America, Journal of Science and Engineering of Composite Materials, 1994-date.

Member of NSERC grant selection committee, GSC 13 (Mechanical Engineering), 1994-1997.

Member of FCAR grant selection committee, 1993-1996.

Founder, Canadian Association for Composite Structures and Materials (CAC SMA), 1988. President of the Association (1991-1993, 1999-date).

Member, American Society of Mechanical Engineers, Boiler and Pressure Vessel Code, section 10, 1983-1993.

Founder, Canada-Japan workshops on Composites, 1996-.

Chair and Co-Chair of 11 International conferences on Composites.

Member of scientific committee of 20 International conferences on Composites.

Reviewer of J. Polymer Composites, AIAA, J. Sound and Vibration, J. Composite Materials, J. Composites Engineering, J. Composite Science and Technology, J. Engineering Structures.

Reviewer, Graduate Programs at University of Toronto Institute for Aerospace Studies, and at Ryerson Polytechnic University, 2000.

Member of NSERC Industrial Chair Evaluation for the Industrial Chair on Composites at University of Alberta, 1996-date.

Member, Advisory Board for the Institute for Aerospace Research, National Research Council of Canada, 1999-date.

INVITED SPEAKERS:

5th International Symposium on Acoustic Emission from Composites, Sundsval, Sweden, July 1995.

Clarkson University, Department of Mechanical Engineering, May 1996.

Ecole Polytechnique Montreal, Department Genie mecanique, July 1996.

National Research Council of Canada, Industrial Materials Institute, October 1996.

International Conference on Research on Materials, Cancun, Mexico, September 1997.

International Conference on Testing of Materials, Hong Kong University of Science and Technology, October 1998.

Journée des éléments finis, GIREF, Université Laval, May 1998.

Canadian Woodlands Conference, Montreal, March 1998.

SAMPE Quebec Chapter, March 1999.

National Research Council of Canada, Institute for Research in Aerospace, April 1999.

Second Emerging Technologies for Manufacturers, Natural Resources Canada, Feb. 2001.

International conference of Metallurgists, Montreal, August 2002.

AWARDS AND DISTINCTION:

Winner of Ralph R. Teetor Award, Society of Automotive Engineers, 1980.

Fellow, Canadian Association for Composite Structures and Materials, 1992.

Fellow, American Society of Mechanical Engineers, 1996.

Winner of the G.H. Duggan medal for Advanced Materials, Canadian Society for Mechanical Engineering, 1996.

Fellow, Canadian Society for Mechanical Engineering, 1997.

Honorary Advisory Professor, Shanghai University of Technology, Shanghai, China, 1990-1995.

Concordia University Research Fellow, 2001.

Concordia University Research Chair in Materials and Composites, 2001-2007.

SABBATICAL LEAVE :

June 1, 1990 till December 1, 1990. Finished the book on "Analysis for Design of Fiber Reinforced Plastic Vessels and Pipings," Technomic Publications, 1991.

COURSES TAUGHT:

Undergraduate:

ENGR 221 Materials Science

MECH 221 Materials Science

ENGR 242 Statics

ENGR 243 Dynamics

MECH 311 Manufacturing Processes

MECH 321 Properties & Failure of Materials

MECH 422 Mechanical Behavior of Polymer Composite Materials

MECH 425 Manufacturing of Composites

MECH 481 Design and Experimental Project

Graduate:

ENGR 630 Advanced Dynamics

MECH 644 Stress Analysis in Mechanical Design

MECH 658 Mechanical Behaviour of Polymer Composite Materials

MECH 660 Testing and Evaluation of Composites

MECH 652 Manufacturing of Composites

MECH 742 Design of Machine Elements Using Finite Element Method

MECH 743 Stress Analysis and Vibration of Structures made of Composite Materials

MECH 750 Design Using Composite Materials

OTHER UNIVERSITY DUTIES:

(Society of Automotive Engineers) SAE Faculty Advisor, 1979-1983.

Acting Chair, Mechanical Engineering Department, Dec. 14, 1983 - Jan. 7, 1984.

Member of University Committee for promotion to full professor, 1986.

Member of Personnel Advisory Committee (PAC), Mechanical Department, 1986 - July 1992.

Dean's advisory committee for selection of chair of Mechanical Engineering, April-May 1993.

Chair, Mechanical Academic Planning and Priorities (MAPP) Committee, June 1, 1993 - July 1994.

Member of the University Task Force on Enhancement of Research, 1992-1994.

Canadian Society for Mechanical Engineering (CSME) Faculty Advisor, 1978-1995.

Chair, Department of Mechanical Engineering, 1994-2000.

Member, Senate Committee on Academic Planning and Priorities, Sept. 1995-2001.

Member of the Endowed Chair committee for the John Molson School of Business, Jan. 2001-date.

Member of Senate, Concordia University, 2001-date.

THESIS SUPERVISION :

Master theses in Progress 8 Doctoral theses in progress 9

Master theses finished 21 Doctoral theses finished 17

GRADUATE STUDENTS WHO HAVE GRADUATED (Past 5 years):

El-Karmalawy M., Ph.D, co-supervision with Dr. R. Ganesan, AFatigue damage characterization and reliability evaluation for CFRP composites, 1997. Currently design engineer at a company in California.

Chen J., Ph.D, co-supervision with Dr. C.K. Jen, Aln-situ cure monitoring and characterization of graphite/epoxy composites using fiber optics and ultrasonics, 1998. Currently Research Officer, National Research Council of Canada, Institute for Advanced Manufacturing, London, Ontario.

Feng W., Ph.D, A Development of partial hybrid finite elements for 3-D global/local analysis of laminated composite structures, 1998. Currently Vice Director, Institute of Mathematics and Applied Mechanics, Shanghai University.

Balike M., Ph.D, co-supervision with Dr. S. Rakheja, AEnhancement of crashworthiness in car-truck collisions using damped under-ride guard and composite crush elements, 1998. Currently engineer at Ford Motor company.

Naji, M., Ph.D, ATheoretical and experimental investigation on the manufacturing of composite structures with angle-bend, 1998. Currently professor at Jordan University of Science and Technology.

Zhao J., Master of Applied Science, co-supervision with Dr. X.R. Xiao A Evaluation of efficiency of partial hybrid finite element analysis using composite laminates with crack, 1998. Currently Ph.D. student at Concordia University, and engineer at ANRAD company in Montreal.

Yong Y., Master of Applied Science, A Characterization of braided composites, Jan. 1999. Currently engineer at CAE Ltd. in Montreal.

Dilunovic M., Master of Applied Science, co-supervision with Dr. X.R. Xiao, A Development of composite material with special dielectric properties, Feb. 1999.

Al-Omari A., Master of Applied Science, A Vacuum assisted resin transfer molding of composites, April 1999.

Rohrauer G., Ph.D, A Design of very high pressure composite pressure vessels, August 1999. Currently Associate Professor at Windsor University.

Zhang C. Ph.D, cosupervision with Dr. R. Ganesan "Stochastic model for delamination of composite laminates", June 2001. Currently engineer at Pratt & Whitney Canada Ltd.

Kan He, Ph.D, cosupervision with Dr. R. Ganesan " Interlaminar stresses and fracture behavior in thickness-tapered composite laminates", February 2002. Currently composite engineer at Chrysler Ltd in Detroit.

Dafu Shen, Master of Engineering, cosupervision with Dr. M.T. Ton-That " Epoxy nanocomposites", August 2002.

GRADUATE STUDENTS CURRENTLY SUPERVISED:

Ouellette P., Ph.D, A Measurement of properties of polymers using ultrasonic techniques".

Liu Y., Ph.D, A Stress analysis of membranes, 1997-

Zhao, J., Ph.D., A Effect of process parameters on residual stresses of glass/vinyl ester composite structures, 1998-

Qi Zhao, Ph.D., A Finite element development for triax composites, 1999-

Bao Xiao, Ph.D. A Fiber optic monitoring of integrity of composites, 2001.

Weiping Liu, Ph.D, co-supervision with Dr. M. Pugh A Liquid composite molding, 2001.

Xu Duosheng, Ph.D, co-supervision with Dr. R. Ganesan A Stability of triax fabric composite structure, 2001.

Hu Shilian, Ph.D, co-supervision with Dr. R. Ganesan " Surface finish of automotive composites", 2002.

Sharifi M., Ph.D, co-supervision with Dr. M. Chen "Cost analysis for Liquid Composite Molding of composite components", 2002.

Lei Shengong, M.A.Sc., co-supervision with Dr. M.T. Ton-That "Nanocomposites of thermoplastic polymers", 2002.

Jiang Yujin, M. A.Sc, " Manufacturing of glass/vinylester composites using the precatalyzing- of - fibers method", 2001.

Shang, D., Master of Applied Science, AOptimization of composite reinforcement for concrete applications 1999-

Wang Heng, M.A.Sc., co-supervision with Dr. P. Wood-Adams "Optimization of epoxy nanocomposites using multi-functional curing agents", 2002.

Salek Hasan, M.A.Sc., "Manufacturing of helicopter landing gear using thermoplastic composites", 2002.

Louis Laberge-Lebel, M.A.Sc. "Manufacturing of composite wing box panel using thermoplastic composites", 2002.

Yu Xin, M.A.Sc, AStress analysis of composite reinforcing rod in concrete, 2001.

G. Fryia, M.A.Sc., A Natural fiber composites, April 2001.

POST DOCTORAL FELLOWS, RESEARCH ASSOCIATES AND ASSISTANTS:

Total number supervised: 33.

Following is list over the past 5 years.

Mr. L.D. Craig, Research Assistant, 1993-1998.

Dr. Tzenov P., Research Associate, 1996-1998.

Dr. J. Yan, 1997-1998.

Ms. M. Ammar, 1998.

Dr. J. Chen, Post doctoral fellow, 1998.

Dr. M. Hojjati, Research Associate, 1998-date.

Mr. P. Ouellette, Research Associate, 1979-date.

El L. Houssie, Research Assistant, 2000.

Dr. Lixin Wu, Research Associate, 2002-

Mr. Taro Dicks, Research Assistant, 2000-2002.

Mr. Oliver Azuelos, Research Assistant, 2000-date.

Mr. Fred Guay, Research Assistant, 2002-

STUDENTS ON A STAGE

Blayac G. , AFiber optic for strain measurement in composites, student on stage from France, summer 2001.

Morel, P.-X., AManufacturing of braided composite tube, student on stage from France, summer 1998.

Allamanno, C., AFinite element analysis of composite beam with internal crack, student on stage from France, summer 1998.

Blachair, A., ADesign, fabrication and testing of a circular cross section beam made of graphite/epoxy NCT-301", student on stage from France, summer 1997.

Carminati, S., AConception d'une poutre de section carré en carbone époxy, student on stage from France, summer 1997.

Bouzzo, D., AFinite element analysis of a composite beam with a through width crack, student on stage from France, summer 1997.

RELATED EXPERIENCE:

ACADEMIC:

External examiner for a Ph.D thesis at the Department of Mechanical Engineering, University of Sherbrooke, (Mr. Otame), July 1990.

Lecturer at a short course on Advanced Composites, Advanced Materials Engineering Center, Halifax, Nova Scotia, November, 1990 and 1991.

External examiner for a Ph.D thesis at the Department of Mechanical Engineering at École Polytechnique, U de M, (Mr. Hao Wang), February 1993.

External examiner for a Ph.D thesis at the Department of Mechanical Engineering at École Polytechnique, U de M, (Mr. Bouti), March 1993.

External examiner, Ph.D thesis, Department of Aerospace Science and Eng., U. of T., (Mr. M.M. Domb), 1995.

External examiner, Ph.D thesis, Mechanical Engineering, McGill University, (Mr. M. Shokrieh) 1996.

External examiner, Ph. D thesis, Mechanical Engineering Department (Mr. H. Champlaud), ETS, Nov. 99.

External examiner, M.A.Sc. thesis, Mechanical Engineering Department (Mr. M. Poulin), ETS, Oct. 99.

External examiner, Ph. D thesis, Royal Melbourne Institute of Technology (Mr. R. Peck), 1998.

External examiner, Ph.D thesis, Royal Melbourne Institute of Technology, (Ms. F. Coman), 1999.

External examiner, M.A.Sc., Victoria University of Technology, Australia (Mr. V.T. Nguyen), 1999.

External examiner, Ph.D, Ecole de Technologie Superieure (Ms. Ton Nu Thi Nga), 2002.

INDUSTRIAL AND CONSULTING EXPERIENCE:

2002 Consultant for Fibre de Verres Abitibi Inc., Rouyin-Noranda.

2000 Consultant for the Graduate Programs, University of Toronto Institute for Aerospace Studies, U. of Toronto.

2000 Consultant, QIT Fer Titane, Tracy, Quebec

1999 Consultant, ITF Inc., Montreal, Quebec

1999 Consultant, Tankcon FRP Ltd., Montreal, Quebec

1993-1995 Consultant, International Reinforced Plastics, Ohio, USA

1990-1992 Consultant, Troy Manufacturing

1987-1990 Consultant, Revenue Canada

1984 1989 Scientific Advisor for the PILP Grant,

ABCO Plastics Ltd., Mahone Bay, Nova Scotia.

Consultant for ABCO Plastics Ltd.

1980 - date Consultant, CPF Dualam Ltd., Montreal, Quebec, Canada

1982 - 1984 Consultant, Spar Aerospace, Montreal, Quebec

1981 - 1983 Consultant, Innotech Aviation Ltd., Montreal, Quebec

1981 - 1982 Consultant, Persta Canada Ltd., Montreal, Quebec, Canada

1980 Consultant, Ritepro Inc., Montreal, Quebec, Canada

1979 Consultant, RBL Industrial Fan Manufacturer, Plessisville, Quebec

1976- 1977 Design Engineer, Canadian Fram Ltd., Chatham, Ontario

INTERNATIONAL MISSIONS ON TECHNOLOGY:

Mission to Malaysia on Composites: Organized and supported by Bell Helicopter Textron Ltd. May 1996.

Mission to Paris, France on Composites: Supported by the Department of Foreign Affairs and International Trade. March 2001.

Mission to Taiwan (second joint Taiwan-Canada in Aerospace): Supported by the Natural Sciences and Engineering Research Council of Canada and organized by the Institute for Aerospace Research (IAR) of the National Research Council of Canada. May 2001.

Mission of Advanced Materials to Singapore and Hong Kong: Supported by the Department of Foreign Affairs and International Trade. June/July 2001.

Mission to Paris, France on Composites: Supported by the Department of Foreign Affairs and International Trade. April 2002.

Mission to the U.K. on Aerospace: Supported by the Quebec Ministere de l'Industrie, de la Science et de la Technologie, and by Consortium en Aerospace du Quebec (CRIAQ). July 2002.

Mission to France, Switzerland, Germany on Nanotechnology: Supported by the Department of Foreign Affairs and International Trade. November 2002.

RESEARCH GRANTS AND CONTRACTS (Past 5 years):

Consortium en Aerospace du Quebec (CRIAQ) and Bell Helicopter,

Pratt & Whitney and Bombardier:

\$674,501 2002-2005

Member of the ISIS (Canadian Network of Centers of Excellence

\$ 40,000/y 2002-2005

Bombardier Ltd. (Conference grant)

\$500 1998

Pratt & Whitney Canada Ltd. (contract)

\$ 42,000 1999

Spar Aerospace Ltd. (student support)

\$ 5,000 1998

C.P.F. Dualam Ltd. (contracts)

\$ 5,000 1998-1999

Pratt & Whitney Canada Ltd. (In kind)

\$ 6,000 1998

Member of the AUTO21 Canadian Network of Centers of Excellence

\$ 23,000/y 2002-2005

Natural Science and Engineering Research Council Canada

NSERC Research (Discovery) Grants

(Stress analysis and vibration of elastic and viscoelastic systems)

\$40,000/y

\$40,000/y

\$43,604/y

\$45,785/y

\$56,000/y

1991-1994

1994-1997

1997-1999

1999-2001

2002-2006

NSERC TPP grant

(Development of integrated composite highway tanker)

\$96,800

\$123,800

\$118,800

1998-1999

1997-1998

1996-1997

CPF Dualam Ltd. Contribution to above TPP grant:

\$35,000

\$34,000

\$32,000

1998-1999

1997-1998

1996-1997

NSERC CRD grant

(Characterization of triax composites for satellite applications)

\$59,500/y

1999-2002

Contribution from EMS Technologies

\$30,000/y 1999-2002

Contribution from Canadian Space Agency

\$5,000/y 1999-2002

NSERC CRD grant

(Ultrasonic monitoring of cure of graphite/epoxy composite)

\$15,000/y

1999-2001

Contribution from Bell Helicopter Textron Canada Inc.

\$7,500/y 1999-2001

NSERC Equipment Grants

-Principal applicant (Circular braiding machine)

- With K. Demirli (robotic equipment)

- With R. Ganesan (extensometer)

- Principal applicant (FT-IR)

\$92,500

\$24,540

\$20,500

\$50,000

1996-1997

1998-1999

2000-2001

2001-2002

Ministere du Quebec conference grant:

-Principal applicant:

\$10,000

2001

FCAR Operating & Capital Grant

FCAR Équipe

(Hoa S., Xiao X., Ganesan R. Ngo D.)

\$36,000/y

1998-2001

FCAR Program for International

Collaboration

Spar Aerospace

\$17,000/y

\$5,000

1995-1997

1998

National Research Council Canada

NRC Contract (Joining of tubular composites)

\$17,500/y 1996-1998

C.P.F. Dualam Ltd. (Contracts)

(Acoustic emission of composite pressure vessels and characterization)

\$16,000 1995-1997

TANKCON FRP Inc. (Contracts)

(Acoustic emission testing of highway tankers)

\$10,000 1995-1997

DNL Ltd. (Contract)

(Acoustic emission testing of bridge structures)

\$7,200 1997

AVCORP Ltd. (Contract)

(Design of composite air inlet)

\$10,000 1997

Forest Engineering Research Institute of Canada (contract)

(Development of composite pickets for log trailers)

\$12,000 1995-1997

Canadian Department of Foreign Affairs

(Hoa S.V., Xiao X.R., Ngo A.D., Vu-Khanh T., Lee S., Poursartip A., Lo, J.)

(Canada-Japan workshop on Composites)

\$35,600 1996-1997

Bombardier Services Division

(Second Canada-Japan workshop on Composites)

\$500 1998

Canadian Foundation for Innovation:

(Innovative Testing Facilities for Materials) (With X. Xiao, R. Ganesan)

(Innovative Facilities for Research using Information Technology) (member of group for Univ.)

\$ 280,000

\$12,500,000

1999

1999

PUBLICATIONS:

Total number of refereed journal publications: 109

Total number of refereed conference proceedings and presentations: 187

Total number of patents: 3

Total number of code and standard contributions: 3

Total number of books and conference proceedings edited: 14

Total number of commercialized computer programs: 2

LISTING OF REFEREED JOURNAL PUBLICATIONS (Past 7 years):

Mazumdar, S.K. and Hoa S.V. "Analytical Models for Low Cost Manufacturing of Composite Components by Filament Winding. Part I. Direct Kinematics", J. Composite Materials, Vol. 29, No. 11, 1995, pp. 1515-1541.

Hojjati, M. and Hoa, S.V. "Model Laws for Curing of Thermosetting Composites", J. Composite Materials, Vol. 29, No. 13, 1995, pp. 1741-1761.

Mazumdar, S.K. and Hoa, S.V., "Analytical Models for Low Cost Manufacturing of Composite Components by Filament Winding, Part II. Inverse Kinematics", J. Composite Materials, Vol. 29, No. 13, 1995 pp. 1762-1788.

Xie, M., Hoa, S.V. and Xiao, X.R., "Bonding Steel Reinforced Concrete with Composites", J. Reinforced Plastics and Composites, Vol. 14, September 1995, pp. 949-964.

Kim, Y.S. and Hoa, S.V., "Buckling of Composite Plate under Biaxial Loading Conditions", J. of Composite Structures, Vol. 31, No. 4, Sept. 1995, pp. 247-252.

Hojjati, M. and Hoa, S.V., "Some Observations in Curing of Thick Thermosetting Laminated Composites", J. Science and Engineering of Composite Materials, Vol. 4, No. 2, 1995, pp. 89-108.

Xiao, X.R., Lin, S. and Hoa, S.V., "Scale Relations for Mold Filling Simulation in Resin Transfer Molding", J. Science and Engineering of Composite Materials, Vol. 4, No. 2, 1995, pp. 131-141.

Hoa, S.V., "Creep of a Composite Box Beam", J. Reinforced Plastic and Composites, Vol. 14, February 1995, p. 128.

Hoa, S.V., "Biaxial Bearing Bypass Testing of Graphite/epoxy Plates", J. Composite Technology and Research, Vol. 17, No. 2, April 1995, pp. 123-131.

Mazumdar, S.K. and Hoa, S.V., "Manufacturing of Non-Axisymmetric Thermoplastic Composite Parts by Tape Winding Technique" J. Materials and Manufacturing Processes, Vol. 10, No. 1, 1995, pp. 47-56.

Hojjati, M., Safavi, A.V. and Hoa, S.V., "Design of Domes for Polymeric Composite Pressure Vessels", J. Composites Engineering, Vol. 5, No. 1, 1995, pp.51-59.

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.

Mazumdar, S.K. and Hoa, S.V., "Determination of Manufacturing Conditions for Hot Gas Aided Thermoplastic Tape Winding", J. Thermoplastic Composite Materials, Vol. 9, January 1996, pp.35-53.

Hoa S.V. and W. Feng, A Application of global/local finite element model to composite laminates J. Science and Engineering of Composite Materials, Vol. 5, No. 3-4, 1996.

Feng W. and S.V. Hoa AA partial hybrid degenerated plate/shell element for the analysis of laminated composites, Int. J. Numerical methods in Engineering, Vol. 39, 1996, pp 3625-3639.

Mazumdar S.K. and S.V. Hoa ADetermination of manufacturing conditions for hot gas aided thermoplastic tape winding, J. Thermoplastic Composite materials, Vol. 9, Jan. 1996, pp. 35-53.

Feng W., Hoa S.V. and Huang Q. AClassification of stress modes in assumed stress fields of hybrid finite elements, International Journal of Numerical Methods in Engineering, Vol. 40, 1997, pp. 4313-4339.

Qian G. L., Hoa S.V., and Xiao X.R. AA vibration method for measuring mechanical properties of composites: Theory and Experiment, J. Composite Structures, Vol. 39, No. 1-2, 1997, pp. 31-38.

Qian G.L., Hoa S.V. and Xiao, X.R., AA new rectangular plate element for composite laminates, Trans. ASME Journal of Sound and Acoustics, Vol. 120, Jan. 1998, pp. 80-86.

Jarrah M.A. and Hoa S.V. ACharacteristics between a base laminate and a repair laminate subjected to variations in pressure in the repair curing cycle, J. Reinforced Plastics and Composites, Vol. 17, No. 6, 1998.

Zhang C., Hoa S.V. and Ganesan R. Approximate solutions for stresses around a pin-loaded holes in symmetric composite laminates, *J. Reinforced Plastics and Composites*, Vol. 17, No. 9, 1998.

Zhang C., Hoa S.V. and Ganesan R. A Edge effects of laminated composite with pin loaded holes, *AIAA*, Vol. 36, No. 10, October 1998, pp. 1883-1893.

Wang Y., Hoa S.V. and Osman M. A Cutting behavior of composite prepregs, *J. Reinforced Plastics and Composites*, Vol. 17, No. 12, 1998, pp. 1119-1134.

Chen J., Hoa S.V., Jen C.K., Viens M. and J.P. Monchalin A Ultrasonic evaluation of graphite/epoxy composites with different curing conditions, *J. Polymer Composites*, Vol. 19, No. 3, June 1998, pp. 225-232.

Feng W. and Hoa, S.V. A Partial hybrid finite elements for composite laminates, *J. of Finite Elements in Analysis and Design*, Vol. 30, No. 4, October 15, 1998.

Chen, J.Y., Hoa, S.V., Jen, C.K. and Wang, H., A Fiber-optic and ultrasonic measurements for in-situ monitoring of graphite/epoxy composites, *Journal of Composite Materials*, Vol. 33, No. 20, 1999, pp. 1860-1881.

Balike M., Rakheja S. and Hoa, S.V. A 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.

Zhao J., Hoa S.V., X.R. Xiao and I. Hanna A Partial hybrid finite element analysis of stress fields in composite laminates with delamination crack under out of plane loading, *J. Reinforced Plastics and Composites*, Vol. 18, No. 9, 1999, pp. 827-843.

Naji M., Hoa S.V. A 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.

LeVan, M., Rutinduka, E., Detellier, C., Gougay, P., Hascoet, V., Tavakoliyan, S., Hoa, S.V. and Matsuura, T., A Mechanical and pore characteristics of zeolite composite membranes, *Journal of Materials Chemistry*, 9, 1999, pp. 783-788.

Naji M. and Hoa, S.V., A Modelling of autoclave curing of composite laminates with angle bend, *J. Reinforced Plastics and Composites*, Vol. 18, No. 8, 1999.

Balike M., Rakheja S. and S.V. Hoa A 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.

Amiouny S. V. and S.V. Hoa A Combinatorial optimization for angles of wrap in filament wound cylinders, *J. Reinforced Plastics and Composites*, Vol. 19, No 7, 2000, pp. 522-534.

Naji M. and Hoa S.V., ACuring of thick angle-bend thermoset composite part: Curing process modification for uniform thickness and uniform fiber volume fraction distribution, J. of Composite Materials, Vol. 34, No. 20, 2000.

Zhang C., Ganesan R. and S.V. Hoa A Effects of friction on three dimensional contact stresses in pin-loaded composites, J. of Composite Materials, Vol. 34, NO. 16, 2000, pp. 1382-1415.

He K., Hoa S.V. and R. Ganesan, AThe study of tapered laminated composite structures. A review, J. of Composites Science and Technology, 60, (2000) pp. 2643-2657.

Hoa S.V. and Y.S. Kim ABuckling of composite plates under biaxial loading conditions, Trans. of CSME, Vol. 24, No. 1B, April 2000, pp. 103-118.

Naji M. and Hoa S.V. ACuring of thick angle bend thermoset composite part: ACuring process modification for uniform thickness and uniform fiber volume fraction distribution, J. Composite Materials, Vol. 34, No. 20, 2000, pp. 1710-1755.

Kim K.J., Sham M.L., Hamada H., Hoa S.V + 13 other authors AEffct 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, J. Composite Interface, Vol. 7, No. 3, 2000, pp. 227-242.

Zhang C., Hoa S.V. and Ganesan R. " Through the thickness compressive strengths of graphite/epoxy laminated composites: Experimental characterization and statistical analysis", J. Science and Engineering of Composite Materials, Vol. 9, No. 4, 2000, pp. 163-176.

Jarrah M.A., Tahat M.S.M. and S.V. Hoa AMode II fracture at the interface between a base and a repair graphite/epoxy laminate, J. Reinforced Plastics and Composites, Vol. 21, No. 11, 2002, pp. 963-982..

Yong Yan and Suong V. Hoa "Energy approach for prediction of mechanical behavior of 2-D triaxially braided composites", Part I: Model Development", J. of Composite Materials, Vol. 36, No. 8, 2002, pp. 963-982.

Yong Yan and Suong V. Hoa "Energy approach for prediction of mechanical behavior of 2-D triaxially braided composites, Part II: Parameter Analysis", Vol. 36, No. 10, 2002, pp. 1233-1254.

Sheng S.Z. and Hoa S.V. "Three dimensional micro-mechanical modeling of woven fabric composites", accepted, J. of Composite Materials, August 2001.

Sheng S.Z. and Hoa S.V. "Modeling of 3D angle interlock woven fabric composites", accepted, J. Thermoplastic Composite Materials, September 2001.

Hoa S.V., Sheng S.Z, Zhao Q. and Ouellette P. " Determination of elastic properties of triax composite materials", accepted, J. of Composite Science and Technology, March 2002.

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