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99. Krishnan, N and Cao, J. (2002) "Real-time Calculation of Optimal Blank-holder Force History in Sheet Metal Forming Using an ARMA Model", *2002 Japan US Symposium on Flexible Automation*, Hiroshima, Japan.
100. Li, S.P. and Cao, J (2001) "Enhancement of Coil Stiffness Using a Cardboard Core", *2001 International Mechanical Engineering Congress and Exposition*, New York, NY.
101. Peng, X.Q. and Cao, J. (2001) "Sensitivity Study on Material Characterization of Textile Composite", *the First M.I.T. Conference on Computational Fluid and Solid Mechanics*, Cambridge, Massachusetts, June 12 - 14, 2001.
102. Kinsey, B.L. and Cao, J. (2001) "Numerical Simulation and Experimental Implementation of Tailor Welded Blank Forming", *Second Global Conference on Processing & Manufacturing of Sheet Metals, 2001 TMS Annual Meeting*, New Orleans, Louisiana, February 11-15,2001.
103. Peng, X.Q., Lussier, D., Cao, J. and Chen, J. (2001) "Material Behavior Characterization of Textile Composite Sheets: Experiments and Simulation", *Second Global Conference on Processing & Manufacturing of Sheet Metals, 2001 TMS Annual Meeting*, New Orleans, Louisiana, February 11-15,2001.
104. Song, N., Qian, D., Cao, J., Liu, W., Viswanathan, V. and Li, S.F. (2000) "Effective Models for Prediction of Springback in Flanging", *Symposium on Advances in Metal Forming*, American Society of Mechanical Engineers, Orlando, Florida.
105. Peng, X.Q. and Cao, J. (2000) "Numerical Determination of Mechanical Elastic Constants of Textile Composites", *15<sup>th</sup> Annual Technical Conference of the American Society for Composites*, College Station, Texas, Sept. 25-27, 2000.
106. Lee, L.H., Cao, J., Xia, Z.C. and Tang, S.C. (2000) "Reduction of Forming Steps of an Axisymmetric Multi-step Drawing Problem via Numerical Modeling", *2000 Society of Automotive Engineers International Congress & Exposition*, Detroit, MI.
107. Cao, J., Kinsey, B.L., Song, N. and Yao, H. (2000) "Next Generation Stamping Dies - Flexibility and Controllability", *International Conference of Flexible Automation & Intelligent Manufacturing*, College Park, Maryland.
108. Kinsey, B., Song, N., and Cao, J. (1999) "Analysis of Clamping Mechanism for Tailor Welded Blank Forming", *1999 International Body Engineering Conference*, paper No. 99IBECC\_26, Detroit, MI.
109. Cao, J., Liu, Zhihong, Liu, W.K. (1999) "Prediction of Springback in Straight Flanging", *Symposium on Advances in Sheet Metal Forming, 1999 ASME IMECE Winter Conference*.

110. Cao, J., Karafillis, A. and Ostrowski, M. "Prediction of Flange Wrinkles in Deep Drawing", *Advanced Methods in Materials Processing Defects*, ed. Predeleanu and P.Gilormini, 1997.
111. Cao, J., Karafillis, A. and Boyce, M. "Prediction of Forming Limit Diagram using KB yield Criterion", *International Symposium on Plasticity and its Current Applications*, 1997.
112. Kinsey, B. and Cao, J. "An Experimental Study to Determine the Feasibility of Implementing Process Control to Reduce Part Variation in a Stamping Plant", 1997 *Society of Automotive Engineers International Congress & Exposition*, Detroit, MI.
113. Cao, J. and Boyce, M., "Design and Control of Forming Parameters Using Finite Element Analysis", *Symposium on Computational Material Modeling*, American Society of Mechanical Engineers, Chicago, IL. 1994, pp.265.
114. Sunseri, M., Karafillis, A., Cao, J. and Boyce, M., "Methods to Obtain the Net Shape in Aluminum Sheet Forming Using Active Binder Force Control", *Symposium on Mechanics of Materials Processing and Manufacturing*, 1994. ASME, Chicago, IL.
115. Cao, J., Bakkestuen, R., Jalkh, P., Boyce, M. and Hardt, D., "Improvement of Forming Height and Stability of Aluminum Parts Using Active Binder Control", *International Deep Drawing Conference*, 1994, Lisboa, Portugal.

#### **NON-REFEREED CONFERENCE PUBLICATIONS**

116. Cao, J. Malhotra, R., Beltran, M.J, Reddy, N.V. (2011) "Incremental Forming at Multi-Scales", Proceedings of 2011 NSF Engineering Research and Innovation Conference, Atlanta, Georgia, Jan. 4-7, 2011.
117. Magargee, J., McHugh, M. Cao, J. and Brink, D.D. (2011) "Evaluating the Tensile and Compressive Behavior of Thin Metal Sheets Using a Transparent Micro-Wedge Device", Proceedings of 2011 NSF Engineering Research and Innovation Conference, Atlanta, Georgia, Jan. 4-7, 2011.
118. Cao, J., Dohda, K., Zhou, R., Makino, T. and Futamura, M. (2010) "An Investigation on Bump Formation in Forming of Micro Dimples", *Metal Forming 2010*, Toyohashi, Japan, September 19-22, 2010, pp.1160-1164.
119. Cao, J and Malhotra, R. (2009) "Incremental Forming at Multi-Scales", Proceedings of 2009 NSF Engineering Research and Innovation Conference, Honolulu, Hawaii, June 22-25, 2009.
120. Cao, J., Peshkin, M., Mahayotsanun, N., Gao, R.X., Sah, S. and Wang, Chuan-tao (2009) "Tooling-Integrated Draw-In and Pressure Sensing for Stamping Process Monitoring", Proceedings of 2009 NSF Engineering Research and Innovation Conference, Honolulu, Hawaii, June 22-25, 2009.
121. Smith, S., Woody, B., Cao, J., Belytschko, T., Malhotra, R., Huang, Y., Ziegert, J., Gnäupel-Herold, T. and Foecke, T. (2009) "Deformation Machining – A New Hybrid Process",

Proceedings of 2009 NSF Engineering Research and Innovation Conference, Honolulu, Hawaii, June 22-25, 2009.

122. Huang, Y., Beltran, M. and Cao, J. (2008) "Experimental and Numerical Investigation of Forming Limits in Single Point Incremental Forming of a V-Shape Groove", Proceedings of the 8th International Conference on Frontiers of Design and Manufacturing, September 23~26, 2008, Tianjin, China.
123. Cao, J., Lee, W., Huang, Y., Wang, H-P (2008) "Numerical and experimental Analysis of Subtle Surface Distortion in Sheet Metal Forming", in The 8th World Congress on Computational Mechanics/The 5th European Congress on Computational Methods in Applied Sciences and Engineering, edited by B.A. Schrefler and U. Perego, Proceedings of WCCM8 and ECCOMAS2008, in Venice, Italy, Jun. 30-Jul. 4, International Center for Numerical Methods in Engineering (CIMNE), Barcelona, Spain, 2008 pp. 228.
124. Cao, J., Lee, W. and Padvoiskis, J. (2008) "Characterization of Material Deformation Behavior of Woven Composites", in 2008 NSF Engineering Research and Innovation Conference in Knoxville, Tennessee, U.S.A., Jan. 7-10, 2008.
125. Cao, J., Peshkin, M. and Mahayotsanun, N., Gao, R.X., Sah, S. and Wang, C.T. (2008) "Integrated Sensing for Stamping Process Monitoring and Control", in 2008 NSF Engineering Research and Innovation Conference in Knoxville, Tennessee, U.S.A., Jan. 7-10, 2008.
126. Kinsey, B.L., Onyancha, R.M., Parasiz, S.A., Krishnan, N., Cao, J., Ehmann, K., Liu, W.K., Espinosa, H. and Li, M. (2008) "Microforming Processes – Fundamental Studies and Developments", in 2008 NSF Engineering Research and Innovation Conference in Knoxville, Tennessee, U.S.A., Jan. 7-10, 2008.
127. Lee, W. and Cao, J. (2007) "Characterization of Woven Composites Forming from Macro to Micro", International Conference on Intelligent Textiles 2007 in Seoul National University, Seoul, South Korea, Nov. 11-13, 2007.
128. Lee, W. and Cao, J. (2007) "Non-orthogonal constitutive law with considering the tensile effect on the shear modulus", 2007 NSF Grantee Conference on International Research and Education in Engineering in Purdue University, Indiana, U.S.A., Oct.30-Nov.1, 2007.
129. Sherwood, J. A. and Cao, J. (2006) "Collaborative Research: Enhancing the Understanding of the Fundamental Mechanisms of Thermostamping Woven Composites to Develop a Comprehensive Design Tool", *National Science Foundation DMII Grantee Conference*, St. Louis, MO.
130. Cao, J. and Krishnan, N. (2006) "Experimental Study of Friction Behavior in Micropin Extrusion", *International Conference of Frontiers in Design and Manufacturing*, Guangzhou, China.
131. Cao, J. and Krishnan, N. (2005) "Recent Advances in Microforming: Science, Technology and Applications", *TMS*, Pittsburg, PA.

132. Buranathiti, T. and Cao, J. (2005) "Benchmark Simulation Results: Automotive Deck Lid Inner Panel (Benchmark 1)", *NumiSheet 2005*, Detroit, MI.
133. Buranathiti, T. and Cao, J. (2005) "Numisheet 2005 Benchmark Analysis on Forming of an Automotive Deck Lid Inner Panel (Benchmark 1)", *NumiSheet 2005*, Detroit, MI.
134. Buranathiti, T. and Cao, J. (2005) "Benchmark Simulation Results: Automotive Underbody Cross Member (Benchmark 2)", *NumiSheet 2005*, Detroit, MI.
135. Buranathiti, T. and Cao, J. (2005) "Numisheet 2005 Benchmark Analysis on Forming of an Automotive Underbody Cross Member (Benchmark 2)", *NumiSheet 2005*, Detroit, MI.
136. Buranathiti, T. and Cao, J. (2005) "Benchmark Simulation Results: Channel Draw/Cylindrical Cup 2-Stage Test (Benchmark 3)", *NumiSheet 2005*, Detroit, MI.
137. Liu, W.K., Cao, J. Cheng, H.S., Lu, H. (2004) "Founding of New Numerical Tool (RKEM) and Advancement of Experimental Setup", *2004 National Science Foundation DMII Grantee Conference*, January, Dallas, TX.
138. Jian Cao, Wing Kam Liu, Hang Shawn Cheng, Hongsheng Lu (2003) "A Multi-Scale Approach for Predicting Wrinkling and its Experimental Verification ", *2003 National Science Foundation DMII Grantee Conference*, Birmingham, Alabama.
139. Jian Cao, Julie Chen, Samuel Chow, Darin Lussier, Xiongqi Peng, Xue Pu (2003), "Characterization in Stamping of Woven Composites", *2003 National Science Foundation DMIII Grantee Conference*, Birmingham, Alabama.
140. Cao, J. (2002) "Springback Prediction in Straight Flanging", *2002 Plasticity Conference*, Aruba, Netherland.
141. Cao, J. and Wang, X. (2001) "Experimental Study on Sheet Wrinkling Behavior and its Analysis", *2001 National Science Foundation DMII Grantee Conference*, Florida.
142. Cao, J., Kinsey, B.L., and Song, N. (2001) "Experimental Implementation of the Novel Forming Process", *2001 National Science Foundation DMII Grantee Conference*, Florida.
143. Chen, J., Bulusu, A., Cao, J. and Peng, X. (2001) "Intelligent Material and Process Design for Stamping of Structural Composites: Modeling and Comparisons", *2001 National Science Foundation DMII Grantee Conference*, Gainesville, Florida.
144. Cao, J. and Wang, X. (2000) "A Stress Based Wrinkling Criterion", *2000 National Science Foundation DMII Grantee Conference*, Vancouver, Canada.
145. Cao, J., Kinsey, B.L., and Song, N. (2000) "Enhance the Formability of Sheet Metal via Smart Tooling", *2000 National Science Foundation DMII Grantee Conference*, Vancouver, Canada.
146. Chen, J., Bulusu, A., Cao, J. and Peng, X. (2000) "Intelligent Material and Process Design for Stamping of Structural Composites: Fabric Modeling", *2000 National Science Foundation DMII Grantee Conference*, Vancouver, Canada.

147. Peng, X.Q. and Cao, J. (1999) "Material Characterization in Forming Structural Composites", *ME100, Polytechnic University, NY*.
148. Chen J., Sherwood, J, and Cao, J. (1999) "High Volume Manufacturing of Structural Composites", *Tsai Symposium on Composites for the Next Millennium*, July 2-3, 1999, Tours, France.

### **ADDITIONAL CONFERENCE/WORKSHOP PRESENTATIONS**

Referred and non-referred conference papers were presented at the corresponding conferences either by Jian Cao or by her students. In addition to those presentations, the following presentations were made by Jian Cao:

149. Predictive Science Based Design for Advanced Metal Forming, January 25, 2013, STC-F, CIRP January meeting, Paris.
150. Combined Isotropic-kinematic Hardening Behaviour in Sheet Metal Forming Processes & Failure in Incremental Forming, August 24, 2012, General Assembly, Part II.
151. Numerical Simulation of Incremental Forming, 2010, CIRP January meeting, Paris.
152. Effect of Surface Texture on Algae Growth, 2009, CIRP General Assembly Part II, Boston.
153. A New Experimental Apparatus for Measuring the Kinematic Hardening Behavior in Sheet Metals, 2007, CIRP January Meeting.
154. Draw-in Sensor for Real-time Measurement/Control in Sheet Metal Forming, 2006, *North American Deep Drawing Group Research Conference*.
155. CAREER Program Development, 2005, *TMS*.
156. Manufacturing Processes Research on Metals, 2004, *Interagency Meeting on Metal Research*.
157. The US National Science Foundation's Investment in Manufacturing, 2004, *China Natural Science Foundation*.
158. Intelligent Manufacturing and Maintenance System, 2004, *Manufacturing Frontier Conference*.
159. From the Nano Tech Lab to the Manufacturing Industry: The NSF Initiative, 2004, *Indo-US Advanced Manufacturing Forum*.
160. Opportunities and Challenges in Micro-forming, 2004, *Indo-US Advanced Manufacturing Forum*.
161. Current Funded Projects & Future Directions in Manufacturing Processes Research, 2003, *Interagency Meeting on Metal Research*.
162. Life Beyond the Ph.D., 2003, *National Science Foundation Division of Design, Manufacturing and Industrial Innovation Grantee Conference*.

163. Research Opportunities in Green Engineering: Bridging Design and Manufacturing, 2003, *Society of Women Engineers Conference*.
164. Engineering Applications of Newly Proposed Reproducing Kernel Element Method, 2003, *International Congress of Applied Mathematics*.
165. A Multi-Scale Meshfree Approach for Predicting Wrinkling and Experimental Verification, 2003, *US Congress of Computational Mechanics*.
166. Process Control: Hardware and Software, 2002, *North American Deep Drawing Group Research Conference*.
167. Instability Analysis – Wrinkling, 2001, *North American Deep Drawing Group Research Conference*.
168. Wrinkling Prediction in Numerical Simulations, 1999, *US Congress of Computational Mechanics*.
169. Springback in Flanging Operation, 1999, *North American Deep Drawing Group Research Conference*.

## **INVITED PRESENTATIONS**

1. Plenary Keynote, The Art and Science of Flexible Sheet Metal Forming, 12<sup>th</sup> International Conference on Technology of Plasticity, September 17-22, 2017, Cambridge, U.K.
2. Invited Speaker, Manufacturing Process Compiler, NAMRC Blue Skype Competition, Los Angeles, June 2017.
3. Invited Talk, Additive Manufacturing, University of British Columbia, Vancouver, Jan. 2017.
4. Invited Speaker, Digital Manufacturing – what is it and how will it impact our world? NU Knowledge at Noon, April 5, 2016, Evanston, IL.
5. Invited Speaker, Advanced Manufacturing – Current Challenge in Computing Conference, March 29 – 31, 2016, Napa, CA.
6. Invited Speaker, Generis American Manufacturing Summit, February 29 – March 1, 2016, Chicago, Illinois, <http://manufacturing.generisgp.com/summit/speakers>
7. Invited Talk, Integration of Innovative Manufacturing Processes, Mechanics and Materials Design for Energy-efficient Distributed Manufacturing, December 15, 2015, University of Michigan, Ann Arbor.
8. Keynote, Digital Manufacturing, 12<sup>th</sup> Conference on Advanced Molding and Materials Processing, November 20, 2015, Nansha, China

9. Keynote, Cope with Uncertainties in Sheet Metal Forming Processes – Classification and Methodologies, 2<sup>nd</sup> Int. Conf on Uncertainty in Mechanical Engineering, Nov. 19, 2015, Darmstadt, Germany.
10. Keynote, Advances in Modeling of Manufacturing Process, Society of Engineering Science Annual Technical Conference, Oct. 28 – 30, 2015, College Station, TX.
11. Invited Talk, Additive Manufacturing, NAS workshop, Oct. 7-9, 2015, Washington, D.C.
12. Invited Talk, “Digital Manufacturing for Flexibility and Energy Efficiency”, DMDII Summer Institute on Sustainability and Energy, August 10, 2015, Chicago, IL.
13. Invited Talk, “Coupling Manufacturing, Mechanics and Materials Design in Additive Manufacturing”, NSF Workshop on Multiscale/3D Printing Cement, July 16-17, Nashville, TN.
14. Plenary Talk, “Flexible Energy Efficient Sheet Metal Forming”, International Deep Drawing Research Group 2015 Conference, Shanghai, China, June 1, 2015.
15. Invited Panelist, Advanced Manufacturing Workshop, University of Pennsylvania, May 21, 2015.
16. Department Seminar Speaker, Mechanical & Industrial Engineering, University of Iowa, May 7, 2015.
17. Invited Talk, “Opportunities and Challenges in Rapid Flexible Manufacturing”, U.S. National Committee for Theoretical and Applied Mechanics, The National Academies, May 1, 2015.
18. Invited Seminar, “Challenges and Opportunities in Linking Materials, Processes and Performance”, NIST, April 30, 2015.
19. Invited Speaker, Generis American Manufacturing Summit, March 10-11, 2015, Chicago, Illinois, <http://manufacturing.generisgp.com/summit/speakers>.
20. Panelist, “Reaping the Benefits of Corporate Sponsored Research: A Panel Discussion by McCormick Faculty”, Northwestern University, Jan. 22, 2015.
21. Invited Lecturer “Flexible Energy-Efficient Manufacturing”, Hong Kong Productivity Council, Oct. 13, 2014.
22. Plenary Talk, “Rapid Manufacturing Processes for Enhancing Energy Efficiency”, International Conference on Advanced Aerospace Manufacturing, May 22-23, 2014, Shanghai, China.
23. Invited Department Seminar, Materials Science and Engineering, Carnegie Mellon, April 25, 2014.
24. Curie Lecture, University of Florida, Gainesville, February 18, 2014.
25. Plenary Talk “Microforming”, 2013 International Conference on Multi-Material Micro-Manufacture (4M2013), 8-10 October 2013, San Sebastian, Spain.



26. Keynote Talk, "Metal forming proc16th International Conference on Advances in Materials & Processing Technologies (AMPT 2013), Sept. 22 – 26, 2013, Taiwan.
27. Invited Talk "Eletroplasticity – Yes or No", University of Ulsan, May 4, 2013, Ulsan, South Korea
28. Invited Talk "Manufacturing Aspects in Systems Engineering for Clean and Renewable Energy Manufacturing", National Science Foundation, March 14, 2013, Arlington, VA.
29. Invited Talk "Converging Knowledge and Technologies for Societal Benefit - Implications: Societal collective outcomes, including manufacturing", National Science Foundation, December 11, 2012, Arlington, VA.
30. Invited Seminar, "Material Design and Manufacturing", Schlumberger, November 12, 2012, Houston, TX.
31. Keynote Talk "Small Features for Large Saving", ISGMA 2012 International Symposium on Green Manufacturing and Applications, August 25-27, 2012, Jeju, Korea.
32. Invited Talk "Transforming the Landscape of Manufacturing", WTEC Study on NBIC2, National Science Foundation, June 25, 2012.
33. Invited Seminar "Point-of-Need Manufacturing Processes for Enhancing Energy Efficiency", University of Texas, Austin, April 10, 2012.
34. Invited Seminar "Point-of-Need Manufacturing Processes for Enhancing Energy Efficiency", Texas A&M, College Station, Texas, April 11, 2012.
35. Invited Epstein Institute Seminar, "Point-of-Need Manufacturing Processes for Enhancing Energy Efficiency", Department of Daniel J. Epstein Department of Industrial and System Engineering, University of Southern California, October 25, 2011.
36. Keynote Talk, "Engineering Energy-efficient Surfaces and Forming Processes", ISGMA 2011 International Symposium on Green Manufacturing and Applications, October 6~7, 2011, Seoul, Korea.
37. Invited Talk, "Recent Findings in Incremental Forming", Institute of Forming Technology and Lightweight Construction (IUL), Dortmund, Germany, August, 2011.
38. Invited Talk, "Surface Texturing: Theory, Fabrication Methods and Applications", Institute of Forming Technology and Lightweight Construction (IUL), Dortmund, Germany, August, 2011.
39. Invited Talk, "Manufacturing Processes to Increase Energy Efficiency and Energy Independency", March 15, 2011, Kansas State University.
40. Invited Talk, "Incremental forming at multi-scales", Indo-US forum, Aurangabad, India, Dec. 17, 2010.
41. Keynote Talk, "Recent findings in microforming and its applications", The 10th Asia-Pacific Conference on Engineering Plasticity and Its Applications, Wuhan, China, Nov. 15-17, 2010

42. Keynote Talk, "Micromanufacturing in Biomedical and Energy Applications", International Forum on MicroManufacturing, Gifu, Japan, Oct. 21-23, 2010.
43. Keynote Talk, "An investigation on bump formation in forming of micro dimples", Metal Forming 2010, Toyohashi, Japan, September 19-22, 2010.
44. Plenary Talk, "Manufacturing Processes to Increase Energy Efficiency and Energy Independency", 9<sup>th</sup> International Conference on Frontiers of Design and Manufacturing, Changsha, China, July 17-20, 2010.
45. Association for Manufacturing Technology, "New Technology Developments in Japan", 2010 Manufacturing Technology Forum, March 31, 2010, Nashville, TN.
46. NSF US-Egypt Wind Energy Workshop, "Understanding the Life of Power Transmission Elements of Wind Turbine Systems", March 22-24, 2010, Cairo, Egypt.
47. Silgan, "Sheet Metal Forming Research at AMPL", February 25, 2010, Wisconsin.
48. Naval Research Laboratory, "Material Formability and Geometry Flexibility in the Deformation Processes," January 28, 2010.
49. India Institute of Technology, Kanpur, "Forming Processes and Surface Texturing in the Era of Energy Research", December 10, 2009.
50. Argonne National Laboratory, Argonne, IL, "Surface Texturing in the Era of Energy Research", November 18, 2009.
51. Shanghai Jiao Tong University, China, "Surface Texturing and Manufacturing Processes to Increase Energy Efficiency", September 14 and September 15, 2009.
52. National Taiwan University, Taiwan, "Surface Texturing and Manufacturing Processes to Increase Energy Efficiency" & "Research at ME of Northwestern University", July 13, 2009.
53. Chung Yuan Christian University, Taiwan, "Surface Texturing and Manufacturing Processes to Increase Energy Efficiency", July 13, 2009.
54. NSF Energy Workshop, "Better efficiency by surface texturing", June 21, 2009.
55. University of Minnesota, Twin City, "Surface Texturing and Manufacturing Processes to Increase Energy Efficiency", April 1, 2009.
56. Society of Manufacturing Engineers Micromanufacturing Conference, "Microforming", March 31, 2009.
57. University of Colorado, Boulder, "Material and Friction Characterization in Forming", February 26, 2009.
58. University of Connecticut, "Material and Friction Characterization in Forming", January 23, 2009.

59. India Institute of Technology, Kanpur, "Metal Forming: Process Innovation and Mechanics", December 15, 2008.
60. Georgia Institute of Technology, "Material and Friction Characterization in Forming", Oct. 24, 2008.
61. Shanghai Jiao Tong University, "Material and Friction Characterization in Forming", Sept. 22, 2008.
62. Seoul National University, Department of Materials Science and Engineering, "Incremental Forming: Advances and Challenges", Sept. 12, 2008.
63. Keynote Presentation, "Incremental Forming: Advances and Challenges", International Conference on Technology of Plasticity, Gyeongju Korea, Sept. 11, 2008.
64. General Electric, "Surface Engineering and its Effect on Friction Control", July 22, 2008.
65. Society of Manufacturing Engineers Micromanufacturing Conference, "Microforming", April 21, 2008.
66. General Motors, "Integrated Sensing System for Stamping Monitoring and Control", April 18, 2008.
67. University of North Carolina, Charlotte, "Mechanics and Control of Deformation Processes", March 18, 2008.
68. University of California, Irvine, "Micromanufacturing and Microfluidics Research at Northwestern", with W.K. Liu, Feb. 28, 2008.
69. California State University, Fullerton, "Introduction of Research at the Department of Mechanical Engineering at Northwestern University", Feb. 27, 2008.
70. 2008 NSF Engineering Research and Innovation Conference in Knoxville, Tennessee, U.S.A. "An American Manufacturing Innovation Initiative", Jan. 10, 2008.
71. 14th International Symposium on Plasticity and its Current Applications in Kailua-Kona, Hawaii, U.S.A, "Experimental and Numerical Investigation of Combined Isotropic-kinematic Hardening Behavior", Jan. 4, 2008.
72. International Symposium on Automotive Sheet Metal Forming, India, Dec. 17, 2007, "Predictability of Numerical Simulations".
73. Keynote, International Conference on Future Trends in Composite Materials and Processing, India, Dec. 14, 2007, "Material Characterization of Woven Composites".
74. Keynote, International Conference on Intelligent Textiles, Seoul, South Korea, Nov. 12, 2007, "Material Characterization of Woven Composites".
75. INSA-Lyon (Institut National des Sciences Appliquées de Lyon), France, Sept. 20, 2007, « Size Effects in Woven Composites and Metals ».

76. Ford Motor Company, Dearborn, Michigan, September 7, 2007, "Enhancing Interface Performance through Surface Texturing".
77. Workshop on Advanced Technologies for New Materials, Taiwan, July 16, 2007, « Develop Computer-Integrated Systems for Composite Sheet Forming Processes From Micro to Macro Scale".
78. SME Micromanufacturing Conference (short course), March 13, 2007, "Fundamentals and Challenges in Microforming".
79. University of Stuttgart, Institute of Metal Forming, Germany, Oct. 5, 2006, "Mechanics and Control of Sheet Metal Forming Processes in Automotive Applications".
80. General Motors, September 29, 2006, "An Investigation of Surface Distortion in Line Dies".
81. University of Michigan, Ann Arbor, September 28, 2006, "Manufacturing at Multi-scales".
82. Tokyo University of Agriculture and Technology, Japan, July 14, 2006, "Mechanics and Control of Sheet Metal Forming Processes".
83. Nagoya Institute of Technology, Japan, July 7, 2006, "Fundamentals and Challenges in Microforming".
84. Toyota, July 7, 2006, "Characterization of Wrinkling and Draw-in in Sheet Metal Forming".
85. Chung Yuan Christian University, Taiwan, July 5, 2006, "Fundamentals and Challenges in Microforming".
86. Shanghai JiaoTong University, China, June 28, 2006, "Advances in Metal Forming".
87. Boeing Phantom Works, St Louis, Missouri, June 13, 2006, "Manufacturing at Multi-scales".
88. General Motors, Michigan, April 3, 2006, "Prediction of Surface Distortion".
89. Univ. of Massachusetts, Lowell, April 21, 2006, "Career Program Development".
90. The Chinese University of Hong Kong, Hong Kong, January 18, 2006, "Manufacturing at Multi-scales".
91. HuaZhong University of Science and Technology, China, January 16, 2006, "Mechanics and Control of Sheet Metal Forming Processes".
92. Hong Kong University of Science and Technology, January 13 2006, "Material Characterization of Woven Composites".
93. Purdue University, December 15, 2005, "Manufacturing at Multi-scales".
94. M.I.T., November 29, 2005, "Manufacturing at Multi-scales".
95. Unico, Inc., Wisconsin, November 22, 2005, "Real-time Calculation of Optimal Blank Holder Force History in Sheet Metal Forming".
96. IMECE Panel on Biomanufacturing, November 10, 2005, "Micromanufacturing".
97. General Motors, Michigan, October 27, 2005, "Characterization of Draw-in and Wrinkling in Sheet Metal Forming".

98. Shanghai JiaoTong University, China, Oct. 11, 2005, "Innovative Processes for Sustainable Manufacturing".
99. Plenary Talk: M&P 2005, Seattle, WA, June 21, 2005, "Manufacturing at Multi-scales".
100. Drexel University, September 23, 2005, "Manufacturing at Multi-scales".
101. Clemson University, August 30, 2005, "Mechanics and Control of Sheet Metal Forming Processes in Automotive Applications".
102. Georgia Tech Institute of Technology, Oct. 29, 2004, "Microforming: Study of Grain Size and Friction Effects in the Extrusions of Micropins".
103. Purdue University, Oct. 12, 2004, "Current Activities and Future Directions in Manufacturing Processes Research".
104. Hong Kong University of Science and Technology, December 9, 2003, "Fundamentals of Forming at Multiple Scales".
105. Ohio State University, November 13, 2003, "Understanding the Material Processing & Manufacturing Program".
106. National Science Foundation, May 27, 2003, "Sheet Forming and Looking Beyond".
107. New Jersey Institute of Technology, November 13, 2002, "Modeling Tools and Forming Technologies for the Enhancement of Design Attributes".
108. Michigan Technological University, November 1, 2001, "Modeling Tools and Forming Technologies for the Enhancement of Design Attributes".
109. University of Leuven, Belgium, April 23, 2001, "The Relationship between Materials Characterization Methods and Material Models for Stamping of Woven Fabric/Thermoplastic Composites".
110. MSC, Inc., Illinois, December 17, 2000, "Analysis of the Softcoil Problem".
111. Illinois Institute of Technology, November 29, 2000, "Material Characterization in Forming Structure Composites".
112. Rensselaer Polytechnic Institute, September 22, 2000, "Material Characterization in Forming Structure Composites".
113. General Electric, September 21, 2000, "Material Characterization in Forming Structure Composites".
114. University of Nevada, Reno, September 14, 2000, "Material characterization and instability analysis in sheet materials forming".
115. Ford Scientific Research Lab, September 6, 2000, "Material Characterization in Forming Structure Composites".
116. National Steel Inc. , September 8, 2000, "Material Characterization and Instability Analysis in Sheet Materials Forming".
117. Columbia University, July 6, 2000, "A Computer Integrated System for Sheet Forming".

118. Northeastern University, May 12, 2000, "Modeling Tools and Forming Technologies for the Enhancement of Design Attributes".
119. University of Illinois, Chicago, February 17, 2000, "A Computer Integrated System for Sheet Forming".
120. General Motors, January 28, 2000, "Stamping Technologies to Reduce Weight and Lead Time".
121. University of Washington, January 7, 2000, "A Computer Integrated System for Sheet Forming".
122. Northwestern Polytechnical University, December, 1999, "Material Characterization in Forming Structure Composites".
123. Georgia Institute of Technology, September 7, 1999, "A Computer Integrated System for Sheet Forming".
124. University of Maryland, College Park, July 21, 1999, "A Computer Integrated System for Sheet Forming".
125. Women in Engineering, University of Maryland, July 23, 1999.
126. Keynote, 'Plasticity in Manufacturing Processes & Product Performance' at 13th U. S. National Congress of Applied Mechanics, Gainesville, Florida, 21-26 June 1998.
127. University of Massachusetts, Lowell, September 15, 1998, "A Computer Integrated System for Sheet Forming".