PUBLICATION LIST (PARTIAL) BRIAN PRASAD

<u>Journal Publications</u> <u>Books</u> <u>Editors/Journals</u> <u>Thesis</u> <u>Conference Papers, NASA & US Government Reports</u>

2. CONFERENCE PAPERS:

 Balancing of Competitiveness Metrics and Measures for Excellence in Manufacturing, <u>Technical Session #: MED-9P, Session Title: Manufacturing Poster Session</u>, Sponsored by: <u>ASME Manufacturing Engineering Division</u>, (w/Suren Dwivedi), <u>2001 ASME International Mechanical Engineering Congress and Exposition</u>, New York, Nov. 11-16,. 2001.



 Methodology for Integrating CE Concepts in a Steelwork Construction Project, with C.J. Anumba, A.N. Baldwin, D. Bouchlaghem, B. Prasad, and A.F. Cutting-Decelle, Advances in Concurrent Engineering: CE99, Series Editor: B. Prasad, (with Editors: P.K. Chawdhry, P. Ghodous and V. Vandrope), pp. 479-488, Technomic Publishing Corp., Lancaster, PA, September 1-3, 1999.



3. Life-cycle Measures and Metrics for Gaining Manufacturing Operational Excellence, <u>Proceedings of the 1997 SAE International Automotive Manufacturing Conference and Exhibitions</u>, May 12-15, 1997, Cobo Center, Detroit, MI, USA, SAE Paper 971753, IAM97, SAE, 1997.



4. Seven Enabling Principles of Concurrency and Simultaneity in Concurrent Engineering, Proceedings of the 1st International Conference on Concurrent Engineering in Construction, , Plenary Paper, The Institute of Structural Engineers, London, UK, July 2-4, 1997, pp. 1-12.



 Towards the use of Knowledge-based Engineering System in a Concurrent Engineering Environment, <u>Proceedings of the Fourth ISPE Concurrent</u> <u>Engineering Research & Applications Conference</u>, Advances in Concurrent Engineering (CE97), Oakland University, Rochester Hills, MI, August 20-22, 1997 (w/ J. Patel, S. Singhal, and A. Vertiz), pp. 379-388.



 Concurrent Function Deployment -- An Emerging Alternative to QFD: Conceptual Framework, <u>Proceedings of the Concurrent Engineering Research and Applications Conference, CE'96</u> Conference, Toronto, Ontario, Canada, Edited by M. Sobolewski, M. Fox, Series Editor: B. Prasad, August 26-28, 1996, Lancaster, PA: Technomic Publishing, pp. 105-112.



7. Use of CE as an Integrator in the Product Development/Delivery Process, Proceedings of the 1996 International Mechanical Engineering Congress & Exposition, The Winter Annual Meeting of ASME, IMEC'96, November 17-22, 1996, held at Atlanta, Georgia.

2. CONFERENCE PAPERS (continued):

- 8. CE Plus CIM Equals IIS: Intelligent Information System, <u>Proceedings of the ASME International Mechanical Engineering Congress</u>, San Francisco, CA, Nov. 12-17, K.H. Law Editor, New York: ASME, 1995.
- 9. Competitiveness Analysis of Early Product Introduction and Technology Insertion, PED- Vol. 68-1, <u>Manufacturing Science and Engineering, Volume 1</u>, ASME, 1994., pp. 121-132., Symposium on New Product Introduction, Winter Annual Meeting, Chicago, ILL, Nov. 13-18, 1994.
- 10. A Multi-agent Based Cooperative Framework to Support Concurrent Engineering, Pittsburgh, PA, pp. 471-480, August 1994. (with G. Bengu and A. Dhar)



- 11. Strategic Tool Design Using Metal Forming Simulation Techniques,

 <u>Proceedings of the 9th Int'l Conference on Vehicle Structural Mechanics and Computer Aided Engineering</u>, April 4-6, 1995, SAE, Troy, MI. (with T. Robertson and R. Duggirala)
- 12. A Knowledge-based Engineering Method to Integrate Metal Forming Process Design and Simulation, <u>Proceedings of the Eighth Annual ASME Engineering</u> <u>Database Symposium</u>, 1994 ASME Computers in Engineering Conference, Minneapolis, Minnesota, Sept. 11-14, 1994. (with T. Robertson and R. Duggirala)
- 13. A Matrix-based Procedure to Measure the Effectiveness of JIT Implementation, 9th International CAD/CAM, Robotics and Factories of the Future Conference (CARS & FOF '93), New Jersey, August 18-20, 1993, New Jersey. (in Proceeding)
- 14. CFD: Concurrent Functions Deployment for Building World Class Products Presented at the <u>Towards World Class Manufacturing '93 Conference</u>, International Federation of Information Processing (IFIP) TC5 in cooperation with SME, September 12-16, 1993, Phoenix, Arizona, USA.
- 15. A Framework to Judiciously Select the Right Concurrent Engineering Tactics, Fourth National Symposium on Concurrent Engineering, CE & CALS '93, Sponsored by Society of Computer Aided Engineering, CERC, June, 1993, Washington, D.C, USA.
- 16. Total Enterprise Management, <u>8th International Conference on CAD/CAM</u>, <u>Robotics and Factories of the Future (CARS & FOF '93)</u>, St. Petersburg Institute of Informatics and Automation, St. Petersburg, Russia, May 17-20, 1993.
- 17. Explicit First Order Approximation based on Geometrical Programming, Presented at the Work in Progress Session, <u>26th AIAA/ASME/ASCE/AHS SDM Conference</u>, April 15-17, 1985, Orlando, Florida.
- 18. Generic Modeling and Design Sensitivity Potential Tools for Automated CAD Process, <u>ASME International Computers in Engineering Conference</u>, <u>Las Vegas</u>, Aug. 12-15, 1984, pp. 556-563. (with S. N. Dwivedi)

2. CONFERENCE PAPERS (continued):

- 19. On the Stability of A Composite Beam with Initial Stress to Moving Load, Paper presented at the Joint ASME/ASCE Mechanics Conference, Univ. of Colorado, Boulder, June 22-24, 1981.
- 20. An Optimal Remodeling Technique for Stress Concentration Problems, Paper presented at the <u>Sixth International Conference on Fracture</u>, <u>Dec. 4-10</u>, <u>1984</u>, New Delhi, India.
- 21. Optimal Structural Remodeling of Multi-objective Systems, <u>Second International Computer Engineering Conference</u>, August 15-19, 1982, Computer Engineering Division, ASME, San Diego, CA.
- 22. Some Considerations in Efficient Design of Minimum Weight Structures, Fourth Int. Conference on Vehicle Structural Mechanics, SAE, Nov. 18-20, 1981, Detroit, MI.
- 23. Organization of PARS -A Structural Resizing System, Presented at the International Computer Technology Conference, ASME Emerging Technology Century 2, Aug. 12-21, 1980, San Francisco, CA. (with R. T. Haftka)
- 24. A Hybrid Variable Penalty Method for Constrained Optimization, <u>Presented at the Tenth Int. Symposium on Mathematical Programming, Montreal, Canada, Aug. 27-31, 1979.</u>
- 25. A Variable Penalty Method for Constrained Minimization, <u>Presented at the Second TICOM International Conference on Computational Methods in Nonlinear Mechanics</u>, The University of Texas, Austin, March 26-29, 1979.
- 26. Structural Optimization based on Cubic Extended Penalty Function, Presented at the 8th U.S. Congress of Applied Mechanics Conference, University. of California, Los Angeles, June 26-30, 1978. (with R. T. Haftka)
- 27. Programs for Analysis and Resizing of Structures PARS, <u>Presented at the Symposium on Future Trends in Computerized Structural Analysis and Synthesis, Washington, DC, Oct. 30- Nov. 1, 1978</u> (with R. T. Haftka)
- 28. Structural Dynamic Analysis and Fatigue Life Prediction of a Flat Car, 14th Annual Railroad Engineering Conference, R. & D. and Railroading, Univ. of Southern Colorado, Pueblo, Oct. 18-20, 1977. (with V. K. Garg and A. Zarembski)
- 29. Dynamic Characteristics of a Flat Car, Presented at the <u>Conference on Advanced Techniques in Track Train Dynamics and Design, O`Hare Hilton, Chicago, Illinois, Sept. 27-28, 1977.</u> (with V. K. Garg and J. F. Yau)
- 30. Dynamic Analysis of A Beam-Column with Varying End-Rigidity, <u>Proc. of the Conference on the Role of Computers in Structural Analysis, Design & Optimization</u>, Indian Institute of Technology, Madras, India., December 11-13, 1972.

3. THESIS/DISSERTATIONS:

- 31. Automated Design of Structures subject to Stress, Displacement and Temperature Constraints, **Ph.D. Thesis**, Submitted to the Department of Mechanics, Mechanical and Aerospace Engineering, Illinois Institute of Technology, Chicago, Dec. 1977.
- 32. Response of a Composite Beam to a Moving Load, <u>Degree of Engineer</u>

 Thesis, Submitted to the department of Applied Mechanics and the

 Committee of Graduate Studies, Stanford University., Stanford, Ca., June 1975.
- 33. Studies of the Blast and Impact Loading on Beams, <u>M.S. Thesis</u>, <u>Submitted</u> to the Department of Mechanical Engineering, Indian Institute of Technology, <u>Kanpur</u>, India, Dec. 1971.

4. JOURNAL/GUEST EDITOR/SPECIAL ISSUES

34. Life-Cycle Design, Special Issue of <u>Artificial Intelligence for Engineering</u>

<u>Design, Analysis and Manufacturing</u>, <u>AIEDAM (ISSN: 0890-0604)</u>, <u>Cambridge</u>

<u>University Press</u>, Volume 14 - Issue 02 - April 2000, Co-edited by WILLIAM
J. MARX, JOHN KUNZ, and BIREN PRASAD, pp. 89-89.



35. Computer Integrated Manufacturing Systems; Special Issue of International Journal of Systems Automations: Research & Applications (SARA), Ablex Publishing Corp., New Jersey, USA, Co-edited with Behnam Pourbabai, Volume 2, No. 3, 1992



36. Automation in Manufacturing Systems; <u>Special Issue of International Journal of Systems Automations: Research & Applications (SARA)</u>, Ablex Publishing Corp., New Jersey, USA, Co-edited with Mo. Jamshidi, New Mexico, Volume 2, No. 2, 1992.



37. Language-based Approaches to Design; <u>Special Issue of International Journal of Systems Automations: Research & Applications (SARA)</u>, Ablex Publishing Corp., New Jersey, USA, Co-edited with Robert E. Phillips, General Electric, Volume 2, No. 4, 1992



38. Cooperative Agents in Concurrent Engineering; Special Issue of International Journal of Concurrent Engineering: Research & Applications (CERA), Academic Press, London, Co-edited by David Goldstein, North Carolina State University, NC. Vol. 2, No. 2, 1994.



List of Conference Papers

Brian Prasad

39. Conflict Management in Concurrent Engineering; <u>Special Issue of International Journal of Concurrent Engineering</u>: <u>Research & Applications (CERA)</u>, Academic Press, London, Co-edited by Mark Klein, Boeing Computer Services, Seattle, Wa. Vol. 2, No. 3, 1994.



40. Application of AI techniques in Systems Engineering; <u>Special Issue of International Journal of Concurrent Engineering: Research & Applications</u> (CERA), Academic Press, London, Co-edited by C. Tsatsoulis, Kansas State University, Wichita, KS., Vol. 2, No. 4, 1994.

