VENKAT ALLADA

Professor, Engineering Management & Systems Engineering
Former Vice Provost for Graduate Studies (2007-2017)
Missouri University of Science and Technology, Rolla, MO 65409

[redacted]

EDUCATION

Ph.D, *Industrial Engineering*
University of Cincinnati, 1994.

M.Tech, *Management & Systems*
Indian Institute of Technology (IIT), New Delhi, 1990.

B.E, *Production Engineering*
University of Mumbai, 1987.

SELECT HONORS AND AWARDS

- Outstanding Young Manufacturing Engineer, Society of Manufacturing Engineers, 1998.
- Dow Outstanding New Faculty Award, American Society of Engineering Education, 1998.
- Co-recipient of the Best Paper Award, ASME International Design Engineering Technical Conferences (Design for Manufacturing Conference), 2000.
- Boeing Welliver Faculty Fellow, Boeing Company, Summer 2001.
- Faculty Excellence Award, Missouri S&T, (1998-99, 1999-00, 2000-01, 2005-06.)
- Outstanding Teaching Award of Excellence, Missouri S&T School of Extended Learning, 2005.
- Innovative Teaching Award, Missouri S&T School of Engineering, 2005.
- Outstanding Contributions Award, Lean Aerospace Initiative, Massachusetts Institute of Technology, 2005.
- Outstanding Contributions award as faculty advisor, Council of Graduate Students (2009-13.)
- Honorable Mention, ETS/Council of Graduate Schools Award for Innovation in promoting Success in Graduate Education: *Women as Professional Leaders in STEM program*, Council of Graduate Schools Annual Meeting, Dec. 2014, Washington, DC.
- St Pat's Honorary Knight, Missouri University of Science andTechnology, Rolla, 2018.

PROFESSIONAL DEVELOPMENT

American Council on Education (ACE) Fellowship, Sept. 2018-May 2019.
Office of the Chancellor, and Office of the Vice Chancellor for Academic Affairs and Provost, University of Illinois at Urbana Champaign.

University Profile: The University of Illinois at Urbana Champaign is a R1 doctoral research university with *highest research activity* Carnegie Classification. The university has 16 schools and colleges and offers more than 150 undergraduate and over 100 graduate programs of study. The university fiscal research expenditures totaled about $640M and its annual operating budget is over $2 billion. The university enrolls about 49,000 students with over 33,500 undergraduate students.

My ACE fellowship was an immersive leadership experience which offered the opportunity to work alongside the Chancellor, Provost, Vice Provosts, Deans and others in the U of Illinois leadership team. The fellowship included attendance and engagement at senior leadership team meetings, strategic planning efforts, and U of Illinois System Board meetings. First-hand observations of leadership style, crisis management, decision making, and budget management were the foundational blocks of the fellowship.

Special focal areas of the fellowship included the following:

- ✓ Support the implementation of a campus-wide hybrid Responsibility Centered Management (RCM) budgeting model called the *Integrated and Value-Centered Budgeting Model.*
- ✓ Engage with deans and other leaders of 16 schools and colleges to comprehend communication challenges and leadership complexities due to differences in organizational structure and school/college sub-cultures.
- ✓ Support the U. of Illinois efforts to enhance its deep-rooted and high-quality public engagement efforts in the state of Illinois.
- ✓ Engage with the Center for Teaching and Learning (CITL), academic units, Provost's office, graduate dean, and international affairs office to discuss various topics such as global campus, novel graduate and undergraduate recruitment tactics, student success initiatives, hybrid learning, working with 3rd party vendors such as Coursera for offering distance learning opportunities.
- ✓ Participate in strategic planning meetings and engage with various campus stakeholders during the finalization process of *The Next 150* – the campus strategicplan.

There is an expectation that ACE fellows will visit with the President/Chancellor of other higher education institutions and their leadership team during the fellowship year. I had the opportunity to visit the following institutions while an ACE Fellow:

Virginia Commonwealth University
Arizona State University
University of Missouri Columbia
University of Missouri Kansas City
City Colleges of Chicago
Georgia State University
Georgia Gwinnett College
University of Oregon
University of Arizona
Villanova University
Rowan University
Drexel University
University of Illinois Chicago
Clark Atlanta University
George Fox University
Oregon State University

Advanced Development for Academic Deans and Academic Leaders, Jan. 7-9, 2019, Ft. Myers, FL.
Organized by *CASE* to enhance development skills by working with senior leaders and academics on advanced fundraising techniques, top-donor relationships, and donor stewardship.

Institute for Management and Leadership in Education (MLE), June 2018, Harvard University.
A two week on-campus academic leadership program designed for experienced administrators who are responsible for thinking strategically about their institutions' change agendas.

Social Justice Mediation Training, June 2017, UM System Office of Diversity, Equity and Inclusion.
A week-long program where participants are trained to mediate while applying a social justice lens to their own techniques, working to ensure a fair process for all disputants. The training explores the relationship between social justice and how conflicts develop and are resolved through lectures, interactive activities, skill improvement, role plays, and analyses of actual videotaped mediation sessions.

Leadership Missouri, April-Oct. 2016, Missouri Chamber of Commerce.
Seven month program held at various locations in the state; participants learn about Missouri and its challenges through engagement with business and community leaders from around the state.

President's Academic Leadership Institute (PALI), AY 2006-07, University of Missouri System.
A year-long academic leadership program that brings together a cohort of faculty from the four University of Missouri system campuses.

PROFESSIONAL EXPERIENCE

1. Administrative Positions at Missouri S&T

University Profile: Founded in 1870, Missouri University of Science and Technology (formerly known as University of Missouri-Rolla), is a public land grant and space grant university located in Rolla, Missouri. Missouri S&T offers over 90 degree programs including 21 doctoral programs. There are 19 Masters and doctoral programs offered via distance delivery. With a Carnegie Classification as a doctoral research university with *high research activity*, Missouri S&T's has approximately 9,000 students, 400+ FTE ranked faculty, and over 1000 staff members. Missouri S&T is highly ranked in several categories: # 2 engineering program for student veterans and for non-traditional students (College Factual, 2018), #6 university in the nation for annual return on investment (PayScale.com, April 2018), #14 brainiest university (Lumosity, 2019), #15 public college with the highest-earning graduates (Forbes, August 2017), and #18 "best schools for internships" (Princeton Review, 2018). The average ACT score of incoming students is 28.1. The first year retention rate is 85% and the six year graduation rates is 65%.

Special Advisor to the Provost, Jan. 2018 – Jun. 2018.
Major Responsibilities[1]:

- ✓ Ensured a smooth transition as the office of graduate studies merged with the office of research and sponsored programs due to organizational restructuring.
- ✓ Worked on campus-wide special projects.

Vice Provost for Graduate Studies (VPGS), Jul. 2007 – Dec. 2017.
Major Responsibilities as VPGS:

- ✓ Served as a strong advocate for graduate students on issues that impact their well-being such as mentorship, workload, funding, safety, diversity and inclusion, student outcomes, and professional development.
- ✓ Served as the principal administrative officer for all graduate programs at Missouri S&T.
- ✓ Developed and implemented the strategic plan for Missouri S&T graduate studies that was in lock-step with the university's strategic plan.
- ✓ Provided stewardship and worked collaboratively with the academic units, college deans, Council of Graduate Students, Graduate Council and Faculty, and other non-academic units on various topics related to graduate studies.
- ✓ Worked collaboratively with the academic units and other units on campus to increase graduate enrollment by recruiting and retaining high-quality graduatestudents.

[1] Refer to the weblink: https://news.mst.edu/2018/01/venkat-allada-to-help-transition-graduate-studies/

- ✓ Collaborated closely with Graduate Council and Graduate Faculty on graduate rules, policies, and procedures.
- ✓ Monitored national and international trends in graduate education and discussed them with appropriate internal audience to create and maintain a vibrant graduate culture at the university.
- ✓ Proactively sought funding opportunities to offer competitive financial packages for our graduate students.
- ✓ Supervised a high performance office team and create an office culture that was welcoming, respectful, and helpful to all stakeholders.

Major Leadership Accomplishments as VPGS

- Established New "Centralized" Campus Unit: Became the first Vice Provost for Graduate Studies at Missouri S&T in 2007. Created a thriving student-centric campus unit after the four former schools were dissolved in administrative restructuring.
  - ✓ Grew the office operations from a five-person staff to a twelve-person staff to create new programming, meet the demands of the fast growth in graduate enrollment.
  - ✓ Provided outstanding student services such as technical editing, and student advising. We received 93% student satisfaction with our technical editing services; 98% student satisfaction with my office staff advisors from 500+ surveys in AY16-17.

- Increased Graduate Enrollment: Collaborated with other campus units and implemented plans for recruiting graduate students from US, India, China, Thailand, and the Middle-east through education fairs, visiting feeder/target schools, MOUs with international universities, creating agent agreements, visiting embassies and sponsoring governments/companies. Additionally, directed a host of pro-active recruitment techniques such as webinars, GradChat, social-networking tools, "drip" marketing strategies, and selected phone call follow-ups with engaged students to increasestudent yield. Organized faculty-led workshops and provided matching support to help other faculty and students to write competitive proposals such as GAANN, IGERT/NRT, and graduate research fellowships. Developed and sponsored GRE workshops to assist students to achieve GRE requirements. Funded innovative recruitment proposals from individual academic departments to recruit high quality graduatestudents.
  - ✓ Total graduate enrollment rose 39% from 1414 in FS07 to 1964 in FS17
  - ✓ Doctoral enrollment rose 100% from 344 in FS07 to 689 in FS17
  - ✓ Masters + grad. certificate enrollment rose 19% from 1070 in FS07 to 1275 in FS17

- Recruitment/Retention of High Quality Doctoral Students: Served as the lever leader for the university strategic plan, April 2013-June 2017.
  - ✓ Successfully spearheaded the authorship of a proposal to secure a competitive $3.1M award ($2.9M in recurring funds) for transformational doctoral student

recruitment/retention/placement efforts at Missouri S&T in October 2014 from the Univ. of Missouri (UM) system.
- ✓ Successfully implemented doctoral recruitment/retention initiatives as outlined in the funded proposal (new fellowships, campus visit programs, enhanced financial package for doctoral students, implementation of the *Slate* enrollment management system at Missouri S&T, student success staff, etc.)
- ✓ As a direct result of the implemented plans, many graduate students are receiving 100% tuition and supplemental fee scholarships in addition to their stipends (FS 16: 345 students; SP 17: 386 students; FS17: estimated 430 students.) Under the newly created Chancellor's Distinguished Fellowship award, twenty eight students are receiving a financial package of $28K-$34K per year committed for a minimum of four years plus 100% coverage of tuition and supplemental fees.
- ✓ Hosted GEM[2] GradLab at Missouri S&T and engaged with HBCUs, NSBE, SHPE, SACNAS, and SWE organizations to recruit and retain under-represented minorities to attend graduate school.

- Assessment of Graduate Learning Outcomes: Spearheaded implementation of the graduate learning outcomes at Missouri S&T.
  - ✓ Visited with each research-based graduate program on campus to collaboratively develop evaluation criteria, rubrics, and data collection procedures for implementation of graduate learning outcomes.
  - ✓ Secured buy-in from the graduate faculty to define and institute graduate learning outcomes for the university. These efforts led to successful preparation of the graduate learning outcomes report that was accepted by the Higher Learning Commission of the North Central Association (HLC-NCA) in Summer 2011. Successfully reaccredited by HLC-NCA in 2018.
  - ✓ Worked with the academic units to help them analyze the data that was collected and "close the loop" for continuous improvement.

- Graduate Student Professional/Leadership Development (selectexamples):
  - ✓ Secured funding for new staff positions for technical editing and professional development for graduate students.
  - ✓ Collaborated with the other three graduate deans of the University of Missouri campuses (Columbia, St. Louis, and Kansas City) to secure UM System funds to design and organize an inter-campus year-long Graduate Student Leadership Development Program (GSLDP).
  - ✓ Launched in 2014, the program focuses on imparting "transferrable skills" to graduate students. A total of thirty two students (eight students from each of the four campuses) are selected as a GLDP cohort every year.

[2] GEM is a network of leading corporations, government laboratories, top universities, and top research institutions that enables qualified students from underrepresented communities to pursue graduate education in applied science and engineering.

- ✓ Training sessions are two-fold: 1) all students visit all four campuses for a one and a half day workshops during the year; and 2) students participate in workshops regarding professional development on their own local campuses.
- ✓ Since FS 2015, implemented Three Minute Thesis (3MT) graduate student competition. This a campus-wide event in which graduate students present their thesis/dissertation research to a general audience in only three minutes with one slide. Approximately, 30 students participate each fall semester with 15 judges from the campus and the Rolla community. The 1st place winner goes on to compete at the regional level at the Midwestern Association of Graduate Schools Annual Conference with all expenses paid.

- Graduate Student Advocacy:
  - ✓ Served as a pro-active faculty advisor and advocate for the campus-level Council of Graduate Students (CGS).
  - ✓ Successfully mediated and resolved student grievance cases, advisor-advisee conflicts, and other graduate student issues.
  - ✓ Recognized by the Council of Graduate Students (CGS) for outstanding contributions over the years.

- Assist in creation of interdisciplinary and innovative graduate programs with engaging curriculum:
  - ✓ Worked closely with the academic units and in consultation with the faculty curriculum committee and graduate faculty to create new graduate certificate programs and new degree programs.
  - ✓ Facilitated multiple academic units to come together to promote interdisciplinary thinking and offer new graduate programs.
  - ✓ Worked closely to reduce the knowledge gap in the course content between the industry needs and the university course offerings.

- Advance S&T's internationalization efforts and global reputation: My interest in this topic piqued when I attended the ACE Institute for Leading Internationalization workshop in 2015 and learned how other institutions effectively weaved their internationalization goals into their university operations and strategic plans. As part of my take home project from this workshop, I helped mobilize S&T's internationalization efforts. This resulted in the creation of the Global and International Engagement team at S&T in 2015 (I served as a co-chair for this team). Our team used the ACE's Center for Internationalization and Global Engagement (CIGE) comprehensive six-pillar internationalization framework to perform S&T's SWOT analysis for each of the six pillars. As per our team's recommendation, the ACE Internationalization Laboratory at S&T began in the Fall of 2016 and will conclude soon in the near future.
  - ✓ Co-chaired the campus-level Internationalization Committee to oversee efforts for providing international learning, teaching, and research experiences, and encouraging intellectual and cultural exchange with international scholars, to further engage our faculty, staff, students, and alumni.

- ✓ Coordinated the committee efforts with the Faculty Senate committees "Academic Freedom and Standards Committee" and "Student Affairs Committee."

Examples of Cross-campus collaboration and partnerships as VPGS

- Co-Leader, Streamlined UG scholarship process, Summer 2014

  An example of working on projects that do not necessarily fall in my assigned domain is the work I did to streamline the undergraduate scholarship process at S&T. I worked closely with the Executive Director for strategic plan implementation in the Chancellor's office to define a project that consisted of the following tasks: (a) Review current practices and processes for awarding student scholarships; and (b) Provide recommendations for process improvement to increase student access to scholarship funds, donor satisfaction, and stewardship of scholarshipfunds.
  - ✓ At the conclusion of the project implementation, savings of approximately $900K were realized in the General Operating budget.
  - ✓ A streamlined scholarship awarding process was institutionalized across academic units, student financial aid office, and the alumni and development office.
    - Used Academic Works software for managing all scholarships; trained department staff on Academic Works; developed dashboard reports.
    - Developed a Scholarship Advisory Board and quarterly meetings to enhance communication across units and to send timely donor reports

- Lever Leader, Campus Strategic Plan, April 2013 - Jun. 2017
  - ✓ Led faculty and staff sub-committee to develop and undertake action items to "Engage in transformative doctoral student recruiting/retention and placement."
  - ✓ Developed the budget and a 7-year timeline to assess annual progress towards the goal.

- Co-Chair, Research Capacity Taskforce Committee, Oct. 2011- Apr. 2012
  - ✓ Appointed by the Chancellor to co-chair a 22-member committee along with the Vice Provost for Research.
  - ✓ Studied Missouri S&T's "current state" research capacity report and developed a "future state" recommendations report to expand and elevate S&T's research performance and reputation.
  - ✓ Recommended short- and medium-term actions that could be taken to improve the research performance and increase the research capacity at S&T.
  - ✓ Recommended areas/disciplines in which we must invest, including hiring new

faculty and recruiting high quality graduate students to enhance the research mission of S&T. Recommendations were organized under categories such as: structure, people, and culture. Considered issues such as research and scholarship indicators, university rankings, research needs, awards and incentives, faculty hiring, recruiting high-quality graduate students, student assistantships and fellowships, and revenue needs of the university.

- ✓ Implemented several recommendations in the report by working in collaboration with other campus units.

- Member, Task Force on Student Educational Capacity, 2009-2010
  - ✓ A 21-member team studied and evaluated capacities in the following areas: Classroom and laboratory capacity, teaching capacity, housing capacity, dining capacity and parking.

- Co-Chair, Graduate Admissions and Recruitment (GAR) Taskforce,2008.
  - ✓ Appointed by the Chancellor along with Vice Provost Global Distance Education to co-chair a 22-member committee.
  - ✓ Created an implementation plan to streamline admission processes and increase the graduate enrollment as per the Missouri S&T strategic plan.
  - ✓ Sub-committees were formed to represent various viewpoints to address the following tasks: (a) Identification of department/program graduate enrollment goals/targets; (b) Evaluation of existing graduate recruitment and admissions procedures/processes/issues; (c) Recommend efficient admission decision procedures to process bulk applications sent by external agencies; (d) Formulation of a coherent campus-wide strategy for addressing graduate recruitment and admissions issues.

- Member, Taskforce on Increasing the Competitiveness of Missouri S&T in the Recruitment of Graduate Students, April 2009.
  - ✓ An 11-member taskforce was established in the 2008/2009 academic year by the Graduate Faculty Council to study the current graduate student compensation structure and to determine how to make graduate student compensation packages at S&T more equitable and competitive.

- Co-organizer, Campus Leadership Enhancement Series, 2009-10.
  - ✓ Co-organized (with Dr. Peggy Cohen, Director of Center for Teaching and Learning and Associate Provost for Professional Development University of Missouri-St. Louis), the leadership series for Rolla and St Louis campuses.
  - ✓ Missouri S&T and UM St. Louis collaborated on a joint program to convene and

support new academic leaders. Program was designed for those in their first few years as chair, director, or assistant/associate chairs.

- S&T Graduate Communications Mapping report (an undertaking of Office of Graduate Studies, International Affairs, and Admissions Office), 2010.
  - ✓ Compiled and documented all forms of communication (emails, memos, admission and funding offer letters, etc.) between various academic and non-academic units at S&T and prospective/admitted students and suggested ways to improve and streamline communications with prospective/admitted students.

- Developed agreements with international universities to attract quality students to Missouri S&T (in collaboration with Director of International Affairs, and Vice Provost for Enrollment Management).
  - ✓ Secured a firm buy-in of the academic department right from the start of the process. Addressed any issues and concerns diligently.
  - ✓ Formalized articulation/transfer agreements with select international universities (strategic partners) with whom we have formalized generic MOUs to recruit students.
  - ✓ Developed a recruitment plan in consultation with the strategic partner to establish realistic targets over a short- and medium-term time horizon.

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2. Academic Positions at Missouri S&T

Tenured Professor, Engineering Management & Systems Engineering, Sept. 2006 – Present.

Tenured Associate Professor, Engineering Management & Systems Engineering, Sept. 2000 – Aug. 2006.

Tenure-track Assistant Professor, Engineering Management & Systems Engineering, Aug. 1994 – Aug. 2000, (received tenure and promotion in Sept. 2000).

Major Responsibilities (1994-2006): Contribute to the research, teaching, and service mission of the university.

SUMMARY OF SCHOLARSHIP AND TEACHING

- Total refereed journal publications: 29; Total refereed conference publications: 77; Book Chapters: 4; Invited lectures/seminars: 14.
- Taught courses using several formats including teaching face-to-face at on-campus and off-site locations (Boeing St. Louis; Aramco-Saudi Arabia, Engineering Officers Advanced Course (EOAC) for Army Officers, Ft. Wood; Engineering Extension Center (EEC), St. Louis), and distance learning using Blackboard media.
- Courses Taught: Engineering Economy; Computer Integrated Manufacturing Systems; Integrated Product/Process Design; Advanced Manufacturing Systems Integration; Industrial Queuing Theory; Value Analysis; Lean Manufacturing Systems; Production Planning and Scheduling.
- Non-credit courses taught:
  - ✓ Course Instructor, Global Research Residential College course (non-credit) taken by S&T Freshmen and Sophomores, FS2010, SP2011, FS 2011, SP2012.
  - ✓ Discover Manufacturing Workshop: Lean Manufacturing, (Site 1: Rolla, June 30, 2005 and July 22, 2004; Site 2: St Louis: July 10th 2003; 1-day workshop for high school Science and Math teachers and high school students).

SCHOLARLY ACTIVITIES

A. Funded Projects

1. Co-Principal Investigator (50% effort with Dr. R. Mishra as PI), Collaborative Research: A TIE Research Program on E-Design for Friction Stir Welding and Processing, National Science Foundation (NSF), $50,000, Sept 1, 2006-Aug 31, 2008.
2. Principal Investigator (100% credit for S&T share of the award), Collaborative Research: An Information Management Infrastructure for Product Family Planning and Mass Customization, (part of multi-university award that includes Missouri S&T, Penn State, and Univ. of Illinois Chicago), National Science Foundation (NSF), $33,245, Sept. 05- Aug. 07.
3. Co-Principal Investigator (30% shared credit; Project PI: Dr. Ming Leu), Organize 2006 NSF Design, Service and Manufacturing Grantees and Research Conference in St. Louis, Missouri, National Science Foundation (NSF), $289,258, Mar 05 - Feb 07.
4. Principal Investigator (100% credit), Advanced Manufacturing Specialist Training Program, Missouri Enterprise, $45,000, Sept. 04-07.
5. Co-Principal Investigator (40% credit; PI: Dr. Ken Ragsdell), Timber Project & Rapid Response Manufacturing System, Missouri Enterprise, $ 181,450, Oct. 04-Apr. 05.
6. Principal Investigator (100% credit), Phase 2: Artifact Systems Re-engineering: An Approach to Study Sustainable Product Development, AT&T Foundation (Industrial Ecology), $25,000, Jan 03-Dec. 03.

7. Principal Investigator (100% credit), Phase 1: Artifact Systems Re-engineering: An Approach to Study Sustainable Product Development, AT&T Foundation (Industrial Ecology), $25,000, Jan 02-Dec. 02.
8. Co-Principal Investigator (25% shared credit; Project PI: Dr. Frank Liou),Gateway to Manufacturing Excellence Project, subcontracted by St. Louis Community College through NSF award, $62,164, Nov. 02-Jul. 05.
9. Co-Principal Investigator (33% shared credit; Project PI: Dr. Frank Liou; Co-PI: Can Saygin), FORD-UMR Partnership for Lean Thinking in Manufacturing, Ford Motor Company, $77,655, Aug. 01- Dec. 02.
10. Co-Principal Investigator (5% shared credit; Project PI: Dr. Ming Leu), Development of a Virtual and Augmented Reality System for Research in Intelligent Design and Manufacturing, National Science Foundation (NSF), $431,401, Sept. 00-Aug. 03.
11. Co-Principal Investigator (20% shared credit; Project PI: Dr. Frank Liou), Development of a Product-Focused Manufacturing Program, SME Education Foundation,182,000.
12. Principal Investigator (50% credit; Co-PI: Dr. Sanjeev Agarwal), Development of an IGES Interface for AIMS Modeler, Boeing, $14,000, Nov. 99 – Jan. 2000.
13. Principal Investigator (100% credit), Methodologies for Modeling and Analyzing Sustained Product Development, National Science Foundation (NSF), $224,889, Oct. 99-Aug. 2002.
14. Principal Investigator (100% credit), Formalization of design for disassembly for serviceability and end-of-product life options, National Science Foundation (NSF), $99,907, + $25,000 match from Manufacturing Research and Training Center (MRTC), MO, Oct. 97- Sept. 2000.
15. Principal Investigator (100% credit), Incorporating Green Engineering in the Manufacturing Curriculum, Halliburton Foundation, $8,000, Sept. 98 – Aug. 99.
16. Principal Investigator (60% shared credit; Co-PI: Dr. Robert Stone), Sustained Product Development: Preparing the Engineering Students to Meet the Ecological Challenges, Missouri S&T Manufacturing Education Mission Enhancement Funds, $15,451, Sept. 98 – Aug. 99.
17. Co-Principal Investigator (13% shared credit; Project PI: Dr. Frank Liou), Development of a 5-axis Rapid Metal Forming System, National Science Foundation (NSF), $378,096 + $100,000 match from UM Research Board + $125,000 match from the Manufacturing Research and Training Center (MRTC), MO, Sept. 98- Aug. 2003.
18. Principal Investigator (100% credit), Design and Process Planning Integration: Phase 1, National Institute of Standards and Technology IPA, $19,709, Jun. 97-Sept. 97.
19. Principal Investigator (100% credit), Design and Process Planning Integration: Phase 2, National Institute of Standards and Technology IPA, $20,313, Sept. 97 - Aug. 98.
20. Principal Investigator (50% shared credit; Co-PI: Dr. Henry Wiebe), Beta testing of systems approach to design for manufacture and assembly course module, Product Realization Consortium/WPI, $5,000, Jun. 97 - Jan. 98.
21. Co-Principal Investigator (14% shared credit; PI: Dr. Frank Liou), Metrology equipment to Enhance Agile Manufacturing and Inspection Research and Education at UMR, Brown & Sharpe Company, ($31,000 towards purchase of MicroVal CNC-based CMM), Jul. 96 - Jun. 97.

22. Principal Investigator (100% credit), Rapid response manufacturing strategies, Finale International Tool Inc., $7,780 + S3,643 (MRTC match), Dec. 95 - Jun. 97.
23. Principal Investigator (100% credit), Feature-based manufacturability evaluation, University of Missouri Research Board, $26,000, Jun. 95 - Dec. 96.

B. In-Kind Funded Projects

1. Co-Principal Investigator (40% shared credit; PI: Dr. Tony Okafor), SME Manufacturing Education grant, Society of Manufacturing Engineers (SME) Education Foundation, Dearborn, MI, $694,540, Jun. 97 - May 98.
2. Principal Investigator (40% shared credit; Co-PIs: Dr. Tony Okafor and Dr. Wen Lu), SME Education Foundation: Manufacturing Engineering Program Development, Society of Manufacturing Engineers (SME) Education Foundation, Dearborn, MI, $72,430, Jun. 96 - Dec. 97.
3. Co-Principal Investigator (20% shared credit; PI: Dr. Wen Lu), SME Manufacturing Education grant, Society of Manufacturing Engineers (SME) Education Foundation, Dearborn, MI, $273,825, Jun. 95 - May 96.

C. Refereed Journals

1. Bhandare, S., and Allada, V., Scalable product family design: Case study of axial piston pumps, International Journal of Production Research, Vol. 47, No. 3, 2009, pp. 585 – 620.
2. Tenneti, B., and Allada, V., Robust supplier set selection for changing product architectures, International Journal of Computer Applications in Technology, Vol. 31, No.3/4, 2008, pp. 197-214.
3. Shil, P., and Allada, V., Evaluating product plans using real options, The Engineering Economist, Fall 2007, Volume 52, No. 3, 2007, pp. 215-253.
4. Kumar, R., and Allada, V., Scalable platforms using Ant colony optimization, Journal of Intelligent Manufacturing, Vol. 18, No. 1, 2007, pp. 127-142.
5. Sankaran, A., and Allada, V., Small world behavior and power law distribution in product networks, International Journal of Industrial Engineering, Vol. 14, No. 1, 2007, pp. 45-52.
6. Kumar, R., and Allada, V., Function-technology based product platform formation, International Journal of Production Research, Volume 45, No. 24, 2007, pp. 5687-5714.
7. Rai, R., and Allada, V., Agent-Based optimization for product family design, Annals of Operations Research, Vol. 143, 2006, pp. 147-156.
8. Viswanathan, S., and Allada, V., Product configuration optimization for disassembly planning: A differential approach, Omega: The International Journal of Management Science, Vol. 34, 2006, pp. 599-616.
9. Vivas, J., and Allada, V., Enhancing engineering education using thematic case-based learning, International Journal of Engineering Education, Vol. 22, No. 2, 2006, pp. 236-

246.
10. Srinivasaraghavan, J., and Allada, V., Application of Mahalanobis distance as a lean assessment metric, International Journal of Advanced Manufacturing Technology, Vol.29, Numbers 11-12, 2006, pp. 1159-1168.
11. Anam, F., and Allada, V., An activity-product affiliation network approach to study product convergence opportunities, International Journal of Innovation and Technology Management, No. 3, 2004, pp. 249-268.
12. Srinivas, Tiwari, M., and Allada, V., Solving the machine loading problem in a flexible manufacturing system using a combinatorial auction-based approach, International Journal of Production Research, Vol. 42, No. 9, 2004, pp. 1879-1893.
13. Kumar, R., Tiwari, M., and Allada, V., Modelling and rescheduling of a re-entrant wafer fabrication line involving machine unreliability, International Journal of Production Research, Vol. 41, No. 17, 2003, pp. 4075-4098.
14. Rai, R., and Allada, V., Modular product family design: agent-based Pareto-optimization and quality loss function-based post-optimal analysis, International Journal of Production Research, Vol. 41, No. 17, 2003, pp. 4075-4098.
15. Rai, R., and Allada, V., Agent-based "factor X" model to study diffusion of eco-innovations, International Journal of Agile Manufacturing, Vol.6, No.1, 2003,pp.17-29.
16. Rai, R., Rai, V., Tiwari, and Allada, V., Disassembly sequence generation: A Petri net base heuristic approach, International Journal Production Research, Vol. 40, No. 13, 2002, pp. 3183-3198.
17. Viswanathan, S., and Allada, V., Product configuration analysis to support redesign for end-of-life disassembly, International Journal Production Research, Vol. 39, No. 8, 2001, pp. 1733-1753.
18. Viswanathan, S., and Allada, V., Disassembiosis: A system to study Product Configuration for End-of-Life Disassembly, International Journal of Manufacturing Science and Production, Vol. 3 , 2000, pp. 119-135.
19. Raviwongse, R., Allada, V., and Sandidge, T., Plastic Manufacturing Process Selection Methodology Using Self Organizing Map (SOM)/Fuzzy Analysis, Journal of Advanced Manufacturing Technology, Vol. 16, 2000, pp. 155-161.
20. Wang, J. P., and Allada, V., Hierarchical Fuzzy Neural Network based Serviceability Evaluation, International Journal of Agile Management Systems, Vol. 2, No. 2, 2000, pp. 130-141.
21. Viswanathan, S., and Allada, V., A Framework for the Grouping of Products for Flexible Disassembly, Journal of Electronics Manufacturing, Vol. 9, No. 1, 1999, pp.53-66.
22. Raviwongse, R., and Allada, V., A Fuzzy-logic Approach for Manufacturability Evaluation of Injection Molded Parts, Journal of Engineering Evaluation and Cost Analysis, Vol. 2, 1999, pp. 81-92.
23. Chaturvedi, S., and Allada, V., Integrated Manufacturing System for Precision Press Tooling, International Journal of Advanced Manufacturing Technology, Vol. 15, 1999, pp. 356-365.
24. Allada, V., and Poyraz, A., Development and Implementation of an Integrated Design and Manufacturing System, International Journal of Industrial Engineering, Vol. 5, No. 1, 1998, pp. 28-37.

25. Raviwongse, R., and Allada, V., Injection Mold Complexity Evaluation model using model using a Back propagation Network implemented on a Parallel Computer, International Journal of Advanced Manufacturing Technology, Vol. 13, 1997, pp. 577-586.
26. Allada, V., Anand, S., Machine Understanding of Manufacturing Features, International Journal of Production Research, Vol. 34, No. 7, 1996, pp. 1791-1819.
27. Allada, V., Anand, S., Efficient Vertex Detection Algorithms Using Hough Transform, International Journal of Advanced Manufacturing Technology, Vol. 11, 1996, pp. 394-405.
28. Allada, V., and Anand, S., Feature-based Modeling for Integrated Manufacturing: The State-of-the Art Survey and Future Research Directions, International Journal of Computer Integrated Manufacturing, Vol. 6, No. 8, 1995, pp. 411-440.
29. Allada, V., Anand, S. and Chu, Y., Intelligent CNC Sheet Metal Cutting Using Machine Vision, December, International Journal of Industrial Engineering, Vol. 1, No. 4, 1994, pp. 305-314.

D. Conference Proceedings

1. Yadav, S., and Allada, V., Developing a Lean Value Model for Product Development, ASME International Design Engineering Technical Conferences and Computers and Information in Engineering Conference (IDETC/CIE2009), Aug. 30 - Sept. 2, 2009, San Diego, CA, Paper no. DETC2009-86491.
2. Bagaitkar, H., and Allada, V., Design for Manufacturing (DFM) Methodology to Implement Friction Stir Welding (FSW) for Automobile Chassis Fabrication, ASME International Design Engineering Technical Conferences and Computers and Information in Engineering Conference (IDETC/CIE2008), Aug. 3–6, 2008 , Brooklyn, NY, Paper no. DETC2008-49247.
3. Bagaitkar, H., and Allada, V., E-Design Tool for Friction Stir Welding, ASME International Manufacturing Science and Engineering Conference collocated with the 3rd JSME/ASME International Conference on Materials and Processing (MSEC2008), Oct. 7–10, 2008, Evanston, IL, Paper no. MSEC_ICM&P2008-72207.
4. Tipaji, P.K., Allada, V., Mishra, R., A cost model for the Metal Inert Gas (MIG) welding process, 2007 Proceedings of the ASME International Design Engineering Technical Conferences and Computers and Information in Engineering Conference, pp. 751-760.
5. Allada, V., Choudhury, A., Pakala, P., Simpson, T., Scott, M., and Valliyappan, S., Product Platform Problem Taxonomy: Classification and Identification of Benchmark Problems, Proceedings of ASME Design Engineering Technical conferences, Philadelphia, PA, USA, Sept. 10-13, 2006, DETC2006/DAC-99573.
6. Shivaraj N. Bhandare and Venkat Allada, Determination of Extent of Platforming for Scalable Products, IIE Annual Conference & Exposition May 20–24, 2006, Paper No. 1646.
7. Vishnu B. Susheela and Venkat Allada, Scalable Platform Formation Method, 2006 IIE Annual Conference & Exposition May 20 – 24, 2006, Orlando, FL, Paper No. 1634.
8. Abhijit K. Choudhury and V. Allada, A Fuzzy Based Group Decision Support Methodology

For Future State Map (FSM) Selection, International Conference on Agile Manufacturing, Norfolk, Virginia, Jul. 18-22, 2006, Paper No. 75.

9. Tenneti, B., and Allada, V., Robust Supplier Selection for Changing Product Architectures, ASME International Mechanical Engineering Congress & Exposition, Nov. 5-11, 2005, Orlando, Florida, Paper #: IMECE2005-81179.
10. Hariharan, S., and Allada, V., Uncertain Demand Driven Resource Platform Design For A Service Center, ASME International Mechanical Engineering Congress & Exposition, Nov. 5-11, 2005, Orlando, Florida, Paper #: IMECE2005-81191.
11. Kumar, R., and Allada, V., Customer Need Driven Function-Behavior Platform Formation, ASME International Design Engineering Technical Conferences & Computers and Information in Engineering Conference, Sept. 24-28, 2005, Long Beach, California, Paper #: DETC2005-85336.
12. Kumar, R., Allada, V., Function-Behavior Platforms Using Ant Colony Optimization, Procc. Industrial Engineering Research Conference, Atlanta, May 14-18, 2005.
13. Shil, P., Allada, V., Game Theoretic Real Option Analysis for New Product Platform Development Project Evaluation, Procc. Industrial Engineering Research Conference, Atlanta, May 14-18, 2005.
14. Sankaran, A., and Allada, V., Power Law Distribution in Product Networks, Procc. International Conference of Industrial Engineering, Nov. 2004.
15. Trichinapally, D., and Allada, V., Formation of Standardizable Module Clusters, Procc. International Conference of Industrial Engineering, Nov. 2004.
16. Kumar, R., and Allada, V., Ant Colony Optimization Method for Product Platform Formation, ASME Design Engineering Technical Conference (DETC), Sept. 28 – Oct 2, 2004, Salt Lake City, Utah.
17. Shil, P., Allada, V., Evaluation of New Product Platform Development Projects Using Real Options, Procc. Industrial Engineering Research Conference, Houston, May 16-18, 2004.
18. Trichinapally, D., and Allada, V., Activity-Product-Module (APM) framework for identifying standardized modules, Procc. Industrial Engineering Research Conference, Houston, May 16-18, 2004.
19. Rai, R., and Allada, V., Optimal product family platform design, Proceedings of the Annual Asia-Pacific Operations Research Society Conference, Dec. 2003.
20. Trichinapally, D., Sankaran, A., and Allada, V., Strategic product planning using neural networks, Procc. of the ANNIE Conference, Nov. 2-5, 2003, pp. 857-863.
21. Joshi, A., and Allada, V., Extended TRIZ Methodology (ETM) for artifact system re-engineering, Proceedings of the 8th Annual International Conference on Industrial Engineering – Theory, Applications and Practice, Nov. 10-12, 2003.
22. Jose, V., and Allada, V., Case-based problem solving exercises for engineering education, Proceedings ASME International Mechanical Engineering Congress & Exposition, Paper # IMECE2003-43648, Nov. 16-21, 2003.
23. Bulla, S., and Allada, V., Role of policy instruments on the diffusion of eco-friendly technologies, Proceedings of Sustainable Innovation, Oct. 27-28, 2003.
24. Liou, F., Allada, V., Leu, M., Mishra, R., Okafor, A., and Agrawal, A., An Integrated And Distributed Environment for a Manufacturing Capstone Course, Proceedings of ASEE Annual Conference & Exposition, Nashville, TN, Jun. 22-26, 2003.

25. Bulla, S., and Allada, V., A Framework for the Study of the Diffusion of Eco-friendly technologies, Proceedings of the CIRP Seminar on Life Cycle Engineering: Engineering for Sustainable Development, May 21-23, 2003.
26. Allada, V. and Jiang, L., 2002, New Modules Launch Planning for Evolving Modular Product Families, ASME Design Engineering Technical Conferences - Design for Manufacturing Conference, Montreal, Quebec, ASME, Paper No. DETC2002/DFM-34190.
27. Rai, R., and Allada, V., Diffusion of Eco-innovation strategies, Procc. Industrial Engineering Research Conference, Orlando, May 19-22, 2002.
28. Rai, R., and Allada, V., Adaptive-agent based Simulation Model to Study Diffusion of Eco-innovation strategies, Procc. ASME 28th Design Automation Conference, Montreal, DETC2002/DAC-34088, 2002.
29. F. Liou, V. Allada, M. C. Leu, R. Mishra, A. Okafor, and A. Agarwal, A Product focused Manufacturing Curriculum, Proceedings of ASEE Annual Conference, Montreal, Canada, Jun.16-19, 2002.
30. Rai, R., and Allada, V., Module-based Multiple Product Design, Procc. Industrial Engineering Research Conference, Orlando, May 19-22, 2002, in CD-ROM.
31. Rai, R., and Allada, V. Diffusion of Eco-innovation strategies in Artifact Systems, Procc. of the 30th International Conference on Computers and Industrial Engineering, Greece, Jun. 28-Jul. 2, 2002, pp. 719-724.
32. Allada, V., Rai, R., Jiang, L., Sustainable Product Systems Development, Procc. NSF Design, Service and Manufacturing Grantees and Research Conference, San Juan, Puerto Rico, Jan. 7-10, 2002.
33. Allada, V., Artifact System Reengineering for Sustainable Product Development, 2nd International Conference on Responsive Manufacturing, Jun. 26-28, 2002, Turkey, pp. 315-318.
34. Atmaca, M., and Allada, V., A General Temporal Logic-based Assembly Sequence Planning Method Using Hard and Soft Constraint Specification, 2nd International Conference on Responsive Manufacturing, Turkey, Jun. 26-28, 2002, pp. 448-453.
35. Jiang, L., and Allada, V., Design for Robustness of Modular Product Families For Current And Future Markets, Procc. ASME Design Engineering Technical Conferences, Paper DETC2001/DFM-21177, 2001, Pittsburgh PA.
36. Allada, V., R. Rai, and J. Lan, Sustainable product development: An Artifact System (AS) based Framework, Proceedings of International Conference on Engineering Design, Glasgow, 2001.
37. Allada, V., and Rai, R., Sustainable product development: An Artifact System (AS) based Framework, Proceeedings of Industrial Engineering Research Conference, Dallas, May 20-22, 2001.
38. Allada, V., Rai, R., and S. Viswanathan, Framework for Sustainable Product Development, In the Proceedings of NSF Grantees Conference, FL, 2001.
39. Lan, J., and Allada, V., Design of Modular Product Families, Procc. SPIE Conference on Intelligent Systems in Design and Manufacturing, MA, Oct 29-30, 2001, Newton, MA, Paper #: 4565-16.
40. Rai, R., and Allada, V., Eco-innovation diffusion in artifact systems, Procc of Environmentally Conscious Manufacturing Conference, Oct 28-29, 2001, Newton, MA,

Paper #: 4569-07.
41. Rai, R., and Allada, V., Artifact System (AS) framework: A study of the co-evolution of technological artifacts, Paper #: 4193-37, Procc. Environmentally Conscious Manufacturing Conference, Boston, Nov 6-8, 2000, pp. 243-251.
42. Viswanathan, S., and Allada, V., Configuration Analysis to Support Product redesign for end-of-life disassembly, Procc. ASME Intl. Design Engr.Tech. Conf.: Design for Manufacturing, Baltimore, DETC2000/DFM-14027, MD, Sept. 10-13, 2000. **(Received the Best Paper Award at the conference).**
43. Jiang L., and Allada, V., Functional Degradation and Reliability Analysis Using Markov Chain for Reuse Strategies of Product Families, Procc. of Artificial Neural Networks in Engineering (ANNIE) Conference, St. Louis, Nov. 2000, pp. 869-876.
44. Viswanathan, S., and Allada, V., Disassembiosis: A Mechanism to Support Automated Configuration Redesign for End-of-Life Disassembly, CIRP International Design Seminar, Haifa, Jun. 2000.
45. Viswanathan, S., and Allada, V., Flexible Disassembly by Product Group Formation, Group Technology/Cellular Manufacturing World Symposium, Puerto Rico, Mar. 27-29, 2000, pp. 61-66.
46. M. C. Leu, F. Liou, D. A. McAdams, V. Allada, B. Ghahramani, S. Agarwal, and R. H. Hall, Planning of a Multi-Disciplinary Rapid Product Realization Program, Proceedings of International Conference on Engineering Education, Taipei, Taiwan, Aug. 14-16, 2000.
47. Allada, V., Preparing Engineering Students To Meet The Ecological Challenges Through Sustainable Product Design, Proceedings of International Conference on Engineering Education, Taipei, Taiwan, Aug. 14-16, 2000.
48. F. W. Liou, J. Zhang, W. F. Lu, H. L. Tsai, K. Krishnamurthy, S. Agarwal, O. R. Mitchell, K. Peaslee, and V. Allada, "A Five-Axis Rapid Metal Forming System," Proceedings of NSF Design and Manufacturing Grantees Conference, Jan. 1999.
49. Viswanathan, S., and Allada, V., Value-based Product Structure Evaluation for Disassembly, Eco-Design'99: International Symposium on Environmentally Conscious Design and Inverse Mfg., Feb. 1-3, 1999, Tokyo, pp. 778-783.
50. Viswanathan, S., and Allada, V., Biological Abstractions of the EOL Disassembly Problem, Procc. Industrial Engineering Research Conference, May 1999, Phoenix, Arizona.
51. Allada, V. and Brahmandam, P., Configuration Modeling for Parallel Disassembly Evaluation, Proceedings of the 8th Annual Industrial Engineering Research Conference, Phoenix, Arizona, May 1999.
52. Allada, V., and Viswanathan, S., Research Issues in Design for Disassembly, Procc. Industrial Engineering Research Conference, Banff, Canada, May1998.
53. Viswanathan, S., and Allada, V., Disassembly-oriented Product Classification Using Radial Basis Network, Artificial Neural Networks in Engineering (ANNIE) Conference, St. Louis, 1998, pp. 825-830.
54. Allada, V., Knowledge-based Design Tool to Support Integrated Manufacturing, ASME Design Engineering Technical Conferences/DFM Conference, Sacramento, CA, Sept. 14-17, 1997, Paper No. DETC/DFM-4335.
55. Allada, V., Ray, S., and Feng, S., Development of a Message Model for Integrated Design and Manufacturing, Intl. Conf. of Industrial Engineering, San Diego, Nov. 1997.

56. Allada, V., Generation of Intelligent Redesign Solutions in an Automated Manufacturability System, Intl. Conf. of Industrial Engineering, San Diego, CA, Nov. 1997.
57. Raviwongse, R., and Allada, V., Quantitative Metrics for Evaluation of Injection Molded Parts, Intl. Conf. of Industrial Engineering, San Diego, CA, Nov. 1997.
58. Raviwongse, R., Allada, V., and Sandidge, T., An Intelligent Fuzzy-based Process Selection Methodology for Manufacturing of Plastic Products, Artificial Neural Networks in Engineering (ANNIE) Conference, St. Louis, Nov. 1997.
59. Chaturvedi, S., and Allada, V., Integrated Manufacturing System for Precision Punches and Dies, Sixth Industrial Engineering Research Conference, Miami, FL, May 1997.
60. Allada, V., and Poyraz, A., Manufacturing Design Advisory System for Machined Components, Sixth Industrial Engineering Research Conference, Miami, FL, May 1997.
61. Wang, J. P., and Allada, V., Object-oriented Approach for Serviceability Analysis and Evaluation, Sixth Industrial Engineering Research Conference, Miami, FL, May1997.
62. Wang, J. P., and Allada, V., Fuzzy Neural Network (FNN) based Design for Service Evaluation, Procc. Intl. Conf. of Industrial Engineering, Houston, TX, Dec. 1996, pp. 918-922.
63. Raviwongse, R., and Allada, V., Injection Mold Complexity Evaluation model using a Back propagation Network implemented on a Parallel Computer, Artificial Neural Networks in Engineering (ANNIE) Conference, St. Louis, Nov. 1996, pp. 1081-1086.
64. Wang, J. P., and Allada, V., Fuzzy Logic Approach for Serviceability Evaluation, Artificial Neural Networks in Engineering (ANNIE) Conference, St. Louis, Nov. 1996, pp. 1075-1080.
65. Allada, V., and Agarwal, M., Formalization of Feature Sequencing for Process Planning, Procc. of 5th Industrial Engineering Research Conference, Minneapolis, MN, 1996, pp. 170-175.
66. Allada, V., and Omurtag, Y., Computer-Integrated Manufacturing Education, International Conference on Education in Manufacturing, organized by Society of Manufacturing Engineers (SME), Mar. 13-15, 1996, San Diego, CA, pp. ER96189-1-4.
67. Allada, V., and Anand, S., Interacting Features Recognition for Prismatic Parts, Procc. of 4th Industrial Engineering Research Conference, Nashville, TN, 1995, pp. 174-182.
68. Hubbard, K., Allada, V., and Omurtag, Y., Computer-Integrated Manufacturing Enterprise in an Academic Environment, Procc. of 4th Industrial Engineering Research Conference, Nashville, TN, 1995, pp. 730-737.
69. Agarwal, M., and Allada, V., Formation of Group Technology Cells based on ART1 Neural Network Paradigm, Procc. International Conference on Industry, Engineering, and Management Systems, FL, 1995, pp. 123-128.
70. Agarwal, M., and Allada, V., An Automated Coding and Classification System with supporting Database for Forged Components, Procc. International Conference on Industry, Engineering, and Management Systems, FL, 1995, pp. 422-427.
71. Allada, V., and Anand, S., Multi-attribute decision model using analytic hierarchy process for vendor selection, Procc. of 4th Industrial Engineering Research Conference, Nashville, TN, 1995, pp. 64-73.
72. Allada, V., and Anand, S., Feature-based Manufacturability Evaluation System, Procc. International Conference on Industry, Engineering, and Management Systems, FL, 1995,

pp. 105-110.

73. Allada, V., and Anand, S., Computer-Aided Inspection using Hough Transform, Third Industrial Engineering Research Conference, Atlanta, GA, May 1993, pp.40-45.
74. Allada, V., and Anand, S., A B-Rep based Feature Recognition System for Process Planning, Third Industrial Engineering Research Conference, Atlanta, GA, May 1993, pp. 208-213.
75. Allada, V., Anand, S., Mital, A., and Kopardekar, P., Implications of Ergonomic and User Considerations on Manufacturing Consumer Products, ASME Design and Technical Conference, DE-Vol. 48, Flexible Assembly Systems, Phoenix, AZ, 1992.
76. Allada, V., Huffer, N., and Anand, S., Quad and Octree structures for Tolerance Representation in Solid Models, Second Industrial Engineering Research Conference Proceedings, Los Angeles, CA, May 1992, pp. 461-65.
77. Allada, V., and Anand, S., 1992, Manufacturing Applications of Octrees, Procc. Computers and Industrial Engineering, Vol. 23, Nos 1-4, pp. 37-40.

E. Invited Book Chapters

1. Allada, V., Feature-based Design Systems for Integrated Manufacturing, Computer-Aided and Integrated Manufacturing, Edited by C. T. Leonedes, Gordon & Breach.
2. Allada, V., and Poyraz, A., Manufacturing Analysis of Machined Parts, Direct Engineering: Toward Intelligent Manufacturing, Kluwer Academic Publishers, Edited by Kamrani and Sferro, pp. 131-153, 1999, ISBN 0-7923-8338-9.
3. Allada, V., and Brahmandam, P., Decision Trees, Industrial Engineering Applications and Practice: User's Encylopedia, (CD ROM), Edited by Mital, A., ISBN 0-9654599-0-X.
4. Allada, V., and Vishwanathan, S., Design for X (DFX), Industrial Engineering Applications and Practice: User's Encylopedia, (CD ROM), Edited by Mital, A., ISBN 0-9654599-0-X.

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F. Non-Refereed Conference Proceedings

1. Jose, V., and Allada, V., Enhancing engineering education using case-based problem solving exercises, CD Proceedings ASEE Midwest Chapter Conference, 2003.
2. Allada, V., Sustained Product Design: Preparing Engineering Students to meet the Ecological Challenges, 34th Midwest Section ASEE Conference, Apr. 1999, Stillwater, OK.
3. Allada, V., Incorporating Green Product Design in Engineering Curriculum, Computers and Industrial Engineering Conference, New Orleans, 1999.
4. Allada, V., Teaching Integrated Product/Process Development Using Team-based

Projects, 32nd Midwest Section ASEE Conference on Computer Aided Instruction in the Classroom and Laboratory for the Next Century, Apr. 2-4, 1997, Columbia, MO.

5. Allada, V., Green Product Design and Analysis in Engineering Curriculum, 32nd Midwest Section ASEE Conference on Computer Aided Instruction in the Classroom and Laboratory for the Next Century, Apr. 2-4, 1997, Columbia, MO.
6. Bulla, S., and Allada, V., Identification of Metrics for the Assessment and Implementation of Lean Manufacturing, Procc. of ICPR Americas '02, St Louis, Nov. 14- 15, 2002.
7. Shil, P., Joshi, A., and Allada, V., Integration of TOC, TRIZ, and Lean Manufacturing Concept, Procc. of ICPR Americas '02, St Louis, Nov. 14-15, 2002.
8. Sankaran, A., and Allada, V., Total Productive Maintenance: Concepts and Guidelines, Procc. of ICPR Americas '02, Nov. 14-15, 2002.
9. Anam, F., and Allada, V., Pull production control systems – A transition from MRP systems, Procc. of ICPR Americas '02, Nov. 14-15, 2002.

G. Technical Reports

1. Allada, V., Sickler, R., Mehta, M., Borappa, V., Tenneti, B., Virdi, G., Rapid Response Manufacturing System (RRMS), sponsored by Missouri Department of Economic Development, Apr. 2005.
2. Allada, V., Feng, S., Ray, S., Collaborative Design and Manufacturing, Final Report of the research work sponsored by the National Institute of Standards and Technology, Gaithersburg, MD, 1999, 71 pages.
3. Allada, V., Poyraz, A., and Wang, J. P., Integrated Design and Manufacturing System (IDMS), Book 1: IDM System User's Guide, Research sponsored by the UM Research Board, 1996 (approx. 80 pages).
4. Allada, V., Poyraz, A., and Wang, J. P., Integrated Design and Manufacturing System (IDMS), Book 2: Feature Attributes and Relations, Research sponsored by the UM Research Board, 1996 (approx. 85 pages).
5. Allada, V., Poyraz, A., and Wang, J. P., Integrated Design and Manufacturing System (IDMS), Book 3: System Development Environment, Research sponsored by the UM Research Board, 1996 (approx. 400 pages).
6. Chaturvedi, S., Integrated Manufacturing System for Precision Punches and Dies: Program Listing, (PI of the project: Allada, V.), Research done for Finale International Tool Inc., 1996, 618 pages.
7. Mital, A., Anand, S., and Allada, V., Identification and ranking of Research Needs in Preparing the American Workforce for Global Competition Beyond the Year 2000, Final Report of a workshop sponsored by the National Science Foundation, Division of Design and Manufacturing, Grant No. DDM-9314666, Jun. 1994.

H. Invited Lectures/Seminars

1. Annual MIT Lean Aerospace Initiative Ed Net Conference, University of Southern California, Los Angeles, Nov. 10-12, 2005.
2. New Product Development, Brewer Science Inc., Rolla, Aug. 8, 2005.
3. Lean Academy (MIT's LAI EdNet), Lead Instructor, Boeing IDS, St Louis, Jun. 6-10,2005.
4. Lean Thinking, Brewer Science Inc., Rolla, Feb 2, 2005.
5. Product Platforms, Industrial & Mfg. Engineering Seminar series, Kansas State University, Manhattan, KS, Feb. 23, 2005 (all expenses paid).
6. Lean Academy (MIT's LAI EdNet), Instructor, Boeing IDS, St Louis, Jun. 7-11, 2004.
7. Sustainable Product Development, Beijing Institute of Technology, Beijing, China, Jun. 2000, (supported in part by the National Research Council of China).
8. Sustainable Product Development, Xian University, China, Jun. 2000 (supported in part by the National Research Council of China).
9. Design for Disassembly, University of Cincinnati, Industrial Engineering Graduate Lecture Series, Mar. 1999, (received $250 honorium).
10. Rapid Product Realization, Xerox Lecture Series, Xerox Corporate Research Center, Webster, NY, invitation by Dr. Charles Coleman, Manager, System Diagnostics (Marking Systems Laboratory), Feb. 1999 (all expenses paid).
11. Design for Disassembly, Ford Motor Company, Dearborn, MI, Mar. 4, 1998.

I. Seminars/Workshops

1. Organizer and co-instructor, Lean Academy, Mar. 14-18, 2005 (24 UG students & 3 graduate students registered)
2. Organized Boeing Production System (BPS) by Jerell Smith, project leader for BPS for Boeing Commercial Airplanes, Wichita, KS (Nov. 15, 2002, 8am-3pm; 50 Missouri S&T students registered and received BPS certificates).

J. Journal/Conference Paper Refereeing

- ✓ Intelligent Automation and Soft Computing Journal
- ✓ Journal of Intelligent Manufacturing
- ✓ Robotics & Computer Integrated Manufacturing
- ✓ International Journal of Production Research
- ✓ Journal of Computing and Information Science in Engineering
- ✓ International Journal for Industrial Engineering

- ✓ Engineering Design and Automation Journal
- ✓ Annals of Operations Research
- ✓ Proceedings of ASME Design for Manufacturing Conference
- ✓ Proceedings of Annual ASEE Conference
- ✓ Proceedings of Industrial Engineering Research Conference
- ✓ ANNIE Conference

K. Proposal Reviewer

- ✓ National Science Foundation, DMII, BES, Knowledge and Distributed Intelligence program
- ✓ US Department of Education
- ✓ University of Missouri Research Board
- ✓ National Science Foundation of Ireland
- ✓ Texas Higher Education Coordinating Board

L. Book Reviewer

- ✓ Managing Product and Service Development by Stefan Thomke, Harvard Business School, McGraw Hill/Irwin Publishers, (350+ pages; completed publisher requested review in Jan 2005).
- ✓ The Lean Design Guidebook by Ronald Mascitelli, 312 pages, ISBN 0-9662697-2-1 (completed review in May 2005 and submitted editor requested review to Engineering Management Journal.
- ✓ Publisher requested book proposal reviewer, Product Family and Product Platform Design by Prof. Simpson, Kluwer Academic Publishers.

PROFESSIONAL SERVICE

- ❑ Faculty advisor, Missouri S&T Cricket Club, 2016 - Present.
- ❑ Member, Campus HLC Assessment Committee, 2009-2011; 2015-2018.
- ❑ Chair, S&T Library Director search committee, 2017.

- Past Chair (2017-18); Chair (2016-17); Chair-elect (2015-16); Member-at-large (2014-15) for Midwest Association of Graduate Schools (MAGS); Chair of MAGS membership committee (2012-14).
- Conference Chair, Midwest Association of Graduate Schools (MAGS) Annual Conference, Conference Theme: Graduate Education Pathways, August 6-8, 2016, Chicago.
- Co-chair, S&T Internationalization and Global Engagement committee (2015-2017). S&T participated in the ACE Internationalization Laboratory project that startedin FS 16 under the mentorship of Dr. Susan Buck Sutton from ACE.
- Member, Campus Strategic Planning Committee, 2008-2017.
- Member, Chancellor's Committee on Diversity & Inclusion, 2012-2017.
- Member, Outstanding Dissertation Award Committee, Council of Graduate Schools (2014, 2012).
- Member, MAGS Graduate Teaching Award committee, 2010-12.
- Co-chair (along with Vice Provost Research), Research Capacity Taskforce Committee, Oct. 2011- Apr. 2012.
- Member, Task Force on Student Educational Capacity, 2009 - 2010.
- Co-Chair (along with Vice Provost Global Distance Education), Graduate Admissionsand Recruitment Taskforce, 2008.
- Faculty advisor, Missouri S&T Council of Graduate Students (CGS), 2007 - 2017.
- Member, Provost's Leadership Cabinet (2007-2017).
- Organizer, Annual MIT's Lean Aerospace Initiative (LAI) EdNet Meeting, Nov 10-12, 2004, Rolla, MO.
- Universities-at large representative, LAI-EdNet Executive committee, (2004-2005).
- Session Chair, ICPR Americas '02 Conference, November 14-15, 2002.
- Session Chair, International Conference on Industry, Engineering, and Management Systems, 1995
- Session Chair, Industrial Engineering Research Conference, 1996, 1999, 2004, 2005
- Session Chair, Computers and Industrial Engineering Conference, 2002
- Session Chair, International Conference of Computers and Industrial Engineering, 1999
- International Advisory Committee Member, International Conference of Industrial Engineering, 1995, 1999
- Editorial Board member, International Journal of Industrial Engineering (1994-1999)
- Selected by the National Academy of Engineers (NAE) to participate in the 1998 Frontiers in Engineering Symposium held in CA, and the US-Germany 2001 Frontiers in Engineering Symposium, held at Essen, Germany (all expenses paid by NAE and Alexander Von Humboldt Foundation of Germany).