Daryush (Dary) K. Aidun

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POSITIONS

Professor: Mechanical & Aeronautical Eng. (MAE) Dept. 05/2000 - present
Dept. Chair, Mechanical & Aerospace Engineering (MAE) Dept., 07/2005-06/2015.
Faculty: MAE Department, Clarkson University since 08/1982.

EDUCATION

Ph.D. Materials Engineering, Rensselaer Polytechnic Institute, 1982.
(Thesis Advisor: Prof. Warren F. Savage (Doc) member of NAE)
M.S.: Materials Science, Syracuse University, 1978.
M.S.: Industrial Engineering (project in Electro Discharge Machining, EDM), Syracuse University, 1976.
B.S.: Industrial Engineering, Syracuse University, 1975.

AWARDS

Charles H. Jennings, This award is presented for the most valuable paper written by a college student or faculty representative published in the Welding Journal (AWS), **2020** & **2022**.
A.F. Davis Silver Award, American Welding Society (AWS), **1985**, **2017** & **2019**.
The award is for the best contribution to the progress of welding in the field of:
(1) Machine Design, (2) Maintenance & Surfacing, and (3) Structural Design.
Life Member Certificate, American Welding Society, **2019**.
MacKay-Helm Award, American Welding Society, **2015**.
"It is awarded for the best contribution to the advancement of knowledge relative to the welding of low alloy steels, stainless steels, or the application of surfacing weld metals as represented in articles published in the *Welding Journal* during the previous calendar year (by an author or authors not employed by filler metal producers or their parent companies)."
Member of the Million Dollar Club, Clarkson University (CU), **2007**.
University Outstanding Teaching Award, CUSA, Clarkson University, **AY 2000-2001**.
Outstanding Professor of the Year Award, Pi Tau Sigma (ASME Honor Society), Clarkson University, **1996 & 1998**.
Adams Memorial Membership Award, American Welding Society, **1991**.
"The award is given as a means of recognizing educators whose Teaching Activities are considered to have advanced the knowledge of welding of the undergraduate or postgraduate students in their respective engineering institutions."
William Spraragen Award, American Welding Society, **1989**.
"The award is for the best research paper printed in the Research Supplement of the Welding Journal in 1989."
Ralph R. Teetor Educational Award, Society of Automotive Engineers (SAE), **1984;**

PROFESSIONAL ACTIVITIES

07/2015 – Present

As the MAE Professor –

- Fellow of the American Welding Society (FAWS);
- Fellow of the American Society of Mechanical Engineers (FASME)
- Professional Engineering (P.E.) License in Metallurgy & Materials Eng. (TN;#123983);
- Editor, Chapter 3 (Heat Flow in Welding), AWS Hand Book,10th Ed. Vol.1, (2015-2019).
- OSHA Certified (General Industry), May 2020;
- Chair: Advance Mfg. Eng. Concentration Program;
- Supervised 3 Ph.D. students:
- Performed research on "Weldability of Dissimilar Alloys"; Designed/Developed fixtures for production of plates/tubes (for heat exchangers) out of Inc.718 (Ni-based super alloy), Alloy 410 (martensitic stainless steel), and Alloy 2209 (duplex stainless steel) using "wire arc additive manufacturing" (WAAM) process.
- Reviewer for Welding Journal, Journal of Additive Manufacturing, International Journal of Heat & Mass Transfer; Journal of Materials Research & Technology, Journal of Material Processing Technology, International Journal of Mechanical Sciences; Science & Technology of Welding & Joining;
- Guest Editor; *Metals*; (ISSN 2075-4701) Special Issue "Residual Stresses and Deformation in Dissimilar Metal Welds", June 2020-2021;
- Teaching Welding Metallurgy (ME 492/590) every Fall and Adv. Manufacturing Processes (ME 390/503) every Spring;

07/2005-06/2015

As the MAE Dept. Chair –

- Increased the MAE UG students from 550 to over 800;
- Hired 12 Asst. Professors, and 1 Associate Professor in the area of Fluids; Nano-materials; Biomechanics and Aero;
- Hired 1 fulltime instructor for teaching Senior Capstone Design courses, and 1 Adjunct faculty (part-time instructor) to teach sophomore Engineering Design course;
- Prepared 7 successful tenure files that resulted in the tenure & promotion of the 7 faculty from Asst. Professor to Assoc. Professor;
- Prepared 5 successful promotion files that resulted in the promotion of the 5 faculty from Associate Professor to Full Professor;
- Prepared Self-Study Reports/Documentations for 2008 & 2014 ABET Review for the ME & AE Programs, which both were fully successful;
- Created the MAE/ABET committee;
- Dept.'s Annual External Funding surpassed $1.5M;

- Received over $900,000 in external funding (as PI over the last 10 years);
- Published over 15 Peer Reviewed Journal Papers and 26 Peer Reviewed Conference Proceedings;
- No. of Advisees Graduated: 1 M.E.; 6 M.S.; 4 Ph.D.
- Presented a keynote talk at the International Symposium on Computer-Aided Welding Engineering; Jinan, China, 2006;
- Session Chair for ASME Capstone Design Implementation;
- Presentation at OMAE/ASME; "Challenges in Welding Dissimilar Alloys", 2012; Rio, Brazil;
- Reviewer for DOE and DOD Proposals;
- Review Panel, NSF, SBIR Phase I & II;

Figure 4. Design of fixtures to produce Tubes of Welds via WAAM process;


Figure 3. Varestraint Welding System

Designed/Build a Varestraint Test System for Evaluating of Hot Cracking Susceptibility of Alloys (**Fig. 3**);

2000 - 2005

- Visiting Professor – Vanderbilt University – Summers 2004-2006.
- Consulted for O'Brien & Gere Engineers, Inc. Syracuse, NY;
- Proposal Panel Reviewer for DMII Division of NSF;
- Peer Reviewer for Research Papers published in the Research Supplement of the Welding Journal & ASM Metallurgical Transactions A & B;

- President of Fluidix Micro-forming Systems, Inc., Atlanta, GA. The company Designed & Manufactured Vortices for Paper Companies; The Vortices were placed in Paper Coating Machineries to coat the papers in a uniform manner resulting in increase in strength & quality;
- Designed and built an Automated Dual Torch Arc P-GMAWelding System (ADT-P-GMAWS) capable of welding, ≥ 1" thick plates in 2G-position simultaneously from both sides, reducing distortion, welding time, and increase in productivity (**Fig. 2**).

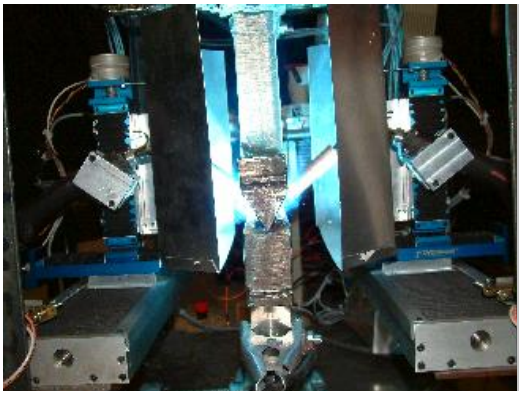

Figure 2. Automated Dual Torch Pulsed GMAW System (ADT-P-GMAWS)

1997 - 2000

- Gave a technical presentation on "High Speed Powder Coating" to McDermott Technology, Inc. Alliance Research Center, Alliance, Ohio, July 22, 1999;
- Presented a seminar titled "Weldability of Materials in Simulated High-Gravity Environment" to the Joining and Welding Research Institute, Osaka University, Osaka, Japan, May 14, 1999; (Key Note)
- Presented a workshop on Materials Science & Corrosion @ O'Brien & Gere Inc. Syracuse, NY;

1994 – 1997

- Designed and built the first Multi-Gravity Research Welding System (MGRWS) in the world dedicated to investigation of welding and casting in simulated high "**g**" environment (Dave Williams & Steve Zanon) (**Fig. 1**);
- "Clarkson students help build a one-of-a-kind centrifuge for "Studying Welding in Varying Degrees of Simulated Gravity," Watertown Daily News, December 18, 1994;

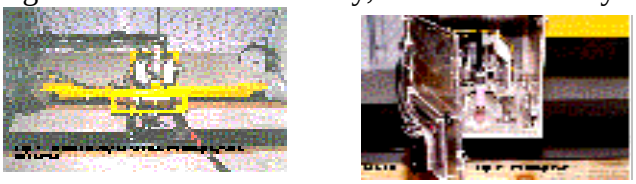

Figure 1. Multi-Gravity Research Welding System (MGRWS)

- "Multi-Gravity System Measures Effect of Gravity on Welds," ASM Advanced Materials & Processes, Feb. 1997;

- "Centrifuge Designed for Welding and Casting in High Gs," News of the Industry, Welding Journal, June 1997;

- Consulted for the Association of American Railroads, Chicago, IL.
- Consulted for ALCOA, Massena, NY.

1988 – 1994

- Chairman of ASME Session, ASME International Meeting, Nov. 6-11, 1994, Chicago, Ill.
- Program Manager, Float Zone Crystal Growth, Clarkson University/CCDS/NASA, Managed the weekly activities and progress of Liquid Encapsulation Melt Zone (LEMZ) Experiment ($ 0.5 million project), which was successfully flown on STS 57 mission. All the activities were reported directly to the CU/CCDS/NASA director, Dr. W.R. Wilcox.

  "Shuttle Retrieves Satellite," Watertown Daily Times, June 24, 1993;
  "Crystal Experiments Come Back to Earth," Watertown Daily Times, July1,1993;
- US Representative {on behalf of Clarkson University, Dr. Tom Eager of MIT, and Dr. Jellison of Sandia National Lab, NM}, for the VAMAS (Versailles Project on Advanced Materials & Standards) on Weld Characteristics, (Dr. T.B. Gibbons, Director, National Physical Lab., Teddington, UK);
- Visiting Professor, Materials Science and Engineering Dept., University of Tennessee, Knoxville;Performed research on Laser Weldability of Al Metal-Matrix Composites; Taught Powder Metallurgy course to senior undergraduates;
- Organizer and Chairman of American Welding Society (AWS) Technical Session of WATEC '89, Knoxville, TN.

1***985 – 1988***

- Presented a seminar titled "Can Modeling of Weld Pool Help to Prevent Weld Defects," American Welding Society (AWS) North Eastern Section, Albany, NY.
- Presented a seminar titled "Effect of Si on the Weldability of Fe-Mn-Al Austenitic Steels," Phillips Laboratory, Briar Cliff Manor, NY; (Invited Talk)

1982 – 1985

- Consulted for Metals & Ceramics Division of Oak Ridge National Lab.,Oak Ridge, TN; Consulted for the American Welding Institute, Knoxville, TN;
- Session Chair, "Control of Welding Variables Important to Automation", American Welding Society (AWS) Annual Meeting (Las Vegas; 1985);
- Presented a seminar titled "Repair Welding Techniques in Steel Castings," to the Physical Metallurgy Research Laboratory, CANMET, Ottawa, Canada;
- Exhibitor/Recruiter for Clarkson University at the American Welding Society Annual Meeting, Dallas, TX, (1984);
- Proposal Reviewer for the Canadian Space Agency (CSA), Dr. Z. Saghir, Chief Scientist, Ottawa, Canada;

RESEARCH FUNDING

Received total of **$2.8M**; **$2.1M as PI**, and **$0.7M as Co-PI**.
[NSF, NASA, Pratt & Whitney, GE Energy, GE Oil & Gas, AWS Foundation, WRC, Plattsburgh Chamber of Commerce].

PEER REVIEWED JOURNAL PUBLICATIONS (60)

1. **Aidun D.K.** and Savage W.F., "Systems for Prediction of Maximum Hardness in the HAZ of Repair Welded Steel Castings," *Welding Journal*, November 1984, pp. 345s - 353s. (won the **AWS A.F. Davis Silver Award**).
2. **Aidun D.K.** and Savage W.F., "Hydrogen-Induced Cracking in Repair Welded Steel Castings," *Welding Journal*, April 1985, pp. 97s - 103s.
3. **Aidun D.K.** and *Bennett R.W.*, "Effect of Resistance Welding Variable on the Strength of Spot Welded 6061-T6 Al Alloy," *Welding Journal*, December 1985, pp. 5 - 25.
4. **Aidun D.K**. and *Raghavandra R.S.*, "Tensile and Impact Properties of PTR and HAZ in Steel Weldments," *Welding Journal*, January 1986, pp. 8s - 13s.
5. *Lippert A.K*. and **Aidun D.K.**, "Characterization of a Chromium Free, Nickel Free Austenitic Weld Metal," *Welding Journal*, September 1987, pp. 29 – 32.
6. **Aidun D.K.** and *Suh J.*, "Effect of Carbon on Solidification Morphology of Fe-Mn-Al Steels, "*Journal of Steel Research STAHL-EISEN*, October 1987, No. 11.
7. *Zacharia T.*, Eraslan A.H. and **Aidun D.K.**, "Modelling of Non-Autogeneous Welding Process," *Welding Journal*, January 1988, pp.18s - 27s.
8. *Zacharia T.*, Eraslan A.H. and **Aidun D.K**., "Modelling of Autogeneous Welding Process,"*Welding Journal*, March 1988, pp. 53s - 62s.
9. *Zacharia T.* and **Aidun D.K.**, "Elevated Temperature Mechanical Properties of Al-Li-Cu-Mg Alloy," *Welding Journal*, December 1988, pp. 281s - 288s.
10. *Zacharia T.*, Eraslan A.H., **Aidun D.K.** and David S.A., "Three Dimensional Transient Model for Arc Welding Process," *ASM/AIME Metallurgical Transactions* B, October 1989, pp. 645 – 659.
11. Wilcox W.R., Carlson F.M., **Aidun D.K.**, "Ground-Based Experiments and Theory in Preparation For Floating Zone Melting and Directional Solidification of Cadmium Telluride in Space," *Acta Astronautica*, Vol 25, No. 8/9, 1991, pp. 505 - 510.
12. *Makhamreh K.* and **Aidun D. K.**, "Mechanical Properties of Flux-Cored Iron-Manganese-Aluminum Weld Metal," *Welding Journal*, March 1992, pp. 104s - 113s.
13. **Aidun D.K.**, *Martin P.* and *Sun J.*, "Fracture and Mechanical Properties of P100 Gr/6061 Al Composite," *ASM Journal of Materials Engineering and Performance*, Vol.1(4), Aug.1992, pp. 463 - 467.
14. **Aidun D.K.**, *Martin P.* and *Sun J.*, "Effects of Heat Treatment on the Mechanical Properties of SiC[p]/6061 Al Composite," *ASM Journal of Materials Engineering and Performance*,Vol.1(5), Oct. 1992, pp. 1 - 10.
15. *Makhamreh K.* and **Aidun D.K.**, "Stress Corrosion Cracking of Flux-Cored Iron-Manganese-Aluminum Weld Metal," *Welding Journal*, June 1993, pp. 247s – 255s.
16. *Shen J.*, **Aidun D.K.**, Regel L., and Wilcox W.R., "Effect of Thermal Annealing on the Microstructure of CdTe and Cd1-xZnxTe Crystals," *Materials Science and Engineering*, B16 (1993), pp. 182 – 185.
17. *Shen J.*, **Aidun D.K**., Regel L., and Wilcox W.R., "Characterization of Precipitates in CdTe and Cd1-xZnxTe Grown by Vertical Bridgman-Stockbarger Technique," *Journal of Crystal Growth* 132(1993), pp. 250 - 260.

18. *Shen J.*, **Aidun D.K.**, Regel L., and Wilcox W.R., "Etch Pits Originating from Precipitates in CdTe and Cd1-xZnxTe Grown by the Vertical Bridgman-Stockbarger Method," *Journal of Crystal Growth* 132(1993), pp. 351 - 356.
19. **Aidun D.K.**, *Makhamreh K.*, Morrison D. and Olszewski J., "An Evaluation of Weldments Joined by Fe-Mn-Al and Fe-Cr-Ni Consumables," Welding Journal, March 1994, 61s – 65s.
20. *Domey J.*, **Aidun D.K.**, .Ahmadi G., Regel L.L., and Wilcox W.R., "Numerical Simulation of the Effect of Gravity on Weld Pool Shape," *Welding Journal*, August 1995, pp. 263s – 268s.
21. **Aidun D.K.** and *Martin S.A.*, "Effect of Sulfur and Oxygen on Weld Penetration of High-Purity Austenitic Stainless Steels," *ASM Journal of Materials Engineering and Performance*, Vol.6(4), August 1997, pp. 496 – 502.
22. *Shen J.*, Balasubramanian R., **Aidun D.K.**, Regel L.L., and Wilcox W.R., "Deformation Behavior of Cadmium-Telluride Stressed at Elevated Temperatures," *ASM Journal of Materials Engineering and Performance*, Vol.7(4), August 1998, pp. 555-563
23. **Aidun D.K**. and *Martin S.A.*, "Penetration in Spot GTA Welds during Centrifugation,"*ASM Journal of Materials Engineering & Performance*, Vol.7(5), Oct. 1998, pp. 597-600.
24. **Aidun D.K.** and *Dean J.P.*, "Effect of Enhanced Convection on the Microstructure of Al-Cu-Li Welds," Welding Journal., October 1999, pp. 349s – 354s.
25. **Aidun D.K.**, *Domey J.J.*, and Ahmadi G., "Effect of High Gravity on Weld Fusion Zone Shape," *Welding Journal*, June 2000, pp. 145s-150s.
26. **Aidun D.K**., "The Corrosion Behavior of Fe-Mn-Al Weld Metals," *ASM Journal of Materials Engineering & Performance*, Vol. 10(1), February 2001, pp. 46-52.
27. **Aidun D.K.**, "Influence of Simulated High-*g* on the Weld Size of Al-Li Alloy," *Acta Astronautica*, Vol. 48, No. 2-3, February 2001, pp. 153-156.
28. **Aidun D.K.**, *Domey J.*, and Ahmadi G., "Digital Simulations of Stationary and a Linear weld," *Metallurgical and Materials Transactions* B, Vol. 33B, 2002, pp. 101-110.
29. *K. LI*, **D. AIDUN**, P. MARZOCCA, "Functionally graded material modeling of a thermally affected dissimilar metals joint," *THERMAL STRESS*, (2007).
30. *K. LI*, **D. AIDUN**, P. MARZOCCA, "Modeling of the mixed weld zone of dissimilar metals joint by functionally graded materials," *STEEL GRIPS Journal of Steel and Related Materials*, Vol. 6, No. 1, (2008), pp 58-68.
31. K. LANA, **D.AIDUN**, C. LIU, F. CARLSON, "Microstructure of gas tungsten arc welds under macro-gravity conditions," *STEEL GRIPS Journal of Steel and Related Materials*, Vol. 6, No. 6, (2008), pp 448-455.
32. *O.M. AL-HABAHBEH*, **D.K. AIDUN**, P. MARZOCCA, *H. LEE*, "Integrated Approach for Life Prediction of Thermo-Fluidic Systems," *Advanced Modeling and Optimization International Journal*, Vol. 11, No. 4, (2009).
33. *K. Li*, **D. Aidun**, P. Marzocca; "Numerical investigation of the heat flow in friction stir welding process;" *THARMAL STRESSES*, (2009).
34. S.M. Mkhitaryan, S.V. Verlinski, **D. Aidun**, P. Marzocca; "Thermal stresses of joined semi-infinite homogeneous elastic plates with collinear system of inclusions;" *THERMAL STRESSES*, (2009).

35. S.M. Mkhitaryan, S.V. Verlinski, **D. Aidun**, P. Marzocca; "Thermo-elastic modeling of joined semi-infinite homogeneous solids with circular inclusion due to a steady-heat source;" *THERMAL STRESSES*, 2009.
36. *O.M. Al-Habahbeh*, D.K. Aidun, P. Marzocca and H. Lee, "Integrated Physics-Based Approach for the Reliability Prediction of Thermal Systems*," International Journal of Reliability and Safety*, Vol 4, No. 4, 1-29 (2011).
37. *M. Izadi*, **D. Aidun**, P. Marzocca & H. Lee, "Integrated Experimental Investigation of Seawater Composite Fouling Effects on the 90/10 CU/Ni Tube," ASME, *Applied Thermal Eng*. ATE 31/14-15 (2011).
38. *M. Izadi,* **D.K. Aidun**, P. Marzocca and H. Lee, "Experimental Investigation of Fouling Behavior of 90/10 Cu/Ni Tube by Heat Transfer Resistance Monitoring Method," ASME *J. Heat Transfer*, Vol. 133, (2011).
39. S.M. Mkhitaryan, L.A. Shekyan, S.V. Verlinski, **D. Aidun** and P. Marzocca, "Stationary Theory of Heat-Conductivity for an Axisymmetrical Piece Homogeneous Space with Circular Inclusion," *Journal of Thermal Stress* (ISSN: 0149-5739) (2011).
40. *Z. Iverson*, A. Achuthan, P. Marzocca, **D. Aidun**, K. Caird; "Optimal Design of Hybrid Renewable Energy Systems (HRES) utilizing Hydrogen Storage Technology for Data Center Applications," *Renewable Energy Journal*, Vol. 52, 2013, pp. 79-87.
41. Alireza Bahrami, **Daryush K. Aidun**, Daniel T. Valentine; "Interaction of Gravity Forces in Spot GTA Weld Pool"; *Research Supplement, Welding Journal*, April 2014 (won the **AWS McKay-Helm Award**).
42. Alireza Bahrami, Daniel T. Valentine, **Daryush K. Aidun;** "Modeling of Carbon Steel-Duplex Stainless Steel GTA Weld Pool"; *Research Supplement, Welding Journal*, July 2014.
43. Zhang Huan, Ding Weiqiang, **Aidun Daryush K;** "Mechanical Properties of Crystalline Silicon Carbide Nanowires,**"** *Journal of Nanoscience and Nanotechnology*, Vol. 15, No. 2, February 2015, pp. 1660-1668.
44. Alireza Bahrami, Daniel Valentine, Brian T. Helenbrook, **Daryush K. Aidun**; "Study of Mass Transport in Autogenous GTA welding of Dissimilar Metals," *International Journal of Heat and Mass Transfer*, Volume 85, June 2015, Pages 41-53.
45. Alireza Bahrami, Daniel T. Valentine, **Daryush K. Aidun**; "Computational analysis of the effect of welding parameters on energy consumption in GTA welding processes," *International Journal of Mechanical Sciences,* Volume 93, April 2015, Pages 111-119.
46. H. Eisazadeh, A. Achuthan, J. A. Goldak, **D. K. Aidun**; "Effect of Material Properties and Mechanical Tensioning Load on the Residual Stress Formation in the GTA 304-A36 Dissimilar Weld," *Journal of Materials Processing Technology*, Vol. 222, August 2015, Pages 344–355.
47. Alireza Bahrami, Brian T. Helenbrook , Daniel T. Valentine, **Daryush K. Aidun**, "Fluid flow and mixing in linear GTA welding of dissimilar ferrous alloys," *International Journal of Heat and Mass Transfer*, Volume 93, Feb. 2016, Pages 729-741.
48. H. Eisazadeh, J. Bunn, H.E. Coules, A.Achuthan, J. Goldak, and **D.K. Aidun**, "A Residual Stress Study in Similar and Dissimilar Welds," Research Supplement, *Welding Journal*, April 2016. (won the ***AWS A.F. Davis Silver Award*****).**

49. H. Eisazadeh, J. Bunn and **D.K. Aidun**, "Numerical and Experimental Investigation of Residual Stress Distribution in a Dissimilar Ferritic-Austenitic Weld," Research Supplement, *Welding Journal*, January 2017.
50. Fatemeh Hejripour and **Daryush K. Aidun**, "Consumable selection for arc welding between Stainless Steel 410 and Inconel 718," *Journal of Materials Processing Technology*, March 2017, 287-299.
51. Hamid Eisazadeh and **Daryush K. Aidun, "**Investigation of transient/residual strain and stress in dissimilar weld," *Journal of Manufacturing Processes*, March 2017.
52. M.P. LaCoursiere, **D.K. Aidun**, and D.J. Morrison, "Slow Strain Rate Testing for Hydrogen Embrittlement Susceptibility of Alloy 718 in Substitute Ocean Water", *Journal of Materials Engineering and Performance*, April 2017.
53. H. Eisazadeh, A. Payzant, Paris Cornwell, J. Bunn, **D.K. Aidun**, "Exploring the Cooling Process for Residual Stress Reduction in Dissimilar Welds," Research Supplement, *Welding Journal*, Nov. 2018.(won the **AWS A.F. Davis Silver Award**).
54. Hejripour, F., Binesh, F., Hebel, M., **Aidun, D. K**, "Thermal Modeling and Characterization of Wire Arc Additive Manufactured Duplex Stainless Steel", *Journal of Material Processing Technology*, 2019, 272:58-71.
55. Hejripour, F. & Valentine, D. & **Aidun, D. K**, "Study of Mass Transport in Cold Wire Deposition for Wire Arc Additive Manufacturing", *International Journal of Heat and Mass Transfer*, 2018, 125, 471-484.
56. M. PLIAZHUK, C. REYES, M.MARTINEZ, J. GOLDAK, H. NIMROUZI, AND **D.K. AIDUN**, "In-Situ Monitoring of Transient Strain Formation in Vertical Welds," *Welding Journal*, Sept. 2019, 251s-262s. (won the **AWS Charles H. Jennings Award**).
57. Hejripour, F. & Helenbrook, B. T. & Valentine, D. T. & **Aidun, D. K**, "Transport and Solidification Phenomenon in Dissimilar Metals Arc Welding", *International Journal of Heat and Mass Transfer*, Sept. 2019.
58. Fatemeh Hejripour & **Daryush Aidun**, "Effects of Processing Parameters on Wire Arc Additive Manufactured INCONEL718", Research Supplement, *Welding Journal*, March 2021. (won the **AWS Charles H. Jennings Award**).
59. Farrokh Binesh, Alireza Bahrami, Mark Hebel & **Daryush K. Aidun**, "Preservation of Natural Phase Balance in Multi-Pass and Wire Arc Additive Manufacturing-Made Duplex Stainless Steel Structures", *ASM Journal of Materials Engineering & Performance*, April 2021.
60. H. Eisazadeh, **D.K. Aidun,** "Residual stress reduction in dissimilar metals weld", *SME Journal of Manufacturing Processes*, April 2021.

PEER REVIEWED CONFERENCE PROCEEDINGS/PUBLICATIONS (38; **12 *IMECE***)

1. **Aidun D.K.** and Savage W.F., "Optimizing Repair Welding Technique in Cast Steels, "*Repair and Reclamation*, Edited by R.E. Dolby and K.G. Kent, The Royal Society / The Institute of Metals / The Welding Institute, London, UK, 24-24 September 1984, pp. 99 -110.
2. **Aidun D.K**., *Suh J.* and *Zacharia T.*, "Effect of Si on the Weldability of Austenitic Fe-Mn-Al Steels," *Advances in Welding Science and Technology*, Edited by S.A. David,ASM International, Gatlinburg, TN, 22-26 May 1986, pp. 151 - 157.

3. *Zacharia T.* and **Aidun D.K.**, "Effect of Composition and Machine Parameters on the Spot Weldability of Al Alloys," *Aluminum Alloys - Their Physical and Mechanical Properties*, Vol. I, Edited by E.A. Starke Jr. and T.H. Sanders Jr., Engineering Materials Advisory Services (EMAS) Ltd., Charlottesville, VA, 15-20 June 1986, pp. 155 - 167.
4. **Aidun D.K.**, "Weldability of Fe-Mn-Al Austenitic Steels," *International Welding Conference 87 (IWC 87)*, Indian Institute of Welding, New Delhi, India, 12-14 January 1987, pp. 651 - 656.
5. **Aidun D.K.**, *Zacharia T.* and Martukanitz R., "Hot Cracking Susceptibility of Al-Li-Cu-Mg Alloy," *INALCO '88*, Tokyo, Japan, 4-12 April 1988.
6. *Zacharia T.*, Eraslan A.H. and **Aidun D.K**., "WELDER: A Computer Code for Simulating Welding Processes," *Modeling and Control of Casting and Welding Processes IV*, Engineering Foundation, Palm Coast, FL, April 17-22, 1988, pp.177-185.
7. **Aidun D.K.** and *Suh J.H*., "Characteristics of Fe-Mn-Al Weldments," *Recent Trends in Welding Science and Technology*, Edited by S.A. David and J.M. Vitek, ASM International, Gatlinburg, TN, May 14-18, 1989, pp. 263 - 267.
8. *Domey J.*, **Aidun D.K.**, and Ahmadi G., "Numerical Simulation of GTA Welds on Titanium Alloys with Comparison to Experimental Results," *International Trends in Welding Science and Technology*, Edited by S.A. David and J.M. Vitek, ASM International, Gatlinburg, TN, June 1-5, 1992, pp. 81 - 85.
9. **Aidun D.K**., *Makhamreh K.M.*, and Morrison D.J., "Corrosion Resistance of Second-Generation Duplex Stainless Steel Weldments in NACE Solution," *ibid*., pp. 661 - 666.
10. **Aidun D.K.**, *Sun J.*, and Morrison D.J., "Weldability of P/M Alloys, " *ibid*., pp. 775 - 780.
11. *Stantz T.M.*, **Aidun D.K.**, and Morrison D.J., "Weldability of Boron Carbide Reinforced Aluminum, " *ibid*., pp. 781 – 785;
12. *Ma W.*, **Aidun D.K.**, and Sancaktar E., "Ultrasonic Welding of Polymer Materials," *ibid*., 1153 - 1157.
13. Sancaktar E., *Ma W.*, and **Aidun D.K.**, "Evaluation of Some Critical Parameters in Ultrasonic Welding of Thermoplastics," *Proceedings of the 16th Annual Meeting and the International Symposium on the Interphase* (The Adhesion Society), F.J. Boerio (ed), pp. 129 - 131 (1993).
14. **Aidun D.K.**, *Martin S.A.*, and *Domey J.J.*, "The Effect of Gravity on the Weld Pool Shape in Stainless Steel," *Centrifugal Materials Processing*, Edited by Regel and Wilcox, Plenum Press, New York, 1997.
15. **Aidun D.K.** and *Tabisz A*., "Influence of Gravity in Materials Fabrication," *48th International Astronautical Congress*, Oct. 1997, Turin, Italy.
16. **Aidun D.K**., "Weldability of Materials in High Gravity Environment", *4th International and 8th Annual Conference of Iranian Society of Mechanical Engineers (ISME 2000)*, Sharif University of Technology, Vol. 3, pp. 255 – 259 (2000).
17. **Aidun D.K.**, "Effect of Centrifugation on the FZ & HAZ of Cupronickel Weld", *Proceedings of the 2001 NSF Design, Services and Manufacturing Grantees and Research Conference*, January 7-10, 2001, Tampa, Florida.

18. **Aidun D.K**., "Joining & Welding of Advanced Materials: Metallurgical Properties of Dissimilar Welds," *Proceedings Of The Second International Conference In Welding,* 10-13 March 2002, Tehran, Iran, pp. 419 – 426.
19. *T. Gandhi,* R. Dixon, P. Rader, *R. Batane* and **D.K. Aidun** (PI), "Effect of Centrifugation on the Macrostructure and Microstructure of Welds", *Proceedings of the 2004 DMII/NSF Conference*, SMU, Jan. 4 – 8, 2004, Dallas, Texas.
20. *T. Gandhi* and **D.K. Aidun** (PI), "Effect of Enhanced Buoyancy Convection on the Microstructure of Dissimilar Welds," *Proceedings of the 2005 DMII/NSF Conference*, ASU, Jan. 5-9, 2005, Phoenix, Arizona.
21. A. Omid, **D. Aidun**, G. Ahmadi, "A Numerical Modeling for Electromagnetic Force of Arc Welding in High Gravity," *Proceedings of 14th Annual (International) Mechanical Engineering Conference* – May 2006, Isfahan, Iran.
22. *T. Gandhi* and **D.K. Aidun**, "Effects of Enhanced Convection on the Microstructure of Dissimilar Welds"; *Proceedings of the 7th International Conference on Trends in Welding Research*; ASM International; August 2006.
23. **D.K. Aidun** and *T. Gandhi*, "Effect of Convection on the Microstructure of Dissimilar Welds"; *Proceedings of International Symposium on Computer-Aided Welding Engineering*; Jinan, China; Oct. 2006.
24. K. LI, **D. AIDUN**, P. MARZOCCA, "Functionally graded material modeling of a thermally affected dissimilar metals joint," TS2007, 4-7 June 2007, Taipei, Taiwan.
25. *LaCoursiere Marissa,* **Aidun Daryush K**., Marzocca Pier "An Experimental Study Investigating the Corrosion Behavior of Cu-Ni Alloys in Waters Treated and Untreated With Anti-Corrosives;" **[IMECE2008-68374].**
26. O.M. AL-HABAHBEH, **D. K. AIDUN,** P. MARZOCCA, H. LEE, "Reliability Prediction for a Thermal System Using CFD and FEM Simulations," **[IMECE2008-68365]**
27. M. IZADI, **D.K. AIDUN**, P. MARZOCCA, H. LEE, "The Experimental Investigation of Fouling Phenomenon in Tubular Heat Exchangers by Heat Transfer Resistance Monitoring (HTRM) Method," **[IMECE2008-68366]**
28. O.M. AL-HABAHBEH, **D.K. AIDUN**, P. MARZOCCA, H. LEE, "Evaluation of Heat Transfer Effect on a Thermal System Using Numerical Simulation," **[IMECE2008-68368]**
29. K. LI, **D.K. AIDUN**, P. MARZOCCA, "3-D Thermo-Mechanical Analysis During FSW of Dissimilar Metals using FGM Concept," ASM International *Trends in Welding Research*, 2008.
30. K. LI, **D.K. AIDUN**, P. MARZOCCA, "Time-Varying FGM Thermal Modeling of FSW Joint of Dissimilar Metals," ASM International *Trends in Welding Research*, 2008.
31. **D.K. Aidun**, Kyle C. Lana, "SIMULATED ENHANCED BUOYANCY CONVECTION ON STRUCTURE OF 304 GMA WELDS," **[IMECE2008-68316]**
32. *Izadi M.,* **Aidun D.K**., Marzocca P. "The Effect of Geometrical Features on Air-Side Heat Transfer and Friction Characteristics, and Optimization of a Large-Size Plain Fin-and-Tube Heat Exchanger by 3-D Numerical Simulation;" **[IMECE 2009-12523]**
33. *Izadi M.,* **Aidun D.K.**, Marzocca P. "The Experimental Investigation of Fouling Phenomenon in Heat Exchangers by Heat Transfer Resistance Monitoring (HTRM) Method;" **[IMECE 2009-12524]**

34. *Al-Habahbeh O. M,* **Aidun D.K.**, Marzocca P. "Integrated Physics-Based Approach for the Reliability Prediction of Thermal Systems" **[IMECE 2009-13342]**
35. *Al-Habahbeh O. M,* **Aidun D.K.**, Marzocca P."Integrated Approach for Life Prediction of Complex Thermal Systems;" **[IMECE 2009-13343]**
36. *Shukla P.,* **Aidun D.K.**, Marzocca P. "Increasing the Efficiency of a Gas Turbine Power Plant by Waste Heat Recovery;" **[IMECE 2009-13347].**
37. *M.P. LaCoursiere,* **D.K. Aidun** and P. Marzocca, "An Experimental Study Investigating the Corrosion Behavior of Cu-Ni Alloys in Waters Treated and Untreated with Anti-Corrosives," **IMECE2009-13341].**
38. *M. Izadi, A. Bahrami,* **D.K. Aidun**, P. Marzocca, "Numerical Simulation of Deposition of Calcium Carbonate Particles Suspended in Turbulent Cooling Water Flow", **[IMECE2011-64565].**

DOMESTIC CONFERENCE PRESENTATIONS (30)

1. "Determination of Cooling Rates in Repair Welds in Cast Steels and Their Application to Selection of Optimum Welding Conditions," American Welding Society (AWS) Annual Meeting, April 5-10, 1980, Los Angeles, CA.
2. "Optimum Repair Welding Techniques in Cast Steels," American Welding Society (AWS) Annual Meeting, April 5-10, 1981, Cleveland, OH.
3. "Underbead Cracking in Cast Steel Repair Welds," AWS Annual Meeting, April 26-30, 1982, Kansas City, MO.
4. "Microstructural Studies of Repair Welds in Steel Castings," AWS Annual Meeting, April 25-26. 1983, Philadelphia, PA.
5. "Tensile and Impact Properties of the PTR and HAZ in Cast Steel Weldments," AWS Annual Meeting, April 8-13, 1984, Dallas, TX.
6. "Effect of Carbon on the Solidification Morphology of Fe-Mn-Al Austenitic Steels," TMS/AIME, March 2-6, 1986, New Orleans, LA.
7. "Report on Activities of the American Welding Institute (AWI)," AWS Annual Meeting, April 15-17, 1986, Atlanta, GA.
8. "All-Position Pulsed-Current GMAW of Second Generation Duplex Stainless Steels, "AWS Annual Meeting, April 25-29, 1993, Houston, TX.
9. Session Chair and Speaker, RSAFP/ASME Conference, "Weldability of Boron-Carbide Reinforced Aluminum Metal-Matrix Composites," Nov. 1994, Chicago, Ill.
10. "Effect of Temperature Distribution and Weld Pool Convection on Weldability of Light Alloys, "ASM Materials Week, Oct. 6-10, 1986, Orlando, FL.
11. "Growth of CdTe Single Crystals using Low Frequency Vibration Stirring by the Vertical Bridgman Technique," AIAA 26th Aerospace Science Meeting, Jan. 11-14, 1988, Reno, NV.
12. "WELDER: A Computer Code for Simulating Welding Processes." 4th Conference on Modeling of Casting and Welding Processes, sponsored by the Engineering Foundation, April 17-22, 1988, Palm Coat, FL.
13. "Diffusion Bonding of P/M Fe-Al Alloy," AWS Annual Meeting, April 1989, Washington D.C.

14. "Weldability of Fe-Mn-Al Austenitic and Duplex Steels," AWS Annual Meeting, April 1991, Detroit, MI.
15. "Tribological Film Deposition with a High Speed Coating Machine," CAMP Annual Report, 1997-1998, pp. 4.
16. "CAMP **Professor Aidun** Improves Surfaces with the High Speed Coating Machine," CAMP News Letter, Vol. 14(3), March 1999, pp.2-3.
17. "Tribological Film Deposition with a High Speed Coating Machine," CAMP Annual Report, 1998-1999, pp. 4-5.
18. "Weldability of Materials in Macro-gravity," AWS Annual Meeting, April 1996, Chicago, Ill.
19. Session Chair and Speaker, RSAFP/ASME Conference, "Weldability of Materials Under Enhanced Convection," April 14-18, 1997, Virginia Beach, VA.
20. "Tribological Film Deposition With a High Speed Coating Machine," Progress in Surface Engineering, ASM International Materials Solutions Conference & Expositions, Nov. 1-4, 1999, Cincinnati, Ohio.
21. "A Novel Technique for Resistance Welding of Aluminum to Steel," Materials Challenges in the Automotive Industry, ASM International Materials Solutions Conference & Expositions, Nov. 1-4, 1999, Cincinnati, Ohio.
22. "High Speed Powder Coating Process for Soft & Hard Substrates," Automotive Finishing' 2000, SME, May 2 – 4, 2000, Detroit, Michigan.
23. "The Effect of Gravity on the Weld Zone Shape of a pure Metal," 4th International Workshop on Materials Processing at High Gravity, May 29 – June 2, 2000, Clarkson University, Potsdam, NY.
24. "Effect of Enhanced Buoyancy Convection on Weld Shape, Size, and Microstructure," the 37th Annual Technical Meeting of the Society of Engineering Science, SES 2000, Oct. 23-25, 2000, University of South Carolina, Columbia, South Carolina.
25. "Effect of Enhanced Buoyancy Convection on Weld Microstructure," MAX INTERNATIONAL, May 6-10, 2001, Cleveland, Ohio.
26. "Effect of Enhanced Buoyancy Convection on the Microstructure of Dissimilar Welds," International Trends in Welding Research, ASM, May 15-19, 2005, Pine Mountain, Georgia.
27. "Investigation of Water Quality Requirements for Heat Exchangers," CAMP Technical Meeting, May 2008, Canandaigua, NY. Global Research Center, June 11, 2008, Albany, NY.
28. "Characteristics of Wire Arc Additive Manufacturing of Duplex Stainless Steel Tube"; Society of Manufacturing Engineers (SME) Conference; Dallas, TX (2018).
29. "Use of Neutron Diffraction Technique for Mapping of Residual Strains/Stresses in WAAM Structures" JAPAN-US NDT Symposium; Hawaii; July 8-12, 2018
30. "Use of Neutron Diffraction Technique for Measurement of Residual Strains/Stresses in Dissimilar Metal Welds (DMW)." JAPAN-US NDT Symposium; Hawaii; July 8-12, 2018.

INTERNATIONAL CONFERENCE PRESENTATIONS (15; **6 Key Note**)

1. "Optimizing Repair Welding Techniques in Cast Steels," The Institute of Metals/The Welding Institute, Sept. 24-25, 1984, London, UK.

2. "Weldability of Fe-Mn-Al Austenitic Steels," International Welding Conference, Jan. 12-14, 1987, New Delhi, India.
3. "The Effects of Surface Condition, Electrode Tip Shape, and Current on the Weld Penetration in High Purity 304 and 316 Stainless Steels," VAMAS Meeting at NationalPhysical Laboratory, Feb. 1989, Teddington, UK.
4. "Influence of Gravity in Materials Fabrication," 48th International Astronautical Congress, Oct. 6-10, 1997, Turin, Italy.
5. "High Speed Coating of Soft and Hard Substrates," Surface Technology/Protective Coatings, EUROMAT '99 (EUROPEAN CONGRESS on Advanced Materials & Processes), Sept. 27-30, 1999, Munich, Germany.
6. Presented a seminar titled "Weldability of Materials in Simulated High-Gravity Environment" to the Joining and Welding Research Institute, Osaka University, Osaka, Japan, May 14, 1999. (***Key Note).***
7. "Weldability of Materials in High Gravity Environment", 4th International and 8th Annual Conference of Iranian Society of Mechanical Engineers (ISME 2000), Sharif University of Technology, May 16-19, 2000, Tehran, Iran.
8. "Joining and Welding of Advanced Materials", First International Conference for Promotion of Suitable New Technologies, Amirkabir University of Technology, Nov. 12-14, 2001, Tehran, Iran. (***Key Note***)
9. "Effect of Convection on the Microstructure of Welds," International Symposium on CAWE'06, 19-22 October 2006, Jinan, China. (***Key Note***)
10. "Weldability of Dissimilar Metal Welds", 31st International Conference on Ocean, Offshore & Arctic Engineering (OMAE 2012)**,** Rio de Janeiro, 10-15 June 2012.
11. "Effect of Enhanced Convection on the Macro-Micro-structure of Dissimilar Ferrous Welds", 24th Annual International Conference on Mechanical Engineering, ISME 2016, Yazd, Iran, April 26-28, 2016.
12. "Residual Stresses in Dissimilar Ferrous Welds using Neutron Diffraction Technique", 24th Annual International Conference on Mechanical Engineering, ISME 2016, Yazd, Iran, April 26-28, 2016.
13. "Challenges in Weldability of Dissimilar Metals/Alloys", Dept. of Materials Engineering, Isfahan University of Technology, Isfahan, Iran, April 23, 2016. (***Key Note***).
14. "WELDABILITY of DISSIMILAR FERROUS ALLOYS"**,** III International Congress & 21st Technical Sessions on Welding and Joining Technologies, INTERJOIN, Gijon, Spain, May 2016. (***Key Note***)
15. "Challenges in AM of Dual Phase Alloys", School of Mechanical Engineering, Isfahan University of Technology, Isfahan, Iran, July 28, 2019. (***Key Note***)

BOOK/CHAPTERS CONTRIBUTIONS

- *Centrifugal Materials Processing,* by L.L. Regel & W.R. Wilcox, Plenum Press, 1997;
- *Editor; Chapter 3; "Heat Flow in Welding*;" *AWS Handbook 10TH Ed., Vol. I; (2019);*
- *Guest Editor; Metals* (ISSN 2075-4701) Special Issue: "Residual Stresses and Deformation in Dissimilar Metal Welds", June 2020-2021.

INTERNAL REPORTS

"WELDER: A COMPUTER CODE FOR SIMULATING FAST TRANSIENT THREE-DIMENSIONAL, THREE-PHASE, FLOW, TEMPERATURE AND MATERIAL COMPOSITION CONDITIONS DURING WELDING," Co-Authors; A.H. Eraslan and T. Zacharia, Clarkson University, Report No. MIE-142, Oct. 1986.

"CAMP Professor Aidun Begins Work on High Speed Coating Machine," Center for Advanced Materials Processing (CAMP) News Letter, Vol. 13(2), December 1997, pp. 7;
"High Speed Coating Machine," CAMP News Letter, Vol.13(4), June 1998, pp. 3-4.

COURSE DEVELOPMENT

Implemented the ME 595, Physical Metallurgy, in 1987, as a graduate course in the field of Materials Engineering;

Implemented the ME 490, Mechanical Behavior of Materials, in 1988, as an undergraduate professional elective course in the field of Materials Engineering;

Implemented the ME 492 and ME590, Welding Metallurgy and Advanced Welding Metallurgy, in 1990, as a professional elective course which includes laboratory/hands on projects for undergraduate and graduate students, respectively;

LABORATORY DEVELOPMENT

Implemented metallography facilities and equipment through grants and gifts;
Implemented the welding laboratory equipped with Shielded Metal Arc, Cold-Wire Gas Tungsten Arc, Gas Metal Arc, Resistance Spot, and Ultrasonic Welding Processes;

COURSES TAUGHT

UNDERGRADUATE

Powder Metallurgy @ University of Tennessee, Fall 1988, Knoxville, TN. Production Planning & Control, Strength of Materials, Thermodynamics @ Tn State U. (Summer 2016). Analyses of Materials Processing, Dynamics, Machine Design, Materials Selection, Mechanical Behavior of Materials, Materials Science & Engineering, Materials Characterization Laboratory, Welding Metallurgy (ME 492; Every Fall), Advanced/Additive Manufacturing Processes (ME 390; Every Spring).

GRADUATE

Advanced Welding Metallurgy (ME 590) Physical Metallurgy (ME 595) Additive Mfg. (ME 503)

UNIVERSITY/DEPATMENTAL ACTIVITIES

- Member of Center for Advanced Materials Processing (CAMP) Faculty, 1997 – present.
- Member of the University's Academic Integrity Committee, 1998 – 2000.
- Vice-Chair of the Materials Concentration Program (School of Engineering), 1997 – present.
- Served on numerous Ph.D. and M.S. exam/defenses in the School of Engineering, 1983 – present.

- Member of the Graduate Committee of the MAE Dept. 1998 - present.
- Faculty Advisor to DOE's Design Challenge '98 and '99; received $4,000 from Institute of Paper Science & Technology (IPST), for Undergraduate Design Project.
- Faculty Advisor to Clarkson University's Technical Association for Pulp & Paper Industry (TAPPI) Student Chapter, 1998-1999.
- Review Session Instructor for Fundamentals of Engineering Exam, Material Science, 1995-1998, 2001.
- Chairman of the Manufacturing Engineering Group (School of Engineering), 1986 - 1988.
- Responsible for recruiting graduate students, seminars, and Ph.D. qualifying exams for students in the Engineering Science Program.
- Laboratory Director of the MAE Dept., 1985 – 1988, 2000-2001.
- Responsible for upgrading the ME 370 Lab. as well as the machine shop facilities, and developing the Materials Evaluation Lab. (MEL).

ADVISEES (Date of Graduation)

Ph.D. 14

Thomas Zacharia (1988; Laboratory Director@ ORNL, V.P. of the Qatar Foundation); Jay Sun (1988; South Korea); K. Makhamreh (1992; co-owner of CLEAN LINK Inc.); June Shen (1994); Jeff Domey (1997; winner of NASA Fellowship, Technical Manager, Corning Inc.; co-Advisor Dr. G. Ahmadi); Kejing Li (2009); O. Alhababeh (2010; Faculty of Mechanical Engineering @ University of Jordan; Co-Advisor Dr. P. Marzocca); M. Izadi (2010, Mechanical Engineer @ Kiewit Co.); Zhang Huan (2013; Argon National Lab. Co-Advisor Dr. Wei Ding), Mahmood Izadi (Consultant, Houston, TX), Alireza Bahrami (2014; R&D Engineer, Fulton Co.); Marissa LaCoursiere (2014, General Dynamics, co-Advisor Dr. D. Morrison); Hamid Eisazadeh (2018; Asst. Prof. Old Dominion Univ); Fatemeh H. Rafsanjani (2019; Staff Scientist @ CARRIER Corp.); Farrokh Binesh (2020); Quality Engineer, @ Engineered Plastics Components Co.); Heather Sterling (Metallurgist @ ALCOA Tech Center), & Mehdi Mortazavi-Yazdi, both in progress.

M.S. 21

R. Ragavendra, Randy Bennett, A. Nagras, Patricia Martin, Gary Rosen.
Jeff Domey (winner of Gold Award, Lincoln Foundation's Student Engineering Design Competition, Nov. 1993; Daily Courier Observer, Page 2, Dec.8, 1993).
James Brock (1994, Chief Metallurgist, ALCOA, Massena, NY). Scott Martin (1995, winner of AWS Fellowship). Kathy Baker (1998), Chao Liu (2001), Adam VanZutphen (2001), T. Gandhi (2004), Justin Schrader (2005), Dale Donaldson (2005, Process Engineer, ALCOA, Massne, NY), Farley Postgate (2005; Carrier Co.), Mike J. King (2008), A. Ekbote (2008), R. Crocker (2008), Marissa LaCoursiere (2009), P. Shukla (2010), N. Patel (2010);

M.E. 11
Dave Williams (1994), Steve Zanon (1994), Danniel Giovani (1994), Arthur Tabisz (1997), Juan Blanco (1998), Scott Crary (1998), Keri Chequiri (2005), Joe Franco (2007), Bryan Shantz (2007), Thompson (2010), K. Hanley (2010);

Mentor to Undergraduate Student Projects in the Field of Fabrication/Manufacturing (>30)
A.K. Lippert (1986-87), Norm Zayek (1996-97), Dan McBride (1997-98), J.J. Connoly (1997-98), Craig Burkhard (1997-98), John P. Dean (1997-98), Nariman D. Aidun (1998), Keith Butzgy (1998), Sonal Darji (1998), Mathew Davis (1998), James Lychalk (1999), Steven Boslet (1999), Adam VanZutphen (1999, REU/NSF, winner of Scientific Merit Award from Clarkson University), Kevin Gay (2000, REU/NSF), Todd Gloo (2000, REU/NSF), Farley Postgate (2000, REU/NSF), Jason Camp (2001, REU/NSF), Josh Waligory (2001, REU/NSF), Brian Clark (2001, REU/NSF), Ben Collier (2001, REU/NSF), Brian R. McLean (2002, REU/NSF), Robert Dixon & Paul Rader (2002 RET/NSF), Rex Lazzo (2016-2017), Eric Perez (2019), Qinwei Li (2019), Michael Salo (2019 – 2021; Honor Student), Cole Cappon (2019), Josh O'Connors (2020), John Abplanap (2020), Keanu Menezes (2022).

List of References:

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