David P. Yan, Ph.D.

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Education

Doctor of Philosophy **2009-2013**
Deakin University, Australia
University of Ontario Institute of Technology, Canada (visiting PhD student) **2011-2013**
Thesis: Machinability and Material Behaviour during Cutting of Titanium-5Al-5Mo-5V-3Cr-0.5Fe

Master of Philosophy (1st Hons) **2007-2009**
Auckland University of Technology, New Zealand
Thesis: Study of Shoulder Flow Zone Forming Mechanism in Thick Section Friction Stir Welding of 6061 Aluminum Alloy Using Scroll Shoulder Tool

Bachelor of Engineering in Mechanical Engineering (Hons) **2004-2007**
Auckland University of Technology, New Zealand (Bachelor of Mechanical Engineering is ABET-accredited program under the Washington Accord)

Awards and Scholarships

- **Major Research Instrumentation Award (MRI),** National Science Foundation **2019**
- **University Undergraduate Research Grants (URG),** San Jose State University **2019**
- **CoE Professional Development Grants (PDGs),** San Jose State University **2019**
- **University Professional Development Grant,** San Jose State University **2017**
- **CoE Professional Development Grants (PDGs),** San Jose State University **2017**
- **Research Council Award,** University of Wisconsin-Green Bay **2016**
- **Grants-In-Aid of Research Award,** University of Wisconsin-Green Bay **2015**
- **Publication Scholarship,** Deakin University **2014**
- **Australian Postgraduate Awards**, Australian Federal Government **2012**
- **Graduate Scholarship**, University of Ontario Institute of Technology **2011**
- **Research for Industry Scholarship**, Auckland University of Technology **2009**

Research Experience

Assistant Professor of Manufacturing Technology **Since Fall 2017**
Department of Aviation & Technology, San José State University, CA
Research interests include experimental and numerical studies of severe plastic deformation processes for metals, metallic powders as well as bulk metallic glasses; applied research and industrial applications in innovative materials, advanced manufacturing and tooling solution such

as characterizing advanced aluminum metal matrix composites and zirconium based bulk metallic glasses, high speed machining of aerospace alloys-Ti 5553, friction stir welding of dissimilar materials, friction stir additive manufacturing, and sustainable manufacturing.

Assistant Professor of Mechanical Engineering Technology (Graduate Faculty)
Spring 2015-Spring 2017
College of Science and Technology, University of Wisconsin-Green Bay, WI, US
Research interests include study of severe plastic deformation processes for metals and bulk metallic glasses; applied research in advanced manufacturing technology such as high speed machining of aerospace alloys-Ti 5553, micro-machining zirconium based bulk metallic glasses, friction stir welding of dissimilar materials, friction stir additive manufacturing.

Adjunct Assistant Professor of Mechanical Engineering **Fall 2014**
Department of Engineering and Physics, Abilene Christian University, TX, US
Performed applied research projects: Drilling and Characterization of Ti-5553 between Oct. 15-Nov. 30, 2014, as a Visiting Academic of Deakin University, Australia

Doctor of Philosophy Research **Fall 2009-Fall 2013**
Department of Mechanical Engineering, Deakin University, Australia
Department of Automotive, Mechanical and Manufacturing Engineering, University of Ontario Institute of Technology, Canada
Doctoral dissertation research conducted with Drs. Tim Hilditch, Guy Littlefair and Hossam Kishawy.

- Extensively researched the machinability and material behavior during cutting of Titanium alloy-Ti-5Al-5Mo-5V-3Cr-0.5Fe and its application in the aircraft structural and engine components, e.g. landing gear and engine compressor sections (focus on machined surface integrity characterized by cutting temperatures, strains and strain rates, and microstructural evolution, i.e. phase transformation and work hardening in relation to cutting conditions).
- Implemented metallurgical analyses of machined titanium samples including SEM, XRD, electron microprobe and nano-indentation characterization, and image analyses of optical and SEM micrographs using Image J.
- Resulted in three journal papers and three international peer-reviewed conference proceedings.

Master of Philosophy Research (part-time) **Fall 2007-Spring 2009**
Department of Mechanical and Manufacturing Engineering, Auckland University of Technology, New Zealand
Master's thesis research conducted with Drs. Zhan Chen and Guy Littlefair.

- Comprehensively investigated the forming mechanism of shoulder flow zone during scroll tool friction stir welding (FSW) thick section 6061 aluminum alloy (concentrated on tracing and quantifying weld zone material flow induction and formulating a guideline to achieve defect-free friction stir welds).
- Conducted non-destructive X-ray testing and optical micrograph characterization on aluminum friction stir weldment.
- Resulted in one published book and three international peer-reviewed conference proceedings.

Research Engineer (Materials) **Fall 2007-Spring 2008**

Engineering Research Institute, Auckland University of Technology (AUT), New Zealand

- Designed, developed and optimized FSW tooling and processing parameters in AUT laboratory, and provided project management and consulting services in New Zealand manufacturing industry.
- Reduced the overall fabrication cost by 25% for ship building company and its contractor (Donovan Group NZ Ltd) through the implementation of FSW systems to join aluminum plates for forming the cabin wall and front deck of the naval patrol ship.
- Designed and optimized holding/clamping systems to butt/lap joint thick aluminum and copper structures.

Mechanical Engineer (Friction Stir Welding) **Fall 2006-Spring 2007**

Buckley Systems Limited, Auckland, New Zealand

- Designed and fabricated non-tilted FSW tools to join thick aluminum plates for making vacuum chambers used in semi-conductor ion implant systems.
- Reduced the overall fabrication cost by 30% by designing and implementing FSW systems to upgrade the existing machining and fabrication processes.
- Designed, evaluated and optimized FSW processing parameters to achieve defect-free weld structure in thick aluminum sections (1.5 inches), and developed holding/clamping systems for FSW of aluminum vacuum chamber components.

Undergraduate Research Assistant (part-time) **Fall 2005-Spring 2006**

Engineering Research Institute, Auckland University of Technology, New Zealand

- Researched advanced materials processing technologies including FSW of metals and light metals, sheet-metal forming and aluminum casting and extrusion process.
- Designed and developed FSW tools and processing parameters to butt join dissimilar thin aluminum, steel and copper plates.
- Conducted materials testing and metallurgical analyses including mechanical properties testing and optical & electron microscopes characterization.

University Teaching Experience

Assistant Professor of Manufacturing Technology **Since Fall 2017**

Department of Aviation & Technology, San José State University, CA

Courses taught including

- Green and Sustainable Product Design (lecture and lab)
- Senior Project I
- Introduction to Engineering Materials (lecture and lab)
- Senior Project II
- Introduction to Electronics (lecture and lab)

Assistant Professor of Mechanical Engineering Technology (Graduate Faculty)

Spring 2015-Spring 2017

College of Science and Technology, University of Wisconsin-Green Bay, WI, US

Developed mechanical engineering technology curriculums between Spring 2015 (full-time appointment) and Summer 2015 (50% appointment), then taught twenty-one credit courses from Fall 2015 (full-time 3-year appointment) to Spring 2017.
Courses taught including

- Chemistry for Engineers (lecture and lab)
- Engineering Materials (lecture and lab)
- Mechanical Design
- Mechatronics (lecture and lab)
- Fluid Mechanics

Graduate advisor responsible for advising graduate work in the areas of sustainable manufacturing and environmentally conscious manufacturing.

Adjunct Assistant Professor of Mechanical Engineering **Fall 2014**
Department of Engineering and Physics, Abilene Christian University, TX, US
Taught Engineering and Physics I & II and participated in B.S. of Mechanical Engineering program curriculum development and ABET accreditation preparation.

Graduate Teaching Assistant **Fall 2011-Spring 2013**
Department of Automotive, Mechanical and Manufacturing Engineering, University of Ontario Institute of Technology, Canada
Performed teaching duties for undergraduate courses including

- Advanced Solid Mechanics and Stress Analysis
- Dynamics
- Manufacturing and Production Processes
- Solid Mechanics

Undergraduate Teaching Assistant **Fall 2007-Spring 2008**
Department of Mechanical and Manufacturing Engineering, Auckland University of Technology, New Zealand
Conducted classroom tutorial and laboratory preparation for upper year undergraduate courses including

- Engineering Materials
- Advanced Manufacturing Technology
- Advanced Engineering Mathematics
- Dynamic Systems and Controls

University Service

SJSU University Program Planning Committee **Fall 2019-Spring 2022**
San José State University (SJSU)

Research Committee of College of Engineering **Fall 2019-Spring 2020**
San José State University

SJSU Undergraduate Studies Committee **Fall 2018-Spring 2019**
San José State University (SJSU)

Graduate Studies Committee of College of Engineering **Fall 2018-Spring 2019**
San José State University

Research Committee of Aviation & Technology Department **Since Fall 2018**
San José State University

Technology Curriculum Development Committee of Aviation & Technology Department **Since Fall 2017**
San José State University

Scholarship Committee of Aviation & Technology Department **Since Fall 2017**
San José State University

UWGB Environmental Science & Policy Graduate Program Committee
University of Wisconsin-Green Bay (UWGB) **Fall 2016- Spring 2017**

UWGB Engineering Program Accreditation Committee **Spring 2015- Spring 2017**
University of Wisconsin-Green Bay (UWGB)

Engineering Technology Program Curriculum Development Committee of Natural & Applied Sciences Department **Spring 2015- Spring 2017**
University of Wisconsin-Green Bay (UWGB)

The Public Service Alliance of Canada for Teaching and Research Assistants
University of Ontario Institute of Technology, Canada **Fall 2011-Spring 2012**

Society of Student Engineers **Fall 2005-Spring 2007**
Auckland University of Technology, New Zealand

Professional Service

- Symposium Co-Organizer, Powder Metallurgy of Light, Reactive and Other Non-ferrous Metals Symposium, sponsored by the Materials Science & Technology (MS&T) 2020, October 4-8, 2020, in Pittsburgh, PA.
- Symposium Co-Organizer, Advanced Microelectronic Packaging, Emerging Interconnection Technology, and Pb-free Solder Symposium, sponsored by The Minerals, Metals & Materials Society (TMS) held during the TMS 2020-149th Annual Meeting & Exhibition, Feb. 23-27, 2020 in San Diego, CA.
- Technical Workshop Co-Organizer, Advanced Packaging and Interconnection Workshop, sponsored by The Minerals, Metals & Materials Society (TMS) held during the TMS 2020-149th Annual Meeting & Exhibition, Feb. 23-27, 2020 in San Diego, CA.
- Symposium Co-Organizer, Powder Metallurgy of Light, Reactive and Other Non-ferrous Metals Symposium, sponsored by the Materials Science & Technology (MS&T) 2019, September 29-October 3, 2019 in Portland, OR.
- Symposium Co-Organizer, Advanced Microelectronic Packaging, Emerging Interconnection Technology, and Pb-free Solder Symposium, sponsored by the Materials Science & Technology (MS&T) 2019, September 29-October 3, 2019 in Portland, OR.
- Judge, TMS 2019 Bladesmithing Competition sponsored by The Minerals, Metals & Materials Society (TMS) held during the TMS 2019-148th Annual Meeting & Exhibition, March 10-14, 2019 in San Antonio, TX.

- Symposium Co-Organizer, Friction Stir Welding and Processing X Symposium, sponsored by The Minerals, Metals & Materials Society (TMS) held during the TMS 2019-148th Annual Meeting & Exhibition, March 10-14, 2019 in San Antonio, TX.
- Symposium Co-Organizer, Friction Stir Welding and Processing IX Symposium, sponsored by The Minerals, Metals & Materials Society (TMS) held during the TMS 2017-146th Annual Meeting & Exhibition, February 26-March 2, 2017, San Diego, CA.
- Active Member, the Additive Manufacturing Bridge Committee, TMS.
- Active Member, the Shaping and Forming Committee, TMS.
- Active Member, the Biomaterials Committee, TMS.
- Active Member, the Titanium Committee, TMS.
- Active Member, the Powder Materials Committee, TMS.
- Active Member, the Electronic Packaging & Interconnection Materials Committee, TMS

Publications

Books:

1. D. P. **Yan**, Z. W. Chen and G. Littlefair, "Friction Stir Welding of Thick Section 6061 Aluminium Alloys Using Scroll Shoulder Tool". LAP Lambert Academic Publishing, Köln, 2010. ISBN: 978-3-8383-0394-9.

Books Edited:

1. Yuri Hovanski, Rajiv Mishra, Yutaka Sato, Piyush Upadhyay and David **Yan**, Editors, "Friction Stir Welding and Processing X": Springer International Publishing, 2019. ISBN: 978-3-030-05751-0. DOI: 10.1007/978-3-030-05752-7.
2. Yuri Hovanski, Rajiv Mishra, Yutaka Sato, Piyush Upadhyay and David **Yan**, Editors, "Friction Stir Welding and Processing IX". Springer International Publishing, 2017. ISBN: 978-3-319-52382-8. DOI: 10.1007/978-3-319-52383-5.

Journal Papers:

1. David P. **Yan** and Xiaoliang Jin, "Study of Serrated Chip Formation and Microstructural Evolution in Relation to Machining Conditions in Turning Ti–5553", International Journal of Advanced Manufacturing Technology, JAMT-D-19-03395, under review submitted on September 3, 2019.
2. Naresh K. Maroju, David P. **Yan**, Boyuan Xie, and Xiaoliang Jin, "Investigations on Surface Microstructure in High-Speed Milling of Zr-based Bulk Metallic Glass", Journal of Manufacturing Processes, Vol. 35, (2018), pp. 40-50. DOI: 10.1016/j.jmapro.2018.07.020
3. Dan Huang, David P **Yan**, Siming Ma, and Xiaoming Wang, "Scandium on the Formation of In-Situ TiB2 Particles in an Aluminum Matrix", Journal of Materials Research, (2018), pp. 1-7. DOI: 10.1557/jmr.2018.208
4. **Yan**, D. P., Hilditch, T., Kishawy, H. A. and Littlefair, G., "On Quantifying the Strain Rate during Chip Formation when Machining Aerospace Alloy Ti-5553", Procedia CIRP, Vol. 8, (2013), pp.122–127. DOI: 10.1016/j.procir.2013.06.076
5. **Yan,** D. P., Littlefair, G. and Pasang, T. "Study of Phase Transformation and Work Hardening Phenomenon during Drilling of Ti-5553 and Ti-64", Int. J. Machining and Machinability of Materials, Vol. 10, No. 4, (2011) pp.264–279. DOI: 10.1504/IJMMM.2011.043089

Conference Proceedings (Peer-reviewed):

1. Obi, S., **Yan**, D. P., & Ostovari, P., "Industrial Technology Programs at SJSU: Silicon Valley Perspectives and Implications for ATMAE", The Proceeding of 2018 Annual Conference of the Association of Technology, Management, and Applied Engineering (ATMAE), November 7-9, 2018, Kansas City, Missouri, pp. 120-121.
2. **Yan**, D., Wang, X. and Littlefair, G., "Flow Features in Shoulder Zone during Scroll Tool Friction Stir Welding Thick 6061 Aluminum Plates". Y. Hovanski et al. (eds.), Friction Stir Welding and Processing IX. The Minerals, Metals & Materials Series, pp. 137-143, the TMS 2017, DOI 10.1007/978-3-319-52383-5_15.
3. Xie, B., Kumar, M., **Yan**, D. and Jin. X., "Material Behavior in Micro Milling of Zirconium based Bulk Metallic Glass". Supplemental Proceedings. The Minerals, Metals & Materials Series, pp. 363-373, the TMS 2017, DOI 10.1007/978-3-319-51493-2_34.
4. Liu, X., Liu, Y., **Yan**, D., Han, Q. and Wang, X., "Aluminum Alloys with Tailored TiB2 Particles for Composite Applications". A.P. Ratvik (ed.), Light Metals 2017. The Minerals, Metals & Materials Series, pp. 181-186, the TMS 2017, DOI 10.1007/978-3-319-51541-0_25.
5. **Yan**, D. P., Hilditch, T., Kishawy, H. A. and Littlefair, G., "Shear Displacement and Actual Strain during Chip Segmentation when Cutting Aerospace Alloy Ti-5553". S. J. Ikhmayies et al. (ed.), Characterization of Minerals, Metals, and Materials 2016. the TMS (The Minerals, Metals & Materials Society) 2016-145th Annual Meeting & Exhibition, February 14–18, 2016, Nashville, TN, pp. 753-760.
6. **Yan**, D. P., Littlefair, G., Pasang, T. and Kishawy, H. A., "An Investigation of Actual Strain during Chip Formation when Cutting Ti–5Al–5Mo–5V–3Cr–0.5Fe". The 1st International Conference on Virtual Machining Process Technology (CIRP sponsored conference), 28th May-1st June, 2012, Montreal, Canada, pp. 1-8.
7. David **Yan**, Guy Littlefair and Tim Pasang, "Deformation Induced Phase Transformation during Machining of Ti-5Al-5Mo-5V-3Cr–0.5Fe". Supplemental Proceedings: Volume 2: Materials Fabrication, Properties, Characterization and Modeling, the TMS (The Minerals, Metals & Materials Society) 2011-140th Annual Meeting & Exhibition, February 27-March 3, 2011, San Diego, CA, pp. 633-640.
8. David P. **Yan**, Guy Littlefair and Zhan W. Chen, "Material Flow Forming the Shoulder Flow Zone Using Scroll Shoulder Tool during Friction Stir Welding of Thick Section Aluminum alloys". Supplemental Proceedings: Volume 1: Materials Processing and Properties, the TMS (The Minerals, Metals & Materials Society) 2010-139th Annual Meeting & Exhibition, February 14-18, 2010, Seattle, WA, pp. 323-329.
9. David P. **Yan**, Zhan W. Chen and Guy Littlefair, "Correlation between Shoulder Flow Zone Quality and Material Flow Quantity during Friction Stir Welding of Thick Aluminum Section Using Scroll Shoulder Tool". Supplemental Proceedings: Volume 3: General Paper Selections, the TMS (The Minerals, Metals & Materials Society) 2010-139th Annual Meeting & Exhibition, February 14-18, 2010, Seattle, WA, pp. 227-233.

Conference Presentations:

<u>Invited Talks:</u>

1. David **Yan**, "Flow Patterns and Joint Quality in Scroll Tool Friction Stir Welding Al and Al-to Cu Structures", Department of Mechanical Engineering, Tennessee Tech University, April 14, 2017, Cookeville, TN 38505.

Oral Presentations:

1. Chang, H., Silberman, J. and **Yan,** D. P., “Investigation to Micro Friction Stir Spot Welding Al and Cu Sheets to Foils for Automotive Lithium-ion Battery Cells Assembly”, in the Advanced Microelectronic Packaging, Emerging Interconnection Technology and Pb-free Solder Symposium held during the Minerals, Metals & Materials Society (TMS) 2020-149th Annual Meeting & Exhibition, February 23-27, 2020, San Diego, CA, accepted in August 2019.
2. Silberman, J., Chang, H. and **Yan**, D. P., “Effect of Tool Speeds on Joint Characteristics in Friction Stir Spot Joining Zr-based BMG to Al Alloy”, in the Bulk Metallic Glasses XVII Symposium held during the Minerals, Metals & Materials Society (TMS) 2020-149th Annual Meeting & Exhibition, February 23-27, 2020, San Diego, CA, accepted in August 2019.
3. **Yan**, D., Wang, X. and Littlefair, G., "Flow Features in Shoulder Zone during Scroll Tool Friction Stir Welding Thick 6061 Aluminum Plates", Friction Stir Welding and Processing IX Symposia- Lightweight Applications, sponsored by the TMS (The Minerals, Metals & Materials Society) held during the TMS 2017-146th Annual Meeting & Exhibition, February 26-March 2, 2017, San Diego, CA.
4. **Yan**, D. P., Hilditch, T., Kishawy, H. A. and Littlefair, G., “On Quantifying the Strain Rate during Chip Formation when Machining Aerospace Alloy Ti-5553”, The 14th CIRP Conference on Modeling of Machining Operations (CIRP CMMO 2013), June 13-14, 2013, Torino, Italy.
5. **Yan**, D. P., Littlefair, G., Pasang, T. and Kishawy, H. A., "An Investigation of Actual Strain during Chip Formation when Cutting Ti–5Al–5Mo–5V–3Cr–0.5Fe". The 1st International Conference on Virtual Machining Process Technology (CIRP sponsored conference), May 28 -June 1, 2012, Montreal, Canada.
6. David **Yan**, Guy Littlefair and Tim Pasang, "Deformation Induced Phase Transformation during Machining of Ti-5Al-5Mo-5V-3Cr–0.5Fe". Deformation, Damage, and Fracture of Light Metals and Alloys Symposium-Session III, sponsored by the TMS (The Minerals, Metals & Materials Society) held during the TMS 2011-140th Annual Meeting & Exhibition, February 27-March 3, 2011, San Diego, CA.
7. David P. **Yan**, Guy Littlefair and Zhan W. Chen, “Material Flow Forming the Shoulder Flow Zone Using Scroll Shoulder Tool during Friction Stir Welding of Thick Section Aluminum alloys”. Global Innovations in Manufacturing of Aerospace Materials: The 11th MPMD Global Innovations Symposium: Innovations in Primary and Secondary Forming-Aluminum, Magnesium, and Titanium Aluminides / Innovations in Machining and Joining, sponsored by the TMS (The Minerals, Metals & Materials Society) held during TMS 2010-139th Annual Meeting & Exhibition, February 14-18, 2010, Seattle, WA.
8. David P. **Yan**, Zhan W. Chen and Guy Littlefair, “Correlation between Shoulder Flow Zone Quality and Material Flow Quantity during Friction Stir Welding of Thick Aluminum Section Using Scroll Shoulder Tool”. Materials Processing and Manufacturing Division-Welding Symposium, sponsored by the TMS (The Minerals, Metals & Materials Society) held during TMS 2010-139th Annual Meeting & Exhibition, February 14-18, 2010, Seattle, WA.

Poster Presentations:

1. **Yan**, D. P., “On Quantifying Amorphous to Crystalline Phase Transition during Micro Milling Zr-based Bulk Metallic Glasses”. Bulk Metallic Glasses XV Symposium-Poster

Session, sponsored by the TMS (The Minerals, Metals & Materials Society) held during TMS 2018-147th Annual Meeting & Exhibition, March 11-15, 2018, Phoenix, Arizona.

2. **Yan**, D. P., Hilditch, T., Kishawy, H. A. and Littlefair, G., "Shear Displacement and Actual Strain during Chip Segmentation when Cutting Aerospace Alloy Ti-5553". Characterization of Minerals, Metals, and Materials Symposium-Poster Section, sponsored by the TMS (The Minerals, Metals & Materials Society) held during TMS 2016-145th Annual Meeting & Exhibition, February 14–18, 2016, Nashville, TN.

Reviews:

PhD Thesis:

1. Manikandakumar Shunmugavel (2017) “Machinability Studies of Selective Laser Melted Titanium Alloy Ti-6Al-4V”. PhD Thesis, David **Yan** (Examiner), Deakin University HDR Examinations, Australia, Spring 2017.

Grants

1. Ozgur Keles (PI), David **Yan** (Co-PI), Birsen Sirkeci (Co-PI), Raymond Yee (Co-PI) and Feruza Amirkulova (Co-PI), (Fall 2019), MRI: “Acquisition of a Metal Additive Manufacturing System” grant of $326,960 from the National Science Foundation, awarded on August 20, 2019.
2. David **Yan** (PI), (Spring 2019), Undergraduate Research Grants: “Cutting Force and Temperature in Machining Zr-based Metallic Glass” of $1,000 from the Office of the Provost, SJSU, awarded on June 14, 2019
3. David **Yan** (PI), (Spring 2019), Undergraduate Research Grants: “Surface Microstructure in Machining Zr-based Metallic Glass” of $1,000 from the Office of the Provost, SJSU, awarded on June 14, 2019.
4. David **Yan** (PI), (Spring 2019), Professional Development Grant of $1,500 from the CoE, SJSU, awarded.
5. David **Yan** (PI), (Spring 2019), “Crack Repair with Friction Stir Welding” grant of $230,000 from The Department of Navy, Naval Air Systems Command, submitted for review.
6. David **Yan**, (PI) and Jin, X. (Co-PI), (Spring 2019), “Investigation to the Influence of Tool Geometry on the Tool Life and Surface Microstructure Alternation when Cutting Aerospace Alloys AISI 4340M”. This will seek funding of $240,000 from the DoE’s Advanced Manufacturing Office, in process for submission.
7. David **Yan** (PI), W. Richard Chung (Co-PI) and Po-Ya Abel Chuang (Co-PI), (Fall 2018), Small Group Collaborative RSCA Project: “Using Micro Friction Stir Processing to Modify Catalyst Nanocrystalline Structure for Electrocatalytic Activity Enhancement” requested for funding of $100,000 from the CoE, SJSU, submitted but not awarded.
8. David **Yan**, (PI), (Fall 2017), TechShop Faculty Liaision Grant of $5000 from the Student and Faculty Success, SJSU, submitted but not awarded.
9. David **Yan**, (PI), (Fall 2017), Professional Development Grant of $1500 from the CoE, SJSU, awarded.
10. David **Yan**, (PI), (Fall 2017), UNIV 101 Professional Development Grant of $1000 from the Academic Affairs, SJSU, awarded.

11. David **Yan**, (PI), (Fall 2017), Faculty Diversity Development Research, Curricular and Creative Activities Award of $5000 from the Office of Diversity, Equity & Inclusion, SJSU, submitted but not awarded.
12. David **Yan** (Co-PI), (Fall 2016), One Time University Funds of $64,309 for Automation Laboratory Setup from the College of Science and Technology, University of Wisconsin-Green Bay, awarded.
13. David **Yan** (PI), (Fall 2016), Grants in Aid of Research of $900 to co-organize and present a paper on the Friction Stir Welding and Processing IX Symposium of the TMS 2017, University of Wisconsin-Green Bay, awarded.
14. David **Yan** (PI), (Fall 2016), Student Success/Retention One-Time Funds for Engineering Workshop of $35,700 from the University of Wisconsin-Green Bay, submitted but not awarded.

Reviewer

- Independent Merit Reviewer, The Shota Rustaveli National Science Foundation of Georgia, Georgia, since 2019
- Independent Merit Reviewer, Fiscal Year 2019-20, the Department of Energy's Consolidated Innovative Nuclear Research FOA Proposals
- Independent Merit Reviewer, Fiscal Year 2018-19 and 2019-20, the Department of Energy's Small Business Innovation Research (SBIR) Phase II Release 2 Proposals
- Independent Merit Reviewer, Fiscal Year 2018-19 and 2019-20, the Department of Energy's Technology Commercialization Fund Proposals
- ASME, Journal of Manufacturing Science and Engineering since 2016
- Inderscience, International Journal of Manufacturing Research since 2016

Professional Memberships

- Member of the Epsilon Pi Tau (EPT) International Honor Society for Technology, since 2018
- Member of the Association of Technology, Management, and Applied Engineering (ATMAE) since 2018
- Member of the TMS (The Minerals, Metals & Materials Society) since 2014