TEXAS STATE VITA

I. Academic/Professional Background

A. Name: Byoung-Hee You

Title: Professor
Email: by12@txstate.edu

B. Educational Background

Degree	Year	University	Major	Thesis/Dissertation
Ph.D.	2008	Louisiana State University, LA	Mechanical Engineering	Microassembly Technology for Modular, Polymer Microfluidic Devices
M.S.	1996	Yeungnam University, Korea	Mechanical Engineering	A Study on an Automatic Seam Tracking System for Sheet Metal Arc Welding
B.S.	1994	Yeungnam University, Korea	Mechanical Engineering	

C. University Experience

Position	University	Dates
Professor, Dept. of Engineering Technology	Texas State University	2023 - Present
Associate Professor, Dept. of Engineering Technology	Texas State University	2015 - 2023
Core Faculty, Material Science, Engineering, and Commercialization Program	Texas State University	2012 - Present
Assistant Professor, Dept. of Engineering Technology	Texas State University	2009 - 2015
Postdoctoral Research Associate	Louisiana State University, Baton Rouge	2009
Graduate Research Assistant	Louisiana State University, Baton Rouge	2003 - 2008
Graduate Teaching Assistant	Louisiana State University, Baton Rouge	2001 - 2003
Research Scientist	RRC, Yeungnam University, Korea	1998 - 2001

D. Relevant Professional Experience

Position	Entity	Dates
Research Scientist	Hyosung Industries Co. Ltd., Changwon, Korea	1996 – 1998

E. Other Professional Credentials (licensure, certification, etc.)

II. TEACHING

A. Teaching Honors and Awards:

- Certificate of Completion for completing the 8-hour Teaching Online @ TxState professional development course, which meets SACSCOC requirements for online instructors, Summer 2020.

- Media Exposure of Senior Design Class: "Engineering students get hands-on experience at NuPlasma," The University Star, May 06, 2019 (https://www.universitystar.com/news/engineering-students-get-hands-on-experience-at-nuplasma/article_5fc0b3ea-260b-582d-ad95-6f0e204c932a.html).
- The Houston-Louis Stokes Alliance for Minority Participation Scholars Program (H-LSAMP)" honored by the H-LSAMP scholar program from the school as an excellent mentor that contributed significantly to a H-LSAMP scholar's success and development (Spring 2012, Spring 2014, and Spring 2016).
- "Graduating Student Recognition of Campus Support Program," Named by five alumni from the School as one of the faculties that contributed significantly to their success and development (Spring 2010, Fall 2010, Fall 2011, Summer 2012, Fall 2014, Summer 2015, and Fall 2015).
- "Student Veteran Appreciation of Campus Support Program". Named by one alumnus from the school as one of the faculties that contributed significantly to their success and development (Spring 2010).

B. Courses Taught:

Department of Engineering Technology, Texas State University, 2009 - Present,

TECH 4398 Senior Design

TECH 4396 Automated Manufacturing Systems II

TECH 5398 Directed Project

TECH 4395 Automated Manufacturing Systems I

TECH 4397 Special Problems

TECH 4365 Machine Elements

TECH 3344 Applied Thermofluids

TECH 5399A Thesis

TECH 5399B Thesis

TECH 5392 Fundamentals of Microelectronics Manufacturing

TECH 5311 Computer-Aided Engineering (CAE)

TECH 4392 Micro and Nano Manufacturing (reformed from Microelectronics Manufacturing I)

TECH 4392 Microelectronics Manufacturing I

MFGE 4392 Microelectronics Manufacturing I

MFGE 2332 Material Selections and Manufacturing Processes

TECH 5315 Engineering Economic Analysis

TECH 5384 Problems in Technology; Robert Savage

TECH 5384 Problems in Technology; Mark Summers

TECH 4390 Summer Internship II

TECH 5382 Industrial Ecology

TECH 3310 Industrial Design

C. Graduate Theses/Dissertations or Exit Committees (if supervisor, please indicate):

1. Rahul Sheley, Ph. D., MSEC, **Thesis Committee Member**, Spring 2025 – present.
2. Shashank Musunooru, M.S., Department of Engineering Technology, **Thesis Committee Member**, Spring 2025 – present.
3. Margaret A. Lee, M.S., Department of Engineering Technology, **Thesis Committee Member**, Spring 2024 – Spring 2025.
4. Ryan Rios, M. S., Department of Engineering Technology, **Thesis Committee Member**, Spring 2024 – Spring 2025.
5. Der-Feng King, M. S., Department of Engineering Technology, **Thesis Committee Member**, Spring 2024 – Fall 2024.
6. Ryan Rios, M. S., Department of Engineering Technology, **Thesis Committee Member**, Spring 2024 – present.
7. Amanda Gregory, Ph. D., Material Science, Engineering, and Commercialization Program, **Dissertation Committee Member**, Spring 2021 – present.
8. Fei Sun, Ph. D., Material Science, Engineering, and Commercialization Program, **Dissertation Committee Member**, Fall 2020 – Spring 2021.
9. Kendalle Howard, M. S., Department of Engineering Technology, **Thesis Committee Member**, Fall 2021 – present.
10. Akinjuyigbe Alo, M. S., Ingram School of Engineering, **Thesis Committee Member**, Fall 2018 – Summer 2021.
11. Emad Nodoushan, Ph. D., Material Science, Engineering, and Commercialization Program, **Dissertation Committee Member**, Fall 2019 – Summer 2020.
12. Joseph Miller, M.S., Ingram School of Engineering, **Co-Supervisor**, Fall 2018 – Summer 2020.
13. Duy Nguyen, M.S., Ingram School of Engineering, **Thesis Committee Member**, Fall 2018 – Spring 2020.
14. Devanda Lek, Ph.D. Material Science, Engineering, and Commercialization Program, **Supervisor**, Fall 2014 – Fall 2018.
15. Sean Moore, M. S., Department of Engineering Technology, **Thesis Committee Member**, Fall 2015 - Fall 2016
16. Juan Gomez, Ph. D., Material Science, Engineering, and Commercialization Program, **Supervisor**, Fall 2012 – Fall 2015.
17. Mina Amini, M.S. Department of Engineering Technology, **Thesis Committee Member**, Spring 2014 - Fall 2014.
18. Devanda Lek, M. S., Department of Engineering Technology, **Supervisor**, Fall 2012 – Summer 2014.
19. Glenn Conner, M.S., Department of Engineering Technology, **Supervisor**, Spring 2012 – Fall 2013.
20. Juan Gomez, M.S., Department of Engineering Technology, **Supervisor**, Fall 2011 – Spring 2012.
21. Akinola, Adekunle Temitope, M.S., Department of Engineering Technology, **Thesis Committee Member**, Fall 2009 - Spring 2010.

D. Courses Prepared and Curriculum Development:

1. <u>Course Development</u>
   a) TECH 4365 Machine Elements
      - Developed a new syllabus and a term-project for sustainability in manufacturing

- Developed a new class note with examples and case studies

b) TECH 3344 Applied Thermofluids
   - Developed a new syllabus and a term-project for sustainability in manufacturing
   - Developed a new class note with examples and case studies
   - Developed a term-project for students

c) TECH 5382 Industrial Ecology
   - Developed a new syllabus and a term-project for sustainability in manufacturing
   - Developed a new class note with examples and case studies
   - Hosted three guest speakers for graduate students

d) TECH 5315 Engineering Economic Analysis
   - Developed a new syllabus and a term-project
   - Developed a new class note with examples and case studies

e) TECH 5311 Computer-Aided Engineering
   - Developed a new syllabus
   - Developed a new class note with examples and case studies
   - Developed term-project for graduate students for CAD/CAE

f) TECH 4392 and MFGE 4392 Microelectronics Manufacturing I and TECH 5392 Fundamentals of VLSI Fabrication
   - Developed a new syllabus
   - Developed a new class note with examples and case studies
   - Developed new experiments in cleanroom

g) TECH 3310 Industrial Design
   - Developed a new syllabus
   - Developed a new class note with examples
   - Introduced statics to students

h) TECH 2332 Material Selections and Manufacturing Processes
   - Revised a syllabus
   - Revised a class note
   - Developed new test problems

2. <u>Curriculum Reform for Manufacturing Technology</u>

a) TECH 2310 Introduction to Computer-Aided Design (CAD)
   - Changed the title of course from Machine Drafting to Introduction to Computer-Aided Design (CAD)
   - Developed course goals and objectives and outline
   - Developed instructional methodologies
   - Suggested a textbook and other learning resources

b) TECH 4395 Automated Manufacturing Systems I

- Changed the title of course from Manufacturing Processes I to Automated Manufacturing Systems I
- Developed course goals and objectives and outline
- Developed instructional methodologies
- Suggested a textbook and other learning resources

3. New Course proposal for Mechanical Engineering Technology

a) TECH 4365 Machine Elements: Dynamics and Design

- Developed course goals and objectives and outline
- Developed instructional methodologies
- Suggested a textbook and other learning resources

III. SCHOLARLY/CREATIVE

A. Works in Print

1. Books (if not refereed, please indicate)

a. Scholarly Monographs:

b. Textbooks:

c. Edited Books:

d. Chapters in Books:

e. Creative Books:

2. Articles

a. Refereed Journal Articles: *Primary Author, #Texas State Students

1. B. Xiao, **Byoung Hee You**, and T. Jin, "Computational analysis of Selective Laser Sintering of Inconel 625," **Frontiers in Heat and Mass Transfer**, vol. 22, no. 2, pp. 417-432, 2024, https://doi.org/10.32604/fhmt.2024.048739.
2. K. Nguyen, M. Bryant, I.-H. Song, **Byoung Hee You**, and S. Khaleghian, "The application of PVDF-based piezoelectric patches in energy harvesting from tire deformation," **Sensors**, vol. 22, no. 24, 9995, 2022, https://doi.org/10.3390/s22249995.
3. H. Na, L. Trueba, and *__Byoung-Hee You__, "A Study of the mechanical properties of biaxial and triaxial braided composites for an automotive propeller shaft," **Fibers and Polymers**, vol. 23, no. 9, pp. 2712-2718, 2022.
4. #D. Lek, I-H. Song, N. Kim, L. Trueba, H. Na, and *__Byoung-Hee You__, "Passive mold alignment for the fabrication of polymer through-holes using punching and double-sided hot embossing," **Sensors and Actuators A: Physical**, vol. 340, no. 16, 113560, 2022.
5. L. Trueba, #T. Gaston, #J. Brackin, #J. Miller, and *__Byoung-Hee You__, "Effective Strategies to Reduce Triethylene Glycol Consumption in Natural Gas Processing Plants," **Case Studies in Chemical and Environmental Engineering**, vol. 5, 100196, 2022.
6. C. R. Brown, X. Zhao, T. Park, P.-C. Chen, **Byoung Hee You**, D. S. Park, S. A. Soper, A. Baird, and M. C. Murphy, "Leakage pressures for gasketless superhydrophobic fluid interconnects for modular lab-on-a-chip systems," **Microsystems & Nanoengineering**, 7:69, 2021.

7. #E. J. Nodoushan, Y. J. Lee, H.-J. Na, **Byoung Hee You**, M.-Y Lee, and N. Kim, "Effects of NaCl and Temperature on Rheological Characteristics and Structures of CTAB/NaSal Wormlike Micellar Solutions," **Journal of Industrial and Engineering Chemistry**, vol. 98, no. 7, pp. 458-464, 2021.
8. D. Park, B. Young, **Byoung Hee You**, V. Singh, S. Soper, and M. Murphy, "An integrated, optofluidic system with aligned optical waveguides, microlenses, and coupling prisms for fluorescence sensing," **IEEE Journal of Microelectromechanical Systems**, vol. 29, no. 4, pp. 600-609, 2020.
9. #G. Makhija, #D. S. Pujara, I.-H. Song, **Byoung Hee You**, H.-G. Kang, "Constructing an Automation Table for an Image-Based *Arabidopsis* Resistance Assay," **Engineering**, vol. 6 no. 5 pp. 495-499, 2020.
10. Y.-J. Kim, #A. R. Kotwal, B.-Y. Cho, J. Wilde, and **Byoung Hee You**, "Geosynthetic Reinforced Steep Slopes: Current Technology in the United States," **Applied Science**, vol. 9, no. 10, pp.2018
11. #S. Moore, **Byoung Hee You**, N. Kim, T. park, and I.-H. Song, "Non-enzymatic continuous glucose monitoring system," **Micro & Nano Letters**, vol. 13, no. 8, pp. 1079-1084, 2018.
12. #T. Bendigeri, Byoung Hee You, I.-H. Song, "Implementing 5s principles on a manufacturing company, SPS Engineering: case study," **International Journal of Research in Engineering and Technology**, vol. 7, no. 12, 2018.
13. ***Byoung Hee You**. C. Ahn, W. Kim, and I. Shin, "The study of developing the freezing seal isolation method for the preinsulated heat transfer pipe," **Journal of Energy Engineering**, vol. 26, no. 3, pp. 105-112, 2017 (In Korean).
14. S. Park, #S. Moore, I.-H. Song, **Byoung Hee You**, M.-Y. Lee, and N. Kim, "Growth of ZnO nanowires on multi-layered polymer structures fabricated by UV liquid transfer imprint lithography," **Microelectronic Engineering**, vol. 176, pp. 45-53, 2017.
15. #S. Moore, #J. Gomez, #D. Lek, **Byoung Hee You**, N. Kim, and I.-H. Song, "Experimental study of polymer microlens fabrication using partial-filling hot embossing technique," **Microelectronic Engineering**, vol. 162, pp. 57-62, 2016.
16. H. Kang, K. Lee, D. Yang, **Byoung Hee You**, and I.-H. Song, "Micro-accelerometer based on vertically movable gate field effect transistor," **Nano-Micro Letters**, vol. 7, no. 3, pp.282-290, 2015.
17. J. H. Seo, **Byoung Hee You**, S. S. Kwen, D. Y. Lee, and M. Y. Lee, "Thermophysical characteristics of the ferrofluid in a vertical rectangle," **Entropy**, vol. 17, no. 2, pp 903-913, 20

b. Non-refereed Articles:

3. Conference Proceedings

a. Refereed Conference Proceedings:

1) B. Xiao, **Byoung-Hee You**, and T. Jin. Tongdan, "Thermal-Fluid Analysis and Morphology Evolution of Molten Pool During Selective Laser Sintering of Inconel 625," 2023 Proceedings of the ASME International Mechanical Engineering Congress & Exposition, New Orleans, LA, USA, Oct. 29-Nov.2, IMECE2023-109482.
2) K. Howard, L. Ramirez, **Byoung Hee You**, and I.-H., Song, "Design Analysis of Capacitive Micromachined Ultrasonic Transducers," **2022 IEEE 17th International Conference on Nano/Micro Engineered and Molecular Systems (NEMS)**, Taoyuan, Taiwan, Apr. 14-17.

3) D. S. Park, M. Witek, X. Zhao, Y. Kang, K. Dathathreya, **Byoung Hee You**, S. A. Soper, and M. C. Murphy, "Design and fabrication of a Multi-Scale fluidic Motherboard for a universal molecular processing system (uMPS)," **2019 Proceedings of the ASME International Mechanical Engineering Congress & Exposition**, Salt Lake City, UT, USA, Nov. 08-14, IMECE2019-11921.

4) R. V. Leeuwen, V. Sriraman, **Byoung Hee You**, and Y.-J. Kim, "The effects of limestone powder particle size on the mechanical properties and the life cycle assessment of the precast/prestressed concrete," **The 25th Symposium Developments in Prestressed Concrete**, Kitakyushu, Japan, Oct. 20-21, pp. 427-432, 2016.

5) J. Gomez, I.-H Song, and **Byoung Hee You**, "Finite element analysis for demolding of micro hot embossing," **2014 Proceedings of the ASME International Mechanical Engineering Congress & Exposition**, Montreal, Canada, Nov. 14-20, IMECE2014-39203.

6) D. S. Park, B. Young, **Byoung Hee. You**, V. Singh, S. A. Soper, A Baird, and M.C. Murphy, "Optical waveguide integrated with a coupling prism and microlenses," **Proceedings of the 18th International Conference on Miniaturized Systems for Chemistry and Life Sciences**, San Antonio, TX, USA, Oct. 26-30, 2014.

7) C. R. Brown, T. Park, P.-C. Chen, **Byoung Hee. You**, D. S. Park, S. A. Soper, and M.C. Murphy, "An experimental validation of the pressure capacity of a modular gasketless microfluidic interconnect," **Proceedings of the 18th International Conference on Miniaturized Systems for Chemistry and Life Sciences**, San Antonio, TX, USA, Oct. 26-30, 2014.

8) H. S. Kang, K. H. Lee, J.Y. Kim, I.-H. Song, and **Byoung Hee You**, "Design of vertically movable gate field effect transistor (VMGFET) sensor for low frequency applications," **2014 Proceedings of International Conference of Control, Dynamic Systems, and Robotics**, Ottawa, Canada, May 15-16, pp. 121-1 – 121-7.

9) G. Conner, D. Lek, J. A. Gomez, I.-H. Song, T. Park, and **Byoung Hee You**, "Mold alignment system for double-sided micro hot embossing using kinematic constraints," **2013 Proceedings of the ASME International Mechanical Engineering Congress & Exposition**, San Diego, CA, USA, Nov. 15-21, IMECE2013-63670.

10) J. A. Gomez, G. Conner, D. Lek, I.-H. Song, Y.-J. Kim, and **Byoung Hee You**, "Finite Element Analysis for Reliable Replication of Alignment Structures in Micro Hot Embossing," **2013 Proceedings of the ASME International Mechanical Engineering Congress & Exposition**, San Diego, CA, USA, Nov. 15-21, IMECE2013-64829.

11) D. S. Park, **Byoung Hee You**, T. Park, S. A. Soper, D. E. Nikitopoulos, and M. C. Murphy, "Multiplex Single Molecule Detection Module for Stroke Diagnosis," **2013 Proceedings of the ASME International Mechanical Engineering Congress & Exposition**, San Diego, CA, USA, Nov. 15-21, IMECE2013-65524.

12) J. Gomez, T. G. Conner, I.-H Song, D.-H. Chun, Y.-K. Kim, and **Byoung Hee You**, "Cavity filling analysis for micro hot embossing," **2012 Proceedings of the ASME International Mechanical Engineering Congress & Exposition**, Houston, TX, USA, Nov. 9-15, IMECE2012-88441.

13) T. Park, I.-H. Song, D.S. Park, **Byoung Hee. You**, and M.C. Murphy, "Thermal bonding of polymer microdevices using a pressure-assisted boiling point control system," **the 16th International Conference on Miniaturized Systems for Chemistry and Life Sciences**, Okinawa, Japan, Oct. 28-Nov. 1, 2012.

14) K.-H. Lee, H.-S. Kang, I.-H. Song, **Byoung Hee You**, and D.-Y. Yang, "Dynamic Response Analysis of Sensing Element of MEMS Accelerometer," **the proceedings of the Korean Society for Noise and Vibration Engineering Conference,** pp. 221-222, 2012.

15) D. S. Park, H. Wang, P.-C. Chen, T. Park, N. Kim, **Byoung Hee You**, D. E. Nikitopoulos, S. A. Soper, and M. C. Murphy, "Passive micro-assembly of a fluidic control chip and a multi-well continuous flow PCR chip for high throughput applications," **2010 Proceedings of the 14th International Conference on Miniaturized System for Chemistry and Life sciences**, Groningen, Netherlands, Oct. 3-7.

16) S. D. Rani, T. Park, **Byoung Hee You**, S. A. Soper, M. C. Murphy, and, D. E. Nikitopoulos, "Numerical simulations of misalignment effects in microfluidic interconnects," **the 2010 Material Society Research Spring Meeting**, San Francisco, CA, USA, April 5-9, kk9.4.

17) P.-C. Chen, D. S. Park, **Byoung Hee You**, N. Kim, T. Park, D. E. Nikitopoulos, S. A. Soper, and M. C. Murphy, "A high throughput microfluidic thermal reactor," **2009 Proceedings of the ASME International Mechanical Engineering Congress & Exposition (IMECE)**, Lake Buena Vista, FL, USA, Nov. 13-19, 2009.

18) D. S. Park, V. Singh, **Byoung Hee You**, N. Kim, P.-C. Chen, S. A. Soper, D. E. Nikitopoulos, J. Goettert, and M. C. Murphy, "Control of internal stress for high quality nickel large area mold inserts," **2009 Proceedings of the ASME International Mechanical Engineering Congress & Exposition (IMECE)**, Lake Buena Vista, FL, USA, Nov. 13-19, 2009.

19) P.-C. Chen, D. S. Park, **Byoung Hee You**, N. Kim, T. Park, S. A. Soper, D. E. Nikitopoulos, and M. C. Murphy, "A disposable high throughput micro-fluidic thermal reactor," **Proceedings of the 13th International Conference on Miniaturized System for Chemistry and Life sciences**, Jeju, Republic of Korea, Oct. 1-5, 2009.

20) **Byoung Hee You**, D. S. Park, P.-C. Chen, S. D. Rani, D. E. Nikitopoulos, S. A. Soper, and M. C. Murphy, "Assembly tolerance analysis for injection molded modular, polymer microfluidic devices," **2008 Proceedings of the ASME International Mechanical Engineering Congress & Exposition**, Boston, MA, USA, Oct. 31-Nov. 6, IMECE2008-68143.

21) P.-C. Chen, D. S. Park, **Byoung Hee You**, N. Kim, T. Park, Y. Desta, S. Park, D. E. Nikitopoulos, S. A. Soper, and M. C. Murphy, "A thermal system for high throughput continuous flow polymerase chain reaction device (CFPCR)," **2008 Proceedings of the ASME International Mechanical Engineering Congress & Exposition**, Boston, MA, USA, Oct. 31-Nov. 6, IMECE2008-68975.

22) P.-C. Chen, D. S. Park, **Byoung Hee You**, N. Kim, T. Park, P. Datta, Y. Desta, S. Park, D. E. Nikitopoulos, S. A. Soper, and M. C. Murphy, "Design and performance of a rapid, nanoliter, continuous flow polymerase chain reactor for a high throughput microsystem," **2008 Proceedings of the 12th International conference on Miniaturized System for Chemistry and Life sciences**, San Diego, CA, USA, Oct. 12-16, MicroTAS_0906.

23) D. S. Park, P.-C. Chen, **Byoung Hee You**, N. Kim, T. Park, T. Y. Lee, P. Datta, Y. Desta, S. A. Soper, D. E. Nikitopoulos, and M. C. Murphy, "Small footprint continuous flow PCR devices for a 96-well CFPCR multireactor platform," **Hilton Head 2008: A Solid-State Sensors, Actuators and Microsystems Workshop**, Hilton Head Island, SC, USA, June 1-5.

24) D. S. Park, P.-C. Chen, **Byoung Hee You**, N. Kim, T. Park, P. Datta, Y. Desta, S. A. Soper, D. E. Nikitopoulos, and M. C. Murphy, "Optimization of the geometry for continuous flow PCR devices in a titer plate-based PCR multi-reactor platform," **2007 Proceedings of the ASME International Mechanical Engineering Congress & Exposition**, Seattle, WA, USA, Nov. 11-15, IMECE2007-42315.

25) P.-C. Chen, **Byoung Hee You**, D. S. Park, S. Park, D. E. Nikitopoulos, S. A. Soper, and M. C. Murphy, "Replication of reliable assembly features for polymer modular microfluidic systems," **2007 Proceedings of the ASME International Mechanical Engineering Congress & Exposition**, Seattle, WA, USA, Nov. 11-15, IMECE2007-42206.

26) **Byoung Hee You**, D. S. Park, P.-C. Chen, W. M. Caceres, D. E. Nikitopoulos, S. A. Soper, and M. C. Murphy, "Dimensional and locational integrity in the replication of polymeric microdevices," **Proceedings of ASME InterPACK 2007**, Vancouver, BC, Canada, July 8-12, IPACK2007-33482.

27) D. S. Park, M. L. Hupert, M. Witek, J. Guy, P. Datta, **Byoung Hee You**, S. A. Soper, and M. C. Murphy, "A 96-well SPRI reactor in a photo-activated polycarbonate (PPC) microfluidic chip," **Proceedings of MEMS 2007 20th IEEE International Conference on Micro Electro Mechanical Systems**, pp. 433-436, Kobe, Japan, Jan. 21-25, 2007.

28) D. S. Park, M. Hupert, J. Guy, P. Datta, J.-B. Lee, M. Witek, **Byoung Hee You**, S. A. Soper, D. E. Nikitopoulos, and M. C. Murphy, "Microtiter plate-based microfluidic platforms: sealing, leakage testing, and performance of a 96-well SPRI device," **2006 Proceedings of the ASME International Mechanical Engineering Congress & Exposition**, Chicago, IL, USA, Nov. 5-10, IMECE2006-15275.

29) **Byoung Hee You**, P.-C. Chen, J. Guy, P. Datta, D. E. Nikitopoulos, S. A. Soper, and M. C. Murphy, "Passive alignment structures in modular, polymer microfluidic devices," **2006 Proceedings of the ASME International Mechanical Engineering Congress & Exposition**, Chicago, IL, USA, Nov. 5-10, IMECE2006-16100.

30) **Byoung Hee You**, D. S. Park, C. W. Mock, W. M. Caceres, D. E. Nikitopoulos, S. A. Soper, and M. C. Murphy, "Tolerance variation and passive alignment in modular, polymer microfluidic devices," **2006 Proceedings of the ASME International Mechanical Engineering Congress & Exposition**, Chicago, IL, USA, Nov. 5-10, IMECE2006-15258.

IV. SERVICE

A. University:

1. Student Organization Showcase: Engineering, Sept. 2022.
2. MSEC Student Awards Committee, 2020, 2021.
3. Serving as a reviewer to the College of Science and Engineering for Research Enhancement Program (REP), 2019, 2021.
4. Coordinating MOU between Texas State University – Yeongcheon City, Korea, 2020.
5. College of Science and Engineering College-Level Graduate Scholarships Committee: 2019 – present.
6. Serving as an advisor, Texas State University Student Chapter, American Society of Mechanical Engineers (ASME), (2012-Present).
7. Serving as a core faculty for Material Science, Engineering, and Commercialization Program (2011 – present)
8. Commencement ceremony (2010 - present)
9. Serving as a member of the graduate faculty (2009 - present)
10. Participating in Texas A&M Engineering Experimental Station (TEES) Consortium: Aug. 2017 ~ Sept. 2018.
11. Participating in MSEC academic review-2017
12. Participating in NASA phone call meeting-2013

13. Nanofabrication Research Space Steering Committee-2013
14. Serving as a Nanofabrication Research Space Steering Committee (2013-present)
15. Attending Spring STEM Job & Internship Fair event (2013)
16. Participating in MSEC curriculum meetings (2010)
17. Coordinating MOU between Texas State University – Korea Textile Machinery Research Institute (KOTMI)
18. Coordinating MOA between Texas State University – Korea Atomic Energy Research Institute (KAERI)
19. Serving as a marshal in the summer commencement ceremony (2010)
20. Serving as a member in minifab processing/equipment needs planning group (2010)
21. Attending Homecoming Tailgating (2009, 2010, and 2011)

B. Departmental:

1. Serving as a search committee member for Open Rank Tenure Line Faculty (2025030TTL) in Engineering Management: Fall 2024- Spring 2025
2. Serving as a search committee member for Open Rank Tenure Line Faculty (202452TTL) in Engineering Management: Fall 2024- Spring 2025
3. Serving as a search committee member for Open Rank Faculty of Instruction in Engineering Management: Fall 2024- Spring 2025
4. Participating in COSE New Student Welcome (Open house), 2024-2025
5. Serving as a search committee chair for Advanced Manufacturing & Mechanical Engineering Assistant/Associate Professor Position, Fall 2023- Spring 2024.
6. Serving as a search committee member for Open Rank Faculty of Instruction in Engineering Management: Fall 2023- Spring 2024
7. Serving as a chair of the Personnel Committee of the Engineering Technology Department: Fall 2021 – present.
8. Serving as a search committee member for Senior Lecturer Position: Fall 2021- Spring 2022.
9. Serving as an interim chair of Engineering Technology Department: Feb. - May 2019
10. Serving as a search committee member for Foundry Assistant/Associate/Full Professor Position (2018-2019)
11. Serving as a search committee chair for Manufacturing & Mechanical Engineering Assistant/Associate Professor Position (2017-2018)
12. Serving as a search committee member for Foundry Assistant/Associate Professor Position (2016-2017)
13. Serving as a search committee member for Lab. Supervisor (2017)
14. Participating in ET IAB Meeting 2015 – present
15. Serving as a personal committee member (2015-present)
16. In-Class observation – 2019: Dr. Handayani, 2019: Dr. Trueba, 2020: Dr. Dabbaghianmiri, Dr. Khaleghian, and Dr. Lek, 2021: Dr. Xiao and Dr. Khaleghian, 2022: Dr. Trueba and Dr. Lek, and 2025: Dr. Mazumder, Dr. Amiri, and Mr. Lokhande.

C. Community:

D. Professional:

1. Serving as an external reviewer for promotion to professor: Dept. of Engineering Technology & Surveying Engineering at New Mexico State University
2. Reviewer: Fibers and Polymers
3. Reviewer, BioChip Journal
4. Reviewer, Sensors and Actuators A: Physical
5. Reviewer, IEEE Sensors Journal
6. Serving as a member of Topic Editor Board in Micromachines
7. Reviewer: Processes
8. Reviewer: Journal of Composites Science
9. Reviewer, Materials Advances
10. Reviewer, Microsystem Technology
11. Reviewer, Journal of Manufacturing Processes
12. Reviewer, Manufacturing Letters
13. Reviewer for International Journal of Precision Engineering and Manufacturing
14. Reviewer for Microfluidics and Nanofluidics
15. Reviewer for International Journal of Advanced Manufacturing Technology
16. Reviewer: The Advanced Research Projects Agency – Energy (ARPA-E) in the U.S. Department of Energy (DOE) OPEN 2018 and 2021
17. Reviewer, Microelectronic Engineering
18. Reviewer for American Journal of Mechanical Engineering
19. Reviewer for the ASME International Mechanical Engineering Congress & Exposition (IMECE) 2012 - present.
20. Reviewer for Polymers
21. Reviewer for Analyst
22. Reviewer for Lab on a Chip
23. Reviewer for American Journal of Engineering Education (AJEE)
24. Reviewer for Research Competitiveness Subprogram (RCS) of the Louisiana Board of Regents Support Fund Research and Development (R&D) Program, 2010

E. Organizations:

1. Honorary:

2. Professional:

1. Past Chair, ASME Micro-Electro-Mechanical Engineering Systems (MEMS) Division Executive Committee, July 2022- June 2023.

2. Chair, ASME Micro-Electro-Mechanical Engineering Systems (MEMS) Division Executive Committee, July 2021- June 2022.
3. Attending ASME Group Leadership Development Conference, April 29 ~ May 1, 2021; Representing ASME MEMS Division's Leadership Team.
4. Vice Chair, ASME Micro-Electro-Mechanical Engineering Systems (MEMS) Division Executive Committee, July 2020-June 2021.
5. Treasurer (IMECE Program Chair), ASME Micro-Electro-Mechanical Engineering Systems (MEMS) Division Executive Committee, July 2019-present.
6. Secretary (IMECE Program Co-Chair), ASME Micro-Electro-Mechanical Engineering Systems (MEMS) Division Executive Committee, July 2018 – June 2019.
7. Member at Large ASME Micro-Electro-Mechanical Engineering Systems (MEMS) Division Executive Committee, July 2017-June 2018.
8. Track Organizer Micro-Electro-Mechanical Engineering Systems (MEMS) division at the 2019 ASME International Mechanical Engineering Congress and Exposition (IMECE).
9. Track Co-Organizer Micro-Electro-Mechanical Engineering Systems (MEMS) division at the 2018 ASME International Mechanical Engineering Congress and Exposition (IMECE).
10. Topic Organizer for IMECE 2015, 2016, 2017, 2019, and 2021 (ASME).
11. Session Organizer for IMECE 2015, 2016, 2017, 2018, 2019, and 2020 (ASME).
12. Topic Co-Organizer for IMECE 2014, 2018, 2019, 2020 (ASME).
13. Member of the American Society of Mechanical Engineers (ASME) 2005- present.
14. Editor, The Korean Society of Manufacturing Process Engineers, 2014-present.

F. Services Honors and Awards:

1. ASME award in testimony of high regards of your associates and the deep appreciation of the society for your valued service in advancing the engineering profession a member of and leader of Microelectromechanical Engineering Division 2021-2022
2. ASME Micro-Electro-Mechanical Engineering Systems Division Awards for Organizing Track 12 Micro- and Nano-Systems Engineering and Packaging, 2019 International Mechanical Engineering Congress and Exposition.
3. ASME Micro-Electro-Mechanical Engineering Systems Division Awards for Organizing Topic 12-2 Plenary Presentations in MEMS/NEMS Engineering and Packaging, 2019 International Mechanical Engineering Congress and Exposition.
4. ASME Micro-Electro-Mechanical Engineering Systems Division Awards for Co-Organizing Track 13 Micro- and Nano-Systems Engineering and Packaging, 2018 International Mechanical Engineering Congress and Exposition.
5. ASME Micro-Electro-Mechanical Engineering Systems Division Awards for Organizing Topic 13-3 Design and Fabrication, Analysis, Processes and Technology for Micro and Nano Devices and Systems at the 2016, 2017, and 2018 International Mechanical Engineering Congress and Exposition.
6. ASME Micro-Electro-Mechanical Engineering Systems Division Recognition for Organizing Sessions at the 2016 International Mechanical Engineering Congress and Exposition.