

Table of Contents of Candidate Profile

• Candidates for the 53rd President-Elect	
Jae Hyeon Ryu	1
Yong-Kyu Yoon	3
• Candidates for the 53rd Vice President	
Chang-Yong Nam	5
Hae-Bum Yun	6
Jayoung Kim	7
Ohbong Kwon	8
• Candidate for Auditor	
Soolyeon Cho	9
• Candidates for Technical Group B-3 Councilor	
In-Hyun Park	10
Sung Yun Jung	11
• Candidates for Technical Group C-4 Councilor	
Jinkyoung Yoo	12
SungWoo Nam	13
• Candidates for Technical Group C-5 Councilor	
JuHyeong Ryu	14
Sung-Hee (Sonny) Kim	15
• Candidate for the Technical Group C-7 Councilor	
Sam Chung	16

Candidates for the 53rd President-Elect



Jae Hyeon Ryu

[\(click name for the video statement\)](#)

Professor
Soil and Water Systems
University of Idaho

Dear Fellow KSEA Members,

I am honored to be nominated for KSEA President. I am working for the University of Idaho (UI) as a faculty member in water resources planning and management using remote sensing technologies, such as satellite images and drone technologies. As an active researcher, I contributed \$64M+ of grant funding distributed across 37 proposals and these funded dollars are primarily used for student support for their career success. I have also demonstrated scholarly activities through numerous publications and presentations (200+) nationally and internationally to disseminate research findings for broader impacts.

Since I joined the KSEA as a member, I have really enjoyed participating in excellent professional activities from local to national events, including local technical seminar series, national math and science contest (NMSC), regional conference, US-Korea Conference (UKC), other professional development opportunities (e.g., SEED) at national levels.

I am a founding member of KSEA Idaho Chapter to promote place-based value-added local chapter activities. Over the past decade, I served KSEA communities as multiple roles to engage in collaborations and professional development by interacting with renowned KSEA colleagues in multidiscipline fields in academia, industry, governmental entities, and private sectors from young generation to senior personnel.

More recently, I have hosted the first hands-on STEM Online camp titled “*Interstate Drone League for KSEA communities (iDrone KSEA)*” held on November 14, 2020 (<http://idrone.ksea.org>). Due to the global pandemic (COVID-19), the iDrone KSEA took place at virtual meeting platforms to inspire future STEM workforce (6th – 12th grade students) to understand basic concepts in automatic controls, robotics, and unmanned aerial systems (UASs, i.e., drones). More than 100 people from ten KSEA local chapters have joined iDrone KSEA online and it was successful and rewarding (KSEA Newsletters, Vol. 49 No.1).

Additionally, as a KSEA vice president during the 51st administrations (2022 – 2023), I have promoted excellent local events to national levels, such as KSEA art contest from Northern Texas Chapter and scaled up TED-talk alike KSEA Youth talk practiced in Eastern Carolina Chapter. I encouraged the next generation to increase self-confidence to become future leaders (KSEA Newsletters, Vol. 51 No. 2).

If I’m elected as KSEA President, I would like to propose few initiatives. First, I will continue to invest my time and effort to promote youth program titled “*KSEA Next Generation Youth Scientists and Engineers (KAYSE)*” because our next generation of KSEA is our future and assets.

The KAYSE (pronounced like ‘Case’) program will start with the existing KSEA STEM program in May each year and continue to support the talented youth to complete their projects by interacting with academic and/or industrial mentors. The selected team will be then invited to present their project at the UKC, ultimately increasing self-confidence to become global leaders.

Second, I will develop cohesive international collaborations between US and Korea, especially working with GLOCAL universities recently Korea government support universities outside the Seoul region as part of Local Revitalization Policy. One of examples has been initiated by developing memorandum of understanding (MOU) between KSEA and Gyeongsang National University (GNU), especially targeted to advance space engineering disciplines for mutual benefits.

Additionally, I envision that KSEA will play a pivotal role to embrace new S. Korea government initiatives, such as space development administration and quantum computing. All these initiatives are well aligned with KSEA mission and objectives as we KSEA contributing to the social welfare and the industrial development in both USA and Korea.

Regarding fund raising, I will actively reach out to various entities, including federal research institutes, small business, and startup companies in both United States and South Korea. Based on networking opportunities at multiple venues, such as the Consumer Electronics Show (CES) in Las Vegas, I will expand value-added KSEA avenue to establish partnerships within global KSEA ecosystems for mutual growth.

In closing, I know we live in diverse climates and feel different winter under abnormal weather circumstances, but at same time, we can’t wait for beautiful spring around corner as much as I do. We will work together for our community, and we will build together our future. Go KSEA and KSEA fighting!

EDUCATION

2006	Ph.D. in Civil & Environmental Engineering University of Washington, Seattle	2010 – Present	Member of American Society of Agricultural and Biological Engineers
2001	M.S. in Civil & Environmental Engineering University of Washington, Seattle	2017 – 2020	Chair of Flowing water committee, American Water Resources Association (AWRA)
1996	B.S. in Agricultural Engineering Konkuk University, Seoul, South Korea	2011 – 2013	Chair of Risk perception and community vulnerability, AWRA
		2010 – 2016	Technical Advisory Board-Water Resources, Korea Institute of Construction Technology (KICT)

PROFESSIONAL EXPERIENCE

2024 – Present	Professor at University of Idaho
2017 – 2023	Associate Professor at University of Idaho
2017	Visiting Research Professor at National Institute of Agricultural Sciences, Korea
2017	Brainpool Research Fellow, KOFST/Ministry of Science and ICT, Korea
2017	Faculty Fellow at Lawrence Berkeley National Laboratory, US Department of Energy
2015 – 2016	Summer Faculty Fellow at US Air Force Academy, US Department of Defense
2010 – 2016	Assistant Professor at University of Idaho
2006 – 2009	Research Associate at UNL
2001 – 2006	Research Assistant at University of Washington-Seattle

KSEA ACTIVITIES

2022 – 2023	KSEA Vice President
2021 – 2022	Idaho Chapter President
2016 – 2017	UKC 2016 Executive Director/ED of 45 th Admin Tech Group J (Civil, Environment, and Architecture: CEA) Councilor
2014 – 2017	
2015 – 2016	General Director of 44 th Admin
2015 – 2016	Task Force of KSEA Council Restructuring
2015	KSEA Northwest Regional Conference (NWRC) Chair
2011 – 2016	President of Boise Idaho Chapter
2014	Chair of Water Session/CEA symposium, UKC 2014
2013 – 2014	Chair of Local Chapter President Committee (42 nd Admin)
2013 – 2014	KSEA Nomination Committee
2013 – 2014	KSEA Contest Committee
2013	Chair of Technical Session, Green and Transportation, Northwest Regional Conference (42 nd Admin)
2013	Co-chair of Symposium J, CEA/UKC 2013
2011	Founding President of Idaho Chapter

PROFESSIONAL ACTIVITIES

2021 – Present	NSF CAREER Reviewer
2023 – Present	NASA Postdoctoral program Reviewer
2023	California Climate Action Initiative Review Panel
2010 – Present	Committee of International Water Council, WEWRS/ASCE
2002 – Present	Committee of Environmental Water Resources System, World Environmental & Water Resources Congress (WEWRS), American Society of Civil Engineers (ASCE)

AWARDS AND HONORS

2017	Brainpool Scholar, KOFST/Ministry of Future, Korea
2017	Faculty Fellow at Lawrence Berkeley National Lab, DOE
2015 – 2016	US Air Force Summer Faculty Fellow
2013	NASA research award for water supply monitoring and forecasting using NASA satellite data products
2012	UI Young Investigator Award for climate change adaptation in Idaho
2007	NOAA SARP research award for drought decision support in the Great Plains

RESEARCH LEADERSHIP AND PUBLICATIONS

200+ journal papers (37), conference proceedings (74), and professional presentations (111) at national, regional, and local level.

GRANTS, PATENTS, ENTREPREUNERSHIP

\$64M+ grant recipient of numerous federal, state, and international funds from the US Geological Survey (USGS), US Department of Agriculture, US Bureau of Reclamation, US Air Force, NASA, and Rural Development of Administration (RDA, South Korea).

Notable Research Accomplishments

Development of unmanned aircraft systems (UAS) based Water Quality Monitoring and Sampling Platform (UASWQP) to promote environmental stewardships at the rural-urban interfaces. Also, developed a hands-on STEM online e-learning platform known as “*iDrone Online*” to investigate how youth can improve their STEM identity and college readiness in the global pandemic (COVID-19). The iDrone e-learning platform is easily replicable and duplicable to be implemented at other institutions for broader impacts in STEM communities, including KSEA as whole in years to come.

Candidates for the 53rd President-Elect



Yong-Kyu Yoon

[\(click name for the video statement\)](#)

Professor
Electrical and computer Engineering
University of Florida

Dear Fellow KSEA Members,

I am grateful for the nomination as a candidate for the presidency of the next KSEA administration. Currently holding positions as Professor and Graduate Coordinator in Electrical and Computer Engineering, Director of the Multidisciplinary nano and Microsystems (MnM) Laboratory, and Deputy Director of the Florida Semiconductor Institute at the University of Florida, Gainesville, FL, I bring a wealth of experience and dedication to this role. Additionally, I am serving as Vice President II for the 52nd KSEA administration, having previously held the position of Korea Evaluation Institute for Industrial Technology (KEIT) Project Director during the 50th and 51st KSEA administrations. Furthermore, I served as the President of the Gainesville Florida Chapter of KSEA from 2015 to 2019 and played a pivotal role as a founding member of the Gainesville Florida Chapter in 2013. Through my various roles within the KSEA, I have had the privilege of working with and connecting with brilliant members of the association. KSEA is a center of excellence in academic, scientific, and technological progression, and I am committed to supporting and advancing its goals as President.

My research interests are diverse and interdisciplinary, spanning a range of areas within electrical and computer engineering. I am particularly well-known for my work in semiconductors, heterogeneous integration, advanced packaging, RF/microwave engineering, and microelectromechanical systems (MEMS). I also have made notable contributions to the field of nanotechnology, and my research in microwave engineering, metamaterials and metaconductors has been highly regarded within the scientific community. Furthermore, I have been at the forefront of research in biomedical applications, leveraging my expertise in electrical and computer engineering to tackle important challenges in the field such as MRI compatible neural probes, smart mouthguards, various wearable sensing systems to name a few. My expertise in these areas has led to numerous publications and presentations, as well as collaborations with other leading experts in the fields. I have consistently demonstrated my ability to address complex problems and to develop innovative solutions, making myself a valuable contributor to the scientific community and a respected thought leader in the field of electrical and computer engineering. Notably, I am a major contributor to the recent NSF grant entitled “*NSF Engines: Central Florida Semiconductor Innovation Engine*,” which is expected to support our team up to \$160 M for next 10 years.

If elected, I will serve as a dedicated and informed President, always acting in the best interests of the society. I plan to streamline processes within the organization and offer a fresh perspective to members. I am eager to engage with the KSEA on a broader range of issues related to the advancement of science and engineering, and the development of a supportive community.

Additionally, here are some of the areas I focus on:

Diversifying Sponsorship Sources: While we remain dedicated to building stronger connections and gaining support from Korea, it is evident that securing funding from Korea has become more challenging in recent years. It is crucial for us to actively explore funding opportunities from a range of sources, including major corporations, small and medium-sized entities (SMEs), and non-profit organizations throughout the United States in addition to Korea. Leveraging my proven track record of successfully securing funding from federal agencies, industries, and investors, I am well-positioned to make a substantial impact in this field. I am committed to actively collaborating with influential Korean American leaders and visionaries across various industries to foster mutually beneficial public private partnerships.

Enhancing the US-Korea Bond: I am committed to fostering stronger ties between the scientific and engineering communities of the United States and Korea. Through my leadership roles KEIT Project Directors and Vice President within KSEA and ongoing research collaborations with esteemed experts in my field, I aim to cultivate a more interconnected scientific community capable of addressing pressing challenges, particularly in areas like semiconductors and manufacturing, aerospace, AI, biomedical, and energy. For instance, while the US excels in electronic design and theory, Korea possesses notable strengths in manufacturing and applications. Recognizing the complementary of these strengths, I am dedicated to playing a pivotal role in helping mitigate their respective weaknesses and reinforce strengths to reach a win-win situation. To achieve this, I am actively reaching out to cutting-edge industry partners including semiconductor and electronics companies, inviting them to engage in KSEA communities such as the UKC and Regional Conferences. This initiative also seeks to promote cross-cultural exchange and collaboration between the scientific and engineering societies of the US and Korea.

Fostering Collaboration Across Senior and Junior Members: The present status of KSEA is indebted to the dedication of earlier members over the past 50+ years. It is crucial to acknowledge and appreciate the sacrifices they made to shape today's KSEA. While our focus is on the next generation and new engagement, we must equally recognize and value the contributions of the senior generation. The current Long-Range Planning Committee plays a pivotal role in shaping the future of KSEA, drawing from its accumulated wisdom and knowledge. Simultaneously, the committee can be further strengthened by integrating the energy and passion of junior members. The synergy resulting from combining wisdom and vigor will propel KSEA's progress, solidifying its position as an exceptional think tank for the future.

I appreciate the opportunity to stand for the position of President and pledge to fulfill its responsibilities to the best of my abilities if elected. I am confident that my experience, vision, and unwavering dedication to the KSEA will position me as a valuable asset in the role of President. Thank you for your attention.

EDUCATION

- 2004 Ph.D. in Electrical and Computer Engineering, Georgia Institute of Technology, Atlanta, GA
- 1999 M.S. in Electrical and Computer Engineering, New Jersey Institute of Technology, Newark, NJ
- 1994 M.S. in Electrical Engineering, Seoul National University, Seoul, Korea
- 1992 B.S. in Electrical Engineering, Seoul National University, Seoul, Korea

PROFESSIONAL EXPERIENCE

- 2019 – Present Professor, ECE, University of Florida
- 2017 Visiting Scholar, ECE, Seoul National University
- 2010 – 2019 Associate Professor, ECE, University of Florida
- 2006 – 2010 Assistant Professor, ECE, SUNY Buffalo
- 2004 – 2006 Post-doc, ECE, Georgia Institute of Technology

PROFESSIONAL ACTIVITIES

- 2022 – Current Associate Editor, Frontiers in Antennas and Propagation, Implantable Antennas
- 2020 – 2021 RHCS Chair, IEEE ECTC Technical Program Committee
- 2020 – 2021 Vice Chair, IEEE International Microwave Symposium, Focus/Special Session
- 2019 – 2020 IEEE MEMS 2020 Technical Program Committee
- 2018 – Present Associate Editor, IEEE TCPMT
- 2017 – 2018 Hilton Head Conference 2018, TPC
- 2015 – Present Editor, Micro and Nano Systems Letters, Springer
- 2014 – 2016 Guest Editor, IEEE J of Biomedical and Health Informatics, Wireless Comm. & RF Tech for Implants
- 2014 – 2016 Section Editor, the Encyclopedia of Nanotechnology, Springer
- 2011 Executive Prog. Sub Comm, Transducers 2011
- 2010 IEEE Antenna and Propagation Symposium Session Chair

KSEA ACTIVITIES

- 2023 – Present 52nd Vice President II
- 2021 – 2023 KEIT Project Director
- 2022 UKC KEIT Symposium Co-Chair
- 2021 UKC KEIT Symposium Co-Chair
- 2020 UKC EEC Symposium Chair
- 2018 UKC EEC Symposium Co-Chair
- 2015 – 2019 Gainesville Florida Chapter President
- 2015 KSEA Florida Regional Conference Session Chair
- 2013 KSEA Gainesville Florida Chapter Founding member

RESEARCH LEADERSHIP AND PUBLICATIONS

More than 280 publications in refereed journals and proceedings along with 4 book chapters, 22 patents, and 160+ invited talks/seminars at national and international institutes or companies.

AWARDS AND HONORS

- 2022 Faculty Excellence Award for Service, UF ECE
- 2021 Teacher of the Year Award, UF ECE
- 2017 Brain Pool Program Award from KOFST
- 2017 Honorary Consultant of Champion Innovation Club (2017– 2020)
- 2017 Term Professorship Award (2017 – 2020)
- 2017 HWCOE Doctoral Dissertation Advisor/Mentoring Award
- 2016 Technology Innovator Award
- 2016 IoP Outstanding Reviewer Award
- 2015 Faculty Member of the Year Award, UF
- 2009 UB Young Investigator Award
- 2008 NSF CAREER Award

GRANTS AND IMPACTS

Recipient of numerous federal, state and international funds from the National Science Foundation (NSF) including NSF Inaugural Engine, US Air Force Research Laboratory (AFRL), Army Research Lab (ARL), Defense Advanced Research Project Agency (DARPA), BrainLink (KOFST), and multiple Industrial sectors, and Advisor of 17 PhD's, 35+ MS', 45+ Undergraduate Mentees.

Candidates for the 53rd Vice President



Chang-Yong Nam

Scientist
Brookhaven National Laboratory

STATEMENT OF PURPOSE

I am deeply honored to be nominated for the Vice President (VP) position within the 53rd KSEA administration. My primary goal is to facilitate scientific and technological collaborations between the United States and Korea while championing organizational excellence within KSEA to advance the best interests of our members.

My involvement in KSEA spans various roles, starting with volunteering in the New York Metropolitan Chapter from 2010. Since then, I have actively engaged in Technical Group (TG) activities, organizing UKC Symposiums, delivering presentations, and serving as a TG Councilor since 2021. My dedication culminated in serving as a Conference Program Chair of UKC 2023, highlighting my ability to lead and collaborate effectively within the KSEA community.

Furthermore, I am committed to strengthening ties between U.S. and Korean scientific and engineering communities. Through my leadership roles in KSEA and ongoing research collaborations, I strive to tackle pressing societal challenges, particularly in advancing the energy efficiency of next-generation microelectronics and semiconductor devices. Beyond my professional pursuits, I am deeply invested in nurturing the next generation of scientists and engineers. This involves implementing mentoring and training programs and fostering partnerships with universities, national laboratories, and industry stakeholders to develop innovative educational initiatives.

I am grateful for the opportunity to run for VP and assure you of my diligent commitment if elected. With my extensive experience and steadfast dedication, I am confident in my ability to serve KSEA effectively. Thank you.

EDUCATION

2007	Ph.D. in Materials Science and Engineering University of Pennsylvania
2001	M.S. in Materials Science and Engineering Korea Adv. Inst. Sci. Tech. (KAIST)
1999	B.S. in Metallurgical Engineering Korea University

APPOINTMENTS

2016 – Present	Scientist Brookhaven National Laboratory
2013 – 2016	Associate Scientist Brookhaven National Laboratory
2010 – 2013	Assistant Scientist Brookhaven National Laboratory
2007 – 2010	Goldhaber Distinguished Fellow Brookhaven National Laboratory
2023 – Present	Adjunct Professor of Materials Sci. Engineering University of Texas at Dallas
2014 – Present	Adjunct Professor of Materials Sci. Chem. Eng. Stony Brook University
2001 – 2002	Commissioned Researcher Korea Institute of Science and Technology (KIST)

2001	Visiting Research Assistant Brown University
1995 – 1997	Military Service, Republic of Korea (ROK) Army

KSEA ACTIVITIES

2023	UKC 2023 Conference Program Chair
2021 – 2024	Technical Group (C-4) Councilor
2022	Participant, Roundtable with Minister of MSIT and Meeting with ROK President during U.N. Week
2019 – Present	Reviewer, Young Investigator Grant (YIG)
2019 – 2022	Chair, UKC MSE Symposium
2018, 2023	Co-Chair, UKC MSE Symposium
2012, 2013, 2016 – 2023	2023 Invited Speaker, UKC MSE Symposium Keynote Speaker, Northeast Regional Conf. (NRC)
2010, 2016, 2017	Invited Speaker, NRC
2014 – 2018	Auditor, New York Metropolitan Chapter
2011 – 2013	Finance Director, New York Metropolitan Chapter
2010 – Present	Org. Committee, KSEA Math & Science Olympiad, New York Metropolitan Chapter

PROFESSIONAL ACTIVITIES

2020 – Present	Associate Editor, Frontiers of Materials
2012 – Present	Grant proposal reviewer, U.S. Dept. of Energy (DOE), NSF, European Res. Council (ERC), Am. Chemical Soc. (ACS) Petro. Res. Fund (PRF)
2021 – Present	Microelectronics Working Group, DOE Nanoscale Science Research Center (NSRC)
2023 – Present	Proposal Rev. Board, Lawrence Berkeley Nat. Lab., Advanced Light Source, The Molecular Foundry
2023	Research Program Foreign Advisory Panel, Korea National Nanofab Center (NNFC)
2021, 2022	Brain Korea (BK) 21 Internal Program Review Panel, Pohang Univ. Sci. Technology (POSTECH)
2016 – Present	The Minerals, Metals and Materials Society (TMS), Func. Mat. Div. (FMD) Award Committee 2021 – 2022 Nanomaterials Committee Chair, 2023 - Present; Vice Chair, 2021-2023; Secretary, 2019- 2021 Member, 2016-present
2015 – Present	Member, American Vacuum Society (AVS)
2006 – Present	Member, Society for Photo-Opt. Inst. Eng. (SPIE)
2001 – Present	Member, Materials Research Society (MRS)

RESEARCH AND ACADEMIC LEADERSHIP

Expert in semiconductor processing, devices, and physics. Have authored 130+ peer-reviewed publications, presented 125+ invited talks/seminars at conferences, universities, national labs, and companies, and organized 20+ international research symposiums/workshops. Currently a Lead Principal Investigator for an \$8M DOE project that seeks to develop next-generation extreme ultraviolet (EUV) lithography patterning materials. Have advised 4 postdocs, and 9 Ph.D., 4 M.S., and 8 undergrad. students, and served on 20+ Ph.D. dissertation committees.

AWARDS AND DISTINCTIONS

2023	Accelerate Initiative Award, U.S. DOE
2023	Inventor of the Year, Battelle Memorial Institute
2021	Winner, DOE National Labs Accelerator Pitch Event
2021	Top-10 Areas of Amazing Science at Brookhaven Lab
2022, 2018, 2011	Spotlight Award, Brookhaven National Laboratory
2007 - 2010	Goldhaber Distinguished Fellowship, Brookhaven National Laboratory
2002 - 2007	Graduate Research Fellowship, Univ. of Pennsylvania
1999 - 2001	Korean Government Scholarship, KAIST
1999	Merit-based Scholarship, Korea University

Candidates for the 53rd Vice President



Hae-Bum Yun

Associate Professor
Civil Engineering
University of Central Florida

STATEMENT OF PURPOSE

I am deeply honored to accept the nomination as a candidate for the 53rd Vice President (VP) of KSEA. Luckily, my activities within the headquarters have predominantly revolved around KSEA Scientists and Engineers Early Career (SEED). Over the years, I've served in various capacities including SEED 2015 and 2016 Workshop Chair, SEED 2023 Committee Member, and currently hold the position of SEED Director. Presently, I am also gearing up for the upcoming SEED 2024 Workshop as its Chair

Having engaged closely with our esteemed seniors and juniors within the association, I am well-versed in the fundamental responsibilities and expectations associated with the VP position as outlined in the bylaws. Furthermore, should I be elected, I am keen to utilize my SEED experiences to promote the next generation. Currently, our SEED Committee is in the process of creating a video alumni book featuring two-minute shorts highlighting the invaluable contributions of mentors and mentees within the SEED program. We are also planning to compile these narratives into a printed alumni book, complemented by the video scripts. Moreover, we aim to streamline this process by developing a system employing generative AI, thereby automating the journey from video uploads to alumni book production. I firmly believe that this completed alumni book and production system can not only benefit SEED but also be extended to other programs like YG, STEP-UP, FIRE, etc., to document the outstanding activities within our association and bolster our external visibility.

My commitment to advancing the mission and vision of KSEA is unwavering, particularly through my dedication to nurturing the growth and development of our younger members. If entrusted with the role of Vice President, I pledge to leverage my SEED experiences to innovate and spearhead initiatives that empower our community while showcasing the remarkable achievements within our association. Together, let us strive towards a future where every member has the opportunity to flourish and contribute to the success of our association. Thank you for considering my candidacy.

EDUCATION

2007 Ph.D. in Civil Engineering, University of Southern California
2002 M.S. in Civil Engineering, Carnegie Mellon University
1996 B.S. in Civil Engineering, Pusan National University, South Korea

ACADEMIC POSITIONS

2016 – Present Associate Professor, Civil Engineering, University of Central Florida
2015 – Present Associated Faculty, Center for Research in Computer Vision, University of Central Florida
2016 – 2017 Visiting Scholar at Korea Marine Equipment Research Institute

2010 Kwang-Hua Visiting Professor of Tongji University, Shanghai, China
2010 – 2016 Assistant Professor, Civil Engineering University of Central Florida
2007 – 2009 Postdoc, Civil Engineering University of Southern California

KSEA HQ ACTIVITIES

2023 – Present Chair, 2024 SEED Workshop
2023 – Present SEED Director
2022 – 2023 Member, 2023 SEED Organizing Committee
2015 – 2016 Chair, 2016 SEED West (Silicon Valley) Workshop
2014 – 2015 Chair, 2015 SEED East (Washington DC) Workshop
2012 – 2013 Member, Honor and Award Committee

KSEA LOCAL CHAPTER ACTIVITIES

2024 – Present Member, 2024 South East Regional Conference Organizing Committee
2015 – 2016 Chapter President, Orlando Chapter
2014 – 2015 Poster Session Chair, 2015 South East Regional Conference Poster
2011 – 2012 Chapter President, Orlando Chapter

PROFESSIONAL ACTIVITIES

2022 – Present Co-chair of the 13th International Conference on Bridge Maintenance, Safety, and Management (IABMAS 2026), Orlando, Florida, 2026
2018 – 2022 Chair of the 8th World Conference on Structural Control and Monitoring (8WCSCM), Orlando, Florida, 2022

RESEARCH GRANTS AND MENTORSHIP

Recipient of numerous federal, state, and international funds from National Science Foundation (NSF), US Department of Transportation (USDOT), Florida Department of Transportation (FDOT), Korea Ministry of Land, Infrastructure and Transport, Korea Institute of Civil Engineering and Building Technology (KICT), Korea Railroad Research Institute (KRRRI), Korea Marine Equipment Research Institute (KOMERI), Korea Ministry of SMEs and Startups, and funds from industries from US and Korea. Advisors of 6 postdocs, 5 PhDs, and 13 MS students, and many UG students.

Candidates for the 53rd Vice President



Jayoung Kim

[\(click name for the video statement\)](#)

Scientist
Thermo Fisher Scientific

STATEMENT OF PURPOSE

I hope that 2024 is off to a great start for you all. I am honored to be nominated for the 53rd Vice President Candidate of KSEA. I am excited about the year ahead of us and all the opportunities we have to make an impact on our science community together. I want you to know how much I appreciate your contributions to the KSEA community.

Since I joined KSEA in 2001 as a fellow/trainee, I have witnessed first-hand the team spirit and dedication of all the KSEA members, leadership, and staff keeping our organization strong and successful. I witnessed in admiration how previous administrations stepped up with agility and finesse to navigate changing times, making many tough decisions while remaining laser-focused on the mission of KSEA. This focus on community has allowed us to make a big difference over the years and has put us on the right track to continue this extraordinary history in years ahead. As a VP candidate, my priority is to strengthen the support, network, and communication among (1) professionals in academia and industry, (2) those in early, middle, and established stages of their careers, and (3) first-generation immigrants and next-generation Korean Americans. My effort will also focus on enhancing financial stability and supporting STEAM education activities, all of which cannot be done without you. With all this in mind, as I strive to dedicate my experience and passion to this role, I would love to have your support.

PROFESSIONAL EXPERIENCE

2001	PhD, Kyung Hee University
2000 – 2024	Fellow, Harvard Medical School
2004 – 2008	Instructor of Surgery, Harvard Medical School
2008 – 2011	Assistant Professor of Surgery, Harvard Medical School
2011 – 2023	Associate Professor, Full Professor, Department of Surgery, Department of BioMedical Sciences, Cedars-Sinai Medical Center, Department of Medicine, UCLA (joint appointment)
2016 – Present	Adjunct Professor in Urology, Gachon Medical School

Currently in ThermoFisher Scientific

KSEA POSITION(S) HELD / KSEA HQ POSITIONS

KSEA 49th Admin, Director of Public Relations, US-Korea Conference (UKC) 2020 Executive Committee, UKC 2020 Plenary Director Member, Scholarship Committee, Chair, Scholarship Committee Chair, KWiSE-KOWFST Women's Forum, Chair, KWSE-KWiSE Forum Co-Chair, Nomination Committee, 2021, UKC 2022 PR Director Chair, Women in STEM Forum Member, APS Committee 2022, UKC2022 PR Director, UKC 2023 Executive Director 2, 2024 UKC Program Director 2

KSEA REGIONAL AND APS POSITIONS

2019, 2020	NMSC Organizing Committee, Southern California
2018	KSEA-KWiSE Science STEM Fair
2019	KSEA-KWiSE Science STEM Fair Committee and Chair of parent education session

2019	KSEA National Math Competition
2018 – 2020	KWiSE Los Angeles President
2020 – 2022	KWiSE HQ President

RESEARCH LEADERSHIP AND PUBLICATIONS

2005 – 2006	President, New England BioScience Society and Conference Chair
2013	Program Director of the Korean World Urological Conference, Research Grant Reviewer, North Carolina Biotechnology Center, Committee, UCLA- USC-Caltech Nanomedicine Symposium
2014	Head Judge, The Intel International Science and Engineering Fair, Reviewer for the PRMRP Pre-IC peer review panel, DOD
2015 – 2016	Invited Grand Award Judge, 2015 At-Large BioGENEius Challenge
2016	Reviewer, National Cancer Institute Special Emphasis Panel/Scientific Review Group 2016/05 ZRG1 DKUS-G (12) B, Reviewer, Interstitial Cystitis Association Research Fund, Reviewer, NIH Special Emphasis Panel/Scientific Review Group
2017	Reviewer, Pilot and Feasibility Studies: The Prevention of Lower Urinary Tract Symptoms (PLUS) Research Consortium, NIDDK
2018	Reviewer, 2018 UCLA CTSI KL2 grant, Invited reviewer for research grants, Kom op tegen Kanker (Stand Up to Cancer), the Flemish Cancer Society
2020	Reviewer, National Institute of Diabetes and Digestive and Kidney Diseases Special Emphasis Panel, Reviewer, The Department of Defense, Congressionally Directed Medical Research Programs

*** My research projects have significant clinical impacts and include human specimens, clinical trials, and interventions. Most recently, my research aims to develop molecular biomarker and machine learning algorithm-based “point-of-care” diagnostic systems and usable medical devices and further validate their clinical value in diagnosis and digitalized health. More than 200 full research papers were published from these research activities in refereed journals, conference presentations, invited talks, and patents in the areas of cancer, urology, omics research, medical device, diagnosis, and disease biomarker discovery field.

AWARDS AND HONORS

2004	American Foundation for Urological Disease Research Scholar
2014	Interstitial Cystitis Association (ICA) Scholarship
2014	IMAGINE NO IC Research Award
2019 – 2023	Faculty Honor Roll, Faculty Artist, Cedars-Sinai Medical Center
2020	Outstanding Woman Scientist Award KWiSE
2020 – 2022	President, Korean Women in Science and Engineering (KWiSE)
2021	Mentor Award WISET
2018 – Present	Certification Commission for Healthcare Interpreters (CCHI)

DEDICATION TO MENTORING & DIVERSITY

Continuing Umbrella of Research Experiences Dana Farber Cancer Institute, Harvard Medical School; Office for Fellowship Training Meeting, Chairperson, Boston Children's Hospital; Committee member of the Career-Life Balance at Boston Children's Hospital; Office for Diversity and Community Partnership, HMS; Co-mentor, DoD PCRP Post-Doc training Award; Co-mentor, Urology Care Foundation Scholar Award; Mentor, Research Intern Program, UCLA; Mentor, The Faculty Mentorship Guide, The Office of Faculty Development and Diversity, CSMC

Candidates for the 53rd Vice President



Ohbong Kwon

Associate Professor
Computer Engineering Technology
New York City College of Technology of CUNY

STATEMENT OF PURPOSE

I am truly honored to be nominated as a candidate for the Vice President (VP) of the 53rd KSEA administration. As a proud member of KSEA, I attribute much of my professional success and growth to the support and opportunities provided by the KSEA. The KSEA has played a vital role in promoting, cultivating, and enhancing my professional development, making me deeply committed to giving back and furthering its mission. Hence, I am passionate about serving our members and advocating for their interests, and I have consistently demonstrated my dedication through active participation and leadership roles within the organization.

In addition, I believe that my experience as 2 times NY Metropolitan Chapter President has equipped me with the leadership skills, strategic vision, and dedication necessary to serve as VP of KSEA effectively.

If elected as Vice President, my vision is to further strengthen KSEA's role as a leading organization for Korean-American community. I aim to enhance networking opportunities, promote diversity and inclusion within the organization, and support initiatives that advance the professional growth and success of our members. I am excited about the opportunity to contribute to the success and growth of KSEA as Vice President. With my experience, passion, and vision, I am confident in my ability to lead and serve effectively in this role.

I extend my sincere gratitude to all those considering my candidacy and eagerly anticipate the opportunity to serve our organization and its members.

EDUCATION

2010	Ph.D. in Electrical and Computer Engineering University of Florida
2000	M.S. in Electrical Engineering Hanyang University, South Korea
1998	B.S. in Electrical Engineering Hanyang University, South Korea

ACADEMIC POSITIONS

2020 – Present	Associate Professor, New York City College of Technology of CUNY
2012 – 2020	Assistant Professor, New York City College of Technology of CUNY
2011 – 2012	Substitute Assistant Professor, New York City College of Technology of CUNY
2010 – 2011	Adjunct Assistant Professor, New York City College of Technology of CUNY

KSEA HQ ACTIVITIES

2023 – 2024	Program Chair, UKC 2024
2022 – 2023	Committee Chair of Local Chapter Presidents
2022 – 2023	Chair, UKC 2023 Computer Science and Information Technology Symposium (CIT)
2019 – 2022	Rules Committee
2018 – 2019	Auditor
2017 – 2018	Co-Chair, UKC 2018 Local Arrangement

KSEA LOCAL CHAPTER ACTIVITIES

2022 – 2023	48 th Chapter President, NY Metropolitan Chapter
2022 – 2023	Chair, 32 nd Northeast Regional Conference (NRC)
2022 – 2023	Chair, KSEA NY Metro Chapter Math and Science Olympiad (KMSO)
2021 – 2022	Chair, 31 st Northeast Regional Conference (NRC)
2018 – 2019	44 th Chapter President, NY Metropolitan Chapter
2018 – 2019	Chair, 28 th Northeast Regional Conference (NRC)
2018 – 2019	Chair, KSEA NY Metro Chapter Math and Science Olympiad (KMSO)
2016 – 2018	Vice President, NY Metropolitan Chapter

RESEARCH LEADERSHIP AND PUBLICATIONS

- Main Area of Research: Efficient implementation of DSP algorithm, highest possible performance using FPGAs in DSP design, and applied mathematics including optimization and statistical techniques
- 34 peer-reviewed publications and 1 book chapter

Candidate for Auditor



Soolyeon Cho

Professor & Associate Dean, College of Design
North Carolina State University, Raleigh, NC

EDUCATION

2009	Ph.D.	Texas A&M University, College Station, TX	2018 – 2019
2002	M.S.	Texas A&M University, College Station, TX	
1995	B.S.	University of Ulsan, Ulsan, Korea	2017 – 2018

PROFESSIONAL EXPERIENCE

2021 – Present	Associate Dean North Carolina State Univ., Raleigh, NC	2017 – 2018
2020 – Present	Professor North Carolina State Univ., Raleigh, NC	2016 – 2017
2015 – Present	Director of PhD Program North Carolina State Univ., Raleigh, NC	2016 – 2017
2014 – 2022	Associate Professor North Carolina State Univ., Raleigh, NC	2016 – 2017
2011– Present	Director of BETlab North Carolina State Univ., Raleigh, NC	2015 – 2016
2011 – 2014	Assistant Professor North Carolina State Univ., Raleigh, NC	2015 – 2016
2010 – 2011	Associate Director Catholic Univ. of America, Washington, DC	2014 – 2015
05/2010 – 08/2010	Research Faculty Pacific Northwest Nation Lab., Richland, WA	2014 – 2015
2008 – 2011	Assistant Professor Catholic Univ. of America, Washington, DC	2013 – 2014
2000 – 2008	Research Assistant/Associate Texas A&M University, College Station, TX	
01/1999 – 08/1999	Research Assistant University of Florida, Gainesville, FL	
1994 – 1997	Mechanical Engineer Hyundai Heavy Industries, South Korea	

KSEA ACTIVITIES

2023– Present	LRPC Member KSEA 52 th Administration
2022– Present	Elec. Committee Member/Chair KSEA 51 st - 52 nd Administration
2022 – Present	History Committee Member KSEA 51 st - 52 nd Administration
2021 – 2022	Nomination Committee Chair KSEA 50 th Administration
2020 – 2021	President KSEA 49 th Administration
2019 – 2020	President Elect KSEA 48 th Administration
2018 – 2019	Vice President 2 KSEA 47 th Administration

2018 – 2019	Advisor North Carolina Chapter General Director UKC 2018
2017 – 2018	President North Carolina Chapter Fund Management Committee KSEA 45 th Administration Finance Director KSEA 45 th Administration Election Committee Member KSEA 45 th Administration Nomination Committee KSEA 44 th Administration Publication Director KSEA 44 th Administration Sponsorship Program Director UKC 2015
2014 – 2015	President North Carolina Chapter Vice-President North Carolina Chapter

PROFESSIONAL ACTIVITIES

2016 – Present	Advisor ASHRAE NCSU Student Chapter
2012 – Present	Reviewer Journal of Energy and Buildings
2012 – Present	Reviewer ASME International Conference
2010 – Present	Reviewer IARIA Journals
2007 – Present	Member Int. Building Performance Simulation Association
2009	Reviewer NSF ARI R2 Program
1999 – Present	Member American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE)

Candidates for Technical Group B-3 Councilor



In-Hyun Park

Associate Professor
Genetics
Yale University

EDUCATION

- 2005 Ph.D. in Cell and Developmental Biology, University of Illinois at Urbana
- 1999 M.S. in Plant Pathology, Seoul National University, South Korea
- 1994 B.S. in Plant Pathology, Seoul National University, South Korea

PROFESSIONAL EXPERIENCE

- 2019 – Present Associate Professor (tenured), Genetics, Yale University
- 2010 – 2017 Associate Professor of Genetics, Yale University
- 2009 – 2015 Assistant Professor of Genetics, Yale University
- 2005 – 2009 Research Fellow, Harvard Medical School

KSEA ACTIVITIES

- 2016 – 2019 Program Co-Chair of BMP symposium, UKC Meeting
- 2020 – 2021 Program Chair of BMP symposium, UKC Meeting
- 2022 – 2023 KSEA UKC Steering Committee

PROFESSIONAL ACTIVITIES

- 2023 – Present Advisory Board, Cell Stem Cell
- 2022 – Present Associate Editor, Cellular and Molecular Life Sciences
- 2017 – Present Editorial Board, Organoids
- 2017 – Present Editorial Board, iScience
- 2014 – Present Editorial Board, Stem Cell Reports
- 2014 – Present Member, Society of Neuroscience
- 2012 – Present Editorial Board, Frontiers in Neurogenesis
- 2010 – Present Member, Embryonic Stem Cell Research Oversight Committees (ESCRO), Yale University
- 2009 – 2012 Member, Stem Cell Bank Working Group, University of Massachusetts, Worcester
- 2005 – Present Member, International Society of Stem Cell Research (ISSCR)
- 2001 – 2005 Member, American Society of Cell Biology
- 1997 – 2000 Member, Microbiological Society of Korea

RESEARCH LEADERSHIP AND PUBLICATIONS

(3 US Patents, 85 papers in peer-reviewed research journals, 32 book chapters and review papers)

1. Cakir B., X. Yangfei, Y. Tanaka, M. H. Kural, M Parent, K. Chapeton, Y. Yuan, C. S. He, M. S. B. Raredon, J. Dengelegi, B. Patterson, K. Y. Kim, Y. P. Sun, S. H. Lee, P. Patra, F. Hyder, L. Niklason, S. H. Lee, Y. S. Yoon, and In-Hyun Park, Development of human brain organoids with functional vascular system. (2019) Nature Methods 16:1169-1175 (PMID: 31591580)
2. Xiang Y., Y. Tanaka, B. Patterson, S. M. Hwang, E. Hysolli, B. Cakir, K. Y. Kim, W. Wang, Y. J. Kang, E. M. Clement, M. Zhong, S. H. Lee, Y. S. Cho, P. Patra, G. J. Sullivan, S. M. Weissman, and In-Hyun Park, Dysregulation of BRD4 function underlies in MeCP2 mutant neurons. (2020) Mol Cell 79:84-98 (PMID: 32526163)
3. Cakir B., Y. Tanaka, F.R. Kiral, Y. Xiang, O. Dagliyan, J. Wang, M. Lee, A. M. Greaney, W. S. Yang, C. duBoulay, M. H. Kural, B. Patterson, M. Zhong, J. Kim, Y. Bai, W. Min, L. Niklason, P. Patra, and In-Hyun Park, Expression of the transcription factor PU.1 induces the generation of microglia-like cells in human cortical organoids (2022) Nature Comm. 13:430 (PMID: 35058453)
4. Patterson, B., Yang, B., Tanaka, Y., Kim, K.Y., Cakir, B., Xiang, Y., Kim, J., Wang, S., and Park, I.H. (2023). Female naïve human pluripotent stem cells carry X chromosomes with Xa-like and Xi-like folding conformations. Science Advances 9, eadf2245. (PMID:37540754)
5. Kiral F. R., B. Cakir, Y. Tanaka, J. Kim, W. Yang, F. Wehbe, Y. J. Kang, Z. Mei, X. G. Sancer, Liu, S. H. Lee, Y. Xiang, and In-Hyun Park Generation of ventralized human thalamic organoids with thalamic reticular nucleus. (2023) Cell Stem Cell 30:677 (PMID: 37019105)

Candidates for Technical Group B-3 Councilor



Sung Yun Jung

Associate Professor
Biochemistry and Molecular Pharmacology
Baylor College of Medicine

EDUCATION

1998 Ph.D. in Pharmacy, Chung-Ang University, South Korea
1993 M.S. in Pharmacy, Chung-Ang University, South Korea
1990 B.S. in Pharmacy, Chung-Ang University, South Korea

PROFESSIONAL EXPERIENCE

2016 – Present Associate Professor, Department of Biochemistry and Molecular, Pharmacology, Baylor College of Medicine (BCM)
2012 – 2016 Assistant Professor, Department of Biochemistry and Molecular Biology (BMB), BCM
2007 – 2011 Research Associate, BMB, BCM
2000 – 2003 Research Professor, Chung-Ang University, Seoul

KSEA ACTIVITIES

2023 – Present General Director, KSEA 52nd Admin
2023 – Present Member, KSEA UKC steering committee
2022 – 2023 Executive Director, UKC2023
2023 Co-Chair, UKC2023 Keynote Symposium Life Science and Engineering
2023 Chair, UKC2023, Seegene Medical Foundation (SMF) Distinguished Forum
2020 – 2022 Chapter President, KSEA South Texas Chapter
2016 Best Poster Award, KSEA UKC2016
2016 Conference Chair, KSEA West Gulf Coastal Regional Conference
2010 – 2011 Chapter President, KSEA South Texas Chapter
2006 Inaugural member, KSEA West Gulf Coastal Regional Conference

PROFESSIONAL ACTIVITIES

2012 – 2020 Core Director, Proteomics Core, BCM
2007 – 2011 Core Facility Manager, Pathway Discovery Proteomics Core, BCM Cancer Center
2021 – Present Editorial board member, BioMed Research International
2021 – Present Editorial board member, Cellular Signalling

RESEARCH LEADERSHIP AND PUBLICATIONS

152 papers in peer-reviewed journals, 4 Patents
1. Mindikoglu, A. L., Park, J., Opekun, A. R., Abdulsada, M. M., Wilhelm, Z. R., Jalal, P. K., Devaraj, S., and Jung, S. Y. (2022) Dawn-to-dusk dry fasting induces anti-atherosclerotic, anti-inflammatory, and anti-tumorigenic proteome in peripheral blood mononuclear cells in subjects with metabolic syndrome. *Metabol Open* 16, 100214
2. Chen Y, Leng M, Gao Y, Zhan D, Choi JM, Song L, Li K, Xia X, Zhang C, Liu M, Ji S, Jain A, Saltzman AB, Malovannaya A, Qin J, , Wang Y. Jung, S. Y. (2019) A Cross-Linking-Aided Immunoprecipitation/Mass Spectrometry Workflow Reveals Extensive Intracellular Trafficking in Time-Resolved, Signal-Dependent Epidermal Growth Factor Receptor Proteome. *J Proteome Res.* 18(10):3715-3730.
3. Jung,S.Y., Choi,J.M., Rousseaux,M.W., Malovannaya,A., Kim,J.J., Kutzera,J., Wang,Y., Huang,Y., Zhu,W., Maity,S., Zoghbi,H.Y., and Qin,J. (2017). An Anatomically Resolved Mouse Brain Proteome Reveals Parkinson Disease-relevant Pathways. *Mol. Cell Proteomics.* 16, 581-593.

RESEARCH ACTIVITY AND GRANTS

- Active - 2 multi-PI NIH R01, 2 multi-PI NIH R21, 8 co-I NIH R01
- Completed - 3 multi-PI NIH R01, 18 co-I NIH R01, 1 Co-PI CPRIT (Cancer Prevention and Research Institute of Texas) Award, 2 Co-I CPRIT Award

Candidates for Technical Group C-4 Councilor



Jinkyong Yoo

Staff scientist
Center for Integrated Nanotechnologies (CINT)
Los Alamos National Laboratory

EDUCATION

- 2010 Ph.D. in Materials Science and Engineering
POSTECH, Republic of Korea
- 2003 B.S. in Materials Science and Engineering
POSTECH, Republic of Korea

PROFESSIONAL EXPERIENCE

- 2018 – Present Co-leader of Quantum Materials Systems Thrust,
CINT, Los Alamos National Laboratory
- 2017 – 2018 Co-leader of NanoElectronics and Mechanics
Thrust, CINT, Los Alamos National Laboratory
- 2020 – Present Member of Department of Energy Quantum
Science Center
- 2013 – Present Staff scientist, Los Alamos National Laboratory
- 2010 – 2013 Postdoctoral Research Associate, Los Alamos
National Laboratory

KSEA ACTIVITIES

- 2021 UKC-SEED panel

PROFESSIONAL ACTIVITIES

- 2024 – Present Principal Editor, Journal of Materials Research
(Springer, Materials Research Society)
- 2024 – Present Panel, Materials Research Society Outstanding
Young Investigator Award Selection Committee
- 2024 A lead symposium organizer of “*Advances
in Emerging Electronic Nanomaterials: Towards
Next-Generation Microelectronics*”, MS&T24,
Pittsburgh, PA, October 6–9, 2024
- 2023 – Present Panel, Semiconductor Research Corporation
Technical Working Group-C: Heterogeneous
Integration
- 2020 – 2021 An organizer of American Physical Society March
meeting Division of Materials Physics Focus
Symposium: Topological Quantum Materials
- 2015 – Present Reviewer, National Science Foundation DMR,
Department of Energy Basic Energy Science Core
program, Army Research Laboratory, Air Force
Office of Scientific Research

RESEARCH LEADERSHIP AND PUBLICATIONS

(4 US Patents, 8 Korea Patents/PTO, 3 Book chapters, 107 papers in peer-reviewed journals)

1. “*Unveiling mechanism of remote epitaxy mechanism of semiconductors on 2D materials*”, Xuejing Wang, Joonghoon Choi, Jinkyong Yoo*, Young Joon Hong*, Nanoconvergence 10, 40 (2023) (Invited review article).
2. “*Evidence of Hexagonal Germanium Grains on Annealed MoS₂*”, Xuejing Wang, Ryan Kaufmann, Andrew Jones, Renjie Chen, Towfiq Ahmed, Michael Pettes, Paul G. Kotula, Ismail Bilgin, Yongqiang Wang, Swastik Kar, Jinkyong Yoo* Materials Today Advances 19, 100401 (2023).
3. “*Enhanced exciton-to-trion conversion by proton irradiation of atomically thin WS₂*”, Xuejing Wang*, Michael T. Pettes, Yongqiang Wang, Jianxin Zhu, Rohan Dhall, Chengyu Song, Andrew C. Jones, Jim Ciston, and Jinkyong Yoo*, Nano Letters 23(9), 3754-3761 (2023).
4. “*Fabrication of a microcavity prepared by remote epitaxy over monolayer molybdenum disulfide*”, Yeonhoo Kim, John Watt, Xuedan Ma, Towfiq Ahmed, Suhyun Kim, Kibum Kang, Young Joon Hong, Jinkyong Yoo* ACS Nano 16(2), 2399-2406.
5. “*Progressive inward growth of solid-electrolyte interphase causes capacity fading of large volume changing anodes*” Yang He, Tianwu Chen, Haiping Jia, Lin Jiang, Ran Yi, Yaobin Xu, Dingchuan Xue, Arda Genc, Cedric Bouchet-Marquis, Lee Pullan, Ted Tessner, Jinkyong Yoo*, Xiaolin Li*, Ji-Guang Zhang, Sulin Zhang*, Chongmin Wang*, Nature Nanotechnology 16, 1113-1120 (2021).
6. “*A fabrication process for flexible single-crystal perovskite devices*”, Yusheng Lei, Yimu Chen, Yuheng Li, Seunghyun Lee, Woojin Choi, Hsinhan Tsai, Kaiping Wang, Yanqi Luo, Yue Gu, Xinran Zheng, Chonghe Wang, Chunfeng Wang, Hongjie Hu, Yang Li, Baiyan Qi, Muyang Lin, Zhuorui Zhang, David Fenning, Shadi Dayeh, Tse Nga Ng, Matt Pharr, Kesong Yang, Jinkyong Yoo, Wanyi Nie, Sheng Xu, Nature 583, 790-795 (2020).
7. “*Remote heteroepitaxy of GaN microrod heterostructures for deformable light-emitting diodes and wafer recycle*”, Junseok Jeong, Qingxiao Wang, Janghwan Cha, De Kwon Jin, Dong Hoon Shin, Sunah Kwon, Bong Kyun Kang, Jun Hyuk Jang, Woo Seok Yang, Yong Seok Choi, Jinkyong Yoo, Jong Kyu Kim, Chul-Ho Lee, Sang Wook Lee, Anvar Zakhidov, Suklyun Hong, Moon J. Kim, Young Joon Hong, Science Advances 6, eaaz5180 (2020).

Candidates for Technical Group C-4 Councilor



SungWoo Nam

Professor and Associate Chair
Mechanical and Aerospace Engineering
Materials Science and Engineering
University of California, Irvine (UCI)

EDUCATION

- 2011 Ph.D. Applied Physics, Harvard University
- 2007 M.S. Physics, Harvard University
- 2002 B.S. Materials Science and Engineering, Seoul National University

PROFESSIONAL EXPERIENCE

- 2023 – Present Professor and Associate Chair, UCI
- 2021 – 2023 Associate Professor, UCI
- 2018 – 2021 Associate Professor and Anderson Faculty Scholar, University of Illinois at Urbana-Champaign (UIUC)
- 2012 – 2018 Assistant Professor, UIUC
- 2011 – 2012 Postdoctoral Scholar, University of California, Berkeley

KSEA ACTIVITIES

- 2021 – 2022 SEED Director, KSEA 50th Admin

PROFESSIONAL ACTIVITIES

- 2023 – Present Associate Chair and Graduate Advisor, UCI
- 2018 – 2023 Symposium Organizer and Chair, Materials Research Society (MRS) Meetings – Fall 2023, Fall 2022, Fall 2021, Fall 2020, Fall 2019, Spring 2019, and Spring 2018

AWARDS AND HONORS

- 2018 Early Career Faculty Fellow, The Minerals, Metals & Materials Society (TMS)
- 2017 Young Investigator Program (YIP) Award, Office of Naval Research (ONR)
- 2016 Early Career Faculty (ECF) Award, National Aeronautics and Space Administration (NASA)
- 2016 Young Investigator Research Program (YIP) Award, Air Force Office of Scientific Research (AFOSR)
- 2016 Faculty Early Career Development Program (CAREER) Award, National Science Foundation (NSF)
- 2014 Young Investigator Award, Korean-American Scientists and Engineers Association (KSEA)

RESEARCH PUBLICATIONS (SELECTED)

- C. Cho, Z. Zhang, J. M. Kim, P. J. Ma, M. F. Haque, P. Snapp and S. Nam, “*Spatial Tuning of Light–Matter Interaction via Strain-Gradient-Induced Polarization in Freestanding Wrinkled 2D Materials*,” Nano Letters 23, 9340 (2023).
- N. R. Glavin, and S. Nam, “*2D layered materials and heterostructures: Past, present, and a bright future*,” Matter 6, 4 (2023).
- J. M. Kim, M. F. Haque, E. Y. Hsieh, S. M. Nahid, I. Zarin, K.-Y. Jeong, J.-P. So, H.-G. Park, and S. Nam, “*Strain Engineering of Low-Dimensional Materials for Emerging Quantum Phenomena and Functionalities*,” Advanced Materials 2107362 (2022).
- M. F. Haque, P. Snapp, J. M. Kim, M. C. Wang, H. J. Bae, C. Cho, and S. Nam, “*Strongly Enhanced Electromechanical Coupling in Atomically Thin Transition Metal Dichalcogenides*,” Materials Today 47, 69 (2021).
- C. Cho, J. Wong, A. Taqieddin, S. Biswas, N. R. Aluru, S. Nam and H. A. Atwater, “*Highly Strain-Tunable Interlayer Excitons in MoS₂/WSe₂ Heterobilayers*,” Nano Letters 21, 3956 (2021).
- C. Cho, P. Kang, A. Taqieddin, Y. Jing, K. Yong, J. M. Kim, M. F. Haque, N. R. Aluru, and S. Nam, “*Strain-resilient Electrical Functionality in Thin-film Metal Electrodes using Two-dimensional Interlayers*,” Nature Electronics 4, 126 (2021).
- J.-P. So, K.-Y. Jeong, J. M. Lee, K.-H. Kim, S.-J. Lee, W. Huh, H.-R. Kim, J.-H. Choi, J. M. Kim, Y. S. Kim, C.-H. Lee, S. Nam, and H.-G. Park, “*Polarization Control of Deterministic Single-Photon Emitters in Monolayer WSe₂*,” Nano Letters 21, 1546 (2021).

Candidates for Technical Group C-5 Councilor



JuHyeong Ryu

Assistant Professor
Department of Industrial and Management Systems Engineering
West Virginia University

EDUCATION

- 2021 Ph.D. in Civil and Environmental Engineering
University of Waterloo, Waterloo, ON
- 2016 M.S. in Civil and Environmental Engineering,
University of Michigan
- 2010 B.S. in Architectural Engineering
Dankook University, Gyeonggi, Korea

PROFESSIONAL EXPERIENCE

- 2022 – Present Assistant Professor, West Virginia University
- 2021 – 2022 Postdoctoral Fellow, University of Waterloo

KSEA ACTIVITIES

- 2023 – Present Committee, KSEA Scientists and Engineers Early Career Development (SEED) 2024
- 2023 – Present General Secretary, Korean-American Society of Civil, Environmental, and Architectural Engineers (KSCEA)

PROFESSIONAL ACTIVITIES

- 2023 – Present Editor, Human Factors in Healthcare
- 2023 – Present Board of Director, Institute of Industrial and Systems Engineers (IISE), Construction Engineering Management (CEM) Division
- 2022 – Present Guest Editor, Buildings
- 2022 – Present Member, American Society of Safety Professionals (ASSP)
- 2021 – Present Member, Construction Research Council (CRC)

RESEARCH LEADERSHIP AND PUBLICATIONS (SELECTED)

1. McFarland, T., Ryu, J.*, Haas, C., and Abdel-Rahman, E. (2024) “*Crafting Safe and Efficient Masonry Practices: Quantitative Assessment of Postural Characteristics in Movement Strategies*”. Journal of Construction Engineering and Management, 150(2), 04023159.
2. Ryu, J.*, Banting, B., Abdel-Rahman, E. M., Haas, C. T. (2023) “*Ergonomic Characteristics of Expert Masons*”. Journal of Construction Engineering and Management. 149 (1), 04022150

3. Ryu, J.*, McFarland, T., Haas, C., and Abdel-Rahman, E. (2022) “*Automated Clustering of Proper Working Postures for Phases of Movement*”. Automation in Construction. 138, 104223
4. Ryu, J., McFarland, T., Banting, B., Haas, C. T., Abdel-Rahman, E. M. (2020) “*Health and Productivity Impact of Semi-Automated Work Systems in Construction*”. Automation in Construction. 120, 103396
5. Ryu, J.*, Alwasel, A., Haas, C. T., Abdel-Rahman, E. M. (2020) “*Analysis of Relationships Between Body Load and Training, Work Methods, and Work Rate: Overcoming the Novice Mason’s Risk Hump*”. Journal of Construction Engineering and Management. 146 (8), 04020097

AWARDS AND HONORS

- 2023 Best Presentation Award, SEED Workshop
- 2021 Doctoral Thesis Awards, Univ. of Waterloo
- 2020 Best Paper Award, International Workshop on Intelligent Computing in Engineering, Germany
- 2014 Tishman Master’s Fellowship, Univ. of Michigan

Candidates for Technical Group C-5 Councilor



Sung-Hee (Sonny) Kim

Professor and Distinguished Faculty Fellow
Associate Chair for Globak Engagement
School of Environmental, Civil, Agricultural, and Mechanical Engineering
The University of Georgia

EDUCATION

- 2004 Ph.D. Civil Engineering, Texas A&M University
- 2000 M.S. School of Civil and Environmental Engineering
Georgia Institute of Technology
- 1999 B.S. Civil Engineering, Inha University – Summa Cum Laude.

PROFESSIONAL EXPERIENCE

- 2023 – Present Associate Chair for Global Engagement,
College of Engineering, Univ. of Georgia
- 2022 – Present Professor, College of Engineering, Univ. of Georgia
- 2018 – Present Graduate Coordinator, College of Engineering,
Univ. of Georgia
- 2016 – 2022 Associate Professor, College of Engineering,
Univ. of Georgia
- 2012 – 2015 Associate Professor, Civil Engineering,
Kennesaw State University
- 2007 – 2012 Assistant Professor, Kennesaw State University

KSEA ACTIVITIES

- 2024 – Present NMSC Chair, KSEA Georgia Chapter
- 2023 – Present Membership Director, KSEA 52nd Admin
- 2023 – Present President, Korean Transportation Association in
America (KOTAA)
- 2022 – 2025 Member, APS Council, KSEA
- 2022 – 2023 Sponsored Forum Director, UKC 2023
- 2012 – 2016 Technical Session Chair, UKC 2012, UKC 2013,
UKC 2014, UKC 2015, UKC 2016

PROFESSIONAL ACTIVITIES

- 2023 – Present Committee, ASCE Georgia Infrastructure
Report Card
- 2022 – Present Voting member, International Society for
Soil Mechanics and Geotechnical Engineering
(ISSMGE) TC202 Transportation Geotechnics
- 2019 – 2022 Academic Representative, FHWA's Asphalt
Pavements and Materials Technical Feedback
Group (PM-TFG)
- 2019 – Present Board of Directors, Falling Weight Deflectometer
User Group (FWDUG)
- 2019 – Present Voting Member, TRB AKM 80 Aggregates
- 2019 – Present Voting Member, AKP 20 Design and Rehab. of
Concrete Pavements
- 2018 – Present Voting Member, ASCE Geo-Institute
Pavement Committee
- 2017 – Present Voting Member, ASCE T&DI Highway
Pavement Committee

RESEARCH LEADERSHIP AND PUBLICATIONS

- 120+ publications in refereed journals, proceedings, and technical reports
- 110+ invited talks/seminars at national and international institutes or conferences

AWARDS AND HONORS

- 2023 President's Award, Korean Geotechnical Society
- 2023 Achievement Award, International Society for Maintenance and Rehabilitation of Transport Infrastructures
- 2021 Georgia Engineer of the Year Award, Georgia Society of Professional Engineers (GSPE)
- 2021 Civil Engineer of the Year Award, American Society of Civil Engineer (ASCE) -Georgia
- 2020 AASHTO High-Value Research Award Nomination, American Association of State Highway and Transportation Officials
- 2020 Editors' Pick with Displayed Issue Cover
- 2019 Distinguished Faculty Fellow Award , College of Engineering, Univ. of Georgia
- 2018,19 Prime Minister's Appreciation Plaque, Egyptian Housing and Building National Research Center, Egypt
- 2018 Public Service and Outreach Fellow, Univ. of Georgia
- 2017 ASCE Fellow, American Society of Civil Engineers
- 2015 Outstanding Faculty Award , Polytechnic Foundation of KSU, Inc

GRANTS

- Recipient of over \$10M research fundings from numerous federal and state agencies including NSF, US Department of Agriculture (USDA), Federal Highway Administration (FHWA), Georgia Department of Transportation (GDOT), and multiple Industrial sectors
- Advisor of 16 PhD's and, 30+ MS'

Candidate for the Technical Group C-7 Councilor



Sam Chung

Data Science Software Architect
CSX Technology Founding Dean & Professor
School of Technology & Computing (STC) City University of Seattle (CityU), Seattle, WA

EDUCATION

- 1995 Ph.D. in Computer Science & Engineering
University of South Florida, Tampa, FL
- 1991 Applied Scientist
George Washington University Washington, D.C.
- 1985 MS in Computer Science
Korea Advanced Institute of Science & Technology
Seoul, Korea
- 1983 B.S. in Electronics
Kyungpook National University, Daegu, Korea

PROFESSIONAL EXPERIENCE

- 2020 – Present Founding Dean & Professor, School of Technology & Computing (STC), City University of Seattle (CityU), Seattle, WA
- 2014 – 2018 Director & Professor, School of Information Systems & Applied Technologies, College of Applied Sciences and Arts (CASA), Southern Illinois University (SIU), Carbondale, IL
- 2001 – 2014 Assistant / Associate / Endowed Chair Professor
University of Washington (UW), Tacoma, WA

MY EXPECTED CONTRIBUTIONS

- Strong TG C-7: Build a strong TG C-7 community in cyberspace by connecting members through LinkedIn through monthly email.
- Sustainable TG C-7: Collaborate with the annual UKC Technical Group Symposium – Computer & Information Technology (CIT) & Affiliated Professional Society - Korean Computer Scientists & Engineers Association in America (KOCSEA)
- Smart TG C-7: Host annual technical workshops for website development, cloud computing, and low-code development for undergraduate members, emphasizing local chapters' IT support.

KSEA ACTIVITIES

- 2022 – 2023 51st Term Vice President 2
- 2020 – 2022 KSEA Seattle Chapter President
- 2018 – 2021 KSEA 48th and 49th IT Director
- 2017 – 2018 UKC 2018 IT Director
- 2015 – 2018 SIU YG Chapter Advisor
- 2001 – 2014 KSEA Seattle Chapter Member, Vice President, President, Advisor

PROFESSIONAL ACTIVITIES (INCLUDING MY EXPERIENCES WITH KSEA APS KOCSEA)

- Served as the General Conference Chair at KSEA NWRC + KOCSEA + Changbal 2022 in Seattle, WA from 11/11/2022 to 11/13/2023.
- 2023 The Presidents Volunteer Service Award Bronze by the White House
- Distinguished Paper Awards (top 5%), Conference on Information Systems Applied Research (CONISAR), 11/5/2022.
- Meritorious Paper Awards (top 10%), Conference on Information Systems Applied Research (CONISAR), 11/5/2022.
- 2022 KSEA Awards. Outstanding Community Service Award. UKC 2022, Arlington, VA. August 17-20, 2022.

RESEARCH LEADERSHIP AND PUBLICATIONS

(The most recent journals since 2023)

- Liu, Y. & Chung, S. (2023). A Serverless Real-Time Data Streaming Architecture for Synchronous Online Math Competition. Journal of Information Systems Applied Research (JISAR). Volume 16, No. 1, March 2023. (Distinguished Paper Awards, top 5%)
- Kim, T., Ju, A., Maeng, B., & Chung, S. (2023). A Predictive Unmanned Aerial Vehicle Maintenance Method: Using Low-Code and Cloud-Based Data Visualization. Journal of Information Systems Applied Research (JISAR). Volume 16, No. 2, July 2023. (Meritorious Paper Awards, top 10%)
- Ata, C. M., Chung, S., & Maeng, B. (2023). Optimizing a Convolutional Neural Network Binary Image Classifier via Mobile Devices: EZ Autism Screener. Journal of Information Systems Applied Research (JISAR). Volume 16, No. 3, November 2023.