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KSEA LETTERS

KSEA 44 LETTERS

Highlights of SEED & NMSC
Chapter, APS, & HQ News

Vol 44 – 03

44TH

The Journal of Korean-American Scientists and Engineers Association

About KSEA

Korean-American Scientists and Engineers Association (KSEA) is a 44-year-old non-profit national-level professional organization. It is open for individuals residing in the USA who are engaged in science, engineering or a related field.

KSEA's objectives are:

- To promote the application of science and technology for the general welfare of society;
- To foster the cooperation of international science communities especially among the US and Korea;
- To serve the majority of Korean-American Scientists and Engineers and help them to develop their full career potential.

KSEA has 78 Chapters/Branches, 13 Technical Groups and 27 Affiliated Professional Societies (APS) covering all major branches of science and engineering. Since its birth in 1971, KSEA has been recognized as the main representative organization promoting the common interests of Korean-American scientists and engineers toward meeting the objectives mentioned above.

KSEA welcomes participation from 1.5th-generation, 2nd-generation, and 3rd-generation Korean-American scientists and engineers including the mixed-race and adoptee communities. KSEA promotes helping younger-generation Korean-Americans to be aware of the rapid advances in science and engineering occurring both inside and outside of the US. Especially, to create opportunities for young generation members to interact with talented scientists and engineers in Korea.

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2016

WKC

World-Korea Conference 2016

Convergence of Science, Technology and Economy

July 13~14, 2016
COEX, Seoul, Korea

Ministry of Science, ICT and Future Planning

KOFST
THE KOREAN FEDERATION OF SCIENCE AND TECHNOLOGY SOCIETIES

We would like to invite you to the "World-Korea Conference 2016" which will be held at COEX in Seoul from July 13 to 14, 2016. This conference is hosted by Ministry of Science, ICT and Future Planning (MSIP) and organized by the Korean Federation of Science and Technology Societies (KOFST). Under the theme of "Convergence of Science, Technology and Economy," it will serve as a venue to build a consensus with international scientists and engineers about the creative economy built on science and technology, encourage them to expedite outcome, and make a pledge for great strides towards the future.

At the "World-Korea Conference 2016," you will have the following experiences:

Global leadership is reinforced through international cooperation on science and technology

At the conference, we will work to reinforce global leadership in science and technology area by seeking for the roles of science and technology to address global challenges (aging population, water scarcity, climate change, etc.) and setting shared goals.

Renowned scholars from around the world gather together

The conference will be a platform of unity as Nobel prize winners and renowned business leaders from around the world will participate as invited speakers and about 1,500 scientists and engineers from more than 18 countries including developing countries and North Korea will get together.

Vision for prosperous future global economy is proposed

At the conference, we will discuss about sustainable economic growth based on science and technology, propose vision for future global economy, and develop new business models built on science and technology.

Seoul, A Mix of Tradition and Modernity:

Seoul was the capital of the Baekje Kingdom and Joseon Dynasty in the ancient times with over 500 years of history respectively. Since the Joseon dynasty era, Seoul has been home to many historical sites and relics. Also, it is a city where you can feel a sense of history and tradition from Gyeongbokgung and Deoksugung Palaces, Namdaemun and many more at the very center of leading high-tech hubs surrounded by high-rise buildings and IT industrial complexes. We hope you enjoy the dynamic beauty of Seoul and experience healthy traditional Korean food such as Kimchi, Bulgogi and Bibimbap.



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PUBLICATION TEAM EDITORIAL NOTE

A Message from the Publication Directors of the KSEA 44th Administration

Spring is almost over and it is time to get ready for summer. In the meanwhile, we look back at two national events in this issue of Letters. The 2016 Scientists and Engineers Early-Career Development Workshop West (SEED-West) held this past April in Silicon Valley, California and was the second SEED conference held this term which provides early career researchers advice and mentoring with special attention paid to entrepreneurship. On the other hand the 2016 National Mathematics and Science Competition (NMSC), which was held this past April across the U.S., challenges the next generation elementary through high school students by challenging their mathematical abilities, piquing their interest in hands-on science, and testing their physics knowledge.

This featured article of this issue is a personal essay by Dr. Seung Woo Lee, the recipient of the prestigious 2016 KSEA Young Investigator Grant, about the importance of persistence in research and how he worked through his failures. We congratulate Dr. Seung Woo Lee for his award as well as congratulating 40 undergraduate and graduate student recipients of KSEA and KUSCO scholarships.

All members can also enjoy reading about the various local KSEA activities such as the South-Western, South-Atlantic and Mid-Atlantic Regional Conferences, as well as professional activities of three affiliated professional societies: KOPANA, NYKB, and AKPA. For those members who are curious on what has been going on at KSEA HQ, they can read about the election results, IT projects, and the legal assistance provided to local chapters. We also honor the life of Dr. Moo-Young Han, the 20th President of KSEA, and offer the deepest condolences of his passing to his family and friends.

We continue to accept any news, event information or articles you'd like to share with other KSEA members. Please contact the KSEA Publications Directors or simply email your article to sejong@ksea.org. We thank you for your readership.

The 44th Admin. Publication Directors

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KSEA LETTERS
Vol. 44 No. 3
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Message from the President

YOUNGSOO RICHARD KIM, PhD

President
Korean–American Scientists and Engineers Association

Distinguished Professor
North Carolina State University

Dear Fellow KSEA Members,

It is hard to believe that the KSEA's 44th Administration is nearing the end of its term. The past year has been a great ride because of the many capable and dedicated Directors, Councilors, and HQ staff members. I thank each of them from the bottom of my heart. Although the 44th Administration inherited some unresolved matters from the previous administration, we confronted and addressed those issues successfully, thus proving that KSEA has the resolve to withstand challenges and is strong and unified. I'd like to report to you some of the major accomplishments of the 44th Administration.

UKC 2015

Excellence and service were the fundamental principles for the theme of the 2015 US-Korea Conference (UKC), Pursuing Excellence with a Servant's Heart. These guiding principles shone in the plenary speeches, video presentations, and the ways the organizers and volunteers served the conference participants and sponsors. Also, we were able to establish the 'project-based sponsorship' concept at UKC 2015, which will provide future administrations with more effective and additional fund-raising opportunities. UKC 2015 served to ensure that the high quality of KSEA's annual conference will continue into the future.

Young Generation Events

YG events held during the 44th Administration included the Young Generation Technical and Leadership Conference (YGTLC) and two Scientists and Engineers Early Career Development (SEED) workshops. The 2016 YGTLC was held in Dallas, Texas January 22 - 24, 2016, and again provided excellent networking opportunities to our YG members.

The SEED workshop was held twice during the 44th administration: the first at KSEA Headquarters in Vienna, Virginia December 5 - 6, 2015 and the second in Silicon Valley, California April 30 - May 1, 2016. These SEED workshops have proven again and again to be among the best career development workshops that are available to KSEA YG members. In addition to these recurring YG events, a new YG Leaders Workshop was held in New Orleans. We are excited to help grow the strong future of KSEA with an increasing array of YG events for our new and younger members.

Bylaws and Policies Changes

The Council made several important changes to the KSEA Policies. These decisions include:

- Incorporation of a regional concept in KSEA's administrative structure so that local chapter presidents can be represented properly on the Council. The Council has adopted a policy change to create eight Regions in the KSEA chapter structure. Each Region is now composed of four to seven local chapters. Regional Representatives will be selected from the pool of chapter presidents based on rotation. In this way, each local chapter (regardless of size) will have the opportunity for its president to serve as a KSEA Councilor.
- Integration of Technical Groups and Affiliated Professional Societies. The Council has adopted policy changes that strengthen the responsibilities of the Technical Group Councilors and strengthen the relationship between the Technical Groups and Affiliated Professional Societies.

Redesign of IT Database System

During this administration, the IT team developed a system that allows KSEA members to encrypt their passwords and update their membership information in the database. This ability will strengthen the security of the membership database and will serve an important function in developing the voter registry for upcoming elections. In addition, the IT team has developed an automatic proposal submission and review system. Finally, additional security measures were developed and applied to this year's online election.

Non-profit Organization Registration of Local Chapters

The 44th Administration has hired the company, Nonprofit Elite, to provide twelve local chapters with non-profit formation and 501c3 application. This status change will equip these local chapters with the necessary legal protection to raise funds on their own.

National Mathematics and Science Competition

The National Mathematics and Science Competition (NMSC) is the flagship community service event held by KSEA. A total of 35 chapters/branches participated in this year's NMSC, with 1,779 students competing in the Math Competition.

Local Chapter Events, Regional Conferences, and APS Meetings

The 44th Administration received and funded 176 local chapter proposals, 7 Regional Conference proposals, and 19 APS meetings. Activities by local chapters and APS continue to grow, which is a healthy sign for the growth of KSEA.

These accomplishments would not have been possible without KSEA's dedicated Directors and Councilors, and I very much appreciate their service. Special thanks go to Prof. Myung Jong Lee, the President Advisor for the 44th Administration, for sharing his wisdom and experience. It has been an honor and privilege to work with so many excellent and service-minded KSEA members.

Thank you for your support of KSEA, and may God bless you and KSEA!

Youngsoo Richard Kim
KSEA President

2016 SCIENTISTS AND ENGINEERS EARLY-CAREER DEVELOPMENT (SEED) WORKSHOP WEST

HAE–BUM "ANDREW" YUN, PhD
2016 SEED West Organizing Co–Chair / KSEA Project Director 4

Associate Professor
University of Central Florida

JONG PARK, PhD
2016 SEED West Organizing Co–Chair / KSEA Project Director 3

Associate Professor
University of South Florida

Historically, the 41st administration developed a national career workshop, the Scientists and Engineers Early Career Development (SEECD) in 2013, for early-stage Korean-American faculty, professionals, and graduate students who may need professional mentoring and career advice. With a great success of the SEECD, the 42nd and 43rd KSEA administrations organized the similar workshops, under the name as Professional Development Workshop (ProDeW) and SEED, respectively.

With this recognition, the 44th KSEA administration successfully organized the SEED-East in December 2015 at KSEA Headquarter in Vienna, VA. The eight SEED organization committee members including two project directors (PJD3 and PJD4) of the 44th administration organized a two-day SEED-West workshop that addressed the various unique career issues faced by junior KSEA members.

The SEED is designed to provide: (1) a workshop on grant proposal writing for postdoctoral researchers and junior faculty members, (2) information on funding opportunities within the US, US-Korea collaboration, and other international opportunities, (3) a career workshop that focuses on the job application process, tenure, and promotion, (4) a career advice on how to build teamwork in the modern work place, and (5) the development of supporting and mentoring systems.

The 2016 SEED west was held at the Silicon Valley in San Jose, CA from April 30th to May 1st, 2016 with 52 invited participants, 8 organizers, 10 volunteers from Silicon Valley Chapter, 17 speakers, 12 mentors, and 1 guest from the Korean Consulate. Lodging was set up at the Residence Inn at Silicon Valley at the Doubletree Hotel, which are both located within a mile from the San Jose airport.

Based on the SEED goal, an extensive 24 hour program was developed to cover needs for academic and industrial career paths in 6 workshops. The workshop began with welcome remarks by the Organizing Chair and PJD4 Hae-Bum Yun, from University of Central Florida, and remarks from the Korean Consulate, followed by a presentation on his career decision and valuable advices for successful career development by the keynote speaker, Dr. John Kim, Rockwell Collins Distinguished Professor, University of California, Los Angeles. Dr. Kim shared his successful strategies in academia and strongly recommended giving back to the community.

The first workshop had three concurrent sessions under the theme, “Research Opportunity & Team work”. The first session’s speaker was Dr. Susan Perkins from the NCI/National Institutes of Health (NIH). She presented remotely through a speakerphone and power point slides because she could not join the SEED West. She introduced comprehensive information on current status of career development and training grants, eligibility, reviewers’ expectation and how to prepare grant applications for successful funding. The presentation in the second session was an overview of the National Science

Foundation (NSF)'s mission, general funding opportunities, and detailed information on the support of international collaboration by Dr. Seta Bogosyan, a NSF program director. The third session was for working professionals of national laboratories and industry. Dr. Sam Ryu of Exxon-Mobil emphasized the importance of teamwork, leadership, and purposeful effort, and also led an active teamwork exercise.

The second workshop was focused on collaboration. With a title of "Collaboration opportunities between USA and Korea", Dr. Heonsoo Rhee, the President of Korea Innovation Center (KIC) at Silicon Valley, introduced the mission of KIC and provided various advices and strategies for successful careers. The third workshop was a lecture, titled, "Research and Commercialization (SBIR/STTR)" by Dr. Sunghwan Cho from NanoCellect Biomedical. He introduced how to successfully bring science to the market. Dr. Cho shared his experiences on building start up companies and SBIR/STTR grant funding.

The forth workshop was an inspirational speech by Dr. Youngsoo Kim, the 44th KSEA President. The title of his talk was "Leadership, position, permission, production, people development, and purpose". He presented different types of leadership and recommended being a leader with purpose. He also gave on how to live a successful, more importantly meaningful life by balancing family, work, and spiritual aspects.

After the dinner, another inspirational speech by Dr. John Kim from California State University, Monterey Bay, was presented, "My Journey". He shared his successful life through integrity, which is uncompromising commitment to do what is right with the highest standard. He said the most important characters of leadership is Integrity. Then, the participants were divided into small 8 groups consisting of 6-7 attendees and 1-2 mentors. Members of each group shared their experiences and exchanged intimate discussions and conversations until 10 PM.

The programs on May 1st were held at the Doubletree Hotel. The sixth workshop was focused on "Career advancement, job search & hiring process" with three parallel sessions tailored for different career groups. For postdoctoral researchers and graduating Ph.D. students, Dr. Jaehyun Ryu from University of Idaho and Dr. Seung Jae Lee from Florida International University presented on keys to success for graduate students and post-docs. For yet-untenured university faculty members, Dr. Jong Park from University of South Florida and Dr. Dewey Ryu from University of California at Davis provided comprehensive and extensive suggestions and advices through Q & A on various subjects, such as time management, student mentoring, relationship with co-workers and many others critical issures. For early stage professionals, Dr. Sam Ryu from ExxonMobil and Ike Song, Vice President of Situational Awareness System at the Northrop Grumman Corporation, emphasized the importance of teamwork, leadership, and purposeful effort.

In the seventh and final workshop consisted of 3 concurrent sessions; the first session was presented by Dr. Youngsoo Kim from North Carolina state University on "Job interview and presentation skill in academia". The second session on grant proposal writing was extension of the sixth workshop.

The third session for "Entrepreneurship and Startup Companies", was led by Drs. Hyunsun Jo from Embedbio and Younjae Kim presented on venture capital topics and how to utilize opportunities available for start-up companies. The SEED West workshop concluded with Dr. Jong Park's session summaries and closing remarks.

Albert Park, PhD, Post-Doc, University of Utah (Salt Lake City, UT)
"I absolutely loved the small discussion sessions. It may sound strange but it was heartwarming and insightful."

Hyojung Paik, PhD, Post-Doc, UCSF (San Francisco, CA)
"Informative and very personalized comments from the relevant mentor is one of key features to develop the career. KSEA-SEED can be a best solution for this issue."

Sangho Lee, PhD, Senior Member of Technical Staff, Oracle Inc. (Redwood City, CA)
"There were lots of inspiring talks by great guest speakers. I sincerely appreciate the organizers for making SEED such a great venue to meet and hear from invalubable mentors."

Jeehwan Lee, PhD Candidate, University of Kansas (Lawrence, KS)
"This KSEA SEED conference is really recommended to Ph.D students who are willing to get a job in USA. And I would like to encourage any Korean students around me to be engaged in this."

Seok Hoon Hong, PhD, Assistant Professor, Illinois Institute of Technology (Chicago, IL)
"It was a good opportunity to see excellent Korean-American leaders, both seniors and juniors, at the SEED meeting. I learned how to grow myself as a future leader during my career. In addition, it was good to know the people who are in the same phase with me, can share our thoughts and be good colleagues each other. I appreciate all who served this workshop and all attendants."

Dongwoo Yeom, PhD, Post-Doc, School of Arch. University of Southern California (Los Angeles, CA)
"It was truly a great opportunity for me to meet fellow and senior colleagues, and also an amazing chance to get advice and tips for my career development. I learned a lot from great mentors and fellow colleagues. Especially, advice and tips for the job interview, application, and the overall process, are something that you can hardly hear anywhere. It was really a valuable time, and I will strongly recommend this workshop to my fellow Korean colleagues."

GREAT PRIDE OF JOINING THE PROFESSIONAL KOREAN SCIENTIST COMMUNITY

SEOYOUNG KIM, PhD

Post–Doctoral Researcher
University of Central Florida

The SEED-West 2016 Workshop was a very exciting experience for me. This was my first attendance of an official KSEA meeting but I instilled with great pride as a member of the Korean scientist community through the workshop and also received a lot of powerful energy and motivation from this professional Korea community.

At first, the operation and program of this workshop was very professional for junior Korean-American scientists and engineers. All of the speakers shared their knowledge, insights and experiences for junior scientists and engineers to reduce their trial and errors. I could feel how much they love and want to contribute to early-career scientists and engineers. Also, there were several practical academic sessions such as grant proposal writing skills, information on funding opportunities and a career workshop that focused on the job application process, tenure and promotion. Moreover, there were industry sessions that explained entrepreneurship and startup companies. I really enjoyed and was interested in the industry sessions because I might be more suitable in industry than in academia. The speakers from industry field awoke my business DNA.

Second, this workshop was like a joint-concert of super stars. Each speaker is the real professional in his field. I could listen to their life story and insights through their experiences. They made a strong impression and motivation to us. For example, Dr. John Kim talked about stepping outside the comfort zone and gave us big motivation about taking on challenges. Dr. Youngsoo R. Kim spoke to us about building a successful career and emphasized personal character like importance of servantship, honesty and integrity. Also, I learned to talk to such star players in person as shown in the photos.

Lastly, I felt the power and spirit of these real professionals and received big encouragement through the SEED workshop. Mostly, this workshop touched my lonely heart and made me proud of my membership in KSEA. Now, I am imaging the many ways I can contribute to KSEA as a real professional in the future.

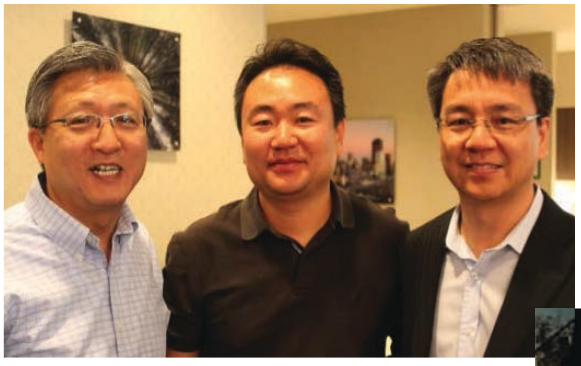

Photo with Drs. Youngsoo Kim and Sam Ryu

Photo with Dr. John Kim

NATIONAL MATHEMATICS AND SCIENCE COMPETITION 2016

EUN–SUK SEO, PhD
KSEA Vice President 1

Professor
University of Maryland

The National Mathematics and Science Competition (NMSC) is one of the main activities that the Korean-American Scientists and Engineers Association (KSEA) organizes annually. Needless to say, it is a great opportunity for members to interact with the public and promote Science, Technology, Engineering and Math (STEM) education to empower future generations. This year the NMSC was held on April 9, the second Saturday of April. I would like to thank Chapter Presidents, local chapter NMSC Chairs and all volunteers of the thirty-five local chapters and branches for carrying out this great event successfully. It was the 15th year for the math competition, 11th year for the science competition, and 4th year for the physics competition.

The math competition was offered to 4th to 11th grade students. There were 30 questions for each grade, which included 20 multiple-choice problems and 10 free response problems. Grades 4-8 had 60 minutes and grades 9-11 had 90 minutes to solve them. A total of 1,779 students participated in the math competition. In addition to the chapter level awards, the top three national winners in each grade were awarded with certificates and cash prizes. This year's national winners are listed in Table 1.

Chapters and Branches that Participated

Chapter/Branch	Chapter President/NMSC Chair
Alabama	Byungjin Min/Young Kim
Arkansas	Byung-Whi Kong/Jaheon Koo
Austin TX	Sibum Sung/Hong-Gu Kang
Boise Idaho	Jae Hyeon Ryu/Justin Kim
Central IL	Andrew Yun/YoungSoo Lee
Central Penn	Jungwoo Ryoo/Eun-Kyeong Kim
Central VA	Saerona Choi/Brian Park
Chicagoland	Chong Shik Park/Young Seok Lee
Dayton-OH	Munsup Seoh/Abby Sharp
Georgia	Bongkyoung Kwon/Hyo-joo Han
Indiana	Soomin Park/John Lee
Iowa City	Haena Kim
Kentucky	Duk-Hyung Lee/Dave Coulliette
Michigan	Joosung Kim/Jullia Lee
Nashville	Hak-Joon Sung
New England	Hyun-Hee Lee
New Jersey	Youngsun Kim/Jaewon Kang
New York Metro	Sae Woong Park
North Carolina	Chang S. Nam/Do Young Eun
North TX	JungHwan Oh
Ohio	Do-Gyoon Kim
Oregon	Brian Shin/Sung Yi
Orlando	Boohyun Nam/Woo Hyung Lee
Philadelphia	Moses Noh
Sacramento	Changmo Kim/Jason Lee
San Diego	Sunghwan Cho/John Baik
SEVA	Gon Namkoong/Kyo Dong Song
Seattle WA	Woon Jong Yoon
Silicon Valley	Steve Sungwon Moon/Siwan Kim
South Texas	Kwanghee Jung/Sang Jun Han
Southern CA	Jinlee Kim/John Lee
Southern VA	Wooram Lee
Southwest Ohio	Changjoo Kim
Tampa Bay	Dongpyo Hong/Myles Kim
Washington Metro	Byoung Joon Song/Kiyong Kim

Table 1. National Winners of the Math Competition

Grade	Name	School	Chapter
4	Jaeho Lee	Findley Elementary School	Oregon
	Juni Kim	Luther Lee Emerson	New Jersey
	Omer Demir	Orlando Science Elementary School	Orlando
5	Suyash Pandit	Bonny Slope Elementary School	Oregon
	Simon Koski	Champion	Silicon Valley
	Shane Lee	Carlisle Public School	New England
6	Alan Xie	Ankeney Middle School	Dayton
	Andrew Kim	Hunters Woods Elementary School	Washington Metro
	Andrew Park	Muirlands Middle School	San Diego
	Minseok Park	Tyee Middle School	Seattle WA
7	Yunseo Choi	Tenafly Middle School	New Jersey
	JongWon Jung	Tenafly Middle School	New Jersey
	Hyunwoo Lee	Odle Middle School	Seattle WA
8	Jiho Cha	Davis Drive Middle School	North Carolina
	Justin Han	Joyce Kilmer Middle School	Washington Metro
	Sebastian Jeon	Benjamin Franklin Middle School	New Jersey
	Eric Oh	Carmel Valley Middle School	San Diego
	Derek Zhu	Green Hills	Michigan
9	Joshua Kolenbrander	Cedar Park High School	Austin
	Jason Lee	Poolesville High School	Washington Metro
	Hahn Lheem		North Carolina
	Jeongwoo Son	Thomas Jefferson High School	Washington Metro
	William Xi	Perrysburg high school	Dayton-OH
10	Dohyun Cheon	North Hollywood	Southern CA
	Minyoung Hwang	Thomas Jefferson High School	Washington Metro
	Hyunjae Lee	Interlake High School	Seattle WA
	Jordan Lee	Bergen County Academies	New Jersey
	Joshua Lee	Thomas Jefferson High School	Washington Metro
	Seung Yun Lee	Paul VI Catholic High School	Washington Metro
	Taekhwan Oh	Tabb High School	SE VA
	Sung Hyun Yoo	Bergen County Academies	New Jersey
11	Jane Ahn	Henry M. Gunn High School	Silicon Valley
	Luis Kim	Memorial High School	South TX
	Jaeyoung Choi	St. Mark's School of Texas	North TX
	Daniel Kim	Bergen County Academies	New Jersey

Science projects were offered to 3rd to 11th grade students, mainly to promote science and motivate students by fostering students' engagement in science practices. A total of 686 students participated from 11 local chapters and branches. Unlike math or physics, science was not a written exam but a project in which student groups or individuals can compete. Only chapter level awards were given without national-level awards.

The physics contest was offered to 9th to 11th grade students. Seventy-five minutes were given to solve twelve questions including 8 mechanics and 4 electromagnetism questions. Sixty six students participated from 12 local chapters and branches. Top three national winners were awarded with certificates and cash prizes. National winners are listed in Table 2.

Table 2. National Winners for the Physics Contest.

Name	School	Chapter
Jason Chen	Temple City High School	Southern CA
Landon Choi	JF Kennedy High School	Southern CA
Jeho Jin	Crescent Valley High School	Southern CA
Ellison Kang	Langley High School	Washington Metro
Daniel Lee	Thomas Jefferson High School for S&T	Washington Metro
Ryan J. Yoo	West Ranch High School	Southern CA

For this year's math exam, the National Contest Committee invited former members of the Math Committee that are subject matter experts to maintain the continuity. The former Chair Prof. Jaewoo Jeong, Miami University at Hamilton, served as the Chair of the Math Committee this year as well. Members of the Math Committee included 5 experienced continuing members and 3 new members (noted with *): Dr. Ji Young Choi, Shippensburg University, Dr. Samjoo Doh, Nuance Communications, Dr. Jimin Lee, University of North Carolina, Asheville, Dr. YoungHee Park Lee, Foothill College, CA, Dr. Byung Guk Kim, University of Massachusetts, Dr. Namyong Lee*, Minnesota State University, Dr. Seojin Kim*, Miami University, and Dr. Jin Hyung To*, University of Illinois at Urbana-Champaign.

The Committee decided that 3rd graders are too young for competition, so it prepared exam questions for each grade from 4th to 11th grades. The Committee reviewed NMSC 2015 data on how many correct answers were given for each question to adjust the level of difficulties. In order to encourage students to have confidence in math, the Committee tried to provide a good portion of easy and essential concept questions in addition to some high level questions. The Committee prepared example questions and internally reviewed. After the necessary revisions, they were reviewed by the External Review Committee chaired by Dr. Sung-Yell Song, Iowa State University, President of Korean-American Mathematical Scientist Association (KAMSA). Dr. Eungchun Cho, Kentucky State University, former President of KAMSA, and Dr. Hae-Soo Oh, University of North Carolina, Charlotte also served on the External Review Committee. The final version of example questions along with solutions were posted on the web at http://www.ksea.org/nmsc/ when online registration was opened on February 1, 2016. The actual exam questions and answers for the contest were prepared according to the same procedure. Each committee member framed exam questions for each grade, and reviewed the exam questions framed by another member. After the internal review, the External Review Committee reviewed the exam questions and answers. This is a lengthy process that takes dedicated commitment of the committee members. I would like to thank the committee members who made it possible to have the exam questions and solutions for the NMSC 2016. It is not easy to target the adequate level of difficulties for each grade without continued research. For the NMSC to be a prestigious world class competition, good exam questions must be developed through continued research and development.

The grading sheets created by the Math Committee last year with built-in tie breakers were used this year again for chapters to fill out for each participant. This data makes it possible for the committee to analyze students' performance. The score distribution for each grade is summarized in Figure 1. Nu-

meric values in a tabular form along with bar charts for each grade are available on the NMSC website noted above.

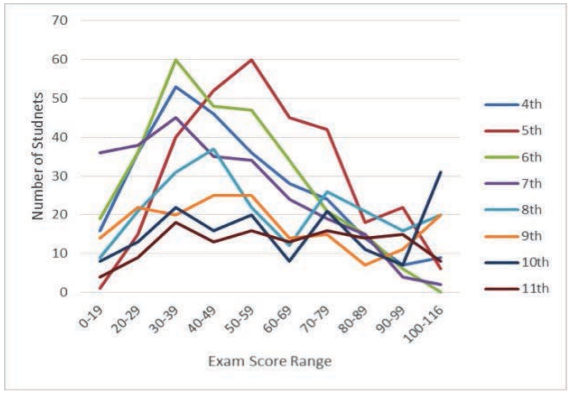

Figure 1. The Math Exam Score Distribution by Grade

I would like to thank the Science Committee Chaired by Dr. Stephen Suh, JT Cancer Center, HUMC, and Co-Chairedby Prof. Ki-Yong Kim, University of Maryland for providing Science projects for NMSC 2016. There were 4 projects, each for grades 3-4, grades 5-6, grades 7-8, and grades 9-11 with an option of a poster competition for the grade 11. Each chapter had the freedom to mix, match, and adjust Science projects for their chapter's needs.

Our strong collaboration continued with Association of Korean Physicists in America (AKPA), an Affiliated Professional Society (APS), for the High School Physics Contest. AKPA developed and delivered exam questions for grades 9-11 along with solutions and grading instructions. This committee was chaired by Prof. Chueng-Ryong Ji, North Carolina State University. The cash prizes for the national winners were provided by AKPA, while KSEA provided t-shirts to promote participation in the physics contest, which is relatively new. The Certificates for the winners were jointly signed by the President of KSEA, Prof. Youngsoo Kim, and the President of AKPA, Prof. Seunghun Lee. There is no reason to limit our contests to math and physics. Building on the successful collaborations with KAMSA and AKPA, the contest can be expanded to include other science and engineering subjects by collaborating with relevant APS.

Many people had to work together for this nation-wide event to be coordinated. I would like to thank General Director, Dr. Jae Hyeon Ryu for hosting telecons with Chapter Presidents and Chapter NMSC Chairs, and the KSEA-HQ staff for providing administrative support. Having experienced staff makes it possible to coordinate such a complex event, so it is smooth and seamless. Our special thanks goes to Ms. Michelle Cho for managing files and information to share with Chapters, and supporting late night telecons during non-working hours, Mr. Jongsung You for updating and maintaining the NMSC website, particularly opening the online registration page on time and posting relevant information as needed, Ms. Kelly Han for managing finances, and Ms. Euna Yoon for helping chapters with advertisements.

Let me thank all of the participants for the successful NMSC, which would not have been possible without them. Special kudos to the Dayton-OH branch for hosting 166 math and 6 physics participants, and SE Virginia Branch for hosting 43 math and 38 science participants. It takes extra efforts for a small branch to make such an accomplishment. As we celebrate the success of NMSC 2016, I would like to recommend committees and chapters to collect and review lessons learned to make future NMSC's even more successful.

DISCOVERIES MADE BY ACCIDENTS AND LEARNING FROM FAILURES

SEUNG WOO LEE, PhD

Assistant Professor
Woodruff School of Mechanical Engieering
Georgia Institute of Technology
2016 Young Investigator Grant Recipient

Looking back at my short research career, many of the academic achievements are originated from the convolution of discoveries made by accidents and learning from failures. My research career began as an undergraduate researcher under Prof. Kookheon Char in the School of Chemical & Biological Engineering at Seoul National University. Motivated by Prof. Char's vision for the functional thin films for energy device applications, I studied nanocomposite films consisting of polyelectrolyte polymers and layered α-zirconium phosphates for proton exchange membrane fuel cell applications. The critical challenge of designing polymer based nanocomposite is to achieve a uniform dispersion of guest materials within the host polymer matrix. Many nanomaterials, such as layered structure α-zirconium phosphates and cylindrical carbon nanotubes, tend to agglomerate because of strong van der Waals interaction. Our idea to solve this agglomeration issue was to employ a layer-by-layer (LbL) self-assembly process, which is a thin film deposition technique based on the alternating adsorption of positively and negatively charged species via electrostatic interactions. I prepared negatively charged layered α-zirconium phosphates using surfactant in solution. Then, I tried to assemble the thin films with various positively charged polymers using LbL self-assembly process. I eagerly tested various assembly conditions by changing their concentration, pH, and salt concentrations for the LbL self-assembly, but eventually failed to assemble a high-quality nanocomposite film. As I think back the reason of the failure now, it was because of the charge screening of the α-zirconium phosphates by the adsorbed surfactants I used for the exfoliation. Thus, there were not enough negative charges on the surface of the α-zirconium phosphates for the electrostatic self-assembly with positively charge polymers. However, in the course of attempting the assembly of this nanocomposite, I had learned several know-hows and the effects of various assembly conditions for the LbL assembly. In addition, I developed interest in incorporating carbon nanotube (CNT) into the LbL thin film system. At that time, CNT was considered as a rising materials for various energy applications owing to its superior physical properties, such as high electrical conductivity and high surface area. I described my interest, the design of CNT thin films for energy devices, in my statement of purpose for graduate school applications. And this is how my long journey of CNT research began…

Taking advantage of this undergraduate research experience, I could join the Ph.D. program in the Department of Chemical Engineering at Massachusetts Institute of Technology (MIT) in Fall 2015. It was a coincidence that Prof. Char also visited Prof. Paula Hammond group at MIT for his sabbatical year at that time. Thanks to Prof. Char's strong recommendation, I could join the project co-advised by Prof. Hammond and Prof. Yang Shao-Horn. My first project was designing high-performance electrodes for proton exchange membrane fuel cell applications. For this project, I reinitiated my idea regarding the LbL assembly of the CNTs to design conductive 3D porous electrodes. However, the challenge was to introduce negative and positive charges on the surface of the CNTs for the electrostatic LbL self-assembly. I could solve this problem with the help of Dr. Yong-Tae Kim, who was a postdoctoral researcher at Prof. Shao-Horn group. During his Ph.D. study, Dr. Kim studied surface oxidation process of CNTs and continuous incorporation of thiol groups on the surface of the CNTs. I found that surface oxidized CNTs have negative charges owing to the introduced oxygen functional groups, such as carboxylic acid. Therefore, I could synthesize negatively charged CNTs via surface oxidation process. By modifying Dr. Kim's previous protocol, I was also able to synthesize positively charged CNTs by introducing amine groups on the surface of the CNTs. Using these negatively charged and positively charged CNTs and utilizing know-hows gained from my undergraduate research, I finally succeeded to fabricate LbL self-assembled CNT films and published this result in 2009.1 It took almost five years to publish the first journal article from the first attempt of the LbL assembly with numerous failures, then resuming with more trials and errors.

Once I assembled the CNT films, Prof. Shao-Horn recommended me to measure their charge storage performance for the potential energy storage device applications, such as Li-ion battery. As I did not have any experience on Li-ion battery test, Dr. Naoaki Yabuuchi, who was the postdoctoral research at Prof. Shao-Horn group, evaluated the charge storage performance of the CNT films as Li-ion battery positive electrodes. The CNT films showed stunning results, showing high capacity, which is comparable to those of conventional inorganic based positive electrodes, with exceptional rate-performance. At the beginning of this test, we did not believe such high capacity from the carbon-only electrodes and also did not clearly understand the origin of the high capacity. After testing more than 300 samples and being confirmed by other research groups, we were confident of our results and revealed that the high capacity can be attributed to the surface redox reactions between oxygen functional groups and Li ions. I introduced the oxygen functional groups on the surface of the CNTs to synthesize negatively charged CNTs for the LbL self-assembly process. However, the roles of oxygen functional groups are not limited to the self-assembly process but include the redox reaction with Li ions, giving rise to high charge storage capacity. Excited with the unexpected high performance, we submitted our results to one of the top scientific journals, but the reviewer's comments were very critical, raising several concerns regarding the high capacity of the functionalized CNT film and its charge storage mechanism. We spent more than one year to address all of the reviewers' concerns by conducting additional tests and submit the revised manuscript again to the same journal with a 45-page-long

rebuttal letter. The reviewers agreed the high performance of the functionalized CNT films, but they still raised concerns regarding the controllability of the oxygen functional groups and the scalability of the electrodes for commercial application, rejecting the paper. The paper was finally accepted in another journal2 after two more revisions with another 25-page-long rebuttal letter. I first submitted this paper at the beginning of my third year of Ph.D., but it was accepted after my Ph.D. defense, spending about 2 years for only revision.

Although it was very difficult and exhausting period of time, I had valuable experiences during this revision process. First of all, I became an expert of energy storage devices in the course of addressing all of the reviewer's questions and concerns. My expertise was limited to the self-assembly process of the thin film materials before this work, but I gained deep insight in various electrode materials for electrochemical energy storage devices. Second, I did learn how to strategically address technical questions for the rebuttal letter, which become a strong asset for my academic career. After practicing 2 years of the revision process with 70 pages of rebuttal letters, I felt other revision processes were relatively easier. Finally, many of the reviewers' concerns brought me great ideas for the future study regarding functionalized carbon electrodes. The reviewers' main concerns included the controllability of the surface oxygen functional groups on the CNTs and the scalability of the CNT films. I immediately studied the controlling process regarding the amount of oxygen functional groups by controlling the surface oxidation time and also investigate other assembly processes to improve the scalability.3,4 Moreover, my attempt to control the specific oxygen functional groups on the surface of the CNT led to another accidental discovery. I immobilized the specific oxygen functional group with a molecule, pyrenecarboxylic acid, on the surface of the CNT using pi-pi interaction between pyrene and CNT, which was intended to investigate the redox reaction between carboxylic acid and Li ions. However, it was unexpected that there was a polymerization reaction of pyrene and the polymerized pyrene showed strong redox behavior with anions, which can also be used as electrode materials for energy storage devices. Motivated by this discovery, we investigated electrochemical characteristics of various pyrene derivatives on the CNT electrodes, demonstrating promising organic electrodes for energy storage devices.5 Motivated by this study, we have been actively studying various redox-active organic electrode materials in my research group at Georgia Institute of Technology.

I should thank all of my mentors, advisors, collaborators, and students who gave me various ranges of inspirations which enabled me to bridge the gaps between research ideas. I hope my experience could show one good example that persistent researchers, who can learn from their failures, will be rewarded with unexpected discoveries.

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2016 KSEA GENERAL ELECTION RESULTS

The Korean-American Scientists and Engineers Association (KSEA) is pleased to announce the results of its 2016 general election.

This year's election with the original end date of April 15, 2016 had to be extended to April 27, 2016 because the minimum voting rate of 10% to establish a quorum (according to KSEA Bylaws Article 11.5) was not met in the first round. This extension decision was made after careful discussion of the situation among the Executive Committee, the Election Committee, Auditors, and the KSEA Attorney.

The ballot counting took place at KSEA HQ on April 17, 2016, and additional ballot counting took place on April 28, 2016. All ballots have been accounted for according to the rules that were pre-established by the Election Committee and no election-related irregularity was observed. The voting statistics are as follows:

- Total Eligible Voters: 5,028
- Total Ballots Received: 530 (10.54% of Eligible Voters)

The Newly Elected Officers and Councilors Are:

PRESIDENT-ELECT (46TH PRESIDENT)

EUN-SUK SEO, PhD.
University of Maryland

45TH VICE PRESIDENT 1

STEPHEN SUH, PhD.
Hackensack University Medical Center

45TH VICE PRESIDENT 2

JUN-SEOK OH, PhD.
Western Michigan University

AUDITOR

YONGHO SOHN, PhD.
University of Central Florida

COUNCILOR GROUP K

BENJAMIN LEE, PhD.
INVIA Medical Imaging Solutions

COUNCILOR GROUP M

HYO-JOO HAN, PhD.
Georgia Southern University

EFFICIENCY AND TRANSPARENCY: KSEA PROPOSAL AND REPORT ADMINISTRATION SYSTEM

YONGHO SOHN, PhD
KSEA Project Director 1

Professor
University of Central Florida

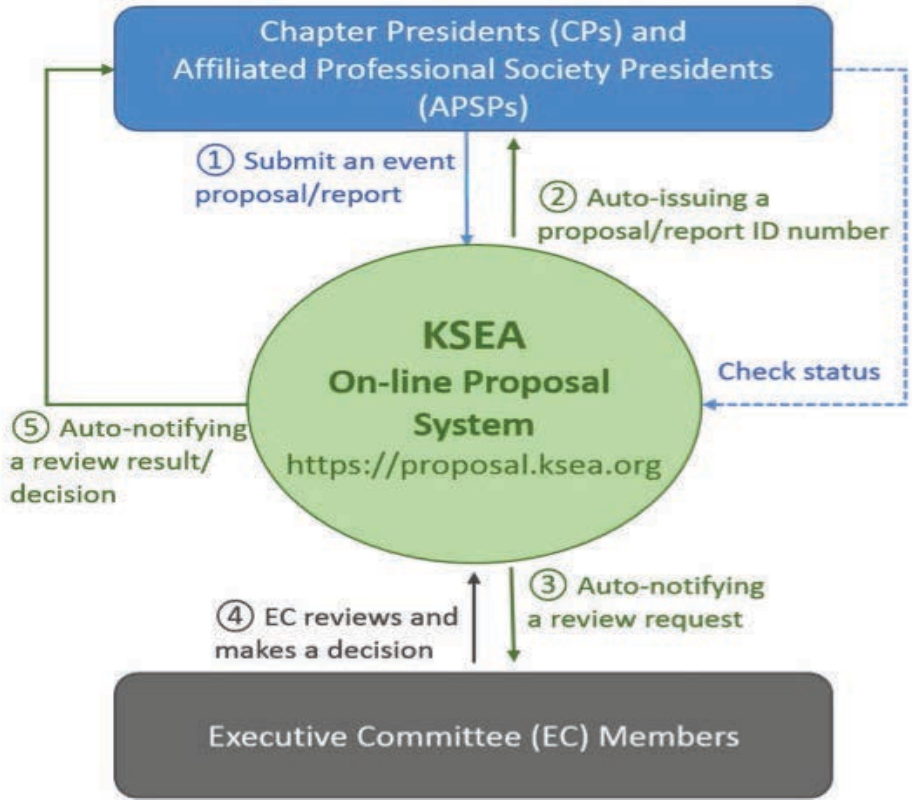
In the spirit of efficient and transparent operation to enhance the organizational integrity of KSEA, the 44th administration developed an autonomous IT Task Force team. One of the projects that this IT Task Force team worked on was the development of a web-based KSEA proposal and report administration system. Core activity for members of KSEA relies on proposals and reports submitted by local chapters (LC's) and affiliated professional societies (APS's). The number of proposals and reports, combined can reach larger than 300 per year. Previously the EC members and KSEA headquarters(HQ) staff members have spent a large of amount of time administering (e.g., communication regarding receiving and approving). Email-based or other cloud-based processes have given some improvement, but there still exists potential for errors and delays which cause unnecessary challenges for the operation and execution of events by LC's and APS's.

CHANGMO KIM, PhD
KSEA IT Director

Project Scientist
University of California, Davis

The IT Task Force team, listed below, has designed and developed on-line, automated submission and review process for proposal and reports submitted by LC's and APS's. Programming was carried out by KSEA ITM, Mr. Jongsung You.

- Dr. Changmo Kim, KSEA IT Director (ITD), Assistant Project Scientist, University of California – Davis.
- Dr. Yanggon Kim, Professor, Towson University.
- Dr. Jungwoo Ryoo, Associate Professor, Pennsylvania State University.
- Dr. Yongho Sohn, KSEA Project Director (PJD), UCF Pegasus Professor, University of Central Florida.
- Dr. Seung Seok Choi, Cooley LLP
- Dr. Sam Chung, Professor, Southern Illinois University.
- Mr. Jongsung You, KSEA IT Manager (ITM)
- Ms. Hye Won (Michelle) Cho, KSEA Associate Project Manager



IT Task Force

The automatic submission and review system has launched in May, 2016. Chapter Presidents (CP's) and APS Presidents (APSP's) are now asked to submit their event proposals and reports through the on-line submission system (https://proposal.ksea.org). When an event proposal or report is submitted by a CP or APSP, the automated system instantly issues a new proposal or corresponding report number, and initiate the review process by notifying the responsible reviewers (e.g., Executive Committee members). The notification asks the reviewers to log-in to the administrative webpage for reviewing and commenting on each proposal or report in the system with a deadline. When the reviewers finish their reviews/recommendations, and a decision regarding the proposal or report is made (e.g., funded amount, report acceptance, etc.), the system again instantly notifies the review outcome to the submitter (e.g., corresponding CP or APSP) through an automated emailing. In addition, CP's and APSP's can check the status of the process during the review.

The IT Task Force team and the Executive Committee of the 44th administration hopes that the system will be adopted (and improved) for efficient and transparent operation of KSEA.

NONPROFIT REGISTRATION EFFORT FROM THE 44TH ADMINISTRATION

K. STEPHEN SUH, PhD
KSEA Project Director 2

Director
Hackensack University Medical Center

BEN WOODWARD

Managing Principal
Nonprofit Elite

KSEA tossed around ideas regarding the issue of 'how to register all KSEA Chapters and associated societies as official nonprofit organizations'. This idea was discussed occasionally for the past several years but it became a reality during the summer of 2015 in Atlanta, Georgia when the majority of the 44th KSEA Council agreed to move forward with this initiative. The goal of this project was to transform all KSEA Chapters into organizations that were officially and properly approved by the State and Federal government. This effort started immediately after UKC 2015, and 13 Chapters were selected as the First Phase of this effort. For this task, 44th Council of KSEA and K. Stephen Suh outlined a comprehensive plan to receive start-to-finish assistance from Nonprofit Elite consulting firm on each of KSEA Chapter organizations for obtaining the status as 501c3 tax exempt nonprofit organizations.

The advantages to KSEA Chapters becoming a 501c3 tax exempt organization are many, including the capability of raising more funds by accepting tax-exempt charitable contributions, qualification for public and private grant money, and the status within local communities as legitimate nonprofit organizations.

KSEA's National Headquarters chose to work with Nonprofit Elite because of its ability to work closely and personally with each chapter and its record of 100% approval rate with the IRS. Nonprofit Elite provides chapter executive members with a consultant who will complete the following services on behalf of the Chapters:

- Strategic Planning – Starting a nonprofit organization is different from starting a business in various aspects such as rules, roles, and reasons. Nonprofit Elite has years of experience in this regard and knows how to help each Chapter.

- Formation – From incorporation and bylaws to the board of directors and operating policies, numerous option on how to set up a non-profit organization could be a big head-ache for each chapter. Nonprofit Elite will lay out each of these options and help each chapter to set it up right from beginning to end.

- 501c3 Tax Exemption – Although applying for 501c3 tax exempt status is not as difficult as most people believe, each chapter needs to do it correctly. Nonprofit Elite has the record of 100% IRS approval rate and it guarantees its work.

There is a part that is needed to be taken by the Chapter presidents and executive members. Each Chapter need to provide one main contact person to Nonprofit Elite to communicate directly and at all times regarding all details. Nonprofit Elite will take about 2-3 hours of time from each contact to gather specific information about each chapter, and as the work progresses, it will communicate largely via email. With information that Chapters provide, Nonprofit Elite will perform all the leg work, and within 2-3 months, each chapter will be able to operate as a 501c3 tax exempt organization. When that status is achieved, each chapter can raise more money and attract more interest from both individuals and local business in its community free of worries.

During the development of the joint work, KSEA and Nonprofit Elite have established a relationship and built three principles: We plan to deliver each KSEA chapter and organization what we promise, serve all KSEA organizations well, and always be honest about nonprofit related work. KSEA plans to use Nonprofit Elite for future works and they will be accessible when Chapters or APS need them.

MOO-YOUNG HAN, PhD
20th PRESIDENT OF KSEA

Dr. Moo-Young Han, Professor Emeritus of Physics, Duke University, passed away on May 15, 2016 in Durham, NC. He was 81 years old. Dr. Han is survived by his wife of 57 years, Chang-Ki Han, three children, Grace Wolf of Virginia, Christopher Han of Texas, Anthony Han of California, and four granddaughters.

At the end of the Korean War (1950-53), Dr. Han was one of hundreds of Korean college students that came to the United States, arriving in 1954. He received his Ph.D. in theoretical physics from the University of Rochester, Rochester, New York in 1964, and after 3 years of postdoctoral research associateship, joined the Physics department of Duke University in 1967.

Dr. Han is best known for his groundbreaking discovery of the hidden symmetry of quarks, the basic building blocks of protons and neutrons that make up atomic nuclei. In 1965, he discovered a new underlying symmetry of quarks that later became known as the color charges of quarks. Universally recognized as the fundamental basis of all nuclear force inside atomic nuclei, the discovery was made together with Dr. Yoichiro Nambu, then of the University of Chicago, and published as the Han-Nambu Quark Theory.

Possessing a rare talent for both research and teaching, Dr. Han was universally praised by his students at Duke for his ability to explain difficult concepts clearly and simply. For his dedication, Dr. Han received the Duke General Alumni Distinguished Undergraduate Teaching Award in 1972, the highest teaching award bestowed to Duke faculty members.

Dr. Han served many national organizations as president, and gave frequent public lectures on a wide range of topics related to the universe and quantum theory. He authored eight books on quantum field theory of elementary particles, and was a guest presenter at the Seoul National University and the Korea Advanced Institute of Science and Technology. He founded the Society of Korean-American Scholars (www.skas.org) serving as the chairman and Editor-in-Chief, publishing online newsletters. Dr. Moo-Young Han was the 20th President of KSEA from 1991 to 1992. Further inquiries may be directed to myhanfamily@gmail.com.

2016 YOUNG INVESTIGATOR GRANT RECIPIENT

Seung Woo Lee, PhD
Assistant Professor
George W. Woodruff School of Mechanical Engineering
Georgia Institute of Technology

KSEA is pleased to announce that Prof. Seung Woo Lee at Georgia Institute of Technology has been selected as the finalist of the 2016 Young Investigator Grant (YIG). He will be awarded a $10,000 grant during UKC2016 which will be held in Dallas on Aug 10-13, 2016. The evaluation was conducted by the Honors and Awards Committee (HAC) with the help of several Technical Group Councilors and senior members. In accordance with Policy 11, Article 5, the HAC submitted the selected candidate to the President and the Council. The Council subsequently approved the recommended winner on April 18, 2016. It is noted that the HAC made a tough decision of recommending only one finalist out of the two possible ones (one in science and the other in engineering) after an in-depth evaluation and discussion on the basis of the internal standard. The profile of Prof. Lee is as follows:

Dr. Seung Woo Lee is an assistant professor at George W. Woodruff School of Mechanical Engineering of Georgia Institute of Technology, Atlanta, Georgia. He received his B.S. (summa cum laude) in chemical engineering from SNU in 2004 and Ph.D. in chemical engineering from MIT in 2010. Prior to joining Georgia Institute of Technology in 2013, he was a post-doctoral researcher at MIT. He is a recipient of 2016 Hanwha Advanced Materials Non-Tenure Faculty Award and 2014 Samsung Global Research Outreach Award. He has published 29 articles in coveted journals and presented 20 papers in conferences, and he also has an excellent citation record as a young investigator. With the YIG, Prof. Lee will mainly investigate nano-structured organic electrodes for electrochemical energy storage devices. The proposed work aims to improve the cycling stability and the power capability of advanced batteries without sacrificing the energy density by the development of organic electrodes. The proposed organic electrodes will be based on nanocomposite structures where redox-active molecules are conformally coated on the conductive matrix mediated by the interactions of surface functionalities between molecules and conductive substrate.

2016 KSEA Undergraduate Scholarship Recipients

KSEA Scholarships for Undergraduate Students in the US recognize outstanding undergraduate students in the United States who excel in academics as well as in services to the community, and have demonstrated a potential to become future leaders of the society for closer cooperation between the U.S. and Korea.
Up to 20 recipients receive $1,000 award each.

Scholarship Name	Recipient	School	Major
Shoon Kyung Kim	Deborah Park	University of Illinois at Chicago	Biological Sciences
Inyong Ham	Angela Kim	Princeton University	Molecular Biology
Nam Sook & & Je Hyun Kim	Harah Jang	Temple University	Neuroscience
Woojin	Ha Ram Kim	University of Central Arkansas	Biology
Chunghi Hong Park	Coco Roening	MCPHS University	Premedical and Health Studies
Hyundai	Daehyun Kim	University of Washington	Mechanical Engineering Applied Computational Math and Science
Chunghi Hong Park	Michelle Roh	Vanderbilt University	Mathematics
SeAh-Haiam	Tae-hyeon Kim	University of Texas at Dallas	Electrical Engineering
Yohan & Rumie Cho	Seula Koo	Tidewater Community College	Science
Wan Kyoo Cho	Ji Min Son	St. John's University	Pharamcy
Chankiu Riew & Hyunsoo Kim	Weon-Deok Seo	North Carolina State University	Food Science
Jae S. & Kyuho Lim	Christine Sim	New York University	Media, Culture, and Communication
Yoo, YoungSoo & Im, Kyung-Bin	Jaehyeok Roh	University of Georgia	Biochemistry & Molecular Biology
KSEA	Jiwoon Park	The Cooper Union	Chemical Engineering
KSEA	Lee Gill	University of Illinois at Urbana-Champaign	Electrical Engineering
KSEA	Jina Jun	St. John's University	Biology and Spanish
KSEA	Giseok Choi	Duke University	Electrical & Computer Engineering, Mathematics
KSEA	Seong Ah kim	University of California, Los Angeles	Biochemistry
KSEA	Ryan Rho	Baylor University	Biology
KSEA	Yoon Son Ahn	University of Minnesota - Twin Cities	Statistics B.A. and Mathematics B.A.

2016 KSEA-KUSCO Graduate Scholarship Recipients

KSEA-KUSCO Scholarships for Graduate Students in the US recognize outstanding undergraduate students in the United States who excel in academics as well as in services to the community, and have demonstrated a potential to become future leaders of the society for closer cooperation between the U.S. and Korea. Up to 20 recipients receive $1,500 award each.

Recipient	School	Major
Sookyung Kim	Georgia Institute of Technology	Material Science and Engineering
Kyung Hyun	University of california irvine	Civil and Environmental Engineering
Dahea You	Rutgers University	Toxicology
Seung-been Steven Lee	University of Washington	Genome Sciences
PilJin Chun	University of Virginia	Civil Engineering
Jaekyo Yi	State University of New York at Stony Brook	Molecular and Cellular Biology
Won Jun Jo	Massachusetts Institute of Technology	Chemical Engineering
Kyung Eun Kim	Georgetown University	Medicine
Yungjun Yoo	University of Maryland	Electrical and Computer Engineering
Junghoon Jahng	University of California, Irvine	Physics and Astronomy
Jeyoung Woo	The University of Texas at Austin	Civil Engineering
Erik Reinertsen	Emory University	Medicine, biomedical engineering, and statistics
Taekeun Kim	Massachusetts Institute of Technology	Brain and Cognitive Sciences
So Yun Min	University of Massachusetts Medical School	Biomedical Science
Jaeil Han	University of Texas Medical School at Houston	Biomedical Science
Yeon Ju Son	University of Pennsylvania	Dental Medicine
Taegon Oh	Northwestern University	Materials Science and Engineering
Minung Kang	Weill Cornell Medical Colleage	Developmental Biology
Hyeonu Heo	University of North Texas	Mechanical and Energy Engineering
Ju Yong Koh	Campbell University School of Osteopathic Medicine	Medicine

LEADERS IN INNOVATION CONFERENCE

BYOUNG–JOON (BJ) SONG, PhD
Washington DC–Metro Chapter
President

Senior Investigator and Section
Chief
National Institutes of Health

HO–WOOK JUN, PhD
KBMES Vice President

Manager, Accenture
President, New York Seoul

The Leaders in Innovation Conference was held on January 14, 2016 at the George Washington University in Washington, DC. In this Conference, which was mainly organized by Mr. Max Han, President of New York Seoul, four distinguished panelists, including Dr. Eun-Suk Seo, then VP and President-Elect of KSEA and Professor of Physics at the Univ of Maryland, Mr. Timothy Hwang, Cofounder & CEO of FiscalNote, Mr. Jimmy Rhee, Special Secretary of Maryland State Government, and Mr. Michael Yea, Deputy Assistant Secretary at US Department of Health and Human Services, gave brief talks followed by Q and A session. Approximately more than 70 people pre-registered and additional 10 people came for on-site registration to attend the Leaders in Innovation Conference.

We have recruited 8 new KSEA members during the Conference. Many of the participants turned out to be young Korean American professionals or graduate students studying at local Universities. Based on the positive feedbacks from the participants, who seemed to be highly motivated by the distinguished panelists, Mr. Han, a member of Washington Metro Chapter, promised to hold another Conference in the coming summer or fall.

2016 ANNUAL TECHNICAL/ENTREPRENEUR SEMINAR & MEETING

SUNG HWAN CHO, PhD
San Diego Chapter President

Assistant Professor
University of Idaho

On Saturday, January 16th, 2016, KSEA-San Diego Chapter Annual Technical Seminar & General Meeting was held at Sheraton La Jolla in San Diego, CA. More than 100 members participated including professionals from academia and industry, graduate and undergraduate students and their friends and families. Two previous chapter presidents attended this meeting from Korea and shared their old yet precious stories with the young generation.

The event started off with a welcoming greeting from our current president, Dr. Sung Hwan Cho. While dinner was served, all the attendees enjoyed meeting their old friends as well as making new friends. Afterwards, there was a keynote speech delivered by Dr. Heekoo Moon who was one of the former San Diego (SD) chapter presidents and is currently an engineering head at Solar Turbine, a Caterpillar company. The title of his talk was 'History of Jet Engine Development'. At the beginning his talk, most attendees were intimidated by the engineering-heavy title but Dr. Moon's talk was very easy to follow therefore well received and enjoyed by the members.

After Dr. Moon's keynote speech, Dr. Sung Hwan Cho introduced KSEA and KSEA San Diego chapter to the attendees. He emphasizes that KSEA's mission could not be achieved without more volunteers' collaborative efforts and encouraged the attendees to step up to serve the organization and Korean American communities. Then, presidents of UCSD KSGA and KSEA-YG presented their yearly reports and plans for the following year.

Various awards were given to some outstanding members of the chapter. The 5th Dr. Jinchoon Kim Scholarship was awarded to Seongcheol Choi (graduate student at UC-San Diego). The 1st Michelle Cho Scholarship was awarded to Kenny Lee (undergraduate student at UCSD). Leadership Awards were given to Dr. Jungjoo Hwang, 2014-15 KSEA-San Diego Chapter President, Taeseok Oh, 2014-15 UCSD KSGA president, and Wonjong Si, 2014-15 UCSD KSEA-YG President. Volunteer Awards were given to Dr. Eunha Hoh, Ms. Eunyung Sung and Dr. Jiyung Lee for their continuing efforts to serve the chapter members.

At the end of the event, there was a raffle drawing and every member really enjoyed it. The first prize was a Fitbit Charge, which is the number one activity tracker in the market. (Fitbit was founded by James Park, a Korean-American.) The general meeting was successfully held as an entertaining and informative meeting where all ages of KSEA-San Diego Chapter members had valuable time to network and get to know each other.

Before the General Meeting, there was 1.5 hour workshop about Internet of Things (IoT) security. Everyone was invited and more than 40 members attended this workshop. The attendees enjoyed three interesting: The following three speakers delivered interesting talks to the audience. Dr. Bo Ryu, who is the president of EpiSys Science presented with a title of 'Inter-Drone Communication'. The 2nd speaker Dr. Sunghwan Cho, the CP of KSEA San Diego chapter and the CTO of NanoCellect Biomedical Inc gave a talk about the importance of cyber security in medical devices and cloud based medical IoT and wireless healthcare system. The last speaker, Dr. Yeseong Kim at UCSD presented about security issues that need to be addressed in most embedded systems from a computer scientist's perspective. Attendees to the seminar really enjoyed the three talks and asked very insightful questions and participated the panel discussion after the talks.

DISSERTATION/THESIS WRITING WORKSHOP FOR SCIENTISTS AND ENGINEERS

CHANG SOO NAM, PhD
North Carolina Chapter President

Associate Professor
North Carolina State University

The Dissertation/Thesis Writing Workshop for Scientists and Engineers was held by the KSEA NC on February 13, 2016 at North Carolina State University (NCSU), Raleigh, NC. The main goal of the workshop was to provide student scientists and engineers with a clear overview of the basic elements common to a dissertation/thesis writing in various disciplines.

First, Dr. Min Young Suh (Assistant Professor, Textile Engineering, NCSU) introduced attendees to a more structured brainstorming model. Dr. Suh's presentation, entitled with "How to brainstorm your dissertation/thesis?" included guidelines and principles related to how to brainstorm a topic, develop a structure, identify research problems, and develop one's own writing process. As a group, the attendees and Dr. Suh exchanged our own definitions for the writing process and discussed the issues related to the dissertation/thesis writing.

As a second speaker, Mr. Mohan Ramaswamy (Associate Head for Research and Graduate Services, NCSU), presented a talk entitled "Making the Best out of Libraries Research Support." He explained important services and access points of the University Library, since it is essential for graduate students to know all about the library and how to navigate the library web site. Next, Dr. Moon W. Suh (Professor, Textile Technology, NCSU) presented a talk on research methods for dissertation/thesis with an emphasis on the broad philosophical underpinning to the chosen research methods. The title of his talk was "Research methodology and dissertation/thesis writing," and highlighted that the methodology should be linked back to the reviewed literature to explain the academic basis of one's choice. Finally, Dr. Chueng Ji (Professor, Physics, NCSU) who has established a track record of advising graduate students shared his academic advising experience with a recently graduated Ph.D. student. His talk, entitled "Example of my recent PhD student's dissertation," stressed responsibilities in the academic advising relationship and offered informative suggestions for the meetings with an academic advisor.

The second portion of the workshop included a "PANEL DISCUSSION" session, in which a group of professors hold an open discussion with the audience who come with questions. The panelists discussed the issues related to the dissertation/thesis writing with each other by asking questions or reacting to the views and opinions of other panel members as well as attendees.

Feedback from workshop attendees was overwhelmingly positive, with many requests for additional writing workshops such as grant proposals and research papers. Many of participants expressed that they appreciated presenters' openness to comments and questions, enjoyed the friendly and relaxed atmosphere, and found speakers to be engaging, knowledgeable and highly helpful for the preparation of their dissertation/thesis.

KSEA SOUTH-WESTERN REGIONAL CONFERENCE 2016

JOSEPH JINLEE KIM, PhD
Southern California Chapter

Associate Professor
California State University at Long Beach

KSEA Southern California Chapter hosted the 26th annual KSEA South-Western Regional Conference (KSEA-SWRC 2016) at the Pointe located in California State University Long Beach campus from 9 am to 7 pm on February 20, 2016. The theme of the conference was "Building up the next generation for science/engineering and industry." The event was hosted by KSEA and KUSCO and organized by KSEA-Southern California Chapter and San Diego Chapter. The participants included KSEA members from KSEA local chapters, Southern CA, San Diego, Executive Committees of KSEA-HQ, and industrial members such as WCCT Global. We had approximately 150 professionals from diverse fields at KSEA-SWRC 2016 where US and Korean scientist, engineers, and entrepreneurs got together to make an outstanding conference with high quality programs. The event was successful because of the innovative idea of running the entire conference in a single, plenary track with the three meals served, raffles, and the band.

Dr. Joseph Jinlee Kim, a general chair of KSEA-SWRC 2016 and KSEA-SC Chapter President, gave an opening remark to welcome all the participants to the conference. The General Plenary Session hosted six renowned speakers to cover issues of the conference's theme.

- Mr. Hyun-Myung Kim, Consul General at Korean Consulate General in Los Angeles
- Dr. Thomas Hanh, Former KSEA President
- Dr. Simon Kim, Interim AVP for Research Programs at CSU Long Beach
- Dr. Chi-Ah Chun, Professor of Psychology at CSU Long Beach – Keynote Speech
- "Building infrastructure leading to diversity (BUILD) program"
- Dr. Hee-Koo Moon, "History of Jet Engine Development" – Invited Speech
- Dr. Eun-Suk Seo, "International Space Station and International Collaboration" – Invited Speech

The parallel sessions in the afternoon had seven invited talks from Bio and Life Science, Civil/Architectural/Environmental, IT and Computer Science, and YG Career Development. Mentoring program and student oral presentation competition were held concurrently in the parallel sessions, as shown below.

Bio/Life Science session moderated by Dr. Jongdae Lee

- Dr. Kenneth Kim, President of WCCT Global - Update on drug development in the 21st century
- Dr. Kyungmoo Yea, Assistant Professor at Scripps Research Institute - Development of antibodies for therapeutic candidates
- Dr. David W. Gjertson, Professor of Biostatistics & Pathology at UCLA - Fundamental of biostatistics

IT/CS session moderated by Dr. Suejung Huh

- Dr. Ari Shapiro, Research scientist at USC Institute for Creative Technologies - Creating digital humans
- Professor Young Jin Park at Shepherd University – Virtual reality game development

Civil/Architecture/Environmental session moderated by Dr. Joon-Ho Choi

- Mr. Simon Turner, CEO for Healthy Buildings – How to optimize IAQ in your building
- Ms. Sara Neff, Senior Vice President of Sustainability, Kilroy Realty Corp. – Recent trends in sustainability in commercial real estate

Mentor-mentee matching program moderated by Dr. Jeho Park and Yeon Joon Jin

- During the three intermediate breaks, the mentoring program was held to help connect mentors and mentees so that young generation could meet and gt to know the expertise and knowledge of the mentors who will guide them for the better direction of their careers.

Student oral presentation competition for class project and/or research project moderated by Dr. Jinsung Cho, Chair, Dr. Jong-Hwa Bae, and Dr. Helen Jung.

- Eighteen teams consisting of eight undergraduate students, four MS students, and six Ph.D. students competed at the student scholarship competitions. All the recipients were awarded a scholarship certificate with a scholarship and the rest of the participants also received the certificate of participation.

The conference had a closing plenary session that included award ceremony, introduction of sponsors, reception and dinner with KSEA-SC band performance and raffle drawings.

In conclusion, as we strive for new opportunities to build our next generation, KSEA-SWRC 2016 provided undergraduate and graduate students with a platform to make an oral presentation of their class and research projects for scholarships. Young generation members and students had an opportunity to meet their mentors through the mentorship program. As a result of advertisement and invited speeches, KSEA and KUSCO have been exposed to KSEA-Southern California Chapter and San Diego Chapter members and Los Angeles Korean Community through news media. More importantly, all of the event organizers and participants truly demonstrated the way how to organize a constructive and productive conference, which motivated the direction of the future conference in a new and creative format.

THE 6TH ANNUAL SOUTH-ATLANTIC REGIONAL CONFERENCE: TRANSDISCIPLINARY COLLABORATION BETWEEN ART AND SCIENCE

CHANG SOO NAM, PhD
North Carolina Chapter President

Associate Professor
North Carolina State University

JI WON PARK
KSEA–YG Duke University Chapter

BS Candidate
Duke University

On March 18-19 2016, approximately eighty scientists and engineers in the Research Triangle Park area—including undergraduates, graduate school students, post-docs, professors and industry professionals—gathered at North Carolina State University (NCSU) for the 6th Annual South-Atlantic Regional Conference. The conference, co-hosted by the North Carolina Chapter of the Korean-American Scientists and Engineers Association (KSEA) and Research Triangle Park Bioscience and Biotechnology (RTP B&B), took up the theme "Art and History for Scientists and Engineers" – and invited speakers whose research created new avenues of thinking at the intersection of art and science.

As with the year prior, the conference began on the campus of the data analytics company SAS. Participants had the chance to go on a tour of the SAS campus thanks to the facilitation of SAS researcher Dr. Seungho Huh. One participant, who was a Visiting Scholar from Korea, remarked that the facilities and scale of the campus were comparable to those of top-tier universities in Korea.

The remainder of the two-day conference took place on the Raleigh campus of NCSU; the choice of venue reflects the renewed effort to engage current students in the conferences. Opening keynote speaker Dr. Robert Dunn (Professor of Applied Ecology, NCSU) broached the theme with a screen-wide picture of kimchi while a song played in the background. The notes of the song, he explained, were based on the DNA of bacteria found in the belly button. Under the title "Art, Science and the Wonder of Kimchi," he presented the argument that a Hyperrealist approach to observation had enabled breakthroughs in microbiology.

Then followed this year's addition to the program: a concert by the eight-member band Drunken Beaver, consisting of graduate students and post-docs at NCSU. Their pieces—some taken from a recent, widely popular Korean show "Reply 1988"—rang familiar to the participants and provided fun accompaniment to the evening networking scene.

On the following day, March 19th, the conference re-opened early morning with an introduction by the KSEA NC Chapter President Dr. Changsoo Nam (NCSU) and the RTP B&B President Dr. Hangsik Moon of their respective institutions.

Dr. Sharon Joines (Associate Professor of Industrial Design, NCSU) was the first speaker of three in the keynote forum. Her educational background has been strictly in engineering; she earned her bachelors, masters and doctorate degrees in Industrial Engineering from NCSU. When she changed course to become a professor in design, she recognized cultural barriers that impeded flow of ideas. In her talk, she sampled case studies from her own experience to offer recommendations for "transdisciplinary collaboration," or the type of collaboration that went beyond any one discipline and adopted a holistic approach.

All eyes were on the second speaker Mr. Bong-Il Jin (Associate Professor of Industrial Design, NCSU) as he began his presentation with the words, "Only by being crazy about ideas others might dismiss as crazy can you produce work that is one-of-a-kind." He introduced approaches he called "intentional mistake" and "balanced contrast" that has spurred innovative design. By walking the audience through his student's electric drill design motivated by geometric shapes, he demonstrated how he has applied his design approaches in his teaching and encouraged students to seek inspiration from unlikely sources. Mr. Jin is a graduate of Hongik University College of Design & Arts and had worked as Designer in Kia and Daewoo Motors for nearly two decades. He boasted of an array of awards in domestic and international design competitions and was selected as the "Most Admired ID Instructor in the US" by Design Futures Council's publication DesignIntelligence in 2006.

Along the same line, third speaker Mr. Brian Baewon Koh (Partner Principal, Innovative Design, Inc.) stressed in his interactive presentation the importance of breaking down boxes that limit one's creativity. He then proceeded to illustrate his philosophy with examples in environmentally friendly architecture. He is an expert in green buildings, having 22 years of professional experience in designing and managing related projects. He currently serves as Faculty and Chair of the US Green Building Council (USGBC) of North Carolina and teaches LEED (Leadership in Energy and Environmental Design), a green building certification program used worldwide.

For lunch, participants divided into small groups led by professionals in the Research Triangle Park area: Dr. Taek Hyon You (Professor of Biology, Campbell University), Dr. Chueng-Ryong Ji (Professor of Physics, NCSU), Dr. Yeoheung Yun (Professor of BME, North Carolina Agricultural and Technical State University), Dr. Ki-Hyon Kim

(Professor of Physics, NC Central University), Dr. Hangsik Moon (GlaxoSmithKline Vaccines), Dr. Do Young Eun (Professor of ECE, NCSU), Dr. Chang Soo Nam (Industrial & Systems Engineering, NCSU), Dr. Yongho Joseph Kim (Parexel International) and Mr. Bong-Il Jin (Professor of Industrial Design, NCSU). In each small group, members had the chance to become acquainted with another and ask questions remaining from the seminar. Lunch took place inside a classroom with chalkboards on all four walls; one participant, an industry professional, reflected that the classroom setting was a throwback to her college days.

During the poster session, eight graduate school students had the opportunity to showcase their research. Participants went around to each poster and asked questions to the presenter. They were asked to vote for the best posters. Afterwards, posters that had won the most number of votes were awarded a small gift as a token of encouragement and gratitude.

Another program unique to this year's conference was a session geared toward students. Ji Won Park, an undergraduate physics and math major from Duke University, spoke on the under-representation of women in physics and challenges she has experienced or expected to face as a racial and gender minority in physics. Joonmoo Huh, a graduate student pursuing a PhD in ECE at NCSU, shared his ambivalence as he was committing a significant fraction of his prime years to graduate school. Inchul Choi, a graduate student pursuing a PhD in Industrial & Systems Engineering at NCSU, chronicled stories he called "failures" and explained how they led him to his current goals. Lastly, Dr. Sun Yong Jeong (Research Instructor, UNC-Chapel Hill) reflected on his journey through graduate school and offered words of advice to current students. One undergraduate participant noted that, difficult as it may have been for the speakers in this session to open up with personal accounts, he empathized with much of their struggles and that they will help him better prepared for life in graduate school.

Since 2010, the South-Atlantic Regional Conference has been an annual reminder of the active Korean-American engagement in the Research Triangle Park (RTP) area of North Carolina. RTP harbors 42,000 scientists and engineers, with more than a thousand Korean-American scientists and engineers serving positions of lead scientist, research director, team leader or executive member. This year's conference, in particular, emphasized the importance of collaboration among disciplines within science as well as without. The conference has been reported in the local publication, NC Hankookin News.

Top left,
Dr. Robert Dunn draws the audience's attention with a slide showing a jar of kimchi.

Top right,
Dr. Sharon Joines shares her experience of discovering cultural differences between designers and engineers.

Bottom left,
Mr. Jin urges participants to be open to "crazy" ideas.

MID-ATLANTIC REGIONAL CONFERENCE 2016

BYOUNG–JOON (BJ) SONG, PhD
Washington DC–Metro Chapter President

Senior Investigator and Section Chief
National Institutes of Health

The Mid-Atlantic Regional Conference 2016 (MARC2016) was held on April 23 at the KSEA-Headquarter Office, Vienna VA. This annual Conference was aimed to promote networking and collaboration among the participants. The Conference was organized by the Washington Metro Chapter and other regional chapters encompassing the states of Pennsylvania, Maryland and Virginia, including Hampton-Norfolk area. This Conference was supported by the KSEA-HQ, Korea-US Science Cooperation Center (KUSCO), the Korean American Society in Biotech and Pharmaceuticals (KASBP)-DC Chapter, Korean Women in Science and Engineering (KWiSE), and Korean Institute of Science and Technology Information (KISTI).

Approximately 65 scientists/engineers pre-registered while additional 20 people came for on-site registration to attend the Conference. More than 15 academic professors from various Universities in the mid-Atlantic Region came and participated to the Conference.

Some key attendees during the MARC2016 are as follows:
Mr. Sun Hak Cho, Science and Technology Attaché at the Korean Embassy
Dr. Eun-Suk Seo, VP and President Elect of KSEA-HQ.
Dr. InHwan Oh, CEO, Leadership and Group IQ Institute & former Senior Manager at NASA
Dr. SaeYoung Ahn, former President of KSEA-HQ
Dr. Jungwoo Ryoo, CP of Central Pennsylvania Chapter
Dr. Saerona Choi, CP of Central Virginia Chapter
Mr. Wooram Lee, CP of Southern Virginia Chapter
Dr. Sung-Ung Kang, CP of Baltimore Chapter
Dr. Young B. Choi, Councilor of Technical Group M
Dr. Gon Namkoong, CP of South Eastern VA Chapter
Dr. Steven An, HOD of KSEA-HQ
Dr. Byoung-Joon Song, CP of Washington Metro Chapter
Dr. Sang-Mok Chung, VP of Washington Metro Chapter

This year, we have focused on biomedical/life science and engineering areas, which were held in two parallel sessions throughout the Conference day. In fact, we had a total of eleven invited expert speakers (i.e., 4 speakers in biomedical science session and 7 speakers in the engineering session).

During the joint sessions in the lunch hour, Drs. Eun-Suk Seo, Professor at Univ of Maryland and Youngsuk Oh, Program Director at NIH, gave a valuable career development advice and a session for successful grant writing session, respectively, for young participants. During the dinner time, Dr. InHwan Oh, CEO at Leadership and Group IQ Institute, gave a valuable talk on how to build leadership skills and to raise group IQ collectively.

Furthermore, the Organizing Committee gave opportunities for young participants to give short lectures on their research. In fact, a total of 24 young scientists and engineers were invited to present their research results. The oral presentation gave a valuable experience for young scientists/engineers for public speaking. In addition, approximately one third of the young speakers received Excellent Research Awards, which will help their careers.

During and after the Conference, the Organizing Committee members received many positive feedbacks especially from the young participants for their networking with senior members such as individual mentor-mentee relationships, information sharing, and future job opportunities. Based on the positive feedbacks, the KSEA Washington-DC Metro Chapter plans to continuously hold the Regional Conference annually.

25TH NORTHEAST REGIONAL CONFERENCE

JASON KI
NY Metro YG Group Representative

Graduate Student
City College of New York

The 25th Northeast Regional Conference (NRC 2016) was held at the Crowne Plaza Hotel in Englewood, NJ on April 30th, 2016. This meeting was organized by KSEA NJ, NY Metro, and Philadelphia Chapters in collaboration with 5 affiliated professional societies: Korean American Society for Biotech & Pharmaceuticals (KASBP), Korean-American IT Engineers and Entrepreneurs (KITEE), Korean-American Women in Science and Engineering (KWiSE), New York Korean Biologists(NYKB), and Philadelphia Korean Scholars Association (PKSA). Through this partnership, the NRC was successful in organizing a record-breaking number of 6 concurrent breakout sessions featuring Information Technology (IT), Biotechnology (BT), Engineering, Entrepreneurship, Women in Science and Engineering, and Young Generation (YG).

The theme for this year's meeting was "Moving Forward Another Quarter Century, TOGETHER" to celebrate the 25th NRC. In commemoration of this milestone, Dr. Kang-Wook Lee (37th KSEA President; IBM) delivered a presentation entitled "Reflection of 25 Years of NRC," encapsulating the history of KSEA northeast chapters and their regional conference as well as the passion of our predecessors. The presentation chronicled the inception of KSEA to its current state while demonstrating the impact NRC has had on the Korean-American scientific community, especially for the Young Generation group. This commemoration speech was followed by a keynote presentation from Dr. Chin Ok Lee (18th KSEA President; Rockefeller University), who is a distinguished scientist and a longtime contributor to KSEA. His talk entitled "Dream for Nobel Prize in Science and Korea" summarized the historical overview of Korean-American scientific endeavors and its place in the global community. Dr. Lee shared personal anecdotes of his ventures in his scientific career, inspiring and motivating the next generation of Korean-American scientists and engineers.

This year, there were a total of 125 attendees and 29 technical talks were presented for NRC 2016. The increased participation from affiliated professional societies expanded the breakout sessions, leading to greater diversity and extended opportunity for the attendees to establish networks, not only with general KSEA members but with attendees more specific to their professional and personal interest. This year's NRC included two new breakout sessions in "entrepreneurship" and "women in science" organized by KITEE and KWiSE NJ/NY chapters, respectively. Furthermore, this event marked the 3rd consecutive year the YG group organized its breakout session at the NRC. There is a consistent growth in participation by young professionals and students in the region, with more than 40 participants from 6 university chapters and 8 session speakers, including Dr. John Lee (KSEA YG Committee Chair; KPMG), who delivered a keynote presentation entitled "You in Twenty Years".

Overall, NRC 2016 was another successful KSEA gathering that served as a memorandum marking the beginning of another quarter century, moving forward together as we continue to pursue excellence as scientists and engineers in the Northeast region.

UNITED STATES AND CANADIAN ACADEMY OF PATHOLOGY ANNUAL MEETING

EUN YOUNG LEE, MD
KOPANA President

Professor
University Of Kentucky

Korean Pathologists Association of North America (KOPANA) was founded in 1992 and by 2001 had membership of over 200 Korean pathologists practicing in North America in a variety of venues such as universities, community hospitals, private laboratories, and research institutes. Currently, about 50 American pathologists of Korean heritage (Korean-American pathologists) are KOPANA members and their number is growing. Now is an important transition time for KOPANA as considerable numbers of our older members have retired or are approaching retirement.

Sixteen years ago, KOPANA began convening its spring seminar in conjunction with the annual meeting of United States and Canadian Academy of Pathology (USCAP) to provide opportunities for networking, education, and enjoyment for our members. Our spring seminar has always been an excellent educational event for both our members and pathologists from Korea. Each year our invited speakers include not only our Korean-American members but also pathologists in Korea. This has been a perfect venue for professional networking between pathologists in two geographic areas.

This year we had another very successful Spring Seminar with nine lectures on "Pulmonary Pathology" and 32 people attended. Five speakers came from Korea and lectures emphasized practical diagnostic utility as well as the latest advances and controversies in research. This was held in conjunction with the 105th annual meeting of the United States and Canadian Academy of Pathology from March 10th to 12th, 2016, in Seattle, Washington.

The speakers and topics for the 15th Spring Seminar were:
(1) Mee-Sook Roh, MD, PhD (Dong-A University): "What is new in 2015 WHO book on Lung Cancers?"
(2) Jin-Haeng Chung, MD, PhD (Seoul National University): Approach to biomarker testing of lung cancers; IASLC recommendation"
(3) Chi Young Ok, MD (MD Anderson Cancer Center): "Introduction to NGS technique and its application in MDACC"
(4) Yoon-La Choi, MD, PhD (Samsung Medical Center): "Current status of molecular pathology in Korea"
(5) Michael Roh, MD, PhD (University of Michigan, Ann Arbor): "The utilization of fine-needle aspirates of lung cancer for molecular diagnostic testing,"
(6) Lucia Kim, MD, PhD (Inha University): "Thymic epithelial tumors; update in 2016"
(7) Joanne Eunhee Suh Yi, MD (Mayo Clinic, Rochester): "Interstitial lung disease and pulmonary vasculitides: update in 2016 with vignette cases,"
(8) Sunhee Chang, MD, PhD (Inje University Ilsan Paik Hospital): "The role of immunohistochemistry in the diagnosis of malignant mesothelioma"
(9) Jae Y. Ro, MD, PhD (Methodist Hospital, Houston): "Changing role of pathologists on lung cancer diagnosis"

Sixty-six people attended our Annual Dinner during the USCAP meeting held in March 14th, 2016. We provided "KOPANA-KSEA Resident Awards" to 16 residents and fellows (8 from the USA and 8 from Korea) who had either platform or poster presentation as the first author at the USCAP meeting,

8TH ANNUAL NYKB CONFERENCE

HYUN JAE PI, PhD
NYKB President

Postdoctoral Fellow
Cold Spring Harbor Laboratory

The Society of New York Korean Biologist (NYKB) hosted the eighth annual conference on April 9, 2016 at Mount Sinai Hess Center for Science and Medicine in New York. With 120 attendances, not only contemporary research in bioscience but also diverse topics such as non-academic research and the faculty hiring process in Korea were covered and discussed.

NYKB was established to construct academic and social networks between Korean biologists around New York Metro and to further support each other to pursue academic and professional excellences in their research and career. Currently, Albert Einstein College of Medicine, Stony Brook University, Cold Spring Harbor Laboratory, Columbia University, Weill Cornell Medical College, Memorial Sloan-Kettering Cancer Center, Mount Sinai School of Medicine, New York University, Rockefeller University, and Rutgers University are affiliated and 250 members are registered. Last year, NYKB hosted various events such as NYKB annual conference, social night, IBS talent forum, etc.

This year, Dr. Kitai Kim (Memorial Sloan Kettering Cancer Center) talked about the genomic stability of induced pluripotent stem cells. Induced pluripotent stem cells (iPSC), which are generated from a patient's own cells and used to produce transplantable tissues, may particularly benefit older patients who are more likely to suffer from degenerative diseases. However, iPSC generated from aged donors (A-iPSC) exhibit higher genomic instability, defects in apoptosis, and a blunted DNA damage response compared to iPSC generated from younger donors (Y-iPSC), which raises significant safety concerns. Dr. Kim's research addresses a mechanism that contributes to A-iPSC instability.

Dr. Jaeseung Jeong's (Korea Advanced Institute of Science and Technology) talk was one of the most popular topics to graduate students and postdocs. Dr. Jeong talked about the hiring process of faculty positions in South Korea. He not only presented important information that applicants should keep in mind, but also provided the perspective of search committee which might be very different from that of applicants.

This year, we invited Dr. Seongwon Peter Hong, a senior research scientist in Regeneron to cover growing interest among NYKB members in non-academic area. Dr. Hong presented how research is performed in so-called companies where the major focuses and research directions were significantly different from academia. He took a few examples of drug discovery and development.

The following is a summary of the other presenters and topics at the eighth NYKB conference.

1. Anmo Kim, PhD (Rockefeller University): "Dynamic silencing of Drosophila vision during rapid gaze changes"
2. Hyung Don Ryoo, PhD (New York University): "Unfolded Protein Response in Drosophila development, aging and disease"
3. Hanseul Yang (Rockefeller University): "Dissecting chromatin dynamics in malignant progression"
4. Sangbae Lee, PhD (Columbia University): "An ID2-dependent mechanism for VHL inactivation in cancer"
5. Tae-Wan Kim, PhD (Columbia University): "Academic Drug Discovery for Alzheimer's Disease"
6. JaYil Lee, PhD (Columbia University): "Single-Molecule Study on the Homology Search and Strand Exchange Mechanisms during Homologous Recombination"

The success of the event was possible due to generous supports from Olipass, Korean-American Scientists and Engineers association (KSEA), Institute of Basic Science (IBS), Korea-US Science Cooperation Organization (KUSCO), Department of Bio & Brain Engineering at KAIST, Korean-American Society of Biotech and Pharmaceuticals (KASBP), and Macrogen.

THE FOURTH AKPA-KSEA NATIONAL HIGH SCHOOL PHYSICS CONTEST (NHSPC 2016)

CHUENG–RYONG JI, PhD
38th KSEA President

Professor of Physics
North Carolina State University

The 4th NHSPC was held jointly with Korean-American Scientists and Engineers Association (KSEA) during the National Math and Science Competition (NMSC) on Saturday, April 9, 2016. This contest was the fourth of the series conducted nationwide and fifth on the entire program. NHSPC 2016 was held in 11 locations this year throughout the nation. The total 66 high school students took the physics test this year. Among them, there were 13 female students, keeping the 20% participation rate of female contestants similar as the last year. A number of non-ethnic Korean students participated in this contest as well. Compared to NHSPC 2015 which was held in 14 locations with 109 participants, however, this year's number of contestants was significantly low. While the NHSPC seems to have taken its place, it appears still in an early stage, and there is a lot of room to improve.

The students were given 75 minutes to solve 12 problems – 8 mechanics and 4 electro-magnetism. As has been the tradition, all problems were multiple-choice problems to ensure the objectivity of the grading with a total of 10 answer choices each to minimize accidental ties and to ensure testing the students' physics skills.

The average score of all participants were 6 out of 12 which was an improvement of 20% compared to NHSPC 2015 in which the average was 5. The average score has been steadily increased. The problems were kept at rather difficult to provide prestige to the participating students and to work with the American Physical Society (APS) for providing physics skills certificate.

All participants were given a t-shirt for participation in the contest, as in the previous years. For a student to be in the award range, the student had to score more than 5, at the average. This year, the national winners are the following six students who scored 11 out of 12:
Ellison Kang (11th grade) of Langley HS, Washington Metro
Daniel Lee (11th grade) of Thomas Jefferson High School for Science and Technology, Washington Metro
Jason Chen (10th grade) of Temple City HS, Southern California
Ryan J. Yoo (11th grade) of West Ranch HS, Southern California
Iandon Choi (11th grade) of JF Kennedy HS, Southern California
Jeho Jin (11th grade) of Crescent Valley HS, Southern California

The physicists were very excited about this contest and helped the preparation of this contest. In particular, I am very grateful to the team members who worked with me to volunteer for the preparation of the contest problems: Profs. Dean Lee (N.C.State), Kiyong Kim (UMD), Harold Kim (Georgia Tech), Jaehoon Yu (UTA) and Nayoung Kim (Stanford).

The success of this program would not have been possible without the strong support of KSEA and a tremendous participation of AKPA members and non-ethnic Korean physicists who took part in organization, proctoring and grading. AKPA should continue working closely with KSEA and APS to ensure the success of this program in the foreseeable future.

PROF. YOUNG CHOI

Prof. Young Choi of Regent University was awarded FACULTY AWARD for EXCELLENCE for his outstanding contributions to scholarship on May 3, 2016 at Quarterly Faculty/Staff Meeting of Regent University.

He was also nominated for the award in 2014 and 2015 consecutively.

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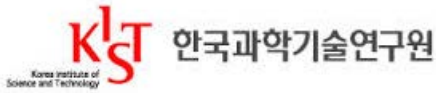

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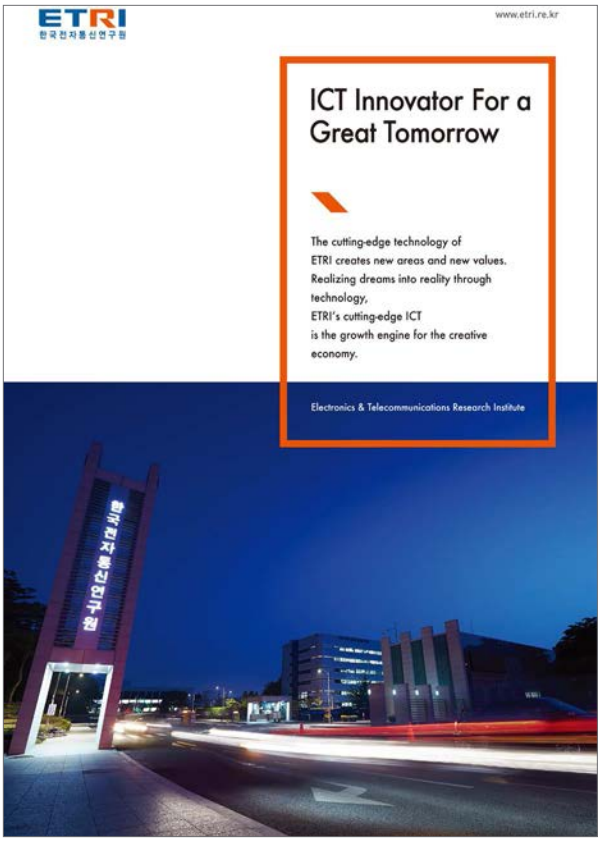
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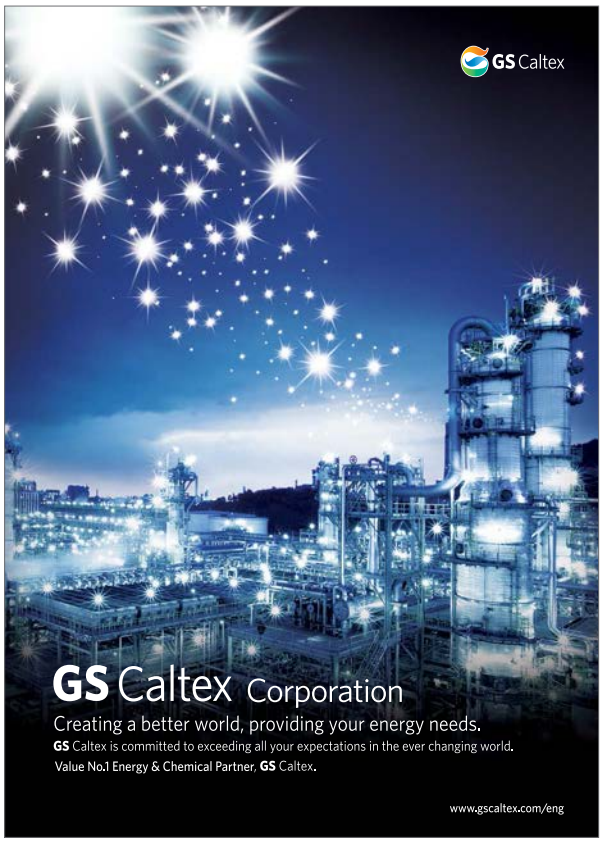
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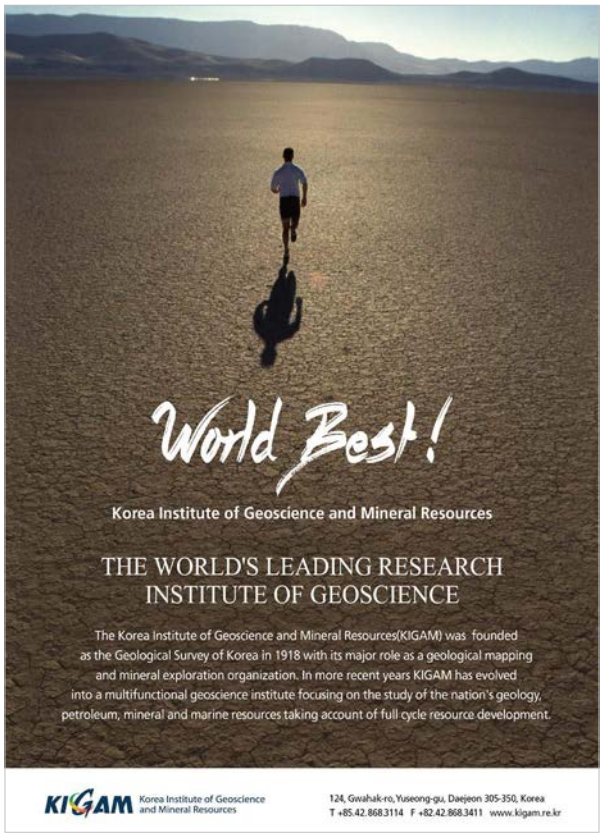
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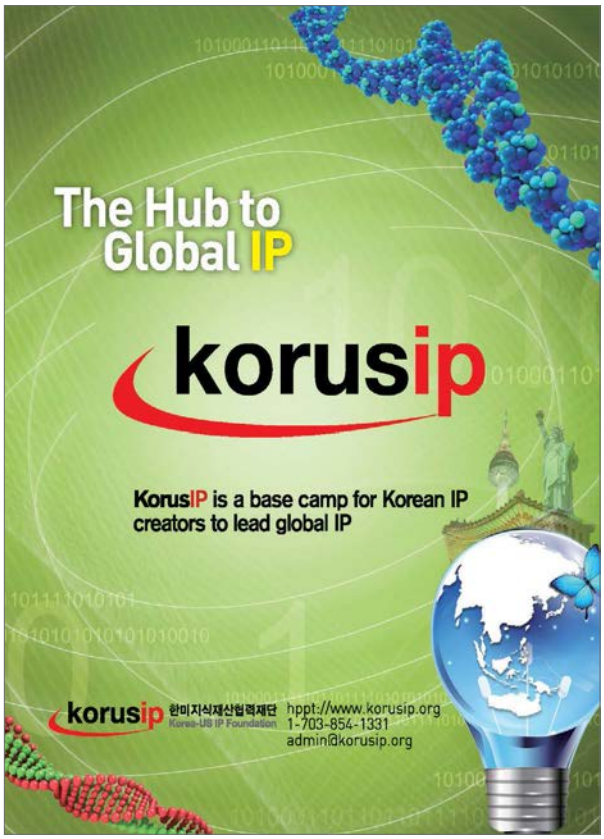
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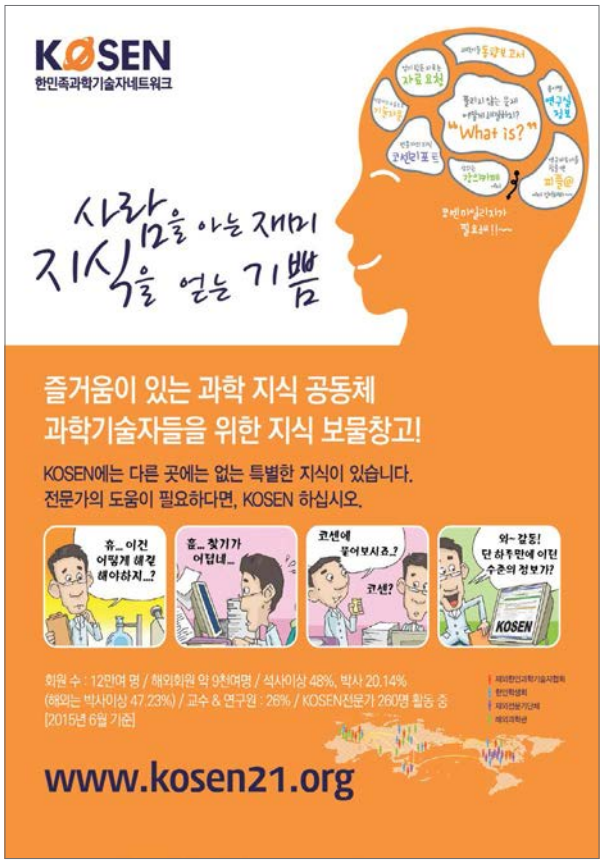
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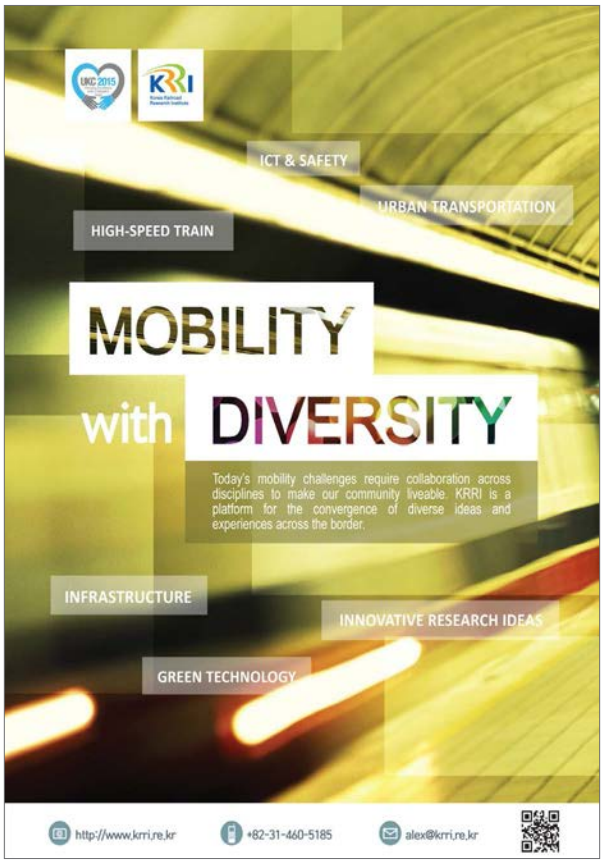
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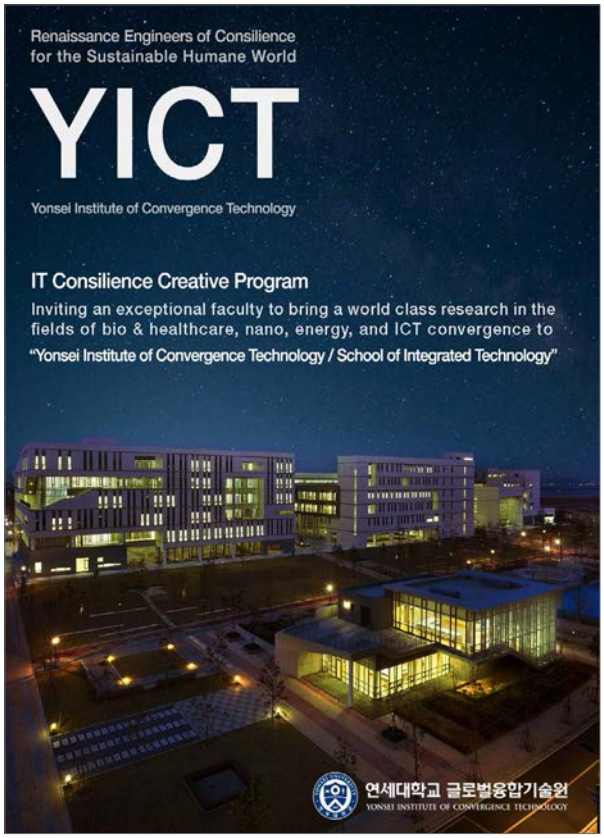
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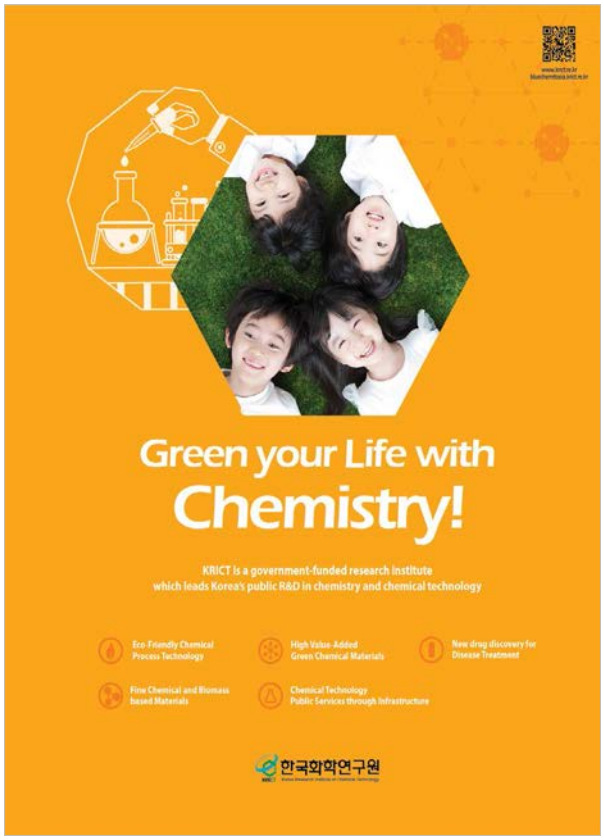
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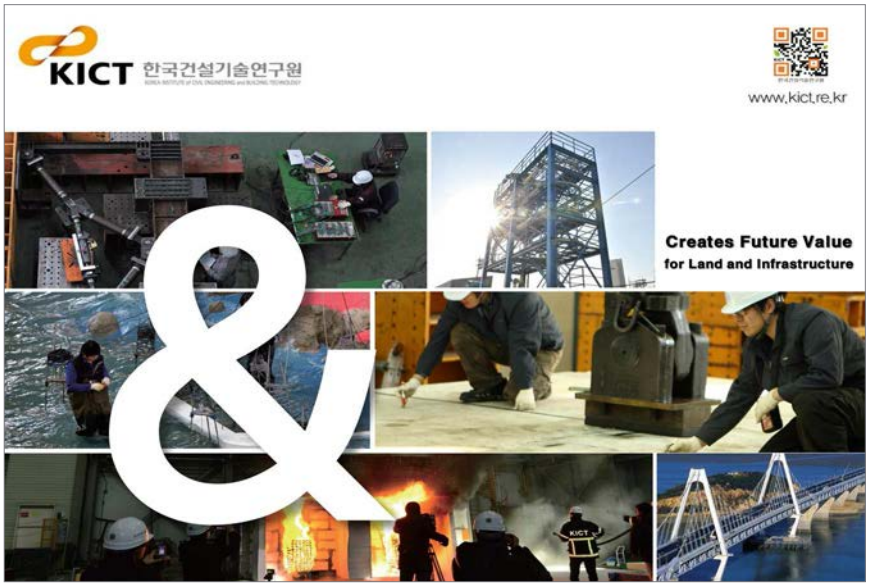

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Kiuck Lee
Inyong Ham
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Soon Kyu Kim
Kwang-Hae (Kane) Kim
Moo Young Han

Nomination for the Award of The 2016 Ho-Am Prize

The Ho-Am Prize Committee awards the 2016 Ho-Am Prizes to those who have made distinguished contributions to the development of our society through prominent accomplishments in Science, Engineering, Medicine, The Arts and Community Service.

1. Awarding Categories

Science..... Those who have made outstanding achievements in research in the area of basic science.
Engineering..... Those who have made outstanding achievements in the areas of engineering and technology.
Medicine ..... Those who have made outstanding achievements in the areas of medicine and pharmacy.
The Arts..... Those who have made outstanding contributions to culture and the arts through creative activities, exhibition and research in relevant areas.
Community Service..... Those who have made outstanding achievements in the area of social service and thereby contributed to the enhancement of public welfare.

- The Prizes in all categories are awarded to people of Korean ethnic origin. The Prize in Community Service, however, can also be awarded to foreigners who have made outstanding contributions to Korea and Koreans at home and abroad.
- The Prize in each category consists of a **diploma**, a **gold medal (187.5g)** and **300 mil. Korean won**.
- Each nominator may only recommend one person or one group in each category.

2. Papers and Materials for Nomination

- Official nomination form and supporting documentary evidence of achievements including news articles.
- One representative thesis and five related theses in the categories of Science, Engineering and Medicine.
  * Nomination form download: **http://www.hoamprize.org**

3. Submission of Nominations

- Deadline : **October 31, 2015**
- On-line nomination : The Ho-Am Foundation has opened an on-line nomination systems on its website.
- Off-line nomination : Materials for nomination should be sent to the following address or e-mail.

* **6th Fl., Seocho Tower, 4, Seocho-daero 74-gil, Seocho-gu, Seoul 137-955, Korea**
Tel) 82-2-2255-0453~7 Fax) 82-2-2255-0461 E-mail) hoam.foundation@samsung.com

- The winners of the 2016 Ho-Am Prizes will be announced in major Korean dailies in April 2016.

4. Recipients of The 2015 Ho-Am Prize

Science
Jinwoo Kim
Professor
Yonsei University

Engineering
Chang-Jin "CJ" Kim
Professor
UCLA

Medicine
Sunghoon Kim
Professor
Seoul National University

The Arts
Kimsooja
Multi-disciplinary
Conceptual Artist

Community Service
Young-shim Baek
Nurse
Daeyang Luke Hospital

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