



GRADUATE SCHOOL  
INHA UNIVERSITY

Introduction of Laboratory

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# Introduction of Laboratory

Name 성함	Surname	Jo		
	Given Name	Jaehun		
Position 직급	Professor		Gender 성별	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female
Department 소속학과	Division of Architecture		Major 소속전공	Building Environment
Contact Information 연락처 정보	Email	jhjo@inha.ac.kr		
	Telephone	82-32-860-7582		
	Home Page			
Monthly Stipend Provided or Not 생활비 지급 의사	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Required Manpower 필요인력 수	(How Many) Master <u>2</u> / Ph.D <u>2</u>
Research Field 연구분야 설명	<ul style="list-style-type: none"> <li>▫ Building energy policy, regulation, and standard</li> <li>▫ Passive House and Zero-energy building</li> <li>▫ Building energy performance evaluation and energy simulation</li> <li>▫ Thermal &amp; airflow simulation analysis in buildings: ventilation strategies &amp; IAQ evaluation, Insulation and condensation performance analysis</li> <li>▫ Design and evaluation of Kinetic façade and movable shading</li> <li>▫ Stack effect engineering and airflow analysis in high-rise buildings</li> <li>▫ Development of hi-performance envelope (e.g. double-skin facade)</li> <li>▫ Knowledge to achieve airtightness criteria (construction phase inspections, airtightness test, air leakage audit and thermographic surveys)</li> <li>▫ Large/Complex buildings air leakage measurement</li> </ul>			
Career Achievements 업적 리스트 (Recent 3 ones)	R&D1: Development of Dual-Control System Enabling Real-time Associative Operation of Passive and Active System in Buildings (3years)			
	R&D2: Development of Integrated Design Engineering Technology for Large Spatial structures: smart thermal and comfort index sensing system (6years)			
	R&D3: Development of core technologies for creative and innovative super-tall building: stack effect and airflow monitoring system (3years)			
Others 기타사항	LAB: Building Environment and System Laboratory  Monthly stipend: master \$700~1,000, Ph.D \$ 1,000~1,500 Research allowance: up to \$3,000 International conference presentation support Private PC			



# Introduction of Laboratory

Name 성함	Surname	Jeon		
	Given Name	Tae-Joon		
Position 직급	Professor	Gender 성별	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female	
Department 소속학과	Biological Engineering	Major 소속전공	Nanobiotechnology	
Contact Information 연락처 정보	Email	<a href="mailto:tjjeon@inha.ac.kr">tjjeon@inha.ac.kr</a>		
	Telephone	+82-32-860-7511		
	Home Page	<a href="https://bsl.inha.ac.kr">https://bsl.inha.ac.kr</a>		
Monthly Stipend Provided or Not 생활비 지급 의사	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Required Manpower 필요인력 수	(How Many) Master _____ / Ph.D. <u>2</u>	
Research Field 연구분야 설명	<ul style="list-style-type: none"> <li>● Biosensors/Biochips – Pathogen Biosensors, Molecular Diagnosis</li> <li>● Life-on-a-Chip – Cells/Tissues/Organs-on-a-Chip</li> <li>● Biophysics – Biomimetic Membranes, Ion Channel Studies</li> <li>● Nanobiotechnology – Liposomes/Vesosomes, Artificial Cells, Aquaporin</li> </ul>			
Career Achievements 업적 리스트 (Recent 3 ones)	Biomimetic membranes as potential tools for water purification: Preceding and future avenues, Desalination 2019 (JCR Category Ranking 2%)			
	An electrokinetic approach to fabricating aquaporin biomimetic membranes for water purification, Desalination 2019 (JCR Category Ranking 2%)			
	Nanopore based detection of Bacillus thuringiensis HD-73 spores using aptamers and versatile DNA hairpins. Nanoscale 2018 (JCR Category Ranking 10%)			
Others 기타사항	<p>Biohybrid Systems Laboratory, led by Drs. Tae-Joon Jeon and Sun Min Kim(Professor of Mechanical Eng.), is challenging to interface abiotic/biotic interphases for the commercial realization of nature and his ongoing research focuses on biochips/biosensors, membrane protein applications, membrane biophysics, artificial cells, and liposomes/vesosomes. Dr. Jeon received his B.S. degree with honors (<i>Magna Cum Laude</i>) in the Dept. of Chemical Eng. from Seoul National University, Korea, in 2001 and completed his Ph.D. in the Dept. of Chemical and Biomolecular Eng. from UCLA, U.S.A., in 2008, followed by his postdoctoral work in the Dept. of Bioeng. at UCLA. Additionally, he founded Librede, Inc. in San Diego, CA and had served as a Consultant and Science Advisory Board Member for AquaZ A/S, previously Danfoss AquaZ A/S, in Denmark from 2009 to 2012, where he suggested several techniques of interfacing abiotic and biotic components to construct an aquaporin embedded water purification system by mimicking biological cells. In 2009, he joined a faculty member in the Department of Biological Eng. at Inha Univ., Korea, which is among top 3 programs in the nation. He is currently Professor of Biological Eng. and Vice Dean of Undergraduate Admissions at Inha University. He has been a PI/co-PI for research grants mostly funded by Korean government over \$4M since 2009. He has published over 60 peer-reviewed research articles with over 1,200 citations and filed 25 patent applications with 18 issued patents.</p>			



# Introduction of Laboratory

Name 성함	Surname	Lee		
	Given Name	Choul-Gyun		
Position 직급	Professor		Gender 성별	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female
Department 소속학과	Department of Biological Engineering		Major 소속전공	Biological Engineering
Contact Information 연락처 정보	Email	leecg@inha.ac.kr		
	Telephone	82-32-872-7518		
	Home Page	www.mbe.re.kr		
Monthly Stipend Provided or Not 생활비 지급 의사	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Required Manpower 필요인력 수	(How Many) Master __1__ / Ph.D __1__
Research Field 연구분야 설명	<p>We are working on various projects that target to produce microalgae-based products from upstream to downstream and from micro-scale to pilot-scale.</p> <ul style="list-style-type: none"> <li>● Systems Biology <ul style="list-style-type: none"> <li>- Metabolic engineering of microalgae with <i>in-silico</i> modeling of metabolic pathways and molecular biology tools to produce new valuable compounds or enhance their productivity</li> <li>- Synthetic biology research with cell-free protein synthesis system</li> </ul> </li> <li>● Microalgal Cell Culture Technology <ul style="list-style-type: none"> <li>- Development of large-scale culture systems based on semi-permeable materials technology for sustainable production of microalgal biomass</li> <li>- Photobioreactor engineering and optimization of cultivation parameters (temperature, light supply, media, etc.) to enhance productivities of biomass and valuable biochemicals such as lipids and pigments</li> </ul> </li> <li>● Biorefinery <ul style="list-style-type: none"> <li>- Development of extraction and conversion technologies to produce various products, such as biofuels, animal feeds, and fertilizers, from microalgal biomass</li> <li>- Downstream processes involved with transesterification, hydrothermal liquefaction, flash pyrolysis, supercritical CO<sub>2</sub> extraction, and so on</li> </ul> </li> </ul>			
Career Achievements 업적 리스트 (Recent 3 ones)	Method for mass culturing photosynthetic microalgae by additionally supplying environmental water. US Patent 10,174,282 (2019)			
	Hydrothermal liquefaction of <i>Chlorella vulgaris</i> : Effect of reaction temperature and time on energy recovery and nutrient recovery (2018)			
	Enhanced Production of Fatty Acids via Redirection of Carbon Flux in Marine Microalga <i>Tetraselmis</i> sp. (2018)			
Others 기타사항	<p>We have many types of microalgal culture systems in various scales, cutting-edge analytical equipment, and downstream process reactors that students can learn to use and operate them for research.</p> <ul style="list-style-type: none"> <li>- Culture systems: Bubble columns, continuously stirred tank reactors, flat-panel photobioreactors, raceway ponds, ocean floating ponds</li> <li>- Analytical equipment: HPLC, GC-MS, Coulter Counter, Cellometer, TOC analyzer, water analyzer, phase-contrast microscope</li> </ul>			

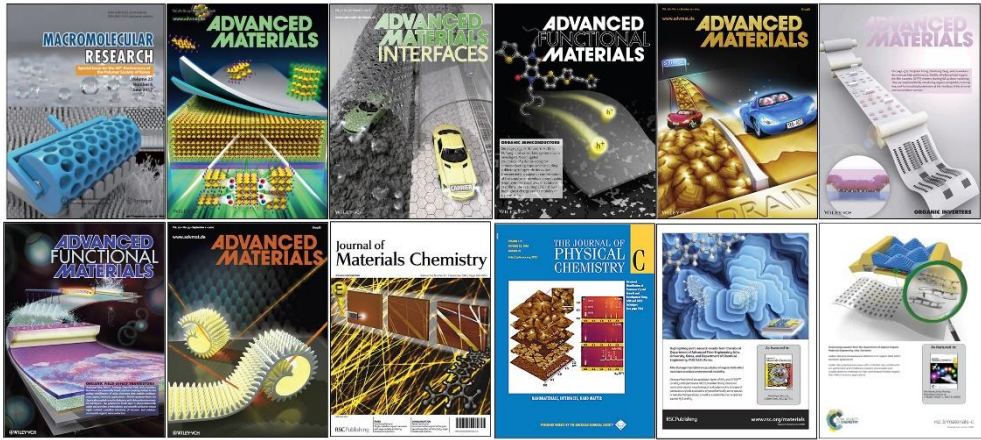


# Introduction of Laboratory

Name 성함	Surname	Shim		
	Given Name	Bong Sup		
Position 직급	Associate Professor	Gender 성별	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female	
Department 소속학과	Chemical Engineering	Major 소속전공	Chemical Engineering	
Contact Information 연락처 정보	Email	<a href="mailto:bshimg@inha.ac.kr">bshimg@inha.ac.kr</a>		
	Telephone	82-32-860-7477		
	Home Page	<a href="https://www.sbongs.com/">https://www.sbongs.com/</a>		
Monthly Stipend Provided or Not 생활비 지급 의사	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Required Manpower 필요인력 수	(How Many) Master _____ / Ph.D _1~2_	
Research Field 연구분야 설명	<p>1. Nano-Bio Functional Materials</p> <p>This research is about discovering novel nano-bio functional materials including photosynthetic protein complexes, electrically conductive melanin pigments, highly crystalline cellulose nanofibers, well-defined clay platelets, and various carbon nanomaterials.</p> <p>2. Biomimetic Nanocomposite Processing</p> <p>This research is to develop biomimetic material processing techniques to form hierarchically organized structures as well as to realize multifunctional properties of nanocomposites, which have wide ranges of real world applications from new generational airplanes and automotive, to bionic interfaces and regenerative medicines.</p> <p>3. Bionic Interfaces</p> <p>This research focus on the development of biocompatible electronic materials for improved biotic-abiotic interfaces which would be designed to provide seamless functional integration from electronic devices to tissues, organs, and to human body.</p>			
Career Achievements 업적 리스트 (Recent 3 ones)	H. Kim; T. Eom; W. Cho; K. Woo; Y. Shon; J. Wie; B. Shim; "Soft electronics on asymmetrical porous conducting membranes bymolecular layer-by-layer assembly", <i>Sensors and Actuators B: Chemical</i> , 254, 916-925, 2018			
	T. Eom; K. Woo; W. Cho; J. Heo; D. Jang; J. Shin; D. Martin; J. Wie; B. Shim; "Nanoarchitecturing of Natural Melanin Nanospheres by Layer-by-Layer Assembly: Macroscale Anti-inflammatory Conductive Coatings with Optoelectronic Tunability", <i>Biomacromolecules</i> , 18, 1908-1917, 2017			
	Y. Shon; H. Kim; H. Hwang; E. Bae; T. Eom; E. Park; W. Ahn; J. Wie; B. Shim; "A Nanostructured Cell-Free Photosynthetic Biocomposite via Molecularly Controlled Layer-by-Layer Assembly", <i>Sensors and Actuators B: Chemical</i> , 244, 1-10, 2017			
Others 기타사항				



# Introduction of Laboratory

Name 성함	Surname	Yang		
	Given Name	Hoichang		
Position 직급	Professor		Gender 성별	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female
Department 소속학과	Chemical Engineering		Major 소속전공	Polymer Science
Contact Information 연락처 정보	Email	<a href="mailto:hcyang@inha.ac.kr">hcyang@inha.ac.kr</a>		
	Telephone	+82-32-860-7494		
	Home Page	<a href="http://nanoseed.dothome.co.kr/">http://nanoseed.dothome.co.kr/</a>		
Monthly Stipend Provided or Not 생활비 지급 의사	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Required Manpower 필요인력 수	(How Many) Master ____ / Ph.D 2
Research Field 연구분야 설명	<ol style="list-style-type: none"> <li>Organic Semiconductor-Based Soft Electronics: Thin Film Transistors, Solar Cells, Sensors, etc</li> <li>Superhydrophobic Surface Coating</li> <li>Nanotechnology-Based Optoelectronics</li> </ol>			
Career Achievements 업적 리스트 (Recent 3 ones)	<u>Influence of Branched Alkyl Ester-Labeled Side Chains on Specific Chain Arrangement and Charge-Transport Properties of Diketopyrrolopyrrole-Based Conjugated Polymers</u> , <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 40681.			
	<u>Fine Control of Perovskite Crystallization and Reducing Luminescence Quenching Using Self-Doped Polyaniline Hole Injection Layer for Efficient Perovskite Light-Emitting Diodes</u> , <i>Advanced Functional Materials</i> , 2019, 29, 1807535			
	<u>Enhanced Efficiency and Stability of an Aqueous Lead-Nitrate-Based Organometallic Perovskite Solar Cell</u> , <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 14023.			
Others 기타사항	<ul style="list-style-type: none"> <li>Research Highlight</li> </ul> 			






# Introduction of Laboratory

Name 성함	Surname	Youk		
	Given Name	Ji Ho		
Position 직급	Professor		Gender 성별	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female
Department 소속학과	Chemical Engineering		Major 소속전공	Polymer synthesis
Contact Information 연락처 정보	Email	youk@inha.ac.kr		
	Telephone	82-10-8815-5099, 82-32-860-7498		
	Home Page	Google Scholar Citations <a href="https://scholar.google.com/citations?user=0W1aX8YAAAAJ&amp;hl=ko">https://scholar.google.com/citations?user=0W1aX8YAAAAJ&amp;hl=ko</a>		
Monthly Stipend Provided or Not 생활비 지급 의사	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Required Manpower 필요인력 수	(How Many) Master _____ / Ph.D <u>1</u>
Research Field 연구분야 설명	<p><b>(1) Synthesis of Stimuli-Responsive Materials</b></p> <ul style="list-style-type: none"> <li>- Thermo-responsive materials: Shape memory polymers</li> <li>- Self-healing materials: Self-healing composites</li> </ul> <p><b>(2) Synthesis of Functional Polymers</b></p> <ul style="list-style-type: none"> <li>- Synthesis of block copolymers: Surface modification</li> <li>- Graft polymerization: Binders for Li-ion batteries</li> <li>- Synthesis of flame retardant monomers and polymers</li> </ul> <p><b>(3) Applications of Functional Materials</b></p> <ul style="list-style-type: none"> <li>- Electrospinning: Li-ion batteries separators</li> <li>- Hard coating with polysilsesquioxane</li> <li>- Spinning: Flame retardant polyimide fibers</li> </ul>			
Career Achievements 업적 리스트 (Recent 3 ones)	<p>1. Preparation of Epoxy Shape Memory Polymers for Deployable Space Structures Using Flexible Diamines, FIBERS AND POLYMERS, 19, 1799 (2018).</p> <p>2. Microwave-assisted rapid one-step synthesis of poly(2-oxazoline)-based block copolymers using a dual initiator for CROP and RAFT polymerization, POLYMER, 87, 108 (2016).</p> <p>3. Suppressing molecular motions for enhanced room-temperature phosphorescence of metal-free organic materials, NATURE COMMUNICATIONS, 6, 8947 (2015)</p>			
Others 기타사항				





# Introduction of Laboratory

Name 성함	Surname	Hwang		
	Given Name	Sungwon		
Position 직급	Associate Professor	Gender 성별	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female	
Department 소속학과	Chemical Engineering	Major 소속전공	Chemical Engineering	
Contact Information 연락처 정보	Email	Sungwon.hwang@inha.ac.kr		
	Telephone	+82-32-8607461		
	Home Page	cepi.inha.ac.kr		
Monthly Stipend Provided or Not 생활비 지급 의사	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Required Manpower 필요인력 수	(How Many) Master __1__ / Ph.D __1__	
Research Field 연구분야 설명	<p>CEPI Lab. is aiming to solve engineering problems in a creative way more effectively than conventional approach that arise in various types of process industries, and produce talented people equipped with basic theoretical knowledge and expertise in modelling and optimization of system engineering. List of industries that the system engineering technology applies to is (a) refinery and petrochemicals, (b) oil and gas, (c) pharmaceutical, (d) fine chemicals, (e) engineering and construction, (f) heavy industry, etc.</p> <p><u>Research field</u></p> <ol style="list-style-type: none"> <li>1. New chemical process development and scale-up</li> <li>2. Modeling and optimization of chemical process design and operation</li> <li>3. Process system engineering with safety, health and environment</li> </ol>			
Career Achievements 업적 리스트 (Recent 3 ones)	LG Chemical R&D Center			
	Tokyo Electron Korea			
	Hyosung R&D Center			
Others 기타사항	 <p>Ski trip to Hongchun in Ja. 2019</p>			



# Introduction of Laboratory

Name 성함	Surname	Lee		
	Given Name	Jong-Han		
Position 직급	Assistant professor	Gender 성별	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female	
Department 소속학과	Civil Engineering	Major 소속전공	Materials and Structural Engineering	
Contact Information 연락처 정보	Email	<a href="mailto:jh.lee@inha.ac.kr">jh.lee@inha.ac.kr</a> / <a href="mailto:one.jhlee@gmail.com">one.jhlee@gmail.com</a>		
	Telephone	+82-32-860-7564		
	Home Page	+82-10-4200-3017		
Monthly Stipend Provided or Not 생활비 지급 의사	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Required Manpower 필요인력 수	(How Many) Master _1_ / Ph.D _1_	
Research Field 연구분야 설명	Materials and Concrete Engineering Lab.has mainly focused on 1) development of smart materials based on cementitious and advanced materials, 2) application of smart materials to concrete and prestressed concrete structures, 3) development and application of Inspection and management systems based on vision and data deep learning technologies			
Career Achievements 업적 리스트 (Recent 3 ones)	Vision-based multipoint measurement systems for structural in-plane and out-of-plane movements including twisting rotation, SMART STRUCTURES AND SYSTEMS , 2017			
	Flexural capacity and crack-closing performance of NiTi and NiTiNb shape-memory alloy fibers randomly distributed in mortar beams, COMPOSITES PART B-ENGINEERING, 2018.			
	Effects of blades inside a nozzle on the fiber orientation and distribution in fiber-reinforced cement-based materials , COMPOSITE STRUCTURES, 2019			
Others 기타사항				



# Introduction of Laboratory

Name 성함	Surname	SONG		
	Given Name	KI IL		
Position 직급	Associate Professor	Gender 성별	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female	
Department 소속학과	Civil Engineering	Major 소속전공	Geotechnical Engineering	
Contact Information 연락처 정보	Email	ksong@inha.ac.kr		
	Telephone	010-6388-0449		
	Home Page	-		
Monthly Stipend Provided or Not 생활비 지급 의사	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Required Manpower 필요인력 수	(How Many) Master __1__ / Ph.D __1__	
Research Field 연구분야 설명	<p><u>Underground space and rock engineering</u></p> <ul style="list-style-type: none"> <li>• Tunnel support design using optimization methods</li> <li>• Deep and subsea tunnel monitoring system and analysis</li> <li>• Structural health monitoring for tunnel using NDT technique</li> <li>• AI aid design of TBM Cutterhead</li> </ul> <p><u>Sustainable development of infrastructure</u></p> <ul style="list-style-type: none"> <li>• Nondestructive characterization for soil and rock using elastic and electromagnetic waves</li> <li>• Smart geophysical characterization technique for geo-infrastructures</li> <li>• Seismic analysis on aged bridge foundation</li> </ul> <p><u>Real-time disaster prevention based on IoT for geo-infrastructure</u></p> <ul style="list-style-type: none"> <li>• BIM-CPS-FEM(Building Information Modelling-Cyber Physical Systems– Finite Element Method) model for underground structure</li> <li>• Development of mobile platform for reinforced slope stability monitoring</li> </ul>			
Career Achievements 업적 리스트 (Recent 3 ones)	Back analysis of an operating subsea tunnel considering the degradation of ground and concrete lining, Marine Georesources & Geotechnology (2018)			
	Electrical resistivity and elastic wave velocity of sand-cement-inorganic binder mixture, Environmental Geotechnics (2018)			
	Magnesium chloride and sulfate attacks on gravel-sand-cement-inorganic binder mixture, Construction and Building Materials (2018)			
Others 기타사항	<p>Geomechanics Engineering Lab at Inha University has been involved in many national scientific research projects related to tunnelling. We has a strong background of numerical analysis and computational geomechanics. The finite element programming and genetic algorithm-based optimization by using a Visual Studio Developer that can design a pipe-roof pre-reinforcement system ahead of the tunnel face is supported by the Korean Advanced Institute of Science and Technology (KAIST) and Samsung. We also have a fundamental knowledge on the nondestructive characterization techniques that use elastic wave and electromagnetic wave propagation for the sustainable geotechnical development. Our main research topics are 1) Prediction of penetration rate using machine learning 2) Automation of tunnel support pattern design for NATM tunnel 3) Geophysical characterization for engineered geo-materials 4) Evaluation of segment backfill grouting quality using impact-echo 4) Propagation of elastic wave in jointed rock mass 5) Seismic performance evaluation of aged bridge foundation.</p>			



# Introduction of Laboratory

Name 성함	Surname	LEE		
	Given Name	Sang-Chul		
Position 직급	Professor	Gender 성별	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female	
Department 소속학과	Computer Engineering	Major 소속전공	Computer Vision / Machine Learning	
Contact Information 연락처 정보	Email	<a href="mailto:sclee@inha.ac.kr">sclee@inha.ac.kr</a>		
	Telephone	+82-32-860-7442		
	Home Page	<a href="http://imageinfo.inha.ac.kr/">http://imageinfo.inha.ac.kr/</a>		
Monthly Stipend Provided or Not 생활비 지급 의사	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Required Manpower 필요인력 수	(How Many) Master <u>  2  </u> / Ph.D <u>  1  </u>	
Research Field 연구분야 설명	Our main research interest is in computer vision, machine learning and multimedia: - Machine learning (deep learning) for vision - High-level Human-Computer interaction - Medical image analysis. - Content based video processing Major topic includes: Vision for drones, Autonomous car, AIDAS(Advanced Driver Assistance System), Human(brain)-computer interface, Anomaly detection in medicine.			
Career Achievements 업적 리스트 (Recent 3 ones)	"Cell segmentation for quantitative analysis of anodized TiO <sub>2</sub> foil", in IEEE Transactions on Industrial Informatics (in press)			
	"Adaptive Bitrate Selection for Video Encoding with Reduced Block Artifacts", in proceedings of the ACM International Conference on Multimedia ( <b>ACM Multimedia 2016</b> ), Amsterdam, The Netherland, 2016.			
	Hyun-Gyu Lee and Sang-Chul Lee, "Nucleus Segmentation Using Gaussian Mixture based Shape Models", in IEEE Journal of Biomedical and Health Informatics, vol. 22(1), pp. 235-243, IEEE, 2018.			
Others 기타사항	Please refer our web site for more detailed research topics and publication lists.			



# Introduction of Laboratory

Name 성함	Surname	SONG		
	Given Name	MINSEOK		
Position 직급	Professor		Gender 성별	■ Male □ Female
Department 소속학과	Computer Engineering		Major 소속전공	System Software (Multimedia/real-time/cloud systems)
Contact Information 연락처 정보	Email	mssong@inha.ac.kr		
	Telephone	032-860-7441		
	Home Page	<a href="https://sites.google.com/site/inhaerslab/">https://sites.google.com/site/inhaerslab/</a>		
Monthly Stipend Provided or Not 생활비 지급 의사	■ Yes □ No		Required Manpower 필요인력 수	(How Many) Master ___1___ / Ph.D ___1___
Research Field 연구분야 설명	<p>We are actively doing research on system software technology for power optimization as follows:</p> <ul style="list-style-type: none"> <li>- Development of system software technologies for servers with heterogeneous computing and storage environments</li> <li>- Development of scheduling algorithms for workload allocation, temporal task distribution, and dynamic voltage scaling to optimize processing power consumption</li> <li>- Development of data placement/caching/migration techniques to limit storage power consumption while guaranteeing the lifetime of storage medium</li> </ul>			
Career Achievements 업적 리스트 (Recent 3 ones)	"Scheduling a Video Transcoding Server to Save Energy," ACM Transactions on Multimedia Computing Communications and Applications, vol 11. no. 2s, Article 45, February, 2015.			
	"Saving Disk Energy in Video Servers by Combining Caching and Prefetching," ACM Transactions on Multimedia Computing Communications and Applications, vol 10, no. 1, Article 15, January 2014.			
	"QoE-Aware Video Storage Power Management Based on Hot and Cold Data Classification," Proceedings of ACM NOSSDAV, 2018.			
Others 기타사항	<ul style="list-style-type: none"> <li>● Ongoing research projects: <ul style="list-style-type: none"> <li>■ Development of Content/User-Aware Low-Power Multimedia System SW in Cloud Environments</li> <li>■ Study on Power Optimization Techniques for Video Streaming Environments Based on Clustered Edge Computing</li> </ul> </li> <li>● Research fields: <ul style="list-style-type: none"> <li>■ System software</li> <li>■ Multimedia system software</li> <li>■ Embedded/mobile system software</li> <li>■ Cloud system software</li> </ul> </li> </ul>			



# Introduction of Laboratory

Name 성함	Surname	Noh		
	Given Name	YoungTae		
Position 직급	Professor		Gender 성별	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female
Department 소속학과	Computer Engineering		Major 소속전공	Networked and Mobile Interaction System
Contact Information 연락처 정보	Email	ytnoh@inha.ac.kr		
	Telephone	+32-860-7445		
	Home Page	http://nsl.inha.ac.kr/		
Monthly Stipend Provided or Not 생활비 지급 의사	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Required Manpower 필요인력 수	(How Many) Integrated(MS+PhD) / PhD: <u>5</u>
Research Field 연구분야 설명	<p style="text-align: center;"><b>[ Positive Computing ]</b></p> <p><b>FocusMore:</b> The overall goal of this research topic is developing proactive distraction management systems for smartphone distraction vulnerable situations. During the research we are currently focused on following questions:</p> <ul style="list-style-type: none"> <li>- What are the patterns of phone distraction vulnerable contexts?</li> <li>- Which type of DND mode is needed?</li> <li>- Would it be possible to automatically generate rules for DND mode?</li> <li>- How do users use proactive distraction management systems?</li> </ul> <p>As an initial contribution we developed an Android mobile application to collect users' context data about their distractions.</p> <p><b>EasyTrack: Orchestrating Large-scale Mobile User Studies</b></p> <ul style="list-style-type: none"> <li>• Human subject studies involve             <ul style="list-style-type: none"> <li>• Stress &amp; depression tracking of students, Smartphone usage tracking studies, Physical activity and sleeping behavior tracking</li> </ul> </li> <li>• Data collecting Platform: major features             <ul style="list-style-type: none"> <li>• Real-time tracking of participants' data collecting behaviors</li> <li>• Automatic detections and alerts of abnormal data collection</li> <li>• Real-time communications (interventions) with experiment/campaign participants</li> </ul> </li> <li>• Challenge with the scalability: With the scales, however, it is laborious for data collectors who conduct human subject studies that especially involve mobile devices.</li> </ul> <p style="text-align: center;"><b>[ Cloud Computing ]</b></p> <p><b>Elastic Kafka over Cloud:</b> This research topic is mainly focused on traffic load balancing in the cloud. We are considering a use case of streams of data produced by IoT sensors and being sent toward the cloud for computational operations. Sometimes these data flows are drastically whimsical and cause the bottle neck in the cloud side. For better data consumption in the cloud our solution is to by making use of Kafka (most recent streaming platform) dynamically distribute the load among dynamic consumers in the cloud. As a clustering system for the cloud we are using the most recent platform by Google – Kubernetes, which showed quite good performance in running containerized applications and easy resource management.</p>			
Career Achievements 업적 리스트 (Recent 3 ones)	Rhongho Jang, Seongkwang Moon, Youngtae Noh, Aziz Mohaisen and Daehun Nyang, " <b>InstaMeasure: Instant Per-flow Detection Using Large In-DRAM Working Set of Active Flows</b> ," IEEE ICDCS'19, to appear.			
	Youngtae Noh, Hirozumi Yamaguchi, Uichin Lee, " <b>Infrastructure-free Collaborative Indoor Positioning Scheme for Time-critical Team Operations</b> ," IEEE Trans. Systems, Man, and Cybernetics: Systems, 2018.			
	Rhongho Jang, DongGyu Cho, Youngtae Noh, and DaeHun Nyang, " <b>RFlow+: An SDN-based WLAN Monitoring And Management Framework</b> ," <a href="#">IEEE INFOCOM 2017</a> , Atlanta, GA, USA, May 1-4, 2017. ( <b>Best-in-session Presentation Award</b> ) [ <a href="#">PDF</a> ] [ <a href="#">PPTX</a> ]			



# Introduction of Laboratory

Name 성함	Surname	ABUHMED		
	Given Name	Tamer		
Position 직급	Assistant professor	Gender 성별	• Male <input type="checkbox"/> Female	
Department 소속학과	Computer engineering	Major 소속전공	Software security	
Contact Information 연락처 정보	Email	tamer@inha.ac.kr		
	Telephone	+82 32 860 8986		
	Home Page			
Monthly Stipend Provided or Not 생활비 지급 의사	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Required Manpower 필요인력 수	(How Many) Master <u>  0  </u> / Ph.D <u>  2  </u>
Research Field 연구분야 설명	Software Security, Networks Security Analysis, Social Network Privacy, Cloud Security, Applied Cryptography, Mobile and Pervasive Computing Security, Security Applications based on Deep learning and Machine Learning			
Career Achievements 업적 리스트 (Recent 3 ones)	Code authorship identification using convolutional neural networks, Future Generation Computer Systems, vol. 95, page 104-115, 2019			
	Large-Scale and Language-Oblivious Code Authorship Identification, ACM CCS, 2018			
	A fuzzy ontology and SVM-based Web content classification system, IEEE Access vol. 5, pages 25781-25797, 2017			
Others 기타사항	UOIT keyboard: a constructive keyboard for small touchscreen devices, IEEE Transactions on Human-Machine Systems 45 (6), 782-789.			





# Introduction of Laboratory

Name 성함	Surname	WON		
	Given Name	Jong-Hoon		
Position 직급	Associate Professor	Gender 성별	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female	
Department 소속학과	Electrical Eng. Future Vehicle Eng.	Major 소속전공	Autonomous Navigation	
Contact Information 연락처 정보	Email	jh.won@inha.ac.kr		
	Telephone	+82(0)32-860-7406		
	Home Page	Autonav.inha.ac.kr		
Monthly Stipend Provided or Not 생활비 지급 의사	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Required Manpower 필요인력 수	(How Many) Master __1__ / Ph.D __1__	
Research Field 연구분야 설명	<ul style="list-style-type: none"> <li>▪ Signal Processing, Estimation Theory and Applications</li> <li>▪ Kalman Filtering, Multi-Sensor Data Fusion and Target Tracking</li> <li>▪ Precise Positioning and Attitude Determination</li> <li>▪ Sensor Integration (e.g. GPS/INS/DR/etc.)</li> <li>▪ GNSS Receiver/Signal Design</li> <li>▪ Next Generation GNSS System Design and Analysis</li> <li>▪ Navigation/Communication System Applications to Next Generation Smart Vehicles</li> </ul>			
Career Achievements 업적 리스트 (Recent 3 ones)	Signal Processing & Receiver Architecture: in GNSS Handbook (eds. by O. Montenbruck and P. J. G. Teunissen eds.) Springer, 2017. (ISBN 978-3-319-42926-7)			
	Analysis of Ground Transmitter Interference Range for GPS L1 Signals in the Ground Test-bed Environment of a Navigation Satellite System IET Radar, Sonar & Navigation, 2018, DOI: 10.1049/iet-rsn.2018.5294IET Digital Library			
	A Script Hook-based Ultra-Low Cost Driving Simulator for Development of Self-Driving Algorithms, Proceedings of the ION 2019 Pacific PNT Meeting April 8 - 11, 2019, Hilton Waikiki Beach, Honolulu, Hawaii			
Others 기타사항	Required skills - One of the followings : communication, control, software programming (Matlab, C/C++, python, etc.)  Please visit our web-page (autonav.inha.ac.kr) for more details			




# Introduction of Laboratory

Name 성함	Surname	Chang		
	Given Name	KyungHi		
Position 직급	Professor	Gender 성별	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female	
Department 소속학과	Department of Electronic Engineering	Major 소속전공	Mobile Communications	
Contact Information 연락처 정보	Email	khchang@inha.ac.kr		
	Telephone	+82-32-860-8422		
	Home Page	https://bit.do/mtrl		
Monthly Stipend Provided or Not 생활비 지급 의사	<input type="radio"/> Yes <input type="radio"/> No	Required Manpower 필요인력 수	(How Many) Master <u>  3  </u> / Ph.D <u>  2  </u>	
Research Field 연구분야 설명	<ol style="list-style-type: none"> <li>1. <b>Next Generation Public Safety Network</b> <ul style="list-style-type: none"> <li>- Co-existence of PS-LTE &amp; LTE-R/M Networks</li> <li>- Service Priority-based RRM</li> <li>- RAN Sharing Optimization</li> </ul> </li> <li>2. <b>3GPP LTE &amp; 5G Systems</b> <ul style="list-style-type: none"> <li>- UDN (Ultra Dense Network)</li> <li>- Mobile Personal Cell (eMBB)</li> <li>- Machine-Type Communications (mMTC)</li> <li>- Ultra-Low Latency (URLLC)</li> <li>- AI (Machine/Deep Learning) &amp; Big Data</li> </ul> </li> <li>3. <b>Cellular V2X</b> <ul style="list-style-type: none"> <li>- Direct Communication</li> <li>- Network-based Communication</li> </ul> </li> <li>4. <b>Mobile Ad-hoc Network (MANET)</b> <ul style="list-style-type: none"> <li>- Flying Ad-hoc NW (FANET) <ul style="list-style-type: none"> <li>&gt; Drone Monitoring System Architecture</li> <li>&gt; Detection &amp; Classification using Machine</li> </ul> </li> <li>- Vehicular Ad-hoc Network (VANET) <ul style="list-style-type: none"> <li>&gt; LTE-V2X Architecture / Interference Management</li> <li>&gt; eV2X / 5G-V2X Technology Analysis &amp; Implementation</li> </ul> </li> <li>- Ship Ad-hoc Network (SANET)</li> </ul> </li> <li>5. <b>OSTN (Ocean Surveillance &amp; Tracking NW)</b> <ul style="list-style-type: none"> <li>- Underwater Network (UWN) System Model</li> <li>- Link Adaptation</li> <li>- Power Allocation &amp; Control</li> </ul> </li> </ol>			
Career Achievements 업적 리스트 (Recent 3 ones)	Hidden Markov model-based drone sound recognition using MFCC technique in practical noisy environments, <i>Journal of Communications and Networks (JCN)</i> , vol.20, no.05, pp.509-518, Oct. 2018.			
	QoS priority-based coordinated scheduling and hybrid spectrum access for femtocells in dense cooperative 5G cellular networks, <i>Trans Emerging Tel. Tech.</i> , pp.1-17, 2017; e3207. <a href="https://doi.org/10.1002/ett.3207">https://doi.org/10.1002/ett.3207</a> , Jan. 2018.			
	LTE-Railway user priority-based cooperative resource allocation schemes for coexisting public safety and railway networks, <i>IEEE Access</i> , pp.7985-8000, DOI 10.1109/ACCESS.2017.2698098, May 2017.			



# Introduction of Laboratory

Name 성함	Surname	Kim		
	Given Name	Deok-Hwan		
Position 직급	Full Professor	Gender 성별	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female	
Department 소속학과	Electronic Engineering	Major 소속전공	Electronic Engineering (Computer System Track)	
Contact Information 연락처 정보	Email	deokhwan@inha.ac.kr		
	Telephone	(+82) 10-4660-3602		
	Home Page	<a href="http://iesl.inha.ac.kr">http://iesl.inha.ac.kr</a> (Intelligent Embedded System Lab)		
Monthly Stipend Provided or Not 생활비 지급 의사	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Required Manpower 필요인력 수	(How Many) Master ____ / Ph.D __2__	
Research Field 연구분야 설명	<p>- <b>Embedded System</b>: Design and implementation of embedded systems, IoT Devices, Edge Devices, smart home &amp; smart City with Deep Learning(AI) and Machine Learning(ML).</p> <p>- <b>Deep Learning Algorithms and Applications for Embedded Devices, Robot Interface and Robot Operating Systems Platform, cloud-based software defined storage</b></p> <p>- <b>Intelligent Social Robot</b> : Embedded Device(IoT), Emotion and Event/Activity Recognition for Robot Control, Sensing and Actuator, Digital Systems.</p> <p>- <b>ADAS / Autonomous Driving</b> : Participate in the future vehicle student training program and train people who are interested in autonomous vehicles.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">   <small>National Research Foundation of Korea</small> </div> <div style="text-align: center;">   <small>INSTITUTE OF INFORMATION &amp; COMMUNICATIONS Technology Planning &amp; Evaluation</small> </div> <div style="text-align: center;">   <small>beyond leading technology Korea Institute for Advancement of Technology</small> </div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="text-align: center;">   <small>한국산업기술평가관리원 Korea Evaluation Institute of Industrial Technology</small> </div> <div style="text-align: center;">   <small>Korea Evaluation Institute of Industrial Technology</small> </div> <div style="text-align: center;">   <small>SmartCar Tech Forum</small> </div> </div>			
Career Achievements 업적 리스트 (Recent 3 ones)	sEMG-signal and IMU sensor-based gait sub-phase detection and prediction using a user-adaptive classifier, To be appeared in Medical Engineering and Physics, 2019(SCIE)			
	EOG-based eye tracking protocol using baseline drift removal algorithm for long-term eye movement detection, Expert Systems With Applications 131 (2019) 275–287 (SCI 2019)			
	Energy-aware RAID scheduling methods in distributed storage applications(The Journal of Networks, Software Tools and Applications,(SCIE, 2018)			
	GPU-accelerated high-performance encoding and decoding of hierarchical RAID in virtual machines(The Journal of supercomputing, SCI, 2018)			
	Real-Time Gait Subphase Detection Using an EMG Signal Graph Matching (ESGM) Algorithm Based on EMG signals(Expert systems with applications vol, 85, no. 1, SCI, 2017)			
Others 기타사항	<p>Foreign students in our laboratory have either researched in comfortable atmosphere or published SCI dissertations. as a proof, Ph.D Pirahandeh who has graduated in 2016, researches as research professor, has published many papers such as Energy-aware RAID scheduling methods in distributed storage applications, GPU-accelerated High performance GPU-based parity computing scheduler in storage application and Energy-aware and intelligent storage features for multimedia devices in smart classroom, those have been published at SCI and SCIE. Currently, 1 PhD candidates and 1 Integrated Course Student are joined with Our Laboratory.</p>			



# Introduction of Laboratory

Name 성함	Surname	Pyun		
	Given Name	Sukjoon		
Position 직급	Associate Professor	Gender 성별	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female	
Department 소속학과	Department of Energy Resources Engineering	Major 소속전공	Exploration Geophysics	
Contact Information 연락처 정보	Email	<a href="mailto:pyunsj@inha.ac.kr">pyunsj@inha.ac.kr</a>		
	Telephone	+82-32-860-7551		
	Home Page			
Monthly Stipend Provided or Not 생활비 지급 의사	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Required Manpower 필요인력 수	(How Many) Master <u>  2  </u> / Ph.D <u>      </u>	
Research Field 연구분야 설명	<p>The main research topics of geophysical prospecting lab (GPL) are the seismic exploration-related techniques. The seismic method is the main tool for oil and gas exploration. For this purpose, we develop seismic imaging and inversion algorithms such as reverse-time migration, travelttime tomography and full waveform inversion. We also develop microseismic monitoring techniques to study earthquakes and mining safety problem. The seismic method can be used to investigate groundwater flow and related pollutant behavior. We study the application of seismic refraction method to characterization of groundwater flow and pollutant pathway.</p>			
Career Achievements 업적 리스트 (Recent 3 ones)	Choi, W., Kim, W., and Pyun, S., 2018, A simple inversion algorithm to estimate a linearly increasing velocity model for microseismic monitoring, Exploration Geophysics, 49(5), 647-654.			
	Park, Y., and Pyun, S., 2018, Refraction travelttime tomography based on damped wave equation for irregular topographic model, Journal of Applied Geophysics, 150, 160-171.			
	Park, Y., and Pyun, S., 2017, An efficient waveform inversion using common mid-point gather in the wavenumber-space-time domain, Exploration Geophysics, 48(3), 219-225.			
Others 기타사항	<p>Basically, students are required to study computer programming (Fortran, C, Python, etc.), engineering mathematics, and classical physics (mainly wave propagation). Recently, we started to study AI-based seismic data processing and interpretation techniques. Detailed applications include source-type characterization of microseismic event for mining safety, fault detection for structural interpretation, etc. So, students who are interested in machine learning are welcome.</p>			



# Introduction of Laboratory

Name 성함	Surname	Seo		
	Given Name	Jung Hun		
Position 직급	Associate professor	Gender 성별	Male	
Department 소속학과	Energy & Resources Engineering	Major 소속전공	Economic Geology & Resource Geology	
Contact Information 연락처 정보	Email	<a href="mailto:seo@inha.ac.kr">seo@inha.ac.kr</a>		
	Telephone	82 32 860 7557		
	Home Page	<a href="http://enereseng.inha.ac.kr/organ/member_detail.aspx?EncryptedID=iJ18OD%2bPZXhHYB7nY%2bGZ4g%3d%3d">http://enereseng.inha.ac.kr/organ/member_detail.aspx?EncryptedID=iJ18OD%2bPZXhHYB7nY%2bGZ4g%3d%3d</a>		
Monthly Stipend Provided or Not 생활비 지급 의사	Yes	Required Manpower 필요인력 수	(How Many) Master 1 / Ph.D 1	
Research Field 연구분야 설명	<ol style="list-style-type: none"> <li>1. Geochemistry of Volcanic and Magmatic-Hydrothermal systems</li> <li>2. Geology of Ore Deposits, Magmatic and Magmatic-Hydrothermal Processes &amp; Applications of Fluid and Melt Inclusions</li> <li>3. Analytical (Spectroscopic &amp; Spectrometric) Geochemical Techniques, Stable Isotope Processes</li> <li>4. Petrology and W-Mo Mineral Explorations in Korea</li> <li>5. Petrology and Geochemistry of Volcanic Rocks in Antarctica</li> <li>6. Thermodynamic and Experimental Studies of Hydrothermal Systems</li> </ol>			
Career Achievements 업적 리스트 (Recent 3 ones)	Magmatic-Hydrothermal Processes in Sangdong W-Mo deposit, Korea: Study of Fluid Inclusions and <sup>39</sup> Ar- <sup>40</sup> Ar Geochronology, Ore Geol. Rev., 91, 316-334			
	Fractionation of Cl/Br during fluid phase separation in magmatic-hydrothermal fluids. Geochim. Cosmochim. Acta, 183, 125-137.			
	Separation of Molybdenum and Copper in Porphyry Deposits: The Roles of Sulfur, Redox and pH in Ore Mineral Deposition at Bingham Canyon: Econ. Geol. 107, 333-356			
Others 기타사항	We study Economic Geology, Geochemistry, Petrology, and Mineral Exploration Please see below; <a href="http://enereseng.inha.ac.kr/organ/member_detail.aspx?EncryptedID=iJ18OD%2bPZXhHYB7nY%2bGZ4g%3d%3d">http://enereseng.inha.ac.kr/organ/member_detail.aspx?EncryptedID=iJ18OD%2bPZXhHYB7nY%2bGZ4g%3d%3d</a>			



# Introduction of Laboratory

Name	Surname	Jeon		
	Given Name	Ki-Joon		
Position	Associate Professor	Gender	Male	
Department	Environmental Engineering	Major	Environmental Engineering	
Contact Information	Email	inहाfeetlab@gmail.com		
	Telephone	+821057211195 (Vietnamese available)		
	Home Page	<a href="https://sites.google.com/view/inhaenvironment2">https://sites.google.com/view/inhaenvironment2</a>		
Monthly Stipend Provided or Not	Provided	Required Manpower	PhD: 2 / M.S: 2	
Research Field	<p><b>1. Air pollution and control</b></p> <ul style="list-style-type: none"> <li>- Development of eye exposure tested chamber system with In-vivo and In-vitro experiment.</li> <li>- Outdoor air quality (aerosol): Evaluation of fine dust size distribution, chemical component etc. on.</li> <li>- Indoor emission characteristic: Evaluation of particles emission during operation of three-dimensional (3D) printer or cooking oily food.</li> <li>- Development of dust collector for industrial scale using electricity and filter.</li> </ul> <p><b>2. Renewable energy and environmental sensor</b></p> <ul style="list-style-type: none"> <li>- 2D material property to use semiconductor transistor or electro catalyst for electrode</li> <li>- Environmental sensor using metal oxide or TMDCs (Transition Metal Dichalcogenides).</li> <li>- Electrode for water splitting to produce the hydrogen and degrade contaminants in the water.</li> </ul>			
Career Achievements (Recent 3 ones)	<b><u>Determination of the emission rate for ultrafine and accumulation mode particles as a function of time during the pan-frying of fish</u></b>			
	<b>Alternative cost-effective electrodes for hydrogen production in saline water condition</b>			
	<b><u>Acetaldehyde removal and increased H<sub>2</sub>/CO gas yield from biomass gasification over metal-loaded Kraft lignin char catalyst</u></b>			
Others	<p>In our lab, there are 4 research professors, 2 Ph.D students, 1 Integrated student, 2 master course students and 4 undergraduate students. One of research professors is from India and, another research professor and <u>1 integrated student are from Vietnam</u>. Our lab members usually use English when we have discussion and group meeting.</p> <p>If you want more information about our lab, please visit our lab homepage. (<a href="https://sites.google.com/view/inhaenvironment2">https://sites.google.com/view/inhaenvironment2</a>)</p>			



# Introduction of Laboratory

Name 성함	Surname Given Name	Kim Jeonghwan	
Position 직급	Associate Professor	Gender 성별	<input type="checkbox"/> Male <input type="checkbox"/> Female
Department 소속학과	Environmental Engineering	Major 소속전공	Membrane Technology for Water and Wastewater Treatment and Resource Recovery
Contact Information 연락처 정보	Email	jeonghwankim@inha.ac.kr	
	Telephone	010-4020-1446, 032-860-7502	
	Home Page	<a href="http://whs.inha.ac.kr/~semt/">http://whs.inha.ac.kr/~semt/</a>	
Monthly Stipend Provided or Not 생활비 지급 의사	<input type="checkbox"/> Yes <input type="checkbox"/> No	Required Manpower 필요인력 수	(How Many) Master __1__ / Ph.D __1__
Research Field 연구분야 설명	Research interest in Sustainable Environmental Membrane Technology (SEMT) at Inha University focus on fundamental aspects and application of membrane technology in water and wastewater treatment. Particularly, we have studied extensively anaerobic membrane biotechnology for energy recovery along with wastewater treatment and reuse. In addition, the SEMT developed hybrid membrane technology ranging from materials development to its application such as catalytic membrane and mixed matrix membrane for intensified processes for subsequent water reuse and fouling control.		
Career Achievements 업적 리스트 (Recent 3 ones)	Novel staged anaerobic fluidized bed ceramic membrane bioreactor: Energy reduction, fouling control and microbial characterization, <i>Journal of Membrane Science</i> , M.Asalam, P. Yang, P. Lee and J. Kim, 2018, 553, 200-208		
	Metatranscriptomic evidence for classical and RuBisCO-mediated CO <sub>2</sub> reduction to methane facilitated by direct interspecies electron transfer in a methanogenic system, P. Yang, G. Tan, M. Aslam, J. Kim and P. Lee, <i>Scientific Reports</i> , 2019, 9, 4116		
	Biologically induced mineralization in anaerobic membrane bioreactors: Assessment of membrane scaling mechanisms in a long-term pilot study, <i>Journal of Membrane Science</i> , D. Jun, Y. Kim, S. Hafenezami, K. Yoo, E. Hoek, J. Kim, 2017, 543-342-350		
Others 기타사항	Importance and strong points of our researches in SEMT are interdisciplinary through international collaboration with common interests in membrane technology in water and wastewater treatment/reuse as well as energy recovery around the world. In last ten years, we have collaborated extensively with research institutes in Belgium, France and USA through national projects. In addition, we have now been extending our global research network to Hong Kong, UK, Pakistan and India. Selected students will be involved in this global research network by performing the national and industrial based research project on the various subjects of membrane technology. Students who are interested in joining our SEMT research group should have BS or MS degree in environmental engineering or related field (i.e., chemical engineering, materials science and engineering, physics, biology, mathematics or physics or other related fields). English score may be required. Most of all, anyone who has passions and enthusiasm on pursuing the answers of research questions in membrane technology for water and wastewater treatment with highly research motivations are always welcomed. Please contact with me if you have any inquiry on our research and graduate position in SEMT laboratory.		





# Introduction of Laboratory

Name 성함	Surname	Park		
	Given Name	Kwan-Dong		
Position 직급	Professor	Gender 성별	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female	
Department 소속학과	Geoinformatic Engineering	Major 소속전공	GPS, Autonomous Driving	
Contact Information 연락처 정보	Email	<a href="mailto:kdpark@inha.ac.kr">kdpark@inha.ac.kr</a>		
	Telephone	+82-32-873-4310		
	Home Page	<a href="https://www.ppsoln.com">https://www.ppsoln.com</a>		
Monthly Stipend Provided or Not 생활비 지급 의사	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Required Manpower 필요인력 수	(How Many) Master __2__ / Ph.D __2__	
Research Field 연구분야 설명	<p>High-precision GPS/GNSS data processing</p> <p>GPS sensor development for autonomous driving</p> <p>Geodesy and geophysical GPS</p>			
Career Achievements 업적 리스트 (Recent 3 ones)	The school laboratory's name is "SNL", which stands for Satellite Navigation Laboratory.			
	The professor has founded a startup focusing on GPS/GNSS-sensor development for autonomous driving and its name is "Precise Positioning Solution Inc."			
	The professor and graduate students have published numerous GPS/GNSS-related articles in the international and Korean journals			
Others 기타사항	All the laboratory members or graduate students are working on government or industrial research projects, thus are being financially supported by the project money. Master's students and doctoral students get about 1500 and 2300 U.S. dollars per month, respectively.			



# Introduction of Laboratory

Name 성함	Surname	KIM		
	Given Name	HAKIL		
Position 직급	Professor	Gender 성별	<input type="checkbox"/> Male <input type="checkbox"/> Female	
Department 소속학과	Information & Communication Engineering Future Vehicle Engineering	Major 소속전공	Computer Vision Image Processing	
Contact Information 연락처 정보	Email	<a href="mailto:hikim@inha.ac.kr">hikim@inha.ac.kr</a>		
	Telephone	032-860-7385		
	Home Page	<a href="http://vision.inha.ac.kr">http://vision.inha.ac.kr</a>		
Monthly Stipend Provided or Not 생활비 지급 의사	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Required Manpower 필요인력 수	(How Many) Master ____ / Ph.D _1__	
Research Field 연구분야 설명	<ul style="list-style-type: none"> <li>• Biometrics: Fingerprint, Finger vein, Iris or Face recognition using deep neural networks</li> <li>• Human action recognition in video surveillance using deep neural networks</li> <li>• Object detection and tracking for an intelligent vehicle using deep neural networks</li> </ul>			
Career Achievements 업적 리스트 (Recent 3 ones)	"Presentation Attack Detection Using a Tiny Fully Convolutional Network," IEEE Transactions on Information Forensics and Security, 2019.			
	"Real-time and robust multiple-view gender classification using gait features in video surveillance," Pattern Analysis and Applications, DOI 10.1007/s10044-019-00802-6, 2019.			
	"Mixture separability loss in a deep convolutional network for image classification," IET Image Processing, Vol. 13, Issue 1, January 2019.			
Others 기타사항	<ul style="list-style-type: none"> <li>• <u>There are four Vietnamese graduates (3 Ph.D. and 1 Master) who finished their degrees and became professors in Vietnam.</u></li> </ul>			



# Introduction of Laboratory

Name 성함	Surname	Park		
	Given Name	Daeyoung		
Position 직급	Professor	Gender 성별	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female	
Department 소속학과	Information and Communication	Major 소속전공	Wireless Communication / Signal Processing	
Contact Information 연락처 정보	Email	<a href="mailto:dpark@inha.ac.kr">dpark@inha.ac.kr</a>		
	Telephone	032-860-8376		
	Home Page	<a href="http://comsys.inha.ac.kr">http://comsys.inha.ac.kr</a> / <a href="http://scholar.google.co.kr/citations?user=iCQPQ8wAAAAJ">http://scholar.google.co.kr/citations?user=iCQPQ8wAAAAJ</a>		
Monthly Stipend Provided or Not 생활비 지급 의사	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Required Manpower 필요인력 수	(How Many) Master __1__ / Ph.D __1__
Research Field 연구분야 설명	* Wireless Communication * Signal Processing with Machine Learning * Optimization Theory			
Career Achievements 업적 리스트 (Recent 3 ones)	"Iterative waterfilling with user selection in Gaussian MIMO broadcast channels," IEEE Trans. Communications, 2018.			
	"Secrecy rate improvement based on joint decoding in MIMO wiretap channels with a helping interferer," IEEE Trans. Vehicular Technology, 2017.			
	"Improved sufficient condition for performance guarantee in generalized orthogonal matching pursuit" IEEE Signal Processing Letters, 2017.			
Others 기타사항	<p>We are looking for an excellent Master/PhD student in the area of signal processing and communication systems. Depending on the student's experience and interests, the student will start working in one of the following fields:</p> <ul style="list-style-type: none"> <li>- Signal processing algorithm for sparse signal recovery</li> <li>- Signal processing with machine learning</li> <li>- MIMO communications system design</li> </ul> <p>Requirements:          The research topics require excellent mathematical skills and extensive C/Matlab/Python programming expertise.          The successful candidate needs to have a BS degree in Electrical/Computer Engineering or in a related discipline with high GPA.</p>			



# Introduction of Laboratory

Name 성함	Surname	Park		
	Given Name	Jae-Hyeung		
Position 직급	Professor	Gender 성별	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female	
Department 소속학과	Information and Communication Engineering	Major 소속전공		
Contact Information 연락처 정보	Email	<a href="mailto:jh.park@inha.ac.kr">jh.park@inha.ac.kr</a>		
	Telephone	+82-32-860-7432		
	Home Page	<a href="http://3dlab.inha.ac.kr">http://3dlab.inha.ac.kr</a>		
Monthly Stipend Provided or Not 생활비 지급 의사	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Required Manpower 필요인력 수	(How Many) Master _1___ / Ph.D ___1__	
Research Field 연구분야 설명	<ul style="list-style-type: none"> <li>- Optics for Augmented Reality (AR) Displays (Head mounted displays, Near eye displays, Vehicle head up displays)</li> <li>- Holographic capture and displays</li> <li>- Computer Generated Hologram</li> <li>- Light field capture and displays</li> </ul>			
Career Achievements 업적 리스트 (Recent 3 ones)	J.-H. Park, M. Askari, "Non-hogel-based computer generated hologram from light field using complex field recovery technique from Wigner distribution function," Optics Express, vol. 27, no. 3, pp. 2562-2574, (2019).			
	J.-H. Park, S.-B. Kim, "Optical see-through holographic near-eye-display with eyebox steering and depth of field control," Opt. Express vol. 26, no. 21, pp. 27076-27088 (2018).			
	S.-B. Kim and J.-H. Park, "Optical see-through Maxwellian near-to-eye display with an enlarged eyebox," Optics Letters, vol. 43, no. 4, pp. 767-770, (2018).			
Others 기타사항				



# Introduction of Laboratory

Name 성함	Surname	Sang-Jo		
	Given Name	Yoo		
Position 직급	Professor	Gender 성별	<input type="checkbox"/> Male <input type="checkbox"/> Female	
Department 소속학과	Information and Communication	Major 소속전공	Communication and Networking	
Contact Information 연락처 정보	Email	sjyoo@inha.ac.kr		
	Telephone	+83-32-860-8304		
	Home Page	http://multinet.inha.ac.kr		
Monthly Stipend Provided or Not 생활비 지급 의사	<input type="checkbox"/> Yes <input type="checkbox"/> No	Required Manpower 필요인력 수	(How Many) Master __2__ / Ph.D _____	
Research Field 연구분야 설명	We (Multimedia Network Laboratory) mainly research the technologies for wireless communication networks which include wireless sensor networks (WSN), wireless network protocols and next generation cognitive radio networks. Our current research projects aim at examining how recent AI (artificial intelligent) technologies can be applied to wireless networking issues such as UAV flying ad-hoc network protocol design and cognitive engine implementation for software defined radio.			
Career Achievements 업적 리스트 (Recent 3 ones)	Optimal Resource Allocation Using Support Vector Machine for Wireless Power Transfer in Cognitive Radio Networks, IEEE TRANSACTIONS ON VEHICULAR TECHNOLOGY, 2018			
	Q-learning-based dynamic joint control of interference and transmission opportunities for cognitive radio, EURASIP JOURNAL ON WIRELESS COMMUNICATIONS AND NETWORKING, 2018			
	Optimal UAV Path Planning: Sensing Data Acquisition Over IoT Sensor Networks Using Multi-Objective Bio-Inspired Algorithms, IEEE ACCESS, 2018			
Others 기타사항	We are very welcoming foreign students (master or Ph.D. degree) who are really interested in wired/wireless communication networks, Internet protocols, computer networks, mobile communication systems, and networked multimedia platform development.			



# Introduction of Laboratory

Name 성함	Surname	Park		
	Given Name	In Kyu		
Position 직급	Professor	Gender 성별	■ Male □ Female	
Department 소속학과	Information and Communication Engineering	Major 소속전공	Computer Vision, Graphics, Image Processing	
Contact Information 연락처 정보	Email	pik@inha.ac.kr		
	Telephone	+82-32-860-9190		
	Home Page	http://image.ina.ac.kr		
Monthly Stipend Provided or Not 생활비 지급 의사	■ Yes □ No		Required Manpower 필요인력 수	(How Many) Master 0 / Ph.D 2
Research Field 연구분야 설명	<ul style="list-style-type: none"> <li>● We work in integrated areas of computer vision, computer graphics, and image processing. Especially or research field includes               <ul style="list-style-type: none"> <li>- Multi-view (light field) image processing for depth estimation, free-viewpoint rendering</li> <li>- Computational image reconstruction such as image/video deblurring, super-resolution, noise reduction.</li> <li>- 3D human (face and body) reconstruction from images and videos</li> <li>- Deep learning to solve the above problems</li> <li>- Application of computer vision algorithms for augmented and virtual reality</li> </ul> </li> </ul>			
Career Achievements 업적 리스트 (Recent 3 ones)	"Robust light field depth estimation using occlusion-noise aware data costs," <i>IEEE Trans. on Pattern Analysis and Machine Intelligence</i> , vol. 40, issue 10, pp. 2484-2497, October 2018 (top journal in computer vision).			
	"Reflection removal under fast forward camera motion," <i>IEEE Trans. on Image Processing</i> , vol. 26, no 12, pp. 6061-6073, December 2017 (top journal in image processing).			
	"Joint blind motion deblurring and depth estimation of light field," <i>Proc. European Conference on Computer Vision (ECCV 2018)</i> , September 2018 (top conference in computer vision).			
Others 기타사항	<ul style="list-style-type: none"> <li>● Image and Vision Computing Lab was founded in March 2004 by Prof. In Kyu Park</li> <li>● Currently we have 1 full-time faculty and 8 graduate students (3 of them are international students) and 1 staff member.</li> <li>● We aim to perform world-leading research and publish quality papers in top level journals and conferences.</li> <li>● Currently we are running 4 projects funded by government and industrial party.</li> <li>● We prefer hiring Ph.D or integrated M.S./Ph.D students who can continue their study and research in a long term with more depth.</li> <li>● For more information, please visit our homepage (<a href="http://image.inha.ac.kr">http://image.inha.ac.kr</a>)</li> </ul>			



# Introduction of Laboratory

Name 성함	Surname	Byun		
	Given Name	Gyungsu		
Position 직급	Associate Professor	Gender 성별	Male	
Department 소속학과	Information and Communication	Major 소속전공	Intelligent Electronics and RF/Analog IC and System Design	
Contact Information 연락처 정보	Email	gsbyun@inha.ac.kr		
	Telephone	+82-32-860-7435		
	Home Page	<a href="http://mics.inha.ac.kr/">http://mics.inha.ac.kr/</a>		
Monthly Stipend Provided or Not 생활비 지급 의사	Yes	Required Manpower 필요인력 수	(How Many) MS (1) or MS/PhD (1)	
Research Field 연구분야 설명	<ul style="list-style-type: none"> <li>• Smart Artificial Intelligent (AI) electronics (coding-based smart IC and system design for future mobile smart communication and computing electronics)</li> <li>• Ultra-low-power compact neural-synaptic communication IC and system design</li> <li>• High-performance memory/CPU interface for high-computing systems</li> <li>• Intelligent wireless/wireline communication and computing systems.</li> </ul>			
Career Achievements 업적 리스트 (Recent 3 ones)	<ul style="list-style-type: none"> <li>• National Science Foundation (NSF) CAREER Award (2015)</li> </ul>			
	<ul style="list-style-type: none"> <li>• Over 70 research products (31 SCI journals, 28 conference, 12 patents)</li> </ul>			
	<ul style="list-style-type: none"> <li>• Major funding from Samsung, NRF and NSF</li> </ul>			
Others 기타사항	<ul style="list-style-type: none"> <li>• Major key research project topics you could perform (if you join ICSlab) <ul style="list-style-type: none"> <li>○ Smart Artificial Intelligent (AI) electronics (coding-based smart IC and system design for future mobile smart communication and computing electronics)</li> <li>○ Ultra-low-power compact neural-synaptic communication IC and system design</li> <li>○ High-performance memory/CPU interface for high-computing systems</li> <li>○ Intelligent RF communication systems.</li> </ul> </li> </ul>			





# Introduction of Laboratory

Name 성함	Surname	Seo		
	Given Name	Yeongkyo		
Position 직급	Assistant Professor	Gender 성별	<input type="checkbox"/> Male <input type="checkbox"/> Female	
Department 소속학과	Information and Communication Engineering	Major 소속전공	VLSI and Circuit Design	
Contact Information 연락처 정보	Email	yeongkyo@inha.ac.kr		
	Telephone	+82 32-860-7415		
	Home Page	<a href="https://sites.google.com/view/circuits-lab">https://sites.google.com/view/circuits-lab</a>		
Monthly Stipend Provided or Not 생활비 지급 의사	O Yes X No	Required Manpower 필요인력 수	(How Many) Master __1__ / Ph.D __1__	
Research Field 연구분야 설명	<p>Circuits and Systems Lab is a part of the Department of Information and Communication Engineering at Inha University, Incheon, South Korea, under the direction of Prof. Yeongkyo Seo. We focus on high performance and energy efficient custom digital circuit design by Silicon and non-Silicon technologies. Also, our research interests focus on In-Memory Computing Devices, Circuits, and Systems using CMOS and post-CMOS Memories for Neuromorphic Applications.</p> <p>Our group currently has multiple openings to hire graduate students as well as undergraduate research interns who are interested in custom digital circuit design for neuromorphic computing system. If you are interested, please send an email with your brief resume to Prof. Yeongkyo Seo (yeongkyo at inha.ac.kr)</p>			
Career Achievements 업적 리스트 (Recent 3 ones)	<p><b>Y. Seo</b>, K-W. Kwon, X. Fong, and K. Roy, "High Performance and Energy-Efficient On-Chip Cache using Dual Port (1R/1W) Spin-Orbit Torque MRAM," IEEE Journal of Emerging and Selected Topics in Circuits and Systems, vol. 6, no. 3, pp. 293-304, Sep. 2016.</p>			
	<p><b>Y. Seo</b>, K-W. Kwon, and K. Roy, "Area-Efficient SOT-MRAM with a Schottky Diode," IEEE Electron Device Letters, vol. 37, no. 8, pp. 982-985, Aug. 2016.</p>			
	<p><b>Y. Seo</b>, and K. Roy, "High-Density SOT-MRAM Based on Shared Bitline Structure," IEEE Transactions on Very Large Scale Integration Systems, vol. 26, no. 8, pp. 1600-1603, Aug. 2018.</p>			



# Introduction of Laboratory

Name 성함	Surname	Choi		
	Given Name	Rino		
Position 직급	Professor		Gender 성별	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female
Department 소속학과	Materials Sci. and Eng.		Major 소속전공	
Contact Information 연락처 정보	Email	<a href="mailto:rino.choi@inha.ac.kr">rino.choi@inha.ac.kr</a>		
	Telephone	+82-32-860-7529		
	Home Page	<a href="http://sndl.campushomepage.com/">http://sndl.campushomepage.com/</a>		
Monthly Stipend Provided or Not 생활비 지급 의사	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Required Manpower 필요인력 수	(How Many) Master __1__ / Ph.D ____
Research Field 연구분야 설명	<ul style="list-style-type: none"> <li>- Semiconductor devices for logic and memory applications</li> <li>- Process and material issues for scaling of devices</li> <li>- Device reliability and electrical characterization</li> <li>- Novel devices for new computational architectures</li> </ul>			
Career Achievements 업적 리스트 (Recent 3 ones)	Korea prime minister award for semiconductor research excellency (2014)			
	Program director of Ministry of Commerce, Industry and Energy R&D program (2012-2014)			
	Create Electrical Characterization and Reliability Project in SEMATECH			
Others 기타사항	In our lab, <u>we have 2 senior Vietnamese students from University of Science in Hochiminh</u> . They can help new students for on and off campus living			



# Introduction of Laboratory

Name 성함	Surname	Lee		
	Given Name	Jeong-Hwan		
Position 직급	Assistant Professor	Gender 성별	Male	
Department 소속학과	Materials Science & Engineering	Major 소속전공	Organic semiconductor devices	
Contact Information 연락처 정보	Email	jeong-hwan.lee@inha.ac.kr		
	Telephone	+82-32-860-7525		
	Home Page	<a href="https://sites.google.com/view/aolinha/">https://sites.google.com/view/aolinha/</a>		
Monthly Stipend Provided or Not 생활비 지급 의사	Yes	Required Manpower 필요인력 수	(How Many) Master ____ / Ph.D __1__	
Research Field 연구분야 설명	<p>1. Optoelectronic Materials and Devices</p> <ul style="list-style-type: none"> <li>- Hybrid (organic + inorganic) semiconductor devices</li> <li>- Optoelectronic devices such as Light-emitting diodes (LED), Photovoltaic (PV), Thin Film Transistor (TFT), Sensor and detector, Flexible optoelectronic devices</li> </ul> <p>2. Optical and Electrical Characterization of semiconductor devices</p> <ul style="list-style-type: none"> <li>- Recombination and emission mechanism in semiconductor devices.</li> <li>- Investigation of charge trapping and temperature dependent behaviors</li> <li>- Transient opto-electrical characterization</li> <li>- Interface modification, metal/semiconductor (SC) and SC/SC interfaces</li> </ul>			
Career Achievements 업적 리스트 (Recent 3 ones)	Small 15, 1900135 (2019)			
	Advanced Electronic Materials 5, 1800437 (2019)			
	Advanced Functional Materials 28, 1800001 (2018)			
Others 기타사항	<p>We want to make a bright future with you by advanced optoelectronic devices. For the purpose, we are dealing with various kind of materials such as organic, inorganic, and hybrid materials. In addition, our interest is developing advanced opto-electronic devices using the materials and investigating fundamental science of working devices behind the background under electrical or optical excitation.</p> <p>We are looking for Ph.D student in the field of organic electronics, For detail information, contact to Prof. Lee (jeong-hwan.lee@inha.ac.kr)</p>			



# Introduction of Laboratory

Name	Surname	Tae June		
	Given Name	Kang		
Position	Associate professor	Gender	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female	
Department	Mechanical Engineering	Major	nanomaterials, energy harvesting, nanocomposites	
Contact Information	Email	tjkang@inha.ac.kr		
	Telephone	82-32-860-7304		
	Home Page	aml.inha.ac.kr		
Monthly Stipend Provided or Not	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Required Manpower	(How Many) Master 2 / Ph.D 2	
Research Field	<p>Advanced Materials Laboratory (AML) at INHA University is focused on developing novel materials and advanced manufacturing technologies to improve the performance of mechanical and energy &amp; environmental applications. Our research area includes energy &amp; environmental nanocomposites, micro/nanomachined sensors and actuators, intelligent soft robots and energy harvesters that convert wasted energies into useful electrical energy.</p> <p>The diagram illustrates the research workflow: <b>Nanomaterials</b> (cellulose nanofiber, graphene, carbon nanotubes) → <b>Processing</b> (nano, micro, macro) → <b>Applications</b> (Energy &amp; Environ., Sensors &amp; Actuators, MEMS/NEMS, Functional Materials).</p>			
Career Achievements (3 ones selected)	"High efficiency electrochemical thermal energy harvester using CNT aerogel sheet electrodes", Nature Communications, 7, 10600, 2016			
	"Ultra-thin and conductive nanomembrane arrays for nanomechanical transducers", Advanced Materials, 20 (16) 3131-3137, 2008.			
	"Sandwich-type laminated nanocomposites developed by selective dip-coating of carbon nanotubes", Advanced Materials, 19 (3), 427-432, 2007.			
Others	Note that research position in AML is only available for students who want to complete the integrated degree of M.S. and Ph.D or Ph.D. degree (not available for M.S. degree only).			



# Introduction of Laboratory

Name 성함	Surname	Kim		
	Given Name	Gi-Woo		
Position 직급	Associate Professor	Gender 성별	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female	
Department 소속학과	Mechanical Engineering	Major 소속전공	Control, Measurement	
Contact Information 연락처 정보	Email	gwkim@inha.ac.kr		
	Telephone	+82-32-860-7313		
	Home Page	<a href="http://sssl.inha.ac.kr/">http://sssl.inha.ac.kr/</a> (Smart Structures and Systems Lab)		
Monthly Stipend Provided or Not 생활비 지급 의사	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Required Manpower 필요인력 수	(How Many) Master __1__ / Ph.D __1__	
Research Field 연구분야 설명	<ul style="list-style-type: none"> <li>• Advanced Control of Dynamic Systems &amp; Mechatronics</li> <li>• Opto-mechanical Sensors Based on Mechanoluminescence</li> <li>• Learning From Human Auditory Systems (Middle and Inner Ears)</li> <li>• Concepts and Control of Compliant Deployable Structures for Solar Sails</li> <li>• Vehicular Electronics and Machine Vision with Deep Learning</li> <li>• Smart material-based sensor and actuators</li> </ul>			
Career Achievements 업적 리스트 (Recent 3 ones)	Yooil Kim, Ji-Sik Kim, and Gi-Woo Kim, "A Novel Frequency Selectivity Approach Based on Travelling Wave Propagation in Mechanoluminescence Basilar Membrane for Artificial Cochlea", Scientific Reports (IF: 4.259) 8, 12023, 2018			
	Jong-Yoon Yun and Gi-Woo Kim, "Harnessing the bilinear nonlinearity of a 3D printed biomimetic diaphragm for acoustic sensor applications", Mechanical Systems and Signal Processing (IF: 4.84) Vol 116, pp. 710-724, 2019.			
	Sun-Woo Kang, Jung-Sik Kim, and Gi-Woo Kim, "Road Roughness Estimation Based on Discrete Kalman Filter with Unknown Input", Vehicle System Dynamics, 2019.			
Others 기타사항	Google Scholar <a href="https://scholar.google.co.kr/citations?user=BL6oQRsAAAAJ&amp;hl=en">https://scholar.google.co.kr/citations?user=BL6oQRsAAAAJ&amp;hl=en</a>  ResearchGate <a href="https://www.researchgate.net/profile/Gi_Woo_Kim">https://www.researchgate.net/profile/Gi_Woo_Kim</a>  ORCID: <a href="https://orcid.org/0000-0003-4625-0382">https://orcid.org/0000-0003-4625-0382</a>			



# Introduction of Laboratory

Name 성함	Surname	Kim		
	Given Name	Sun -Min		
Position 직급	Professor	Gender 성별	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female	
Department 소속학과	Mechanical Engineering	Major 소속전공	Thermodynamics & Fluid Mechanics	
Contact Information 연락처 정보	Email	sunmk@inha.ac.kr		
	Telephone	+82-32-860-7328		
	Home Page	https://www.bsl.inha.ac.kr		
Monthly Stipend Provided or Not 생활비 지급 의사	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Required Manpower 필요인력 수	(How Many) Master _____ / Ph.D <u>2</u>	
Research Field 연구분야 설명	<p>Microfluidics platform for biological studies</p> <p>Lab/Organ on a Chip</p> <p>Biomimetic Membranes platform for sensor and screening applications</p> <p>Mechanical Energy Harvesting</p>			
Career Achievements 업적 리스트 (Recent 3 ones)	Biomimetic membranes as potential tools for water purification: Preceding and future avenues, Desalination 2019 (Top 2%)			
	An electrokinetic approach to fabricating aquaporin biomimetic membranes for water purification, Desalination 2019 (Top 2%)			
	Hypoxic Physiological Environments in a Gas-Regulated Microfluidic Device, Micromachines 2018			
Others 기타사항	<ul style="list-style-type: none"> <li>Supervised PhD student thesis selected as “Excellent Dissertation Award in Fluid Engineering,2019” from Korean Society of Mechanical Engineers</li> <li>Graduate students won prestigious “International Travel Award” from Biophysical Society, USA 2017 and 2018</li> <li>Supervised students received several “Best paper and Oral presentation awards” International and national</li> </ul>			



# Introduction of Laboratory

Name 성함	Surname	Kim		
	Given Name	Jaehwan		
Position 직급	Professor	Gender 성별	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female	
Department 소속학과	Mechanical Engineering	Major 소속전공	Sold and Manufacturing	
Contact Information 연락처 정보	Email	jaehwan@inha.ac.kr		
	Telephone	+82-32-874-7325		
	Home Page	http://ncfc.inha.ac.kr/		
Monthly Stipend Provided or Not 생활비 지급 의사	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Required Manpower 필요인력 수	(How Many) Master <u>  5  </u> / Ph.D <u>  5  </u>	
Research Field 연구분야 설명	<p>Environment-friendly composites design, fabrication and characterization</p> <p>Nanocellulose material preparation and applications</p> <p>Multifunctional nanocomposites for energy harvesting and biomedical applications</p> <p>Soft actuators for soft robots and smart optics</p> <p>Flexible sensors for multipurpose</p>			
Career Achievements 업적 리스트 (Recent 3 ones)	The Effect of Wet Spinning and Stretching to Enhance Mechanical Properties of Cellulose Nanofiber Filament, IJPEM-GT, 2019			
	"One-step nanocellulose coating converts tissue paper into an efficient separation membrane," Cellulose, 25(9), 4871-4886, 2018			
	"Perspective and potential of smart optical materials," Smart Mater. Struct., 26, 093001(31pp), 2017			
Others 기타사항	<p>Creative Research Center for Nanocellulose Future Composites is a government supported long-term research center, via National Research Foundation of Korea. The center envisions an internationally unique research center that will bring the impact of nanocellulose based smart material technology into real world. Researchers and students drawn from a wide spectrum of disciplines are devoting their efforts towards the development and implementation of environmental-friendly smart materials and devices. Since this research is multi-disciplinary area, domestic and international collaboration are essential and welcomed.</p>			





# Introduction of Laboratory

Name 성함	Surname	CHUL-HEE		
	Given Name	LEE		
Position 직급	Professor	Gender 성별	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female	
Department 소속학과	Mechanical Engineering	Major 소속전공	Solid Mechanics & Manufacturing Engineering	
Contact Information 연락처 정보	Email	avdclab@outlook.com		
	Telephone	+82-32-860-7311		
	Home Page	http://avdclab.inha.ac.kr/		
Monthly Stipend Provided or Not 생활비 지급 의사	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Required Manpower 필요인력 수	(How Many) Master _____ / Ph.D. <u>3</u>	
Research Field 연구분야 설명	Transportation-Vehicle Components Design and Controls, Tribology (Friction, Adhesion, Wear and Lubrication), Structural FE Analysis and Optimization, Vehicle Dynamics and Vibration Analysis, Smart Materials and Mechanical Control			
Career Achievements 업적 리스트 (Recent 3 ones)	Friction performance of 3D printed ball bearing: Feasibility study			
	Tribological and rheological tests of core-shell typed carbonyl iron/polystyrene particle-based magnetorheological fluid			
	Piezoelectric energy harvesting pedal integrated with a compliant load amplifier			
Others 기타사항	<p>Virtual Product Development</p> <ul style="list-style-type: none"> <li>- 3D CAD and CAE programs are used for various mechanical component parts based on virtual product development process and design and analysis are carried out in various fields.</li> </ul> <p>Optimization</p> <ul style="list-style-type: none"> <li>- We are carrying out researches on optimization through design and DOE, structural and shape optimization using topology optimization and multi-domain optimization.</li> </ul> <p>Tribology</p> <ul style="list-style-type: none"> <li>- It is an area of science and technology that deals with two aspects that affect one another while exercising relatively and related problems, including friction, wear and lubrication.</li> </ul> <p>Smart System Control &amp; Dynamic Analysis</p> <ul style="list-style-type: none"> <li>- Smart materials include shape memory alloys that memorize shapes according to temperature, MRF and MRE whose rheological properties change depending on the magnetic field, and various piezoelectric materials</li> </ul> <p>Autonomous Vehicle</p> <ul style="list-style-type: none"> <li>- The component kinematic design, vehicle dynamics control technology, dynamic simulation and performance evaluation of autonomous vehicles.</li> </ul>			



# Introduction of Laboratory

Name	Surname	Kang		
	Given Name	Jaeyoung		
Position	Professor	Gender	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female	
Department	Mechanical Eng.	Major	Vibration & Dynamics	
Contact Information	Email	kangj@inha.ac.kr		
	Telephone	82-32-860-7324		
	Home Page	http://dsvl.inha.ac.kr/		
Monthly Stipend Provided or Not	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Required Manpower 필요인력 수	(How Many) Master __1__ / Ph.D __1__	
Research Field	<ul style="list-style-type: none"> <li>- Friction noise and vibration of automotive and railway</li> <li>- Nonlinear vibration and chaos</li> <li>- Computational multi-body dynamics</li> <li>- NASA Heliogyro solar sail</li> </ul>			
Career Achievements	<ul style="list-style-type: none"> <li>- Vice-chair, INHA-NASA joint research center, 2018~present</li> <li>- NRF, Numerical simulation of Squeak noise, 2017~present</li> <li>- NRF, Development of FEM algorithm for squeak noise and its experimental validation, 2014~2017</li> <li>- NRF, Comprehensive model of brake squeal and its simulation, 2010~2013</li> <li>- The 24th Best paper award in the Korean Federation of Science and Tech. Soc., 2014</li> </ul>			
Others 기타사항	<p>Our lab is one of the world-leading research groups in the field of friction noise and vibration. Over 50 research papers related to friction noise have been published. Experiment, Theory and computation algorithm on the brake squeal and other mechanical squeak have been developed in our group and applied to Hyundai Motors and LG Chem. Particularly, the flexible multi-body structure with sliding and moving parts is our recent interest. Recently, we launched the new research project on the large deformable dynamics for the space structure like NASA Heliogyro solar sail. We will extend our research scope to space deployable dynamics.</p>			



# Introduction of Laboratory

Name 성함	Surname	Moon		
	Given Name	Seoksu		
Position 직급	Assistant Professor	Gender 성별	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female	
Department 소속학과	Mechanical Engineering	Major 소속전공	Mechanical Engineering	
Contact Information 연락처 정보	Email	ss.moon@aist.go.jp		
	Telephone	+82-32-860-7378		
	Home Page	http://neel.inha.ac.kr/		
Monthly Stipend Provided or Not 생활비 지급 의사	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Required Manpower 필요인력 수	(How Many) Master __1__ / Ph.D __1__	
Research Field 연구분야 설명	We analyze and perform the modeling of engine spray and combustion processes which can be accommodated to the 1D or 3D virtual engine tools for the ultimate optimization of next-generation engines fueled with conventional fuels or alternative fuels (biofuels, naphtha, dimethyl-ether, natural gas and so on). We also develop cutting-edge X-ray measurement techniques for the analysis of high-speed microscale flows from high-pressure injectors for automotive engines which speed reaches up to 700 m/s. These works are performed with the collaboration of automotive companies such as Hyundai, Mazda, Isuzu and Denso and also the foreign national institutes such as Argonne National Laboratory (US) and AIST (Japan).			
Career Achievements 업적 리스트 (Recent 3 ones)	Hole number effect on spray dynamics of multi-hole diesel nozzles: An observation from three- to nine-hole nozzles, EXPERIMENTAL THERMAL AND FLUID SCIENCE, 102, pp. 387~396, 2019.			
	Near-nozzle spray dynamics of 6-hole GDI injector under subcooled and superheated conditions, FUEL, 232, pp. 308~316, 2018.			
	Potential of direct-injection for the improvement of homogeneous-charge combustion in spark-ignition natural gas engines, APPLIED THERMAL ENGINEERING, 136, pp. 41~48, 2018.			
Others 기타사항	Our lab has broad collaboration networks with domestic and foreign automotive companies and research institutes so that the graduate students can have opportunities to visit and perform the researches in abroad which will help the students to raise their global senses as well as research potentials. The students having basic knowledge on thermodynamics, fluid mechanics, internal combustion engines are welcomed.			

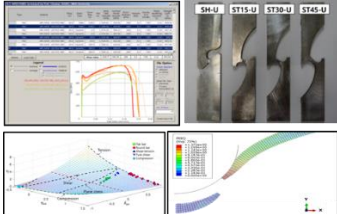
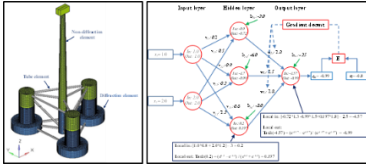
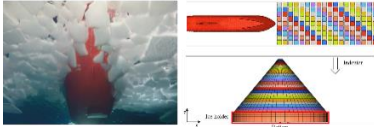


# Introduction of Laboratory

Name 성함	Surname	Kim		
	Given Name	Yooil		
Position 직급	Associate Professor	Gender 성별	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female	
Department 소속학과	Naval Architecture & Ocean Engineering	Major 소속전공	Structural Mechanics	
Contact Information 연락처 정보	Email	<a href="mailto:yooilkim@inha.ac.kr">yooilkim@inha.ac.kr</a>		
	Telephone	82328607347		
	Home Page	<a href="http://mdsl.dothome.co.kr/">http://mdsl.dothome.co.kr/</a>		
Monthly Stipend Provided or Not 생활비 지급 의사	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Required Manpower 필요인력 수	(How Many) Master _1_ / Ph.D _1_	
Research Field 연구분야 설명	<ul style="list-style-type: none"> <li>● Advanced Engineering               <ul style="list-style-type: none"> <li>✓ Ship hydroelasticity including springing/whipping</li> <li>✓ Mooring chain fatigue analysis considering OPB/IPB</li> <li>✓ LNG sloshing and CCS strength assessment</li> </ul> </li> <li>● Arctic Technology               <ul style="list-style-type: none"> <li>✓ Probabilistic ice load estimation</li> <li>✓ Ice-induced fatigue of ship/offshore structure</li> <li>✓ Ice-induced abrasion and friction</li> </ul> </li> <li>● Structural Integrity Management               <ul style="list-style-type: none"> <li>✓ Probabilistic crack propagation analysis</li> <li>✓ Structural reliability analysis</li> <li>✓ Risk-based inspection planning</li> <li>✓ Signal processing</li> </ul> </li> <li>● Data-driven Design Technology               <ul style="list-style-type: none"> <li>✓ Nonlinear system identification</li> <li>✓ Data-driven time series forecast</li> <li>✓ Application of artificial neural network</li> </ul> </li> </ul>			
Career Achievements 업적 리스트 (Recent 3 ones)	ISSC(International Ship Structural Committee) Quasi-static response committee member			
	Editorial Board Member, International Journal of Naval Architecture and Ocean Engineering			
	Best paper award, Korean Federation of Science and Technology Societies Best paper award, Society of Naval Architects of Korea			



# Introduction of Laboratory

Name	Surname	Choung		
	Given Name	Joonmo		
Position	Full professor		Gender	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female
Department	naval arch. and ocean eng.		Major	Ship and offshore structures
Contact Information	Email	<a href="mailto:jmchoung@inha.ac.kr">jmchoung@inha.ac.kr</a>		
	Telephone	+82 10 8604 7346		
	Home Page	<a href="http://sose.inha.ac.kr/">http://sose.inha.ac.kr/</a>		
Monthly Stipend Provided or Not	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Required Manpower	Master (2 vacancies) Ph.D (2 vacancies)
Research Field	<p>▪ <b>Research for materials and ductile fracture</b></p>  <ul style="list-style-type: none"> <li>- To develop new fracture models against ship collisions, and underwater explosions.</li> <li>- To conduct material calibration tests and structural failure tests using 50tonf UTM and 5tonf HTM (high speed test machine).</li> </ul>			
	<p>▪ <b>Research for floating offshore wind turbines (FOWT)</b></p>  <ul style="list-style-type: none"> <li>- New OPB fatigue prediction technique.</li> <li>- Fully coupled aero-hydro-structure-mooring dynamics technique.</li> <li>- ANN (artificial neural network) model for FOWT.</li> </ul>			
	<p>▪ <b>Research for ice-to-arctic vessel interactions</b></p>  <ul style="list-style-type: none"> <li>- Ship-to-ice resistance simulations using FEA</li> <li>- Ice crushing mechanics based on continuum theory</li> </ul>			
Career Achievements	<p>Student can study the problems that they introduced or identified.</p> <p>Students can concentrate on special projects.</p> <p>Students can be author of popular publications.</p>			
Others	<p>▪ <b>Laboratory facilities</b></p> <ul style="list-style-type: none"> <li>- 50tonf UTM for monotonic strength tests and cyclic fatigue tests suited with temperature chamber from -200 to +300</li> <li>- 5tonf HTM for high speed strain rate tests suited with temperature chamber</li> </ul>			
	<p>▪ <b>Monthly payment</b></p> <ul style="list-style-type: none"> <li>- more than one million KRW for a master student and two million KRW for a ph.d student</li> </ul> <p>▪ <b>Annual incentive</b></p> <ul style="list-style-type: none"> <li>- abt 1 million KRW for a master student and abt 2 million KRW for a ph.d student</li> </ul>			



# Introduction of Laboratory

Name 성함	Surname	JIN		
	Given Name	HYOUNG-JOON		
Position 직급	Professor		Gender 성별	<input type="checkbox"/> Male <input type="checkbox"/> Female
Department 소속학과	Polymer Sci. and Eng.		Major 소속전공	Polymerization, carbon, natural polymer, fiber, carbon electrode
Contact Information 연락처 정보	Email	hjjin@inha.ac.kr		
	Telephone	+82-2-860-7483		
	Home Page	lucs.inha.ac.kr (Korean version only)		
Monthly Stipend Provided or Not 생활비 지급 의사	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Required Manpower 필요인력 수	(How Many) Master _____ / Ph.D __2__
Research Field 연구분야 설명	<p>The main research interests in this group are currently in nanostructured carbons for energy storage and conversion, and nanofabrication of polymeric materials and biopolymers, especially silk fibroins and bacterial celluloses, for electronic devices.</p> <ul style="list-style-type: none"> <li>- The study aims to develop anode material for secondary batteries and high barrier film by manufacturing reduced graphene based on large-area exfoliated graphene.</li> <li>- Fabrication of reduced graphene oxide by using surface modification for high energy batteries and gas barrier films</li> </ul>			
Career Achievements 업적 리스트 (Recent 3 ones)	Ultra strong pyroprotein fibres with long-range ordering, NATURE COMMUNICATIONS, 8, pp74, 2017			
	Macroporous catalytic carbon nanotemplates for sodium metal anodes, ADVANCED ENERGY MATERIALS, 8, 1701261, 2018			
	Carbonization of a stable -sheet-rich silk protein into pseudographitic pyroprotein, NATURE COMMUNICATIONS, 6, 7145, 2015			
Others 기타사항	<ul style="list-style-type: none"> <li>- This research will pave the way to obtain the core-technology of energy storage materials for "Fourth Industrial Revolution" by developing surface modification of large lateral-sized exfoliated graphene.</li> <li>- This study will be expected to apply into emerging fields such as next generation mobile electronics, HEV, PHEV, and FCEV.</li> <li>- This technology will envision broad and important impacts on core-technology related to electrochemical systems and barrier film industries as well as on high profit areas for future industry.</li> </ul>			



# Introduction of Laboratory

Name 성함	Surname	Kwon		
	Given Name	Yong Ku		
Position 직급	Professor	Gender 성별	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female	
Department 소속학과	Department of Polymer Science and Engineering	Major 소속전공		
Contact Information 연락처 정보	Email	ykkwon@inha.ac.kr		
	Telephone	+82-32-860-7482		
	Home Page	http://nano.inha.ac.kr		
Monthly Stipend Provided or Not 생활비 지급 의사	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Required Manpower 필요인력 수	(How Many) Master ___ / Ph.D. <u>1</u>	
Research Field 연구분야 설명	<p>-Synthesis and battery applications of nanoscale materials such as nanoparticles, nanoporous materials, aerogel and xerogels</p> <p>-Synthesis of conducting polymers, high performance polymers for electronic, photonic and battery applications</p> <p>-Synthesis of reprocessable thermoset polymers, biodegradable polymers</p> <p>-Structure analysis of nanostructured polymeric materials</p>			
Career Achievements 업적 리스트 (Recent 3 ones)	M. Kim, K. Eo, H.J. Lim, Y.K. Kwon, Low shrinkage, mechanically strong polyimide hybrid aerogels containing hollow mesoporous silica nanospheres, <i>Comp. Sci. Tech.</i> , 15, 355, 2018			
	J.Y. Yoon, Y.K. Kwon, Synthesis and characterization of low bandgap conjugated poly[(3-alkylthiophene-2,5-diyl)-alt-(3-cyanothiophene-2,5-diyl)] by direct heteroarylation polymerization, <i>Polymer</i> , 138, 33, 2018			
	Y.K. Kwon et al., Well-defined hollow nanochanneled-silica nanospheres prepared with the aid of sacrificial copolymer nanospheres and surfactant nanocylinders, <i>Nanoscale</i> , 33, 14774, 2015			
Others 기타사항	-Don't worry for your background and intellectual achievement! I just want to work with sincere students to do their best for their future no matter what he or she has now.			



# Introduction of Laboratory

## (LeeKH, bioorganic Lab)

Name 성함	Surname	Lee		
	Given Name	Keun-Hyeung		
Position 직급	Professor	Gender 성별	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female	
Department 소속학과	Chemistry	Major 소속전공	Organic chemistry	
Contact Information 연락처 정보	Email	Leekh@inha.ac.kr		
	Telephone	+82-32-860-8784		
	Home Page			
Monthly Stipend Provided or Not 생활비 지급 의사	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Required Manpower 필요인력 수	1(How Many) Master _____ / Ph.D _1____	
Research Field 연구분야 설명	Bioorganic chemistry, chemosensor, nano-organic materials			
Career Achievements 업적 리스트 (Recent 3 ones)	Highly sensitive ratiometric detection of heparin and its oversulfated chondroitin sulfate contaminant by fluorescent peptidyl probe, <i>Biosensors and Bioelectronics</i> , <b>2017</b> , 91, 545			
	Development of new peptide-based receptor of fluorescent probe with femtomolar affinity for Cu(I) and detection of Cu(I) in Golgi apparatus <i>Biosensors and Bioelectronics</i> , <b>2016</b> , 85, 437			
	Stimuli-Responsive Conformational Conversion of Peptide Gatekeepers for Controlled Release of Guests from Mesoporous Silica Nanocontainers, <i>J. Am. Chem. Soc</i> <b>2014</b> , 136, 12880.			
Others 기타사항				





# Introduction of Laboratory

Name 성함	Surname	Soo-Jin		
	Given Name	Park		
Position 직급	Professor	Gender 성별	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female	
Department 소속학과	Chemistry	Major 소속전공	Material chemistry	
Contact Information 연락처 정보	Email	sjpark@inha.ac.kr		
	Telephone	+82-32-876-7234		
	Home Page	sjpark.inha.ac.kr		
Monthly Stipend Provided or Not 생활비 지급 의사	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Required Manpower 필요인력 수	(How Many) Master <u>  1  </u> / Ph.D <u>  2  </u>	
Research Field 연구분야 설명	Areas of Research Interests: ▶ Surfaces and Interfaces of Carbon, Ceramic, Polymer, and Composite Materials ▶ Adsorption and Catalytic Properties of Nanoporous Materials for Energy, Electronics, and Environments.			
Career Achievements 업적 리스트 (Recent 3 ones)	1. Large-Scale Conductive Yarns Based on Twistable Korean Traditional Paper (Hanji) for Supercapacitor Applications: Toward High-Performance Paper Supercapacitors, Advanced Energy Materials, 2018, 8, P. 1810854			
	2. Facile construction of MoO <sub>3</sub> @ZIF-8 core-shell nanorods for efficient photoreduction of aqueous Cr (VI), Applied Catalysis B: Environmental, 2019, 240, P.92-101			
	3. H <sub>2</sub> O <sub>2</sub> /steam activation as an eco-friendly and efficient top-down approach to enhancing porosity on carbonaceous materials: the effect of inevitable oxygen functionalities on CO <sub>2</sub> capture, Green Chemistry, 2018, 20, 5224-5234.			
Others 기타사항				



# Introduction of Laboratory

Name 성함	Surname	Ro		
	Given Name	Chul-Un		
Position 직급	Professor	Gender 성별	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female	
Department 소속학과	Chemistry	Major 소속전공	Analytical Chemistry Environmental Chemistry	
Contact Information 연락처 정보	Email	curo@inha.ac.kr		
	Telephone	+82 10 6381 1400		
	Home Page	iws.inha.ac.kr/~curo		
Monthly Stipend Provided or Not 생활비 지급 의사	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Required Manpower 필요인력 수	(How Many) Master <u>  2  </u> / Ph.D <u>  2  </u>	
Research Field 연구분야 설명	Environmental analysis Atmospheric aerosol particles Single-particle analysis (see the research papers on Google Scholar → <a href="https://scholar.google.com/citations?hl=en&amp;user=rw3HlykAAAAJ&amp;view_op=list_works&amp;sortby=pubdate">https://scholar.google.com/citations?hl=en&amp;user=rw3HlykAAAAJ&amp;view_op=list_works&amp;sortby=pubdate</a> )			
Career Achievements 업적 리스트 (Recent 3 ones)	<u>Single-particle characterization of aerosols collected at a remote site in the Amazonian rainforest and an urban site in Manaus, Brazil</u> L Wu, X Li, HK Kim, H Geng, RHM Godoi, CGG Barbosa, AFL Godoi, ... Atmospheric Chemistry and Physics 19 (2), 1221-1240, 2019			
	<u>Single particle mineralogy of microparticles from Himalayan ice-cores using SEM/EDX and ATR-FTIR imaging techniques for identification of volcanic ash signatures</u> MA Malek, HJ Eom, H Hwang, S Do Hur, S Hong, S Hou, CU Ro Chemical Geology 504, 205-215, 2019			
	<u>Single-particle analysis of industrial emissions brings new insights for health risk assessment of PM</u> V Dappe, G Uzu, E Schreck, L Wu, X Li, C Dumat, M Moreau, B Hanoune, ... Atmospheric Pollution Research 9 (4), 697-704, 2018			
Others 기타사항	1. Full financial support during the study period. 2. Full support for the participation to the foreign conference, e.g. in Europe, Japan, China, etc., at least once in a year.			



# Introduction of Laboratory

Name 성함	Surname	Chang Bum		
	Given Name	Jo		
Position 직급	Assistant professor	Gender 성별	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female	
Department 소속학과	Chemistry	Major 소속전공	Material chemistry	
Contact Information 연락처 정보	Email	jochangbum@inha.ac.kr		
	Telephone	+82-32-860-7681		
	Home Page	https://jochangbum.wixsite.com/catalyst		
Monthly Stipend Provided or Not 생활비 지급 의사	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Required Manpower 필요인력 수	(How Many) Master _____ / Ph.D __2__	
Research Field 연구분야 설명	<ul style="list-style-type: none"> <li>- Rational design of functional nanomaterials for catalysis</li> <li>- Catalysis in petrochemical processes and environmental chemistry</li> <li>- C1 (CO<sub>2</sub>, CH<sub>4</sub>) chemistry</li> <li>- Mesoporous silica, zeolite, carbon</li> </ul>			
Career Achievements 업적 리스트 (Recent 3 ones)	Highly monodisperse supported metal nanoparticles by basic ammonium functionalization of mesopore walls for industrially relevant catalysis Chem. Commun. 53, 3810-3813 (2017)			
	Synthesis of Silicate Zeolite Analogues Using Organic Sulfonium Compounds as Structure-Directing Agents, Angew. Chem. Int. Ed. 54, 12805-12808 (2015)			
	Random-graft polymer-directed synthesis of inorganic mesostructures with ultrathin frameworks. Angew. Chem. Int. Ed. 53, 5117-5121 (2014).			
Others 기타사항				



# Introduction of Laboratory

Name 성함	Surname	Kim		
	Given Name	Hong Seok		
Position 직급	Associate Professor	Gender 성별	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female	
Department 소속학과	Molecular Medicine	Major 소속전공	Molecular Biology	
Contact Information 연락처 정보	Email	<a href="mailto:kimhs0622@inha.ac.kr">kimhs0622@inha.ac.kr</a>		
	Telephone	032-860-9834		
	Home Page			
Monthly Stipend Provided or Not 생활비 지급 의사	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Required Manpower 필요인력 수	(How Many) Master <u>  1  </u> / Ph.D <u>      </u>	
Research Field 연구분야 설명	1. Atherosclerosis - oxidative stress induced by metabolic disease - inflammation (monocyte/macrophage, endothelial cell) 2. Cancer - molecular mechanisms of carcinogenesis - signal pathway in tumor progression			
Career Achievements 업적 리스트 (Recent 3 ones)	Free Radic Biol Med. 109:75-83, 2017.			
	Sci Rep. 6:34223, 2016.			
	Antioxid Redox Signal.25:836-851, 2016.			
Others 기타사항				



# Introduction of Laboratory

Name 성함	Surname	KIM		
	Given Name	KYU-SUNG		
Position 직급	Professor		Gender 성별	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female
Department 소속학과	Otorhinolaryngology (ENT)		Major 소속전공	Neurotology, Aerospace Medicine
Contact Information 연락처 정보	Email	stedman@inha.ac.kr		
	Telephone	(032) 890-3620		
	Home Page	<a href="https://www.inha.com/eng/department/department_pop_01.php?idx=94">https://www.inha.com/eng/department/department_pop_01.php?idx=94</a>		
Monthly Stipend Provided or Not 생활비 지급 의사	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Required Manpower 필요인력 수	(How Many) Master: <u>  1  </u> / Ph.D: <u>  1  </u>
Research Field 연구분야 설명	<ul style="list-style-type: none"> <li>▪ Space Medicine: Conducting researches focused on the space adaptation syndrome, spatial awareness mechanisms in space, medical prevention/treatment system development.</li> <li>▪ Neuro-vestibular research: Based on electrophysiological methods, assessing the neuronal responses to kinetic and electrical stimulations in the vestibular nucleus, cerebellum and thalamus. All interesting brain regions are related to the vestibular end organs.</li> <li>▪ Motor control and Neural diseases: Animal experiments by constructing animal models with labyrinthectomy and intractable neural diseases. Performing behavior tests and immunochemistry.</li> </ul>			
Career Achievements 업적 리스트 (Recent 3 ones)	<ul style="list-style-type: none"> <li>▪ Research Fund Acquisition (2018-2027): National Research Foundation of Korea</li> </ul>			
	<ul style="list-style-type: none"> <li>▪ Board of scholar directors in the Korean Balance Society</li> <li>▪ Member of Editorial Directors of Aerospace Medical Association of Korea</li> <li>▪ Member of Consultants in Korean Federation of Sci. and Tech. Societies</li> <li>▪ Board of Directors in Korean Society of Otorhinolaryngology-Head &amp; Neck Surg.</li> </ul>			
Others 기타사항	<p>Inha Research Institute for Aerospace Medicine (IIAM) was founded to support by the funding resources from Korean NRF in 2018, and there are three affiliated research groups for space medicine; neurovestibular, vascular, and immunologic field in extreme environments, such as microgravity, radioactivity, hypobaric and temperature, etc. To conduct the addressed topics, the institute facilitates various research equipments; 5-axis kinetic vestibular stimulation system, multi-channel microelectrode array (MEA), OnmiPlex Neural Data Acquisition system, PlexStim Electrical Stimulator system, rotarod system, manual rotary microtome, tissue floatation water bath, biological microscopes for immunochemistry.</p>			



# Introduction of Laboratory

Name 성함	Surname	Han		
	Given Name	Inn-Oc		
Position 직급	Professor		Gender 성별	<input checked="" type="checkbox"/> Female
Department 소속학과	Medicine, Physiology		Major 소속전공	Neuroscience
Contact Information 연락처 정보	Email	iohan@inha.ac.kr		
	Telephone	82-10-7252-3643		
	Home Page			
Monthly Stipend Provided or Not 생활비 지급 의사	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Required Manpower 필요인력 수	(How Many) Master _____ / Ph.D _2____
Research Field 연구분야 설명	<ul style="list-style-type: none"> <li>- Cognitive Science (Alzheimer's Disease)</li> <li>- Neuroimmunology</li> <li>- Molecular Immunology</li> <li>- Metabolism (Diabetes, Obesity)</li> </ul>			
Career Achievements 업적 리스트 (Recent 3 ones)	Glucosamine improves survival in a mouse model of sepsis and attenuates sepsis induced lung injury and inflammation (2018) J Biol. Chem, 294(2) : 608-622			
	Hypoxia-Induced Neuroinflammation and Learning-Memory Impairments in Adult Zebrafish Are Suppressed by Glucosamine (2018) Molecular Neurobiology 55(11) : 8738-8753			
	LPS-stimulated iNOS induction is increased by Glucosamine under normal Glucose conditions but is inhibited by Glucosamine under high Glucose conditions in Macrophage cells. (2017) J Biol. Chem 292(5): 1724-1736.			
Others 기타사항				



# Introduction of Laboratory

Name 성함	Surname	Kang		
	Given Name	Ju-Hee		
Position 직급	Full Professor	Gender 성별	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female	
Department 소속학과	Pharmacology, College of Medicine	Major 소속전공	Clinical Pharmacology	
Contact Information 연락처 정보	Email	johykang@inha.ac.kr		
	Telephone	+82-32-860-9872		
	Home Page			
Monthly Stipend Provided or Not 생활비 지급 의사	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Required Manpower 필요인력 수	(How Many) Master _____ / Ph.D. <u>1</u>	
Research Field 연구분야 설명	<ol style="list-style-type: none"> <li>Neurodegenerative disease           <ol style="list-style-type: none"> <li>Development of cerebrospinal fluid biomarkers for early diagnosis of Alzheimer's disease (AD) under collaboration with Korean clinician and researchers in United States; Clinical cohort studies and evaluation of applicability</li> <li>Development of blood biomarkers for AD targeting circulating microRNA in extracellular vesicles; Evaluation of clinical efficacy of miRNA biomarkers and investigation of role of target miRNA in AD pathogenesis.</li> <li>Investigation for the pathogenic roles of ischemic damage in AD pathogenesis, particularly in tau modification and amyloid production.</li> </ol> </li> <li>Aging-induced Sarcopenia           <ol style="list-style-type: none"> <li>Investigation of novel molecular mechanisms of aging-induced sarcopenia using in vitro cell culture model and in vivo models: major target is extracellular molecules, myokines, and adipokines.</li> <li>Preventive or therapeutic effects of various molecules against development of aging-induced sarcopenia; Pharmacological mechanisms of action</li> </ol> </li> </ol>			
Career Achievements 업적 리스트 (Recent 3 ones)	Kim S, et al., Roles of Exosome-Like Vesicles Released from Inflammatory C2C12 Myotubes: Regulation of Myocyte Differentiation and Myokine Expression. (2018) Cellular Physiology and Biochemistry, 48:1829-1842.			
	Joa KL, et al., Effects of task-specific rehabilitation training on tau modification in rat with photothrombotic cortical ischemic damage. (2017) Neurochemistry International, 108:309-317.			
	Kang JH, et al., CSF biomarkers associated with disease heterogeneity in early Parkinson's disease: the Parkinson's Progression Markers Initiative study. (2016) Acta Neuropathologica, 131:935-949			
Others 기타사항	<p>Currently, 1 senior researcher, 1 research associate and 2 graduate students (PhD course; 1 Korean and 1 Thais) join my lab. They work several projects which are supported by national research grants.</p> <p>If available, I will support to participate in domestic or international conferences, which will provide the insights our research fields.</p> <p>Monthly stipend will be provided, however, it should be noted that the amount of stipend will be dependent on the grants available (usually, at least 600,000 KW/month).</p> <p>NOTE: The information above should be used for appropriate purpose, therefore please don't release other institutions or universities without permission.</p>			



# Introduction of Laboratory

Name 성함	Surname	Ryu		
	Given Name	Jeong Seon		
Position 직급	Medical doctor	Gender 성별	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female	
Department 소속학과	Department of Internal Medicine	Major 소속전공	Pulmonology, Lung cancer	
Contact Information 연락처 정보	Email	jsryu@inha.ac.kr		
	Telephone	82+10-9975-1956		
	Home Page	gbu772.wixsite.com/lungca		
Monthly Stipend Provided or Not 생활비 지급 의사	More than 1,000,000 Won, dependent upon applicant's expertise	Required Manpower 필요인력 수	Master __1__ / Ph.D __1__	
Research Field 연구분야 설명	<p>We have focused translational research to develop diagnostic, prognostic, and predictive biomarker in lung cancer.</p> <ul style="list-style-type: none"> <li>○ Early diagnose of lung cancer and monitoring curative effacement           <ul style="list-style-type: none"> <li>- NGS analysis based lung cancer diagnosis method development</li> <li>- Development of non-invasive/minimally invasive biomarkers</li> <li>- Establishment of monitoring system for the blood-based chemotherapy effect</li> </ul> </li> <li>○ Precursor of lung cancer genome analysis           <ul style="list-style-type: none"> <li>- WES / RNA sequencing based lung cancer precursor genome analysis</li> <li>- Development of specific biomarker for early lung cancer</li> </ul> </li> <li>○ Clinical cohort and functional genomics research           <ul style="list-style-type: none"> <li>- Clinical information analysis</li> <li>- Genome transcriptome and TMA based protein expression characteristics</li> <li>- Connection analysis and function research</li> </ul> </li> </ul>			
Career Achievements 업적 리스트 (Recent 3 ones)	Prognostic Impact of Minimal Pleural Effusion in Non-Small-Cell Lung Cancer, J Clin Oncol, 32(9), pp. 960~960, 2014			
	Proteins involved in DNA damage response pathways and survival of stage I non-small-cell lung cancer patients. Ann Oncol. 23(8), pp. 2088-93, 2012			
	Effect of BRCA1 haplotype on survival of non-small-cell lung cancer patients treated with platinum-based chemotherapy. J Clin Oncol. 26(36), pp. 5972-9, 2008			
Others 기타사항	<ul style="list-style-type: none"> <li>○ The first lung cancer clinical cohort establishment in Korea</li> <li>○ Over 100,000 specimens and matched clinical information</li> </ul>			





# Introduction of Laboratory

Name 성함	Surname	Yang		
	Given Name	Su-Geun		
Position 직급	Associate Professor	Gender 성별	Male	
Department 소속학과	College of Medicine	Major 소속전공	Biomedical Science	
Contact Information 연락처 정보	Email	<a href="mailto:orosyang@gmail.com">orosyang@gmail.com</a> , <a href="mailto:sugeun.yang@inha.ac.kr">sugeun.yang@inha.ac.kr</a>		
	Telephone	82-10-3628-0468		
	Home Page	<a href="http://www.inhamedic.com">www.inhamedic.com</a>		
Monthly Stipend Provided or Not 생활비 지급 의사	Yes	Required Manpower 필요인력 수	(How Many) Master <u>1</u> / Ph.D <u>1</u>	
Research Field 연구분야 설명	<p>1) Polymer-based medical and pharmaceutical engineering</p> <ul style="list-style-type: none"> <li>• Nanomedicine for cancer therapy and cancer imaging</li> <li>• NIR-laser based photodynamic cancer therapy</li> <li>• 3D bioprinting and medical devices</li> </ul> <p>2) Space medicine and cell physiology (NASA collaboration research)</p> <ul style="list-style-type: none"> <li>• Microgravity, cosmic radiation protection</li> <li>• Space disease prevention medicine</li> </ul>			
Career Achievements 업적 리스트 (Recent 3 ones)	NIR-responsive ROS generating core and ROS-triggered 5'-Deoxy-5-fluorocytidine releasing shell structured water-swelling microgel for locoregional combination cancer therapy, Journal of Controlled Release Volume 305, 10 July 2019, Pages 120-129			
	MT1-MMP Responsive Doxorubicin Conjugated Poly(lactic-coglycolic Acid)/Poly(styrene-alt-maleic Anhydride) Core/Shell Microparticles for Intrahepatic Arterial Chemotherapy of Hepatic Cancer, ACS Appl Mater Interfaces. 2017 Jan 11;9(1):71-79.			
	Tumor-suppressing miR-141 gene complex-loaded tissue-adhesive glue for the locoregional treatment of hepatocellular carcinoma, Theranostics. 2018 Jun 24;8(14):3891-3901.			
Others 기타사항	<p>Preferences</p> <ul style="list-style-type: none"> <li>• Major: chemical engineering and polymer science, synthetic chemistry Medical doctor</li> <li>• English: Strong English speaking and writing power for science discussion and paper writing</li> <li>• Strong enthusiasm and passion for science</li> </ul>			



# Introduction of Laboratory

Name 성함	Surname	Kim		
	Given Name	Young Hyo		
Position 직급	Associate Professor	Gender 성별	<input type="checkbox"/> Male <input type="checkbox"/> Female	
Department 소속학과	Dept. of Otorhinolaryngology	Major 소속전공	Rhino/Allergy/ Sleep Medicine	
Contact Information 연락처 정보	Email	<a href="mailto:inhaorl@inha.ac.kr">inhaorl@inha.ac.kr</a>		
	Telephone	+82-32-890-2437		
	Home Page	N/A		
Monthly Stipend Provided or Not 생활비 지급 의사	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Required Manpower 필요인력 수	(How Many) Master __1__ / Ph.D __1__	
Research Field 연구분야 설명	Our laboratory is mainly for studying the pathophysiology of immunological diseases such as allergic rhinitis and allergic asthma. The facilities and research protocols for these experiments are well established, and you can learn experimental techniques and theories from research professors and senior researchers. We also have an aerospace medical research institute funded by the Korea Research Foundation. We have the only advanced equipment in Korea to study the effects of rapid changes in gravity and baropressure on living things.			
Career Achievements 업적 리스트 (Recent 3 ones)	Kim YH, Lee SM, Cho S, Kang JH, Minn YK, Park H, et al. Amyloid beta in nasal secretions may be a potential biomarker of Alzheimer's disease. <i>Sci Rep.</i> 2019 Mar 21;9(1):4966.			
	Jang TY, Jung AY, Kwon S, Kim YH. Hypergravity enhances the therapeutic effect of dexamethasone in allergic asthma and rhinitis animal model. <i>PLoS One.</i> 2018 May 17;13(5):e0197594.			
	Park KI, Jang TY, Yang SC, Hong HS, Kim YH. Correlation of Nasal Eosinophilia and Response after Nasal Provocation Test in Patients with Nonallergic Rhinitis. <i>Otolaryngol Head Neck Surg.</i> 2018 Aug;159(2):231-237.			
Others 기타사항	<p>Our laboratory publishes more than five international SCI papers annually. We will at least recognize your co-authorship for every paper you contribute. And of course, I'll give you the first authorship for the paper you're most mainly contributing.</p> <p>Our lab is based on timely commute to work and leave. So you can spend your evenings at leisure, except when the experiment is very busy. Also, you don't have to come to the lab on weekends.</p> <p>We can provide the economic support you need for your conference. You can also provide meal tickets for meals at the hospital. Our university will be able to offer you full or half scholarships. If you work hard in our lab for more than a year, the next year we can consider supporting your life in Korea.</p>			



# Introduction of Laboratory

Name 성함	Surname	Lee		
	Given Name	Hyun-Joo		
Position 직급	Associate Professor	Gender 성별	<input type="checkbox"/> Male <input checked="" type="checkbox"/> Female	
Department 소속학과	Dep. of Consumer Science	Major 소속전공	Retail and Consumer Sciences	
Contact Information 연락처 정보	Email	Hyunjoo.lee@inha.ac.kr		
	Telephone	82-32-860-8118		
	Home Page	<a href="http://consumer.inha.ac.kr/user/consumer/">http://consumer.inha.ac.kr/user/consumer/</a>		
Monthly Stipend Provided or Not 생활비 지급 의사	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Required Manpower 필요인력 수	(How Many) Master __1__ / Ph.D __1__	
Research Field 연구분야 설명	Retail technology (self-service technology, mobile payment system, VR, etc.) Sustainable consumption Cross-cultural consumer behavior			
Career Achievements 업적 리스트 (Recent 3 ones)	<b>Lee, H-J.</b> & Lyu, J. (in press). Exploring factors which motivate older consumers' self-service technologies (SSTs) adoption. <i>The International Review of Retail, Distribution and Consumer Research</i> , <b>SCOPUS</b> .			
	<b>Lee, H-J.</b> & Hwang, J. (2016). The driving role of consumers' perceived credence attributes in organic food purchase decisions: A comparison of two groups of consumers. <i>Food Quality and Preference</i> , 54, 141-151. <b>SCI</b> .			
	<b>Lee, H-J.</b> & Lyu, J. (2016). Personal values as determinants of intentions to use self-service technology in Retailing. <i>Computers in Human Behavior</i> , 60, 322-332. <b>SSCI</b> .			
Others 기타사항	Fluent in English Research experience related to consumer behavior, retailing, marketing A PhD student is preferred, but not available a Master student is acceptable			



# Introduction of Laboratory

Name 성함	Surname	Kim		
	Given Name	Sung-Bum		
Position 직급	Assistant professor	Gender 성별	Male	
Department 소속학과	Business administration	Major 소속전공	Business administration	
Contact Information 연락처 정보	Email	<a href="mailto:kimsungb@inha.ac.kr">kimsungb@inha.ac.kr</a>		
	Telephone	82-32-860-7739		
	Home Page	<a href="https://www.inha.ac.kr/cop/search/profView.do">https://www.inha.ac.kr/cop/search/profView.do</a>		
Monthly Stipend Provided or Not 생활비 지급 의사	No	Required Manpower 필요인력 수	(How Many) Master _1___ / Ph.D _1___	
Research Field 연구분야 설명	Dr. Sung-Bum Kim's research interests include hospitality, tourism and service management, and marketing. He places special focus on consumer behavior and psychology in the hotel, restaurant, and tourism industries.			
Career Achievements 업적 리스트 (Recent 3 ones)	Choi, K., Meng, B., & <b>Kim, S. B.*</b> (2019). The influence of cultural familiarity on Tanzanian millennials' perceptions of Korea: the mediating roles of involvement. <i>Asia Pacific Journal of Tourism Research</i> . [SSCI]			
	<b>Kim, S. B.</b> , Lee, S., & Kim, D.-Y. (2018). The effect of service providers' facial hair on restaurant customers' perceptions. <i>Service Business</i> , 12, 277-303. [SSCI]			
	<b>Kim, S. B.</b> , Kim, K. J., & Kim, D.-Y. (2016). Exploring the effective restaurant CrM ad: The moderating roles of advertising types and social causes. <i>International Journal of Contemporary Hospitality Management</i> , 28(1), 2473-2492. [SSCI]			
Others 기타사항	<p>After he earned his bachelor's, master's, and doctoral degrees in the U.S., Dr. Sung-Bum Kim joined Inha University in 2015. Dr. Kim is currently an assistant professor in Inha's College of Business Administration.</p> <p>Dr. Kim has a strong record of research and scholarship with significant contributions to the literature. As a part of his research program, Dr. Kim has published papers in such top-tier refereed journals as <i>Annals of Tourism Research</i>, <i>Tourism Management</i>, the <i>Cornell Hospitality Quarterly</i>, the <i>International Journal of Contemporary Hospitality Management</i>, the <i>Journal of Travel and Tourism Marketing</i>, the <i>Asia Pacific Journal of Tourism Research</i>, <i>Service Business</i>, <i>Computers in Human Behavior</i>, and more. Dr. Kim also is a frequent reviewer of scholarly papers for top-tier refereed journals review.</p> <p>Dr. Kim has also presented his research at international conferences. In 2011, a paper he presented was selected as best paper at the Tourism Sciences Society of Korea (TOSOK) international tourism annual conference. In addition, he is currently advising a master's degree student from Vietnam.</p>			



# Introduction of Laboratory

Name 성함	Surname	Won		
	Given Name	JongChan		
Position 직급	Professor		Gender 성별	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female
Department 소속학과	Korean Language & Literature		Major 소속전공	Children's Literature
Contact Information 연락처 정보	Email	wjc92@inha.ac.kr		
	Telephone	032-860-7996. 010-4706-9096		
	Home Page	Inha.ac.kr		
Monthly Stipend Provided or Not 생활비 지급 의사	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Required Manpower 필요인력 수	(How Many) Master __3__ / Ph.D __3__
Research Field 연구분야 설명	<p>Despite that the publication of children's books is increasing sharply, the study of children's literature is rather isolated. There are almost no colleges studying children's literature as a field of study. However, Inha University has had many students majoring in Children's Literature since the old times and its alumni are pursuing further studies as college professors in Korea, China, Vietnam, and more. The study of Children's Literature does not discuss the lessons taught by children's literature, but it considers children's literature as a field of art to discuss the accomplishments.</p>			
Career Achievements 업적 리스트 (Recent 3 ones)	『Genealogy of Canonization in Korean Children's Literature』 (2018)			
	『History of Children's Literature in East Asia』 (2017)			
	『Children's Literature in North Korea』 (2012)			
Others 기타사항	<p>Inha University's Department of Korean Literature Graduate Program currently has more than 10 students majoring in Children's Literature who are active as writers and critics and some students are from China and Vietnam. In 2020, we will apply for the BK21 (Brain Korea 21) Prime to foster students majoring in Korean Studies of East Asia. Once this project is finalized, all graduate students in the Department of Korean Literature can receive additional scholarships.</p>			