

Job Posting for Permanent Full-time Positions for H2 2018

This posting includes a three-step procedure according to 'the Guidelines for Turning Temporary Positions into Permanent Positions' of the Ministry of Science and ICT.



A government-funded research institute, the Korea Institute of Industrial Technology (KITECH) is dedicated to leading the development of Korea's industrial source technologies and manufacturing innovation, consistently driving the advancement of national competitiveness in industrial technologies by fostering global hidden champions.

Area of Employment

Research Sector

Category	Area	Qualification (Open Positions)	Remark
Research Institute of Advanced Manufacturing Technology	<ul style="list-style-type: none"> ○ Material/Mechanical/Industrial/Information Communications Engineering - Smart manufacturing process technology and virtual reality technology - 3D printing process and system - Manufacturing process design/interpretation technology 	Doctor (1-9)	Location: Incheon · Siheung
	<ul style="list-style-type: none"> - Manufacturing process design/interpretation technology 	Master (1-9)	
	<ul style="list-style-type: none"> ○ Mechanical/Production Engineering - High-strength low-moldability plate material molding - Mold cutting processing and micro-processing 	Doctor (1-9)	
	<ul style="list-style-type: none"> - Mold cutting processing and micro-processing 	Master or Doctor (1-9)	
	<ul style="list-style-type: none"> ○ Metal/Material/New Material Engineering - Intelligent microstructure control plastic working - Development and process of high-tech materials - Metallic material performance assessment and analysis - Electronic package solder joint - Power semiconductor joint - Metal casting technology 	Doctor (1-9)	
	<ul style="list-style-type: none"> - Electronic package solder joint 	Master or Doctor (1-9)	
	<ul style="list-style-type: none"> - Power semiconductor joint 	Master (1-9)	
	<ul style="list-style-type: none"> - Metal casting technology 	Master (1-9)	
	<ul style="list-style-type: none"> ○ Metal/Material/New Material/Chemical Engineering - High-functionality surface treatment materials and process - Wet process electroplating and dry surface treatment 	Doctor (1-9)	
	<ul style="list-style-type: none"> - Wet process electroplating and dry surface treatment 	Master or Doctor (1-9)	
<ul style="list-style-type: none"> ○ Metal/Material Engineering/Physics - Plasma nanocomposite and bio-coating 	Doctor (1-9)		
<ul style="list-style-type: none"> ○ Metal/Material/Mechanical/Chemical Engineering - Casting process and high-functionality materials - Intelligent welding process and welding metallurgy 	Doctor (1-9)		

Category	Area	Qualification (Open Positions)	Remark
Research Institute of Industrial Technology Convergence	<ul style="list-style-type: none"> ○ Textile Materials - High-functionality/eco-friendly textile - Energy storage/conversion textile materials 	Doctor (1-9)	Location: Ansan
	<ul style="list-style-type: none"> - E-textile - Precursor for carbon fiber and low-priced carbon fiber - Smart wearable device 	Master or Doctor (1-9)	
	<ul style="list-style-type: none"> ○ Textile/Polymer Process - High-value-added dyeing processing - Textile composite design/interpretation (using 3D CAD and FEA) 	Doctor (1-9)	
	<ul style="list-style-type: none"> - Epoxy synthesis and application technology - Felt-based filter manufacturing technology - Polymerization/reforming and radiation technology for polymer for textile 	Master or Doctor (1-9)	
	<ul style="list-style-type: none"> ○ Robot - Recognition/sensor convergence/HRI - Soft robot 	Doctor (1-9)	
	<ul style="list-style-type: none"> - Robot design and control 	Master or Doctor (1-9)	
	<ul style="list-style-type: none"> ○ NT/IT/CT Process Technology - Nano materials for energy conversion - MEMS/NEMS-based sensor manufacture - Smart manufacturing process operation and control system - Circuit design and firmware technology for entertainment engineering 	Master or Doctor (1-9)	
	<ul style="list-style-type: none"> ○ Future Convergence Production Technology - Artificial intelligence-based robot control/operation technology - Printing-based IoT device - ICT/AI convergence-type autonomous control processing system - VR/AR space/object recognition technology 	Doctor (1-9)	
	<ul style="list-style-type: none"> - Convergence technology through design thinking 	Master or Doctor (1-9)	

Category	Area	Qualification (Open Positions)	Remark
Research Institute of Sustainable Manufacturing System	<ul style="list-style-type: none"> ○ Chemistry, Chemical/Mechanical Engineering <ul style="list-style-type: none"> - Clean chemical analysis and material properties assessment technology - Renewable fuel thermochemical conversion and use technology 	Master (1-9)	Location: Cheonan
	<ul style="list-style-type: none"> ○ Smart Control/Manufacture <ul style="list-style-type: none"> - Smart machine SW technology - Smart information analysis technology 	Doctor (1-9)	
	<ul style="list-style-type: none"> ○ Smart Manufacturing Process System <ul style="list-style-type: none"> - High-tech materials processing and system control technology - Functional sensor technology 	Doctor (1-9)	
	<ul style="list-style-type: none"> ○ Eco-friendly Process for Dealing with Hazardous Environment <ul style="list-style-type: none"> - Organic electronic materials (solar cell, image sensor) technology - High-functionality polymer design and synthesis/analysis technology - Functional eco-friendly (reducing pollutants, etc.) chemical convergence materials technology 	Doctor (1-9)	
	<ul style="list-style-type: none"> ○ Carbon Circulation Eco Energy <ul style="list-style-type: none"> - Waste resource-based environmental (hydrogen) energy technology - High-temperature energy production CPS (Cyber Physics System) technology - Production site energy-saving technology 	Doctor (1-9)	
	<ul style="list-style-type: none"> ○ Smart Heat Fluid/Refrigeration and Air-conditioning <ul style="list-style-type: none"> - industrial energy high-efficiency technology - Eco-friendly thermal system technology - Energy device integration interpretation technology 	Doctor (1-9)	
	<ul style="list-style-type: none"> ○ Human/Bio-engineering <ul style="list-style-type: none"> - Biometrics/measurement and connected health care technology 	Doctor (1-9)	
Seonam Regional Division	<ul style="list-style-type: none"> ○ Material/Electric and Electronic/Physical/Mechanical Engineering <ul style="list-style-type: none"> - Convergence sensor - Light-emitting materials 	Doctor (1-9)	Location: Gwangju Suncheon
	<ul style="list-style-type: none"> - MEMS/NEMS process - Flexible device/module 	Master (1-9)	
	<ul style="list-style-type: none"> ○ Electric and Electronic/Chemical/Material Engineering <ul style="list-style-type: none"> - Energy storage/conversion application technology 	Master or Doctor (1-9)	
	<ul style="list-style-type: none"> ○ Mechanical Engineering/Computer Engineering/Electric Engineering <ul style="list-style-type: none"> - Automotive electronics - Intelligent vehicle control - Plastic working/mold technology 	Doctor (1-9)	
	<ul style="list-style-type: none"> - Vehicle platform design 	Master (1-9)	
	<ul style="list-style-type: none"> ○ Metal/Material/New Materials Engineering <ul style="list-style-type: none"> - Dry surface treatment - Plate material rolling and rigid plastic working 	Doctor (1-9)	
	<ul style="list-style-type: none"> - High-density thick film surface treatment 	1-9 masters	

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Dongnam Regional Division	<ul style="list-style-type: none"> ○ Mechanical Engineering/Mechatronics - IoT sensor-based failure diagnosis/prediction technology 	Doctor (1-9)	Location: Busan · Jinju · Yangsan
	<ul style="list-style-type: none"> - Underwater navigation algorithm and platform design technology 	Master or Doctor (1-9)	
	<ul style="list-style-type: none"> ○ Mechanical Engineering/Cutting Processing and Design - Aircraft parts cutting processing system and process technology - Tool abrasion-linked production competitiveness (low cost/high quality/high productivity) technology - Cutting processing information monitoring/data processing technology 	Doctor (1-9)	
	<ul style="list-style-type: none"> - Processing/molding process-linked parts design/engineering technology 	Master (1-9)	
	<ul style="list-style-type: none"> ○ Material Engineering/Structural Materials - High-functionality nano structure control technology for extreme environment 	Master or Doctor (1-9)	
	<ul style="list-style-type: none"> ○ Material Engineering/Surface Treatment - Material-based biocompatible surface treatment technology - Plating process and eco-friendly surface treatment technology - Superhigh-hardness nano complex coating technology for processing aircraft parts 	Doctor (1-9)	
	<ul style="list-style-type: none"> - Superhigh-hardness nano complex coating technology for processing aircraft parts 	Master (1-9)	
Daegyeong Regional Division	<ul style="list-style-type: none"> ○ Material Engineering - Metal microstructure control and material deformation behavior analysis 	Master or Doctor (1-9)	Location: Daegu · Gyeongsang · Yeongju · Gumi · Gyeongju
	<ul style="list-style-type: none"> ○ Mechanical Engineering - Metallic materials lamination processing process and laser patterning - Powder molding process (powder compression molding, injection molding, sintering process) - Functional polymer materials design · interpretation and molding technology 	Doctor (1-9)	
	<ul style="list-style-type: none"> - Tribology, bearing friction abrasion mechanism analysis 	Master (1-9)	
	<ul style="list-style-type: none"> ○ Mechatronics (Machinery/Electrical and Electronics) - Rotor kinetics/big data-based life soundness prediction management - Unmanned platform system design and AI-based intelligent control 	Doctor (1-9)	
	<ul style="list-style-type: none"> - Motor interpretation and design for electric cars 	Master (1-9)	
	<ul style="list-style-type: none"> ○ Construction Machinery Area - Multiple physical system interpretation and design/energy harvesting system 	Master or Doctor (1-9)	
	<ul style="list-style-type: none"> - AR/VR-based real-time design technology (HILS, MILS) - Hydraulic system interpretation/design/control 	Master (1-9)	

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Gangwon Regional Division	<ul style="list-style-type: none"> ○ New Materials/Mechanical Engineering <ul style="list-style-type: none"> - Computer simulation-based complex (nonferrous) metal processing technology 	Doctor (1-9)	Location: Gangneung · Wonju
	<ul style="list-style-type: none"> - Smart special thermal treatment and plastic working technology 	Master (1-9)	
	<ul style="list-style-type: none"> ○ Materials/Production Engineering <ul style="list-style-type: none"> - Deep learning-based functional alloy design technology 	Doctor (1-9)	
	<ul style="list-style-type: none"> - Metal powder manufacturing technology for lamination and molding 	Master (1-9)	
	<ul style="list-style-type: none"> ○ Mechanical/Material (Metal)/Electronic Engineering <ul style="list-style-type: none"> - Data mining and prediction technology based on Metallic materials thermodynamics (dissolution/coagulation process) 	Doctor (1-9)	
	<ul style="list-style-type: none"> - AI-based optimal design/processing technology 	Master or Doctor (1-9)	
Ulsan Regional Division	<ul style="list-style-type: none"> ○ Chemical/Environmental Engineering <ul style="list-style-type: none"> - Development of eco-friendly binder and process for casting 	Doctor (1-9)	Location: Ulsan
	<ul style="list-style-type: none"> - AI-based process optimization design interpretation and catalyst synthesis 	Master or Doctor (1-9)	
	<ul style="list-style-type: none"> ○ Chemical/Material/Environmental Engineering <ul style="list-style-type: none"> - Nano materials application and assessment technology for reducing industrial fine dust 	Doctor (1-9)	
	<ul style="list-style-type: none"> - Greenhouse gases/fine dust causal substances emission reduction and assessment 	Master (1-9)	
	<ul style="list-style-type: none"> ○ Mechanical Engineering <ul style="list-style-type: none"> - IoT-based laser micro-machining and application technology 	Doctor (1-9)	
Jeonbuk Regional Division	<ul style="list-style-type: none"> ○ Mechanical Engineering <ul style="list-style-type: none"> - Electronic control and measurement technique - Hydraulic system design interpretation technology - Plate material molding/plastic working process 	Master or Doctor (1-9)	Location: Jeonju · Gimje
	<ul style="list-style-type: none"> ○ Mechanical/Electric/Electronic/Mechatronics Engineering <ul style="list-style-type: none"> - Intelligent vehicle control and AI technology - IoT sensor-based autonomous prediction diagnosis technology - Big data analysis 	Doctor (1-9)	
	<ul style="list-style-type: none"> ○ Robot Engineering <ul style="list-style-type: none"> - Soft robot - Wearable robot - Manipulator control 	Doctor (1-9)	
	<ul style="list-style-type: none"> ○ Material/Mechanical/Chemical Engineering <ul style="list-style-type: none"> - Carbon composite manufacturing process technology - Functional nano composite thin film manufacturing and lamination technology - Flexible/elastic nano composite manufacturing technology 	Doctor (1-9)	

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Jeju R&BD Center	<ul style="list-style-type: none"> ○ Electronic/Mechanical Engineering <ul style="list-style-type: none"> - Digital-based functional product design/reverse engineering and manufacture - Precision patterning micro-process design and manufacture 	Doctor (1-9)	Location: Jeju
	<ul style="list-style-type: none"> ○ Mechanical/Electronic/Energy Engineering <ul style="list-style-type: none"> - Energy materials/equipment/collection and efficiency improvement - AI/machine learning-based model/smart health care solution 	Doctor (1-9)	
	<ul style="list-style-type: none"> ○ Electronic/Industrial/Information Communications Engineering <ul style="list-style-type: none"> - Equipment automation and data processing - IoT/embedded system - Sensor circuit design and micro-signal processing 	Doctor (1-9)	
	<ul style="list-style-type: none"> ○ Mechatronics/Material/Energy Engineering <ul style="list-style-type: none"> - Bio-friendly materials/energy materials synthesis and assessment - Part material design/processing and properties control/assessment 	Doctor (1-9)	
Korea National Cleaner Production Center (KNPC)	<ul style="list-style-type: none"> ○ Industrial Environmental Regulations <ul style="list-style-type: none"> - Industrial pollutants emission policy planning and commercialization - Analysis of impacts of environmental regulations on industries and external cooperation ※ Preferred are those with high foreign language skills (English, Japanese). 	Doctor (1-9)	Location: Seoul
	<ul style="list-style-type: none"> ○ Resource Circulation Technology and Policy Planning <ul style="list-style-type: none"> - Resource circulation technology platform, life cycle-based policy planning, and international standards 	Master or Doctor (1-9)	
	<ul style="list-style-type: none"> ○ Re-manufacture <ul style="list-style-type: none"> - Re-manufacture quality certification and statistics DB, re-manufacturing comp any process diagnosis guidance 	Master (1-9)	
Korea National Ppuri Industry Center (KPIC)	<ul style="list-style-type: none"> ○ Root Industry·Technology Policy <ul style="list-style-type: none"> - Root industry policy planning, new project planning/management/operation ※ Preferred are those majoring in related engineering areas. 	Master or Doctor (1-9)	Location: Seoul
	<ul style="list-style-type: none"> ○ Root Industry Manufacturing Process Advancement and Modernization <ul style="list-style-type: none"> - Root industry smartification and energy saving policy ※ Preferred are those majoring in related engineering. 	Master or Doctor (1-9)	
	<ul style="list-style-type: none"> ○ Fostering of Professional Technicians for Root Industry <ul style="list-style-type: none"> - Manpower nurturing and workforce promotion policy planning/management ※ Preferred are those majoring in law, politics, management of technology (MOT), or related areas. 	Master (1-9)	
Korea National Industrial Convergence Center (KNICC)	<ul style="list-style-type: none"> ○ Industrial Convergence Foundation Formation <ul style="list-style-type: none"> - Industrial convergence assessment/new convergence project discovery 	Doctor (1-9)	Location: Ansan
	<ul style="list-style-type: none"> ○ Empirical R&D (Machinery/Electronics) <ul style="list-style-type: none"> - Empirical planning, execution, and result analysis feedback 	Master or Doctor (1-9)	
	<ul style="list-style-type: none"> ○ Solution of Problems in Commercialization of New Convergence Projects <ul style="list-style-type: none"> - Support for suitability certification of new convergence products and special cases in regulation 	Master (1-9)	
Korea Engineering Plant Center (KEPC)	<ul style="list-style-type: none"> ○ Industrial Data Analysis <ul style="list-style-type: none"> - Policy planning related to cloud platform and big data 	Master or Doctor (1-9)	Location: Ansan
	<ul style="list-style-type: none"> ○ Modeling · Simulation <ul style="list-style-type: none"> - Modeling and policy planning in manufacture/engineering area 	Master (1-9)	
Korea Institute for Rare Metal (KIRAM)	<ul style="list-style-type: none"> ○ Rare Metal Manufacturing Process/Precision Analysis <ul style="list-style-type: none"> - Rare metal powder manufacture and materialization technology - Refined structure and trace element analysis 	Master or Doctor (1-9)	Location: Incheon
Packaging Technology Center	<ul style="list-style-type: none"> ○ Packaging, Polymer Materials, Polymer processing/Manufacture/Analysis <ul style="list-style-type: none"> - Eco-friendly packaging, nano materials, organic/inorganic composites, conductive polymer, etc. 	Master or Doctor (1-9)	Location: Bucheon

□ Administration Sector

Area	Major (Qualifications)	Detail	Open Positions	Location
General Administration (General Positions)	No required major (Only bachelor's degree is required.)	<ul style="list-style-type: none"> ○ Management planning, technology policy, etc. <ul style="list-style-type: none"> - Preferred are those with special qualifications related to the jobs such as certificates for lawyer, patent attorney, and certified labor attorney. 	1-9	Head Office
Office Work (Research Assistants)	No required major (Only bachelor's degree is required.)	<ul style="list-style-type: none"> ○ Research administration <ul style="list-style-type: none"> - Preferred are those with certificates related to MOT (Management of Technology) such as Korea Certified Valuation Analyst and Technology Transfer Agent. - Preferred are those with certificates in the computer area such as web design, GTQ, and SW coding. 	1-9	Head Office or regional divisions

※ Research assistants: Workforce coming under the open positions for unlimited contracts acknowledged by the Korean government.

※ Details about major regional divisions (locations): See our official Website (www.kitech.re.kr).

※ Type of employment: Permanent (full-time)



Eligibility Criteria

Category	Description
General	<ul style="list-style-type: none"> ○ A person whose eligibility is not suspended as per Article 33 (Grounds for Disqualification) of the 「State Public Officials Act」, Article 82 (Employment Restrictions on Public Organization Employees Dismissed for Corruption) of the 「Act on Anti-Corruption and the Establishment and Operation of the Anti-Corruption & Civil Rights Commission」, or other relevant laws. ○ Completed military duty or exempted from it ○ Not disqualified from traveling abroad ○ Meets relevant eligibility and not disqualified from working in the advertised location ○ Do not apply if you do not meet the relevant eligibility requirements. ○ Estimated date of the start of work: July 1, 2018 (May be deferred for up to 30 days (1 month))
Research (Ph.D)	<ul style="list-style-type: none"> ○ Five or more theses/dissertations and/or patent registrations (within seven years of the day of job advertisement) <ul style="list-style-type: none"> - More than one journal where the applicant is the main author (including corresponding author) or participating author required - Academic thesis accepted
Research (Masters)	<ul style="list-style-type: none"> ○ Two or more theses/dissertations and/or patent registrations (within seven years of the day of job advertisement)
Other	<ul style="list-style-type: none"> ○ Extra credit for veterans and people with disabilities upon submission of supporting document(s) pursuant to the relevant law ○ Preference for eligible female candidates



Recruitment Process

Research

서류심사 Document Review 전공면접 Technical Interview 종합면접 General Interview



Administration

NCS기반필기평가... NCS-based Written Assessments (Occupational Basic Competency Certification, Job Performance Assessment)



※ From the NCS-based written assessments, the job performance assessment will be based on a technical assessment of technology policy.



Required Documents

Category	Document
General	<ul style="list-style-type: none"> ○ Certificate of graduation ○ Copy of the proof of veteran status and/or disability (if applicable) ○ Certificate of experience/employment (if applicable) ○ Copy of license (if applicable) ※ All documents submitted are used to identify and determine the applicant's eligibility for job requirements and preference. All applicants will be subject to blind recruitment across the entire selection process.
Research	<ul style="list-style-type: none"> ○ Research outcome <ul style="list-style-type: none"> - Upload proof.



Submission and Inquiries

■ Submission period: From March 15 (THU) until 18:00, March 31 (SAT), 2018

- We do not accept documents by post or in person. Please note that your documents may not be properly submitted on the day of the deadline due to heavy traffic. Please submit your documents before the day of the deadline.

■ Submit online by visiting the Korea Institute of Industrial Technology recruiting page (<http://recruit.kitech.re.kr>).

※ Documents: Please refer to the above required documents to apply.

■ Inquiries: Please direct any job and recruitment inquiries to the Korea Institute of Industrial Technology at recruit@kitech.re.kr or ☎ 041-589-8626.

■ Other

- Interview by video conference is available for overseas applicants (for technical and final interviews).
- Applicants selected in the process will be contacted individually. (Notifications will be made via contact information provided in the application.)

- Career experience to be provided in the application should be confined to full-time positions for which certificate of experience or employment can be issued.
- No applicant may be selected if the Institute cannot find an eligible candidate.
- Original copies of supporting documents (certificates of academic degree, achievements (thesis, dissertation, patent registration, etc.), license, etc.) are to be submitted at the final interview.
- Upon acceptance to the Institute, official career experience will be determined based on the information provided in the application. Any disadvantage caused by the omission of or failure to provide correct information will be borne by the applicant.
- The applicants whose information is confirmed as fraudulent or who are deemed inadequate or ineligible in a security check will be disqualified and their acceptance will be canceled.
- The applicants who have not yet but are scheduled to graduate must submit a relevant certificate supporting their academic qualification within three months of employment. Failure to submit will result in the cancelation of employment.