

# 2014 두산그룹 해외 우수인재 채용

## 두산중공업 R&D 박사

### 1. 모집인원 : 00명

### 2. 지원자격

- '14 또는 '15 박사 학위 취득예정자 및 기학위취득자
- 남자의 경우, 병역 必 또는 면제자

### 3. 지원방법

•두산 채용포털 (<http://career.doosan.com>) 접수

- 채용공고 ▶ 경력채용 ▶ 2014 두산그룹 해외 우수인재 채용 ▶ 두산중공업 R&D 박사 온라인지원서 작성
- 두산중공업 R&D 박사 : 학위 논문 (없을 경우, 연구 논문 대체)

### 4. 전형일정

구 분	일 시	지 역
지원서류 접수	8/27 ~ 9/23	
1st Interview / DCAT	10/17 ~ 10/26	미국 현지
2nd / Final Interview	11/22 ~ 11/23	미국 현지
입사일	7월 중, 2015	

\*DCAT : Doosan Comprehensive Aptitude Test  
※ 전형일정은 미국 Eastern Standard Time 기준

### 5. 담당자

구 분	담당자	연락처
두산중공업 R&D 박사	이현희 대리	+82-2-513-7195 hyunhee.lee@doosan.com





## 6. 세부 모집 분야

두산중공업 R&D 박사

[기계/Mechanical Engineering]

모집분야	세부분야	연구분야	근무지
Thermal & Fluid	Thermal & Fluid	Supersonic/Subsonic Solver Development Design Tool-CFD Analysis Tool Integration & Automation Even Flow Distribution and Flow Control Fluid Induced Vibration Analysis	용인(수지)
	Turbo Machine Flow	Axial Turbine design/flow analysis Multistage Flow Solver Development including wetsteam condensation Turbulence Model Development	
	Multiphase Flow	2 Phase Flow(Phase Change & Mixing)/CFD Analysis & Experiment Particle Generation and Behavior CFD Analysis & Experiment(Fouling, Particle Separation, etc) Free Surface CFD Analysis and Experiment	
	Combustion	Coal Combustion Analysis Solver Development Combustion Models Development (Devolatilization, Char Conversion, Gas Reaction, etc) Coal Burner Combustion CFD Analysis Coal Boiler Combustion Optimization Technology	
	Optimization of Flow Circuit & Heat Transfer Surfaces Arrangement and their Integrity Assessment	Development of Design Tools for Various type Heat Exchangers (Condenser, Feedwater Heater, Moisture Separator Reheater, HRSG, Gas-Gas Heater and etc.) Analysis for Transient Heat Transfer Phenomena Dynamic Simulation to Predict the System Dynamic Behaviors Assessment of Structural Integrity, Reliability and Life Cycle of critical Components	
	Heat Transfer Performance Improvement	Optimum Design of Heat Exchangers Experimental and Numerical Analysis of Heat Exchangers Heat Transfer Enhancement Using Super hydrophobic Nanostructured Surfaces	
Structure / Vibration	Structural Strength	Structure Analysis, Reliability Analysis Seismic and Impact Analysis Optimum Design	용인(수지)
	Life Assessment	Fatigue Analysis and Life Assessment Crack Propagation Analysis, Creep Analysis Fatigue-Creep Interaction Analysis	



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두산중공업 R&D 박사

[기계/Mechanical Engineering]

모집분야	세부분야	연구분야	근무지
Structure / Vibration	Vibration Engineering	Structural Vibration Analysis/Test Technology Rotor Dynamics and Tribology Signal Processing/Diagnostic Monitoring Technology Flow-induced Vibration	용인(수지)
	Noise Engineering	Noise Engineering and Noise Control Structure/Aerodynamic Noise Analysis and Test Technology	
Plant System Engineering	System Performance Analysis	Plant cycle heat balance calculation and optimization technology Heat transfer and Boiler/Turbine performance design Tube inside flow balancing and stability analysis technology	용인(수지)
	System Dynamic Behavior Analysis	Computer aided dynamic simulation technique for power plant Boiler/HRSG dynamic analysis and system design technology Mechanical dynamics (Turbo machinery dynamic analysis, mechatronics) Simulator for power plant	
	Design Tool Development and Automation	Software design & integration, Numerical analysis & algorithm Database design & data processing Graphics & data visualization, Application framework	
	Combustion System Analysis	Combustion model development Emission(CO, NOx, Soot etc.) estimation technology development Radiation heat transfer analysis technology development Combustion CFD analysis technology(Open Source using) Power plant Burner/Boiler combustion CFD analysis	
	New Energy System	Process design and optimization Thermal property, Thermal fluid characteristic research CAPE (Computer Aided Process Engineering) technology Supercritical fluid application technology development	



## 6. 세부 모집 분야

두산중공업 R&D 박사

### [전기전자/Electrical Engineering]

모집분야	세부분야	연구분야	근무지
Control System	Control System Hardware	Structural Vibration Analysis/Test Technology Rotor Dynamics and Tribology Signal Processing/Diagnostic Monitoring Technology Flow-induced Vibration	용인(수지)
	Control System Hardware	Control system software and communication protocol design Device driver design Engineering tool and database design Software verification and validation	
Process Control	Control algorithm	Power & Desalination plant control algorithm development Plant dynamic analysis & optimal tuning technology development	
	Simulation & Optimal control	Power & Desalination plant simulation & proven technology Optimal algorithm design using modern control theory Plant operation & reliability improvement technology	

### [소재/Material Engineering]

모집분야	세부분야	연구분야	근무지
Material Science & Engineering	Structural Material	Alloy Design of Steel(Ferritic, Martensitic, Austenitic) & Development Alloy Design(Simulation) of Non-ferrous Alloy(Ni & Co-based Superalloy, Ti Alloy) & Development High Temperature Material for Steam/ Gas Turbine/ Boiler Application Hot Stamping/Mold Steel & Roll Material Plant & Nuclear Material	창원
	Material Evaluation & Life Assessment	Mechanical Property/ Evaluation of Ferrous & Non- ferrous Alloy Corrosion/ Oxidation/ Chemical Metallurgy/ Diffusion Fatigue, Creep, Creep-Fatigue Evaluation/ Fracture Mechanics Welding Metallurgy/ Simulation of Welding Material Evaluation/ Life Assessment of Ferrous & Non-ferrous Alloy Phase Transformation/ Metallography/Crystallography Physical Metallurgy	



## 6. 세부 모집 분야

두산중공업 R&D 박사

### [소재/Material Engineering]

모집분야	세부분야	연구분야	근무지
Material Science & Engineering	Metal Process Engineering	Metal Forming & Process, Simulation Precision Forging & Open Die/Closed Forging of Metal Investment Casting of Ni- & Co-based Superalloy for GT Blade/ Vane Ingot Making Process(ESR, VAR, VIM) & Simulation	창원
Advanced Process Development	Surface Treatment	New process development of thermal barrier coatings Surface treatment and coating powder materials development Optimized coating technology Metallurgical characteristics and reliability assessment techniques	
	Welding Joining	Repair Welding & Joining technology of Super Heat Resisting Alloys High Alloys Welding Metallurgy, Material Test & Evaluation Joining Material Development of Brazing & Diffusion Process Defect Analysis and Evaluation of Dissimilar Welding	
	Structural Integrity Evaluation	Flaw growth analysis & structural integrity evaluation Evaluation of thermal, mechanical and welding residual stresses using computer aided numerical method Fracture mechanical evaluation of cracked structures, pipes & vessels	

### [화공/Chemical Engineering]

모집분야	세부분야	연구분야	근무지
Water R&D	Desalination	Advanced desalination technologies (Electrochemical Tech., Noble membrane application, Energy consumption optimization, etc.)	용인(수지)
	Wastewater Treatment	Anaerobic digestion technology (Pretreatment, Biogas production, Wastewater treatment technology after dewatering and drying, etc.) Industrial wastewater treatment (Process Engineering, Absorption/ separation technology) Advanced wastewater treatment technology (Electrochemical Tech.)	



## 6. 세부 모집 분야

두산중공업 R&D 박사

### [화공/Chemical Engineering]

모집분야	세부분야	연구분야	근무지
Water R&D	Water system hybridization for Low energy Consumption	Water system integration with renewable energy Water process optimization for low energy consumption New process development applied with electrochemistry, osmotic technology, etc	용인(수지)

### [가스터빈기술/Gas Turbine Technology]

모집분야	세부분야	연구분야	근무지
Gas Turbine Development	System Integration	Turbomachinery Rotor Integration Design Turbomachinery Layout/Platform Design Mechanical design (Pipe, Valves, Pedestal, etc) Turbomachinery Rotordynamics Analysis	창원
	Compressor	Axial Compressor Aerodynamic Design Turbomachinery Aeromechanic Design Turbomachinery Mechanical Design & Safety Evaluation Compress Performance/Aeromechanic Test	
	Combustor	Combustor Mechanical Design Combustor Heat Transfer Analysis / Cooling Design	
	Turbine	Axial Turbine Aero-Thermal Design Heat Transfer Analysis / Cooling Passage Design Cooled Blade/Vane Heat Transfer Test	
Advanced Generator	Evaluation Superconductor Wire	The manufacture process and characterization of HTS coated conductor wire The development of HTS coated conductor wire The design of superconducting coil and current lead The manufacture and performance evaluation for superconducting coil The stability evaluation and design of protection system for superconducting coil	