



VKIST the 3rd recruitment in 2021
APPENDIX 1: Job description – Researchers

General requirements:

English proficiency: IELTS 5.5 or TOEIC 625 or higher.

Exempt from English certificates:

- Have a university or postgraduate diploma in English language;
- Have a university or postgraduate diploma in an English-speaking country;
- Graduated from university, graduate at an English-language training institution in Vietnam.

Specific jobs' requirements:

No.	R&D Field	Quantity	Job description	
			Job description	Job requirements
	Biomedical Engineering Division			
1	Researcher on Biomedical engineering (mid-tier)	1	Carry out research on Biomechanics; Biomaterials Biomedical sensors Medical imaging & Medical devices Biomedical equipment development	<ul style="list-style-type: none">• Majors:<ul style="list-style-type: none">- Medical engineering- Mechanical engineering- Applied Physics- Chemical engineering- Medical physics• Degrees: Bachelor's, Master's or Doctorate degrees

No.	R&D Field	Quantity	Job description	
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				<ul style="list-style-type: none"> • Experience: At least five (05) years of R&D experience in related field after the highest degree, or equivalent experience in technology development for enterprises
Food Processing Technology Division				
2	Researcher on Food Processing Technology (<i>mid-tier</i>)	1	Carry out research on Food product development: Food safety and hygiene Food processing technology	<ul style="list-style-type: none"> • Majors: <ul style="list-style-type: none"> - Food Engineering - Food Science - Biology & Nutrition - Food chemistry & Processing • Degrees: Bachelor's, Master's or Doctorate degrees • Experience: At least five (05) years of R&D experience in related field after the highest degree, or equivalent experience in technology development for enterprises
Advance Materials and Device Division				

No.	R&D Field	Quantity	Job description	
			Job description	Job requirements
3	Researcher on Advance materials and device (<i>mid-tier</i>)	1	Carry out research on - Device physics - Circuit design - Material processing, functional materials - Thin/thick film technology - Advanced material characterization	<ul style="list-style-type: none"> • Majors: <ul style="list-style-type: none"> - Solid state physics - Material sciences - Mechanical engineering • Degrees: Bachelor's, Master's or Doctorate degrees • Experience: At least five (05) years of R&D experience in related field after the highest degree, or equivalent experience in technology development for enterprises
Information Technology Division				
4	Researcher on Information technology (Software) (<i>junior</i>)	3	- Research and develop image processing and analysis algorithms, focusing on face image data and three-dimensional human face models - Deploy analysis and image processing technologies for practical applications	<ul style="list-style-type: none"> • Majors: <ul style="list-style-type: none"> - Information Technology, - Electronics and Telecommunications, - Computer Science or related majors; • Degrees: Bachelor's degree or higher, graduated with good or higher standing;

No.	R&D Field	Quantity	Job description	
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				<ul style="list-style-type: none"> • Experience: <ul style="list-style-type: none"> - Having programming skills in one of the languages Python, Java, C/C++, .Net, Matlab, Javascript, HTML; - Experience in working/researching in image processing, face image analysis, three-dimensional face modeling; • Prioritized: <ul style="list-style-type: none"> - Master's degree or Doctorate in Information Technology or Electronics and Telecommunications; - Experience in developing software programs on Tensorflow, Caffe, Pytorch, OpenCV...
5	Researcher on Information technology (Hardware) (<i>junior</i>)	3	<ul style="list-style-type: none"> - Operate a Hemisphere multi-camera system, collecting face image data - Participate in the Image Processing Project and other applied scientific research projects 	<ul style="list-style-type: none"> • Majors: <ul style="list-style-type: none"> - Physics (Optics) - Mechanical Engineering, - Mechatronics, - Information Technology, - Electronics and Telecommunications,

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			- Research on the multi-camera multi-synchronous photography system and propose system improvements (adding a camera in the back of the neck, controlling the light source, designing the appropriate shooting angle position ...)	- Computer Science or related majors; • Degrees: Bachelor's degree or higher • Experience: Experience in researching and deploying optical-based systems, synchronous camera systems • Prioritized: Experience and knowledge in one of the programming languages Python, Java, C/C++, .Net
Electronics Division				
6	Researcher on Electronics (<i>mid-tier</i>)	2	- Design of power circuits for power electronic systems. - Research and design CPU boards for control and signal processing. - Design Analog and Digital hardware boards for control and signal processing.;	• Majors: related to Electronics • Degrees: Bachelor's degree or higher; • Experience: - Have experience in similar positions at prestigious companies and organizations domestically or overseas; - Have at least 03 years of experience in hardware design;

No.	R&D Field	Quantity	Job description	
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			<ul style="list-style-type: none"> - Design Drive boards that control the power semiconductor IGBT, MOSFET, SIC, etc. - Design embedded system for electric car charging station control, self-propelled robot and electric motor control - Design small power boards; - Make requirements and methods of measuring and testing the boards. 	<ul style="list-style-type: none"> - Have in-depth knowledge about IC/LSI, Functional IC, Memory IC, Complex IC, basic communication protocols, highspeed communication IC, wireless technology; - Experience in embedded system design; - Proficient in circuit design software and simulation design software.
7	Researcher on Electronics (<i>junior</i>)	3	<ul style="list-style-type: none"> - Research and design power electronics system and control algorithm for motor control; - Research and design power electronic system and control algorithm for charging station and renewable energy; - Research to design the controller (CPU) and signal processing circuits in measurement and control; 	<ul style="list-style-type: none"> • Majors: <ul style="list-style-type: none"> - Electrical - Electronics - Control - Automation - Information technology • Degrees: Bachelor's degree or higher, graduated with a good or higher standing. • Experience: not required

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			<ul style="list-style-type: none"> - Research and design electric motors; - Research and develop self-propelled robot 	
8	Researcher on Mechanical design (<i>mid-tier</i>)	1	<ul style="list-style-type: none"> - Design 2D/3D mechanical details and systems; - Design and disassemble machining drawings; - Structural calculation, motion simulation, force analysis, technical documentation; - Analyze, propose detailed design solutions and implement a full design for a product: design solutions, processing technology, division and separation of items or modules constituting the product. - Train the team's staff, evaluate the team's employees monthly, quarterly and annually. - Organize the implementation, divide the work according to the sub-module 	<ul style="list-style-type: none"> • Majors: <ul style="list-style-type: none"> - Mechanical Engineering, - Mechatronics or related majors; • Degrees: Bachelor's degree or higher • Experience: <ul style="list-style-type: none"> - Have at least 05 years of experience in directly engaged in product manufacturing or in product design team; - Be able to research, complete mechanical design for a product; - Proficient in the technology of processing and manufacturing mechanical parts; - Understand drawing standards according to ISO, JIS; - Have knowledge and experience in: Materials, manufacturing

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			<p>components, separate details for a group of engineers with design experience;</p> <ul style="list-style-type: none"> - Make suggestions on training and improvement of the work of the team; - Be responsible to the Head of Department for the work of the group; 	<p>tolerances, machine details, machine principles, material strength;</p> <ul style="list-style-type: none"> - Proficient in using 3D and 2D CAD software specializing in mechanical design, simulation software; • Prioritized: - Experience in managing teams of 5 or more people - Able to read and understand technical documents and communicate in Japanese or English.
	Biotechnology Division			
9	Researcher on Biotechnology (<i>junior</i>)	2	<p>Research fields:</p> <ul style="list-style-type: none"> • Pharmacology: study on pharmacological and toxicological effects of herbs and herbal products by in vivo models. • Food science, Pharmaceutics and Pharmaceutical technology: - Develop herbal products and manufacturing processes. 	<ul style="list-style-type: none"> • Majors: - Pharmacology. - Food Science - Herbal Analysis and Standardization - Pharmaceutical Industry and Pharmaceutics • Degrees: Bachelor's, master's or doctorate degree

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			- Establish quality standards for ingredients and finished products of herbal origin.	• Prioritized: Have experience in related field
IT-BT Convergence Technology Division				
10	Researcher on Biotechnology (Mid-tier)	01	<ul style="list-style-type: none"> - Work with living cells or using molecules derived from them for applications-oriented toward human well-being - Validate potential biomarkers as diagnosis, therapeutic candidates - Analyze organic compounds in water, working air; organic compounds and their metabolism 	<ul style="list-style-type: none"> • Majors: Biochemistry (cell biology, enzyme and protein technology, immunology) • Degrees: Doctorate degree • Experience: <ul style="list-style-type: none"> - More than five (05) years of R&D experience in the biochemistry field - Have experience as a project leader • Prioritized: Industrial experience
11	Researcher on Biosensor technology (Mid-tier)	01	Research and development of new sensor platforms for the detection and diagnosis of diseases	<ul style="list-style-type: none"> • Majors: Biosensor technology • Degrees: Doctorate degree • Experience: <ul style="list-style-type: none"> - More than five (05) years of R&D experience in the biochemistry field

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				<ul style="list-style-type: none"> - Have experience as a project leader • Prioritized: Industrial experience
12	Researcher on Biotechnology (<i>junior</i>)	01	<ul style="list-style-type: none"> - Work with living cells or using molecules derived from them for applications-oriented toward human well-being - Validate potential biomarkers as diagnosis, therapeutic candidates - Analyze organic compounds in water, working air; organic compounds and their metabolism 	<ul style="list-style-type: none"> • Majors: biochemistry (cell biology, enzyme and protein technology, immunology) • Degrees: Bachelor's degree or higher
13	Researcher on Electronic and Telecommunication (<i>junior</i>)	01	<ul style="list-style-type: none"> - Design the controller and signal processing circuits. - Research the algorithm and programming microcontroller for signal processing - Program data acquisition and analysis using C#, python and so on 	<ul style="list-style-type: none"> • Majors: <ul style="list-style-type: none"> - Electrical - Electronics • Degrees: Bachelor's degree or higher



No.	R&D Field	Quantity	Job description	
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14	Researcher on Biomedical Engineering (<i>junior</i>)	01	<ul style="list-style-type: none">- Design and fabrication of biomedical sensors, devices, and biological measurement systems- Research and development of new devices and equipment for improving human health	<ul style="list-style-type: none">• Majors:<ul style="list-style-type: none">- Biomedical engineering- Diagnostic imaging• Degrees: Bachelor degree or higher
15	Researcher on Advanced Materials Sciences (<i>junior</i>)	03	<ul style="list-style-type: none">- Fabrication of magnetic materials and nanotechnology- Having capability to build the process for material processing	<ul style="list-style-type: none">• Majors:<ul style="list-style-type: none">- Material Science and Nano technology- Chemistry- Physics• Degrees: Bachelor degree or higher