KAIST [기계공학과 Active Materials and Dynamic Systems Lab] 연수연구원 모집 공고

1. 모집 분야 및 직무

직 종	모집분야	모집구분	모집인원	직 무
연구직	연수연구원	경력무관	2명	- 이온성 소프트 액추에이터용 활물질 개발 - 에너지저장장치 전극소재 및 디바이스 개발 - 에너지 하베스터 소재 및 디바이스 개발 - 금속유기골격체 (MOF) 합성과 응용 기술 개발
총 원			**2명**	

※ 적격자 부재 시 선발인원이 없을 수 있음
※ 채용과정에서 변동 발생 시 응시자에게 별도 통보함

2. 응시자격 및 우대사항

모집분야	응시자격	우대사항
공 통	◦ **국가공무원법 제 33 조의 결격사유가 없는 자**	◦ **국가유공자 등 예우 및 지원에 관한 법률 등에 따른 취업지원 대상자(가점 부여)** ◦ 지역인재, 장애인, 청년인턴 수료자, 직무 관련 전문자격증 소지자 우대
연수연구원	◦ 기계공학, 재료공학, 화학 및 생명공학 해당 분야에서 박사학위를 받은 자 ◦ 임용예정일(2021 년 3 월 1 일)을 기준으로 박사학위 취득자	

3. 응시방법 및 기간

응시방법	지정 양식 작성하여 우편 또는 이메일로 제출 ◦ 이메일 : dlawldud@kaist.ac.kr ◦ 우 편 : 대전시 유성구 대학로 291 기계공학과 N27 7101 호 임지영 담당자 앞
응시기간	2020 년 12 월 15 일부터 2020 년 12 월 31 일 18시까지 도착(수신) 분에 한함

4. 채용 절차

전형 구분	세부내용	일 정	선발인원
서류전형	응시원서 및 자기소개서 서면 평가	2021 년 1 월 11 일 (예정)	3 배수 이내 선발
면접전형	면접	2021 년 1 월 15 일 (예정)	1배수 이내 선발
임 용	임용서류 작성 및 제출 등	2021 년 3 월 1 일 (예정)	

※ 기관 내부 사정에 따라 절차 및 일정이 일부 변동될 수 있으며, 변동 발생 시 응시자에게 별도 통보

5. 근로계약 정보

구 분	세부내용
고용형태	기간제
부서	기계기술연구소
근무형태	■ 전일제 (주 5 일, 09 시–18 시) □ 시간제 (주 0 일, 00 시간)
계약기간	2022 년 2 월 28 일 까지 (참여 과제 또는 사업 조기종료 시 계약기간이 단축될 수 있음)
급 여	추후 협의

※ 기타 사항은 관련 규정 및 법령에 따름

6. 블라인드 채용 안내 (아래 금지 사항 기재시 **감점** 처리될 수 있음)

- 입사지원서 상 사진등록란, 학교명, 평점평균, 생년월일 기재란 없음.
- 학교명이 드러나는 이메일 주소 등 편견을 유발할 수 있는 사항 기재 금지
- 지원서(자기소개서 포함) 작성 시 개인 인적사항(출신학교, 가족관계 등) 편견을 유발할 수 있는 사항 일체 기재 금지

7. 기타 안내

- 응시서류(원본) 반환청구기간: 접수마감일로부터 14일
- 채용비리로 인한 피해자 구제 연락처: KAIST 인사팀(insa@kaist.ac.kr)
- 친인척 합격자 공개: 지원자의 4촌 이내 친족(배우자, 4촌 이내의 혈족과 인척)이 카이스트 재직 임직원인 경우 친인척 채용인원 수를 홈페이지에 공개함(최종합격자는 임용서류에 친인척 내용 기재)
- 비위면직자 등은 공공기관에의 취업이 제한됨에 따라 모든 지원자는 '비위면직자 등 취업제한 관련 체크리스트(소정양식)'에 해당되는 문항을 체크하여 제출해야 함(근거: 부패방지 및 국민권익위원회의 설치와 운영에 관한 법률 제82조).
- KAIST 기간제근로자(별정직) 퇴직 후 재임용 제한 규정 관련하여, KAIST 근무 경력이 있는 경우 응시원서(경험 혹은 경력사항)에 해당 내용을 반드시 기재해야 함. 근무 경력이 있음에도 불구하고 미기재 또는 거짓기재 시 채용이 취소될 수 있음.
- 첨부: 직무기술서, 응시원서 및 자기소개서, 비위면직자 등 취업제한 관련 체크리스트

8. 관련 문의: 기계공학과 임지영 042-350-1560 / dlawldud@kaist.ac.kr

Vacancy Announcement for research Position from KAIST [Mechanical Engineering Active Materials and Dynamic Systems Lab]

1. Job Type & Responsibility

Job type	Position	Career level	No. of persons recruited	Responsibility
research position	postdoctoral researcher	irrelevant	2persons	- Research of active materials for IPMC - Research of electrode materials and devices for energy storage - Research of materials and devices for energy harvester - Research of metal organic framework for energy storage and harvesting
Total number of persons to be recruited			**2persons**	

※ In the absence of suitable candidates, nobody can be selected.
※ Applicants will be notified of any changes occurring during the recruitment process individually.

2. Eligibility and Preference

Position	Eligibility	Preference
Common	◦ **Those who do not have reasons for disqualification under Article 33 of the State Public Officials Act***	◦ **Those who are eligible for employment support under the Act on the Honorable Treatment and Support of Persons, etc. of Distinguished Services to the State (additional points to be added)** ◦ Local talent, disabled person, those who have completed the youth internship program or job-related professional certificate holders are preferred
postdoctoral researcher	◦ Ph.D degree from Material Science, Chemical and Biological engineering, Mechanical Engineering ◦ Ph.D. degree holders as of the appointment date (March 1, 2021)	

*State Public Officials Act Article 33 (Grounds for Disqualification)

None of the following persons shall be appointed as a public official:

1. An incompetent person under the adult guardianship or under the limited guardianship;
2. A person who was declared bankrupt and has not yet been reinstated;
3. A person in whose case five years have not passed since his/her imprisonment without labor or a heavier punishment as declared by a court was completely executed or exempted;
4. A person who was sentenced by the suspension of the execution of imprisonment without labor or a heavier punishment and for whom two years have not passed since the period of suspension expired;
5. A person who is under a suspended sentence of imprisonment without labor or a heavier punishment as declared by a court;
6. A person who is disqualified, or whose qualification is suspended, pursuant to a judgment of the court or other Acts;

6-2. A person who committed a crime prescribed in Article 355 or 356 of the Criminal Act with regard to his/her duty during the period of service as public official and was sentenced to a fine of at least three million won and in whose case two years have not yet passed since the ruling on such sentence became final;

6-3. A person who committed a crime prescribed in Article 303 of the Criminal Act or Article 10 of the Act on Special Cases concerning the Punishment, etc. of Sexual Crimes and was sentenced to a fine of at least three million won and in whose case two years have not yet passed since the ruling on such sentence became final;

7. A person who was removed from office by a disciplinary action, and for whom five years have not passed thereafter;
8. A person who was dismissed by a disciplinary action, and for whom three years have not passed thereafter.

3. Application Method & Period

How to apply	Fill out the prescribed application form and submit it via e-mail or post. ◦ E-mail : dlawldud@kaist.ac.kr ◦ Postal address : Mechanical Engineering, 291 Daehak-ro, Yuseong-gu, Daejeon
Application period	Only applications that arrived between 15, 12, 2020 and 31, 12, 2020, 18:00 are 3valid.

4. Employment Procedure

Type of screening	Description	Schedule	No. of candidates to be selected
Document screening	Screening of the Application Form and the Self Introduction	11, 1, 2021 (scheduled)	Within 3 times the number of persons to be recruited
Interview	Interview	15, 1, 2021 (scheduled)	1 time the number of person to be recruited
Appointment	Completion/submission of documents required for appointment	1, 3, 2021 (scheduled)	

※ Procedure and schedule are subject to change depending on internal circumstances of the university; applicants will be notified of any changes individually.

5. Employment Contract Information

Classification	Details
Employment type	Fixed-term
Department	Mechanical Technology Research Institute
Work pattern	■ Full-time (5 days a week, 09:00 to 18:00) □ Part-time (○ days, ○○ hours per week)
Contract terms	By 28, 2, 2022 (Contract term may be shortened in the event of early termination of the relevant project or business.)
Salary	Further consultations

※ Other matters shall follow the relevant regulations and laws.

6. Guidelines on 'Blind Hiring'

(Entering the prohibited data mentioned below may lead to **deduction of points.**)

- The Application Form does not have sections requesting photo, the name of school applicants attended, GPA and date of birth.
- Entry of information that could lead to bias such as the e-mail address of the school applicants attended is prohibited.
- Inclusion of personal information such as the name of schools applicants attended and family relationship, etc. in the Application Form (including The Self Introduction) is prohibited because it may lead to bias.

7. Miscellaneous Matters

- Period for request for return of application documents (original): 14 days from the application deadline
- Contact for victim of unfair employment : KAIST Human Resources Management Team (insa@kaist.ac.kr)
- Disclosure of successful applicants of relatives of KAIST employees : Disclosure of the number of successful applicants who are relatives within 4th degree of relationship (spouse, first cousins, any blood relatives) of KAIST executive or employee on the university website (Only for the successful applicants are required to state whether they are relatives of KAIST executive or employee in the documents for appointment.)
- In relation to restrictions on public institutions' employment of public officials who have been dismissed for corruption, all applicants should check applicable items of the Checklist for Restrictions on Employment of Public Officials Dismissed for Corruption (prescribed form) and submit it in accordance with the Restrictions on Employment of Public Officials Dismissed for Corruption.
- Required documents : Job Description Form, Application Form and the Self Introduction, and Checklist for Restriction on Employment of Public Officials Dismissed for Corruption

8. Inquiry: Mechanical Engineering, Jiyoung Lim, 042-350-1560 / E-mail dlawldud@kaist.ac.kr

한국과학기술원 NCS 기반 직무기술서

<table>
<tr><td rowspan="2">채용분야</td><td rowspan="2">연구직</td><td rowspan="2">분류체계</td><td>대분류</td><td>중분류</td><td>소분류</td><td>세분류</td></tr>
<tr><td>16.재료
15.기계</td><td>02.요업재료
01.기계설계</td><td>01.파인세라믹제조
02.기계설계</td><td>01.전기전자재료제조
03.구조해석설계</td></tr>
<tr><td>설립이념</td><td colspan="6">○ 한국과학기술원법
- 깊이 있는 이론과 실제적인 응용력으로 국가 산업 발전에 기여할 고급 과학기술 인재 양성
- 국가 정책으로 추진하는 중장기 연구 개발과 국가 과학기술 저력 배양을 위한 기초응용 연구 수행
- 각 분야 연구 기관 및 산업계와 연계한 연구 지원</td></tr>
<tr><td>KAIST
주요사업</td><td colspan="6">○ Education: 창의적 인재 육성, 융합교육 강화, 글로벌 과학기술 리더 양성, 교육인적 역량 강화
○ Research: 우수 연구 과제 발굴 지원, 특성화된 연구인력 확보, 창업문화 선진화, 고부가가치 지적재산권 창출 및 기술이전/사업화 촉진, 선도적 대형과제 발굴
○ Cooperation: 국제적 수준의 근무 환경 조성, 글로벌 리더십을 위한 다양한 협력
○ Administration: 외국인 학생·교원 대상 행정·기술 서비스 제공(Bi-lingual Campus 운영 지원)</td></tr>
<tr><td>성장 동력</td><td colspan="6">○ Vision: 글로벌 가치창출 세계 선도대학(Global Value-Creative World-Leading University)
- 지식창조형 글로벌 융합인재 양성 허브
(Hub for Fostering Knowledge Creation and Global Convergence Talents)
- 세계적 신지식 신기술 창출 진원지(Center for the World-Leading New Knowledge and Technology)
○ 5대 혁신: 교육혁신, 연구혁신, 기술사업화혁신, 국제화혁신, 미래전략혁신
○ 3C Leadership: Change(변화), Communication(소통), Care(돌봄)</td></tr>
<tr><td>담당 업무</td><td colspan="6">○ 이온성 소프트 액추에이터용 활물질 개발
○ 에너지저장장치용 전극소재 및 폴리머 전해질 개발
○ 마찰전기 발전기용 (TENGs) 소재 개발 및 디바이스 제작
○ 금속유기골격체 (MOF) 합성 및 응용 기술 개발</td></tr>
<tr><td>직무수행
내용</td><td colspan="6">○ 이온성 소프트 액추에이터용 활물질 합성 및 전기화학 특성 분석
○ 에너지저장장치용 전극소재 합성 및 전기화학 분석
○ 에너지하베스팅 디바이스 설계 및 물리적/화학적 분석
○ 금속유기골격체 합성 및 전기화학 특성 분석</td></tr>
<tr><td>필요지식</td><td colspan="6">○ 재료화학, 전기화학공학, 화학공학
○ 전자기학, 동역학, 진동학, 재료역학</td></tr>
<tr><td>필요기술</td><td colspan="6">○ 소재 설계 및 합성 기술
○ XRD, XPS, SEM, TEM 등 물질 특성 분석 장비 사용 및 이를 이용한 분석 능력
○ 전기화학 분석 및 특성 해석 기술
○ 신호처리, 수치해석, 기구설계</td></tr>
<tr><td>직무수행태도</td><td colspan="6">○ 창의적이고 도전적인 연구자세, 객관적인 판단력, 논리적 분석 태도
○ 새로운 기술 지식을 탐구하려는 자세, 적극적인 업무 태도, 긍정적인 업무 태도
○ 맡은 일을 끝까지 완수하는 책임감 있는 태도
○ 조직의 일원으로 구성원과 융화하며 상호 협력하려는 자세
○ 원칙을 준수하고 청렴하며 공정한 업무 처리 태도</td></tr>
<tr><td>직업기초능력</td><td colspan="6">○ 의사소통능력, 수리능력, 문제해결능력, 자기개발능력, 대인관계능력
○ 정보능력, 기술능력, 조직이해능력, 직업윤리</td></tr>
<tr><td>참고사이트</td><td colspan="6">www.ncs.go.kr, www.kaist.ac.kr</td></tr>
</table>

NCS-Based KAIST Job Description – Research position

<table>
<tr><td rowspan="3">Recruitment area</td><td rowspan="3">Research position</td><td rowspan="3">Classification system</td><td>Parent category</td><td>Sub-category</td><td>Sub sub-category</td><td>Sub sub-sub-category</td></tr>
<tr><td>16. Material</td><td>02. Ceramic materials</td><td>01. Fine ceramic manufacturing</td><td>01. Electrical and electronic material manufacturing</td></tr>
<tr><td>15. Mechanical</td><td>01. Mechanical design</td><td>01. Mechanical design</td><td>03. Structural Analysis Design</td></tr>
<tr><td>Mission</td><td colspan="6">○ Korea Advanced Institute of Science and Technology (KAIST) Act
- Educating outstanding talent proficient in theory and practice as required in the fields of science and technology for industrial development
- Carrying out the nation's mid- and long-term R&D, and basic and applied research to foster national competitiveness in science and technology
- Providing comprehensive support to research conducted by other research centers and industries</td></tr>
<tr><td>KAIST's major businesses</td><td colspan="6">○ Education: Fostering creative talent, strengthening convergence education, nurturing global leaders in science and technology, strengthening human resource capacity
○ Research: Support for development of outstanding research projects, acquisition of specialized researchers, advancement of entrepreneurial culture, creation of high value-added intellectual property rights, promotion of technology transfer/commercialization, and development of large-scale, leading projects
○ Cooperation: Creating a working environment to be at par with global standards, and multifaceted cooperation for global leadership
○ Administration: Provision of administrative and technical service for international students/ faculty (Support for operation of a "Korean-English bilingual campus")</td></tr>
<tr><td>Growth engines</td><td colspan="6">○ Vision: Global Value-Creative World-Leading University
- Hub for Fostering Knowledge Creation and Global Convergence Talents
- Center for the World-Leading New Knowledge and Technology)
○ Five innovation initiatives: Innovation in education, research, technology commercialization, globalization and future strategies
○ 3C Leadership: Change, Communication, Care</td></tr>
<tr><td>Duties and responsibilities</td><td colspan="6">○ Development of the active materials for IPMC actuators
○ Development of electrode materials and polymer electrolyte for energy storage devices
○ Development of triboelectric materials and triboelectric nanogenerators
○ Development of the metal-organic framework for energy storage and harvesting application</td></tr>
<tr><td>Job performance details</td><td colspan="6">○ Synthesis of the active materials for ionic soft actuator and analysis of electrochemical properties
○ Synthesis and electrochemical measurement of electrode materials for energy storage devices
○ Structural design and physical/chemical analysis of triboelectric nanogenerator
○ Synthesis and electrochemical measurement of the metal-organic framework</td></tr>
</table>

Knowledge required	○ Material Science, Electrochemical Engineering, Chemical Engineering ○ Electromagnetism, Dynamics, Mechanical vibration, Mechanics of materials
Required skills	○ Ability to synthesize and design for the active materials ○ Material characterizations with XRD, XPS, SEM, TEM ○ Advanced electrochemical analysis ○ Signal processing, Numerical analysis, Mechanical design
Attitude while performing duties	○ Creative and challenged, Logical ○ Positive ○ High responsibility ○ High mutual cooperation
Basic skills	○ Communication, Flexibility, Work ethics, Interpersonal skill
Reference site	www.ncs.go.kr, www.kaist.ac.kr