

원자력 글로벌 인턴십 선발공고

한국원자력협력재단은 우리나라의 원자력 차세대 전문인력의 글로벌 역량강화를 위해 2018년도 「원자력 글로벌 인턴십」 참가대상자를 아래와 같이 선발하고자 합니다. 원자력 분야의 진출을 희망하는 열정적인 분들의 많은 응모 바랍니다.

2018년 2월 26일

한국원자력협력재단 사무총장

1. 선발개요

| 구 분 | 파견국가 (지역) | 파견기관 | 파견기간 | 선발인원 | 비 고 |
|------|----------------|------------------------|--------------------------|------|-------------|
| 국제기구 | 오스트리아 (비엔나) | 국제원자력기구 (IAEA) | 7월 초 ~ 12월 말 (6개월 내외) | ○ | 졸업자 지원가능 |
| | 프랑스 (파리) | 경제개발협력기구 (OECD/NEA) | | ○ | |
| | 영국 (런던) | 세계원자력대학교 (WNU) | | ○ | |
| 계 | 3개국 | - | | ○ | |

※ 파견기관 및 기간은 내부 사정에 따라 일부 조정될 수 있음

※ 원자력 글로벌 인턴 주요업무

- 파견기관 국제공동 연구개발 지원
- 국제기구 협력사업 운영 지원
- 정부 주관 국제행사 현장 지원

2. 선발인원 및 응시자격

가. 선발인원 : 0명

나. 선발대상

- 원자력에 관심있는 대한민국 국적의 4년제 이공계 대학(원)생
- 세부요건

- 원자력 관련 국제기구 인턴 및 취업에 관심있는 이공계 전공 대학 4학기 (2학년) 이상 수료자, 대학원 석사과정 재학생
- * 단, IAEA 경우 6학기(3학년) 이상 수료자, 졸업 후 1년 이내의 자
- 학교성적, 어학 등 일정능력 보유자로서 인턴 수행 후 국내외 취업이 가능한자

| 학점 (GPA) | 영어 - 공인영어성적 보유자 |
|----------------------------|---|
| 평점 B 이상 (4.5 기준 3.0 이상) | <ul style="list-style-type: none"> - 비즈니스 커뮤니케이션이 가능한 영어능력 보유자 - 아래 영어시험성적 요건 중 1개 이상을 만족하는 자 TOEIC 800점, TOEFL(ibt) 80점, TEPS 700점, TOEIC Speaking Level 7, OPIC IH (2016년 3월 이후 취득) - 영어요건 면제대상(관련 증빙자료 첨부 필수) <ul style="list-style-type: none"> ① 영어권 국가에서 3년 이상 지속적 거주한 자(고등학교 이후) ② 영어권 국가 내 고등학교 졸업자 또는 학사학위 이상 취득자 ③ 학사학위(이상)을 수여 받은 학교의 Medium of Instruction이 영어인 경우 |

- 최근 3년 내('15 ~'17년) 국비지원사업 미참가자
- * 정부지원일자리 사이트(<http://www.work.go.kr/ilmoa/main.do>) 가입 후 국비지원사업 수혜여부 확인 (마이페이지에서 조회 가능)
- 희망지역 비자취득 또는 해외여행 결격사유가 없는자
- 남자는 군필자 또는 면제자

다. 우대조건

- 원자력 전공자 및 대학원생 우대
- 저소득층 및 취업 취약계층은 우대 선발하며, 장애인, 북한이탈주민, 지방 대학(원) 재학생 및 졸업자는 가산점 부여
- ※ '저소득층 및 취업취약계층에 대한 지원기준' 참조

3. 인턴 선발자 지원내용

- 가. 인턴십 파견을 위한 항공비, 체재비 등 필요비용 지원
- 나. 해외체류를 위한 안전보험 가입
- 다. 현지 성과 극대화를 위한 사전 교육 기회 제공
- 라. 인턴십 수료증 제공

4. 선발방법

- 가. 1차시험 : 서류전형 (온라인 지원)

- 지원 자격 및 인턴십 수행계획서 심사
- * 1차 시험 합격자에 한하여 2차 시험에 응시할 수 있음

나. 2차시험 : 인·적성검사

- 해외 파견에 적합한 인성 및 직무적성 여부 검사
- 1차 시험 합격자에 한해 명시된 기간 내 온라인으로 개별 응시

다. 3차시험 : 면접시험

- 영어 PT발표 면접, 국문 인성면접으로 구분하여 심사
- 응시자의 인성, 자질 및 전문성 등 내부기준에 따라 평가

라. 4차시험 : 해외 파견기관 적합심사

- 3차시험 합격자 중 파견기관과의 화상/전화 인터뷰 실시 및 최종평가

5. 원서접수 및 시험일정

가. 선발일정

- '18. 2. 26(월) : 선발공고
- '18. 3. 18(일) : 접수마감 (당일 24:00 까지)
- '18. 3. 22(목) : 서류심사 합격자 발표
- '18. 3. 26(월) : 서류심사 합격자 대상 온라인 인·적성검사 완료 (24:00)
- '18. 4. 4(수) : 국문 심층 면접 및 영어PT 발표심사
- '18. 4. 6(금) : 면접 합격자 발표
- '18. 4. 9(월)~ 4.20(금) : 해외 파견기관 적합심사
- '18. 4. 25(수) : 최종 선발자 발표

나. 제출서류

- 지원신청서, 자기소개서, 해외인턴십 수행계획서 각 1부 (온라인 지원)
- 재학증명서, 졸업증명서 또는 휴학증명서, 국영문 성적증명서 1부
- 공인영어성적표 (TOEFL(IBT), TOEIC, TEPS) 사본 첨부 (2016. 3월 이후 취득)
- 개인정보 수집·이용·제공 동의서 작성 및 제출
- 국외파견에 따른 보호자 동의서 및 서약서
- 우대 선발자의 경우 증빙서류 1부 (붙임 참조)

다. 신청방법

- 제출서류: 2018년 원자력 글로벌 인턴십 홈페이지 온라인 지원(www.neti.or.kr)
- 접수마감: 2018년 3월 18일(일) 24:00까지 신청분에 한함
- 문의사항: 042-867-0187, internship@konicof.or.kr

※ 상기 일정은 사정에 따라 일부 조정될 수 있으며, 합격자 발표는 한국 원자력협력재단 홈페이지와 원자력교육훈련정보포털(NETI)에 게재

6. 응시자 주의사항

- 가. 응시 희망자는 응시자격요건이 적합한지를 먼저 판단하여 출원하시기 바랍니다.
- 나. 응시원서 기재내용이 사실과 다르거나 미비한 서류는 접수하지 아니하며, 접수된 서류는 일체 반환하지 않습니다.
- 다. 응시원서의 기재착오 또는 누락 등으로 인한 불이익은 응시자의 책임입니다.
- 라. 제출된 서류가 허위사실인 경우 합격 또는 임용이 취소될 수 있습니다.
- 마. 본 시험 시행계획에 변경이 있을 경우 해당시험 시행 일주일 전에 우리재단 홈페이지에 공고합니다.
- 바. 응시원서 접수결과 응시자가 선발예정인원과 같거나 없을 경우에는 1회 이상 재공고 후 시행 예정입니다.
- 사. 자세한 사항은 한국원자력협력재단 교육운영팀(042-867-0187)으로 문의 바랍니다.



한국원자력협력재단
KOREA NUCLEAR INTERNATIONAL COOPERATION FOUNDATION

□ IAEA : 총 19개 (세부내용 첨부문서 참조)

| No. | Division | Department | Job Description |
|-----|----------|---------------------------|--|
| 1 | NAPC | Nuclear Data Section | <p>Nuclear model code simulation verification, nuclear data validation</p> <ul style="list-style-type: none"> - Constrain, optimise a set of default model parameters in TALYS based on the feedback of integral experimental information contained. All existing targets, n-induced. |
| 2 | NAPC | Nuclear Data Section | <p>Nuclear model code simulation verification, nuclear model parameters optimization</p> <ul style="list-style-type: none"> - Constrain, optimise a set of default model parameters in TALYS based on the feedback of the differential experimental information contained in the EXFOR database. All existing targets, a, p and g induced |
| 3 | NAPC | Nuclear Data Section | <p>Web interfaces: exploring and developing the nuclear data landscape</p> <ul style="list-style-type: none"> - Prototype and propose new modern web interfaces able to tab in, verify and validate the diverse nuclear data forms available during the evaluation process. Deploy to entire libraries for access to a broader community. |
| 4 | NAPC | Nuclear Data Service Unit | <p>Decay data: beta spectra simulation</p> <ul style="list-style-type: none"> - Deploy the BetaShape code to systematically simulate beta emission properties of all the radionuclides for which enough information is available in the ENSDF database. - Compare systematically the BetaShape code results with data available in ENSDF and other decay libraries. - Produce a complete set of beta/anti-neutrino spectra ready to be imbedded into an ENDF-6 formatted decay data library. |
| 5 | NAPC | Nuclear Data Service Unit | <p>Development and improvement of the experimental nuclear reaction data library (EXFOR)</p> <ul style="list-style-type: none"> - Compilation of bibliographic, experimental and numerical information in the literature - Review of bibliographic, experimental and numerical information in EXFOR entries. |
| 6 | NAPC | Physics Section | <p>Development of e-learning tools for nuclear analytical techniques</p> <ul style="list-style-type: none"> - Assist in the organization and implementation of the Training Workshop on the IAEA Neutron Activation Analysis E-learning Course - Update the NAA course materials based on the feedback obtained in the TW and from users of the course |

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|----|--------|---------------------------------|---|
| | | | <ul style="list-style-type: none"> – Assist in the implementation of the e-learning course on NI in CLP4NET |
| 7 | NAHU | Division of Human Health | <p>Human Health Intern</p> <ul style="list-style-type: none"> – Support writing paper focused on global health, cancer and IAEA activities – Assemble paper about ‘radiation medicine needs by region – Draft readiness assessment to apply to Member States’ requests for IAEA assistance – Support research subset analyses |
| 8 | NS-IEC | Member States Preparedness Unit | <p>IEC Member States Preparedness Intern</p> <ul style="list-style-type: none"> • To support IEC staff in the maintenance, development and improvement of EPRIMS platform and also in vetting the quality of the information included in the platform. EPRIMS is a web based knowledge sharing platform that allow Member States (MS) to share relevant information on Emergency Preparedness and Response (EPR) arrangements in MS, which provides for: <ul style="list-style-type: none"> – Supporting cooperation in EPR among MS – Improving harmonization of EPR arrangements at the national, regional and international level – Facilitating self-assessment of MS against IAEA international Safety Standards in EPR • Development of training materials and implementation of training activities to support MS in the use of EPRIMS • Defining structure and procedures for developing and maintaining a data base of experts in EPR to be recruited for IAEA missions, training events and consultancy meeting on EPR topics |
| 9 | NS-IEC | IES Operations | <p>Support for the development and implementation of EPR training</p> <ul style="list-style-type: none"> – Assists in the development and implementation of procedures and tools used within the IAEA’s IES and shared with counterparts in Member States. – Assists in the implementation of IES training program, including review of training material and procedures for the conduct of assessment and prognosis during a nuclear or radiological emergency and assists lecturing during training sessions for Member States on how to use the online assessment tools. – Provides support to the IES and supports associated training and exercises. – Provides support for the organization and conduct of workshops, meetings and other IEC activities. |
| 10 | NSNI | Safety Assessment Section | <p>Safety Assessment Intern</p> <ul style="list-style-type: none"> – Prepare and maintain requested inputs in demanded electronical format – Support in collating and preparing technical material for use in meetings for safety standards and related technical documents development – Support preparation and organisation of technical and consultants meetings, Safety Assessment and Design Safety workshops |

| | | | |
|----|------|--|---|
| | | | <ul style="list-style-type: none"> – Assist in the development of safety education and training materials, of outreach material, such as website content, presentations, brochures |
| 11 | NSRW | Radiation Protection of Patients | <p>Radiation Protection in Medical Uses of Ionizing Radiation</p> <ul style="list-style-type: none"> – New tools for improving knowledge and awareness available to Member States – New e-learning material available – Scientific papers based on results of surveys drafted and submitted for publication |
| 12 | NSRW | Transport Safety Unit | <p>Transport Safety</p> <ul style="list-style-type: none"> – Assist with e-learning modalities for IAEA's E&T activities in transport safety; – Revise and update content for training material, both for traditional and eLearning platforms; – Develop and/or assemble learning tools (such as video/audio clips on various subjects) that can be implemented for traditional training and on eLearning platforms; – Upload revised and updated training material to the IAEA's e-learning platform; – Upgrade and improve the training material based on the feedback of participants; – Assist with the integration of eLearning modules into other online training programs. |
| 13 | NENP | Water Cooled Reactor Technology Development Team | <p>Scientific Novelties in Phenomenology of Severe Accidents in Water-Cooled Reactors</p> <ul style="list-style-type: none"> – Assist in preparation of lecture materials and assist in collecting course materials from the lecturers selected for this course [July - October] – Organize the share point where the lecture materials will be uploaded and assist in uploading and maintaining the share point throughout the course preparation time and the course execution in Italy [August - October] – Attend the course in Italy [October 22 - 26, 2018] ← This is of great importance to Intern and unique opportunity to gain a comprehensive understanding about the science of severe accidents, learn of how such courses are developed, organized and delivered, and build new network with international experts and peers from various countries. – Assist in finalizing the course booklet for printing as the IAEA Training Course Series Report [October - December] – Assist in uploading the content of the course information to the web site [November] |
| 14 | NENP | Nuclear Power Engineering Section | <p>Internship Nuclear Power Engineering Section</p> <ul style="list-style-type: none"> – Collect information from Member States for use in developing a draft IAEA Technical Document on integrated risk assessment and management for NPPs focusing on following topics; - Risk framework including all relevant types of risk; |

| | | | |
|----|-------|--|--|
| | | | <ul style="list-style-type: none"> - Risk metrics for monitoring the effectiveness of risk management - Development of distribution for total project costs and project schedule - Risk impact and mitigation efforts |
| 15 | NEFW | Spent Fuel Management Team | <p>Spent Fuel Management Project Assistant</p> <p>To provide assistance in:</p> <ul style="list-style-type: none"> - Planning/preparing/organizing meetings, writing meeting reports; - Compiling technical information on specific topics related to spent fuel management; - Reviewing technical information (e-Learning materials); - Editing technical documents. <p>Work will be on spent fuel management issues, focusing on the following areas:</p> <ul style="list-style-type: none"> - Partitioning Processes for Advanced Fuel Cycles; - Performance of Spent Fuel and Related Storage Systems. |
| 16 | NEFW | Nuclear Fuel Engineering Team | <p>Nuclear Fuel Cycle Engineering Project Assistant</p> <ul style="list-style-type: none"> - Verification of the data already incorporated in NFCIS and to be incorporated after receiving the questionnaires sent to Member States / Information checked - Verification of NFCIS in WINDOWS 10 (to be migrated from WINDOWS 7) / NFCIS functions verified - Verification of NFCIS function to display facility information on a map / NFCIS display function verified - Assist for technical support to NFCIS users / resolution of users' feedback - Assist for organizing meetings and preparing documents related to NFCIS |
| 17 | NEPIK | Planning and Economic Studies Section | <p>Energy Economics Intern</p> <ul style="list-style-type: none"> - General information on nuclear costs structured in a Wiki - A nuclear power costs database (with sorting and visualization capabilities) - A project planning and costing application |
| 18 | NEPIK | Planning and Capacity Building | <p>Energy Planning and Modelling Intern</p> <ul style="list-style-type: none"> - Develop demo cases in MAED and MESSAGE models - Contribute to test enhanced versions of MAED and MESSAGE models - Contribute to update training materials for MAED and MESSAGE models |
| 19 | NE | Division of Nuclear Fuel Cycle and Waste Technology Waste Technology Section Waste Disposal Unit | <p>Tasks will focus on topics relevant to investigation activities performed at underground research facilities (URFs) for the purpose of the geological disposal of high-level waste and spent nuclear fuel.</p> <ul style="list-style-type: none"> - To investigate and summarize all tests and experiments which have been carried out at underground research facilities around the world under the guidance of the Scientific Secretary for the document development - To support the Scientific Secretary in organizing relevant technical and consultancy meetings |

□ OECD/NEA : 총 1개

○ NEA는 수요부서가 합의되지 않아 과거 인턴들의 소속부서 자료로 대체

| No. | 근무 부서 | 주요 업무 |
|--------------|---|---|
| 1기 (2013) | Data Bank, Nuclear Science | 연구 및 실험시설 데이터베이스 (Research and Test Facility Database; 이하 RTFDB) 관리, Data Bank 관련업무, OECD/NEA 한글판 브로슈어 수정작업 등 |
| | NEA External Relations and Public Affairs | 핵 안전 부서 내 공동 프로젝트 및 작업그룹 업무 분담, GIF 보고서 및 후쿠시마 리포트 리뷰, OECD/NEA 브로셔 한국어 번역 등 |
| 2기 (2014) | Data Bank, Nuclear Science | 몬테칼로 노심해석 코드 타당성 평가를 위한 데이터 정리, Serpent 몬테칼로 노심해석코드 타당성 평가 수행, 화학적 사 용후 연료 재처리 연간리포트 취합 및 편집 등 |
| 3기 (2015) | Data Bank, Nuclear Science | 연구 및 실험시설 데이터베이스 (Research and Test Facility Database) 자료 업데이트 및 수정 작업, RTFDB update 관련 프레젠테이션 등 |
| 4기 (2016) | Division on Nuclear Science | 회원국 보고서를 이용한 데이터베이스 정보 기록, DB Prototype 제작(search protocol 작성, prototype coding 등), TIETHYS 관련 논문 제출 등 |
| 5기 (2017) | Division of Radioactive Waste Management | 방사성폐기물관리 경제성 연구(selection of potential economic areas of the RWMC activity) alc 프로포절 준비, 관련 국제활동 리뷰, 워크숍 개최 준비 지원 |

□ WNU : 총 1개

1. Basic Information

- Estimated Dates and Duration : From 25 June to 21 December 2018
- Division/Department Placement : World Nuclear University - 1 position

2. Internship Details

1) Job description

- Getting acquainted with the World Nuclear University programmes.
- Aiding with the organization and implementation of the World Nuclear University programmes such as the Summer Institute, the WNU Short Courses and any other programme in planning phase.

- Deliver regular reports on activities performed by the intern
- During the WNU Summer Institute (SI) in South Korea, under the supervision of Patricia Wieland, the Head of WNU:
 - Becoming familiar with the SI programme.
 - Assisting with setting up and organization of the WNU office, lecture room and working group rooms and poster session.
 - Using WNU website, private website and mobile app.
 - Welcoming Fellows and responding to questions related to the SI organization and programme.
 - Assisting with preparation of weekly reports.
 - Welcoming invited leaders and helping them set up with microphones and presentations.
 - Photographing and filming the most interesting parts of the lecturers, like some Q&A sessions with invited leaders.
 - Being present in lectures to assist with any urgent queries that may occur during lecture, in order to keep the programme running smoothly.
 - Assisting mentors and helping them prepare for their working groups.
 - Daily updating the private website with presentations to be ready for the afternoon working group sessions.
 - Helping to prepare and organize the technical visits and organizing groups of Fellows.
 - Sending out surveys and preparing the short report about the results.

At the Summer Institute, there will be plenty of opportunities to take part in curriculum lectures and certain social activities and we encourage Summer Institute interns to fully engage in the experience and make the most of meeting nuclear professionals from all over the world.

2) Job requirements

- Fluent written and spoken English
- Basic knowledge of the nuclear fuel cycle and nuclear energy
- Proficient with Microsoft office products (Word, Excel, Power Point); Survey monkey, and social media such as Facebook, WhatsApp, LinkedIn, Twitter, Instagram)
- Motivated, enthusiastic, timely, organized, and proactive

3. Preference

Enthusiastic young person who is interested in nuclear energy. The intern should be organised and good at time keeping. They will participate in the day to day running of different programmes so will need to be able to follow procedures, and be proactive. We are looking for someone who is outgoing and sociable, as a large part of the role at the Summer Institute will involve interacting with fellows, mentors, lecturers and invited leaders. We are looking for someone who is motivated, and who is enthusiastic about working and

learning in a multicultural environment.

4. Ideal Academic degree for interns

Bachelor degree(4thyear) or Master degree(or candidate)

5. Other requirement or suggestion

As the WNU Summer Institute will start on 26 June 2018 in Busan, it would be good if the intern be present there from **25 June**. Please mention to the intern candidates the exact time and place for work at internship guideline.

South Korea:

- Busan (BEXCO): 25 June - 16 July;
- Gyeongju (Hotel Hyundai): 20 July - 3 August 2018.
- Week 16-20 July is the technical tour travel inside Korea.

London: 6 August - 21 December 2018

We will provide a desk and a laptop for the intern to use while in London. In Korea, it would be good if the intern brings own laptop.

Please mention to the intern the total amount to be paid by KONICOF so that they can prepare themselves better for living abroad in an expensive city like London. If they do not possess a student visa, it is difficult to open a bank account, and transportation and living costs are higher.