

중국 옌타이대학 파견 교원 후보자 모집

1. 모집 개요

구분	해외파견
근무지	중국 옌타이대학 (Yantai University)
모집인원	2명
파견기간	2023.08.01. ~ 2024.07.31. (옌타이대 학사일정에 따름)
파견직급	단국대학교 공과대학(죽전) 초빙교수

2. 모집 절차

- 파견 후보 지원 ▶ 서류 및 면접 심사
※ 추후 교원 채용 과정을 거쳐 임용 후 옌타이대학 파견 예정

3. 임용조건

- 가. 계약제로 임용하며 임용기간은 1년으로 함
나. 임용일자: 2023년 8월 1일

4. 지원자격

- 가. 박사학위 소지자
나. 사립학교 교원 임용 및 해외 체류에 결격 사유가 없는자
다. 영어강의 가능자
- 아래 과목 중 학기당 3과목씩 강의

1) 2023-2학기 기준

연번	교과목 영문명	교과목
1	Polymer Science and Engineering	고분자과학 및 공정
2	Polymer Physics	고분자물리
3	Solid State Materials	고체재료
4	Introduction to Metals & Ceramics	금속세라믹개론
5	Organic Chemistry	유기화학
6	Mechanics of materials	재료역학

2) 2024-1학기 기준

연번	교과목 영문명	교과목
1	General Chemistry	일반화학
2	Dynamic Behavior of Materials	재료동역학
3	Thermodynamics of Materials	재료열역학
4	Composite Materials Science	복합재료학
5	Material Characterization	재료특징
6	Electronic Properties of Materials	재료전자성능

5. 모집 일정

공고 및 원서접수	면접	최종 결과
2023.06.08(목) ~ 06.22.(목) 15:00 까지	6월 중	6월말, 개별 연락

6. 지원 방법

순서	구분	지원방법
1	온라인 지원	구글폼 작성 후 제출 https://forms.gle/XtnqU8JDtflZonyC8
2	서류제출 (이메일)	서류 이메일제출 (globaldku@dankook.ac.kr) ① (자유양식) 영문 이력서 1부 ② 개인정보 수집·이용 동의서 1부 ③ 학력증명서(학사/석사/박사) 각 1부 ④ 경력증명서 1부

* 온라인지원(구글폼)과 서류제출(이메일) 모두 완료해야 최종 접수되며 (부분)누락 시 지원이 취소됨

* 문의: peterwoo@dankook.ac.kr 또는 전화 031-8005-2607

7. 지원 시 유의사항

가. 제출 서류는 3개월 이내 발급된 서류만 인정

나. 지원서 허위 기재, 제출서류 위조, 성범죄경력조회 결과 부적격으로 판정될 경우, 합격 또는 임용이 취소됨

다. 지원자 제출서류 및 파일은 일체 반환 불가

라. 실제 강의 교과목은 강의개설여건에 따라 변경될 수 있음

[붙임] 중국 엔타이대 파견 조건

1. 강의조건

- 가. 학기당 3과목 강의(주당 9시간 강의)
- 나. 1과목당 주 3교시, 학기당 총 48시간, 총 18주 강의(고사 포함)
- 다. 전 과목 영어강의

2. 계약 세부사항

- 가. 단국대 지급사항

항목	지원사항	비고
체재비 지원	월50만원	파견기간 동안
왕복항공권	연 1회	이코노미, 편도*2회
비자신청 제반비	실비지급	신체검사비, 서류공증비, 비자 신청비 등

- 나. 엔타이대 지급사항

- 월 급여 및 강의료

기준	월 급여	강의료/시간당
박사학위 취득 후 5년 이상의 강의 경력	20,000위안	200위안
박사학위 취득 후 2년 이상 5년 미만	18,000위안	180위안
박사 과정 수료	15,000위안	150위안

* 방학기간(7~8월, 1~2월) 중에는 급여 미지급

- 다. 기타

항목	지원사항	비고
연간 보험비	가입	1,800위안 상당
매 학기 여행경비	1,100위안	현금 지급
아파트	지급	전기료, 인터넷, 가스비는 개인부담
연 1회 왕복 교통비	3,000위안	현금 지급
거류증 발급 및 수속비	수속처리	1,600위안 상당

3. 강의 교과목

가. 2023-2학기 기준

연번	교과목 영문명	교과목
1	Polymer Science and Engineering	고분자과학 및 공정
2	Polymer Physics	고분자물리
3	Solid State Materials	고체재료
4	Introduction to Metals & Ceramics	금속세라믹개론
5	Organic Chemistry	유기화학
6	Mechanics of materials	재료역학

1) Polymer Science and Engineering - 고분자과학 및 공정

This course mainly involves polymer chemistry, polymer physics, polymer material processing and other related knowledge, mainly including the following contents: 1. Active polymerization: the concept, principle, classification, basic characteristics of active polymerization and its application in polymer construction. 2. Functional polymer materials: shape memory polymer, biodegradable polymer and liquid crystal polymer concept, molecular structure analysis and application. 3. Polymer film and nanofiber: the development of polymer film and nanofiber and the introduction of modern preparation technology. 4. Polymer processing: polymer melt extrusion and foaming technology.

◎ 선수과목: 재료과학기초, 보통화학, 물리화학

2) Polymer Physics - 고분자물리

Polymer Physics has taken important role in the design of polymer-based composites and applications. In this course, general knowledge on relation between structure and properties of polymers was introduced, such as, the structure of polymer molecule chains, segment, aggregation of polymer. The properties were put on polymer solution, mechanical and electrical properties of polymers. Some key issues of design of polymer-based composites and applications were effectively analyzed and characterized, and several advanced polymer-based composites with enhanced properties and improved processing technology would be developed using above-mentioned general knowledge of polymer physics.

◎ 선수과목: 재료과학기초, 재료공정기초, 물리화학

3) Solid State Materials - 고체재료

This course is an important basic course for materials science and engineering

(China-South Korea cooperation). It is also a theoretical and technical elective course. Solid materials are a new class of materials with special electrical, magnetic, optical, acoustic, thermal, mechanical, chemical, and biological functions. They are important basic materials for high-tech fields such as information technology, biotechnology, and energy technology and national defense construction. This course focuses on the current state of research and development of various solid-state materials, as well as related structures, properties and applications.

◎ 선수과목: 대학물리, 재료과학기초, 재료공정기초

4) Introduction to Metals & Ceramics - 금속세라믹개론

This course covers the basic properties of metal and ceramics materials. The metal materials contain solidification and crystallization structure, theory of deformation-fracture and reinforcement, typical iron-carbon binary phase diagrams and applications, characteristics of heat treatment processes and typical steel materials. The ceramics materials contain phase transition and phase diagrams, preparation, mechanical properties and thermal, electrical, magnetic, optical properties. Students would possess ability of analyzing and solving practical problems by applying the theoretical knowledge they have learned. They are also equipped with the ability to read general professional literature and further improve self-study in the basic theory and knowledge of metal materials. Students should also possess ability to analyze microstructure for metal and alloy materials.

◎ 선수과목: 재료과학기초, 물리화학

5) Organic Chemistry - 유기화학

Organic chemistry is a basic subject that plays an important role in the teaching plan, whose content is to enable students to master the mechanism, basic reaction and properties of common organic compounds. In addition, they need to master the reaction process of some important reactions, such as free radical process, electrophilic addition reaction process, nucleophilic substitution, nucleophilic addition reaction process, which can be used eventually simple reagents can be used to synthesize some organic compounds and distinguish some similar organic compounds by chemical methods. Organic chemistry is the source of organic compounds, which can lay a solid foundation for the research and development of new energy materials, electronic materials and building materials.

◎ 선수과목: 보통화학

6) Mechanics of materials - 재료역학

Under the influence of force, the strength, stiffness and stability of the course are the main courses of materials majors in higher colleges, which occupy an important position in engineering education, and are the bridge between basic and professional courses, and play an important role. It also provides knowledge reserve for further learning of basic courses and courses in various majors, and has strong engineering practice, which plays an important role in cultivating students' analytical problem-solving and creative thinking ability development and improving students' comprehensive quality.

◎ 선수과목: 고등수학, 대학물리, 공학설계 및 컴퓨터그래픽

나. 2024-1학기 기준

연번	교과목 영문명	교과목
1	General Chemistry	일반화학
2	Dynamic Behavior of Materials	재료동역학
3	Thermodynamics of Materials	재료열역학
4	Composite Materials Science	복합재료학
5	Material Characterization	재료특징
6	Electronic Properties of Materials	재료전자성능

1) General Chemistry - 일반화학

This course contents the basic principles and methods of inorganic chemistry, organic chemistry, analytical chemistry and physical chemistry. The course includes basic knowledge of solutions and colloids, electrolyte solutions and buffer solutions, redox reactionsetc. The purpose of learning this course is to enable students to have a comprehensive understanding of the basic theory of chemistry, the history and current situation of chemistry, the relationship between chemistry and society, some hot issues in the field of chemistry and the future prospects of chemistry, further to solve some preliminary chemical problems by using the principles of chemistry learned and lay a foundation for the follow-up study of specialized courses.

2) Dynamic Behavior of Materials - 재료동역학

This course provides a comprehensive introduction to the dynamic behavior of materials. The main contents include: Dynamic Deformation and Waves, Elastic Waves, Plastic Waves, Shock Waves, Shock Waves: Equations of State, Differential Form of Conservation

Equations and Numerical Solutions to More Complex Problems, Shock Wave Attenuation/Interaction/Reflection, Shock Wave-Induced Phase Transformations and Chemical Changes, Explosive-Material Interactions, Detonation, Experimental Techniques: Diagnostic Tools, Experimental Techniques: Methods to Produce Dynamic Deformation, Plastic Deformation at High Strain Rates, Plastic Deformation in Shock Waves, Shear Bands (Thermoplastic Shear Instabilities), Dynamic Fracture, Applications.

3) Thermodynamics of Materials - 재료열역학

The course is divided into two parts: basic principles of thermodynamics and some basic applications in materials science. Firstly, the basic principle of the classical thermodynamic law, the basic thermodynamic relations, the thermodynamic properties and the phase equilibrium of various systems are introduced. In addition, this part briefly introduces the application of statistical thermodynamics theory in revealing the laws of phase and organization formation in materials. The second part focuses on the application of the basic principles of thermodynamics to phase diagrams, surface and interface effects, solid-state phase transition, heat treatment of materials and the analysis of some physical phenomena, which provides a thermodynamic theoretical basis for the preparation of materials and the change of properties of materials in service.

4) Composite Materials Science - 복합재료학

This chapter addresses the advantages of fiber composite materials as well as fundamental effects, product development, and applications of fiber composites, including material chemistry, designing, manufacturing, properties, and utilization of the materials in various applications. Keywords: fiber, matrix, composite, fiber composite, thermoset, thermoplastic, natural fiber, biopolymer

5) Material Characterization - 재료특징

6) Electronic Properties of Materials - 재료전자성능