JOHANNES KEPLER
UNIVERSITÄT LINZ

PROFESSORSHIP FOR CHEMICAL PROCESS ENGINEERING

INFORMATION FOR APPLICANTS

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JOHANNES KEPLER UNIVERSITÄT LINZ

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1. The Johannes Kepler University Linz (Austria)

The Johannes Kepler University Linz (JKU Linz, http://www.jku.at) is a young European university with an expert and accomplished focus on the academic areas of social and economic sciences, law, natural sciences and engineering. The studies of Human Medicine were added in 2014. During its fifty year history, the university has achieved a national and international standing with its manifold achievements in research and teaching. The JKU is a campus-style university located north of the city of Linz. The unique campus environment provides close proximity between all disciplines. Interdisciplinary collaboration, innovative base-knowledge research, and close ties to local businesses and the business community have helped to establish its principal direction. By upholding principles of unity in research and teaching as well as fostering advanced methods of knowledge transfer, the JKU Linz generates and provides services for the greater good of society, the business community, fine arts and culture. Core target groups include students, the scientific community as well as organizations representing private and public life.

As the largest institution of research and education in Upper Austria, and thus as a knowledge transfer center, the university contributes to the continual support and development of Upper Austria as a dynamic economic region. The JKU is also actively involved in competence centers, and has developed spin-off programs that support the establishment of new companies. The JKU's mission statement defines and outlines the university's basic principles for future development and its strategic concept.

A special feature of the university is the campus-style layout and easy access to all four faculties

- Faculty of Social Sciences, Economics & Business
- Faculty of Law
- Faculty of Engineering & Natural Sciences
- Faculty of Medicine

on 350,000 m² of land located in a northern section in the city of Linz.

2. The Faculty of Engineering & Natural Sciences

The Faculty of Engineering & Natural Sciences is comprised of 58 institutes in the following fields of base-knowledge research as well areas of application-oriented research:

- Computer Science
- Mechatronics
- Chemistry and Polymer Engineering
- Mathematics
- Physics

See: https://www.jku.at/technisch-naturwissenschaftliche-fakultaet for additional information.

3. The Academic Area of "Chemistry/Polymer Engineering"

The academic area of Chemistry and Polymer Engineering (https://www.jku.at/technisch-naturwissenschaftliche-fakultaet/organisation/fachbereiche/chemie-und-kunststofftechnik/) at the Faculty of Engineering & Natural Sciences consists of the following institutes:

- Institute of Analytical Chemistry
- Institute of Inorganic Chemistry - Center of Nanobionics and Photochemical Sciences (CNPS)
- Institute of Polymer Chemistry
- Institute of Chemical Technology of Inorganic Materials
- Institute of Chemical Technology of Organic Materials
- Institute of Catalysis
- Institute of Organic Chemistry
- Institute of Physical Chemistry
- Institute of Polymer Extrusion and Compounding
- Institute of Polymeric Materials and Testing
- Institute of Polymer Injection Moulding and Process Automation
- Institute of Polymer Product Engineering
- Institute of Polymer Sciences
- Institute of Process Engineering
- Linz Institute of Organic Solar Cells (LIOS)

The current English-language Bachelor's and Master's degree programs in Chemistry and Polymer Engineering at the JKU have a highly regarded international reputation for top-quality. Corresponding rankings for university excellence in this academic area identify the JKU strongly, yielding excellent results. Research is conducted in the area by world-class, renowned scientists and academics who are international leaders in their field. The academic area of Chemistry and Polymer Engineering is characterized by academic excellence in base-knowledge research as well as close cooperation with industrial companies.

4. Requirements for the Position "Chemical Process Engineering"

The professorship position should represent the subject area of Chemical Process Engineering in research and education. Prospective applicants must be highly qualified in a scientific and academic capacity (post-doctorate/habilitation degree (*venia docendi*), or comparable academic qualifications) and are expected to represent and teach Chemical Process Engineering in its the full depth and breadth (including general principles and basic operational procedures, apparatus reactions, and facilities design). Professional experience at an industrial company and/or with collaborating with industry is advantageous.

4.1. Research

The successful candidate is expected to conduct a high-level of internationally recognized research in the field of Chemical Processing Engineering. The open position is embedded as a part of the university's interdisciplinary strategy, whereby important contributions to inter-university priorities such as "Sustainable Development: Responsible Technologies & Management (JKUsustain)" and "Digital Transformation" is desired. Examples include procedural processes to close material cycles. The successful candidate is expected to pursue strong collaboration efforts both internally at the JKU (with institutes in related fields, the JKU's Faculty of Engineering & Natural Sciences, and the (LIT) Linz Institute of Technology), as well as with external partners, particularly with industrial companies.

The candidate's application regarding his/her qualifications in research will be considered under the following criteria:

- Academic and/or scientific activities at universities, scientific, or industrial institutions in Austria and abroad
- Previous activities at industrial companies and/or cooperation efforts with industrial companies
- External research funding acquired
- Quality and quantity of existing publications in peer-reviewed journals as well as patents in the area of the open professorship position
- Academic and scientific lectures/presentations
- Post-doctorate degree/habilitation (*venia docendi*), or a comparable, internationally recognized post-doctorate qualification, in the area of Chemical Process Engineering
- Submit a research concept including planned cooperation efforts both internally at the JKU and with partners outside of the JKU

4.2. Teaching

Faculty members at the Institute for Process Engineering are international as the university courses in the current curriculum in the area of chemical process engineering for chemistry and polymer engineering are primarily held in English. The successful candidate is expected to be willing and responsible in participating in teaching at the Institute of Process Engineering, particularly:

<u>Bachelor's Degree in Chemistry</u>

- Process Engineering (Lectures, Mandatory Classes)
- Lab Course in Process Engineering (Practical Course, Mandatory Classes)
- Chemical Reaction Engineering (Lecture and Tutorials, Mandatory Classes)

<u>Master's Degree in Technical Chemistry and/or Master's Degree WiTech</u>

- Chemical Plant and Apparatus Engineering (Lectures, Mandatory Classes)
- Process Instrumentation and Control Technology (Lectures, Mandatory Classes)
- Control and Process Engineering (Lectures, Mandatory Classes)

See: http://studienhandbuch.jku.at to view the course catalog for course details.

The successful candidate is expected to hold university-level classes in other academic areas, as well as actively take part in creating and implementing new academic degree programs.

The candidate's application regarding his/her qualifications in research will be considered under the following criteria:

- Ability to courses that represented the field of chemical process engineering its full depth and breadth
- Experience as university lecturer at universities as well as at other institutions in the tertiary educational sector
- Course evaluation results
- Experience supervising Master's/Diploma degree theses and doctoral dissertations
- Take part in training and continual education courses in the field of university didactics
- A teaching concept for the academic area of Chemical Process Engineering

4.3. Additional Requirements

The successful candidate must be willing to collaborate with research institutions and facilities in Austria and abroad as well as with industrial companies. The cooperation efforts should result in attracting external funding.

The successful candidate will be willing to independently manage academic administration and actively take part in university committees.

In addition to key professional qualifications and management experience, the successful candidate should also possess a strong social skill set.

The successful candidate should be skilled and experienced to support the JKU's '*Plan for the Advancement of Women*', and is expected to participate in gender mainstreaming.

The candidate's application regarding his/her qualifications for the position will be considered under the following criteria:

- Experience in managing an organizational unit
- Experience in human resource management and development
- Experience in supporting the advancement of women and participating in gender mainstreaming activities
- Willingness/ability to hold university-level courses in English

5. Legal Contingencies

Effective as of January 1, 2004, the structure of Austrian universities has been completely re-organized. They are independently financed on the basis of a three-year service level agreement with the Austrian government, have a global budget at their disposal, and are not subject to any directives by the Austrian Federal Ministry of Science and Research.

5.1. Terms of Employment

All terms of employment, including a university professorship, are subject to the Private Sector Employees Act. A work contract between the university and the appointed professor confirms the professor's appointment. The Salaried Employees Act and the collective agreement for university employees provide the legal framework for all related labor, social, and pension conditions. An evaluation of all teaching and research activities will be conducted after a 5-year period to assess the fulfillment of all target agreements.

5.2. Pension Regulations

5.2.1. Pension

A pension account at the Pension Insurance Company for Employees (PVA) provides the basis to calculate the amount of pension. All pension account holders are registered for annual partial credits during insurance periods in the amount of 1.78% of the annual contribution basis and these are capped at the maximum assessment basis. The sum of the partial credits is the total credits that are re-valued annually. The total credit divided by 14 equals the amount of gross monthly pension. For more information about the pension you receive directly from the state, please contact the.

5.2.2. Company Pension fund for University Professors

In compliance with the 2002 Austrian Universities Act, a special pension scheme is provided for university professors and has been agreed upon in a Collective Agreement. The contribution payment made by the university is 10% for the set minimum salary as stated in the collective agreement. Voluntary salary payments agreed upon aside from the collective agreement minimum salary are not a part of the base calculation of the contribution payments.

6. Salary

The amount of the minimum salary for Group A 1 (Professorship) has been determined in the collective agreement for university employees and is a gross annual salary of 70,071.40 Euros per year (last update: 2018). Payment is allocated in 14 equal amounts, whereby two parts are special allocated payments.

The position as Professor for “Chemical Process Engineering” provides a provision (on a voluntary basis) to agree on a salary over the minimum salary set by the collective agreement. Independent of the current position (current salary), the amount of the gross annual salary (collective agreement minimum salary plus voluntary additional amount) can be between €80,000 to € 100,000.

The net amount will depend on personal factors; as a guideline it can be assumed that a gross annual salary of € 80,000 will be an annual net amount of approximately € 50,000.

After a positive evaluation every six years – 4 times in total – there will be an advance to the next pay grade in accordance to the salary bracket in collective agreement for job category A1.

7. Application Procedure

Prospective applicants for the professorship position in Chemical Process Engineering are requested to send the following application and requested documentation in electronic form to: bewerbung@jku.at (in a summarized PDF document format). If the file size is over 15 MB, we recommend securely sending the publication list separately (Pt. 7.2.4.3). If documents cannot be sent in electronic format, they are to be sent in quintuplet copy and should arrive at the Rector’s office no later than one week after the end of the application deadline.

7.1. General Information

7.1.1. Letter of Intent

7.1.2. Tabular Curriculum Vitae

7.1.3. Academic Diplomas (Doctorate, Post-Doctorate/Habilitation, in copy)

7.2. Research

7.2.1. Information about research experience at

- 7.2.1.1. Universities in Austria and abroad and at scientific research facilities (information about: name of institution(s), type of activities, duration)
- 7.2.1.2. Industrial research facilities (information about: name of institution(s), type of activities, duration)

7.2.2. Information about previous activities at

- 7.2.2.1. Industrial companies (information about: name of institution(s), type of activities, duration)
- 7.2.2.2. Collaboration efforts with industrial companies (information about: name of institution(s), type of activities, duration)

7.2.3. List of acquired research funding (function, total project volume, personal project volume, contracting party and/or funding organization, duration, project manager and/or the number of full-time employees managing the project)

7.2.4. Information about publications and patents

- 7.2.4.1. List of subject-related publications according to the type of publication
- 7.2.4.2. List of existing patents, if available
- 7.2.4.3. Information and copies of five publications you consider most important and significant (include reason for selecting these publications)
- 7.2.4.4. Information about Researcher ID or ORCID

7.2.5. List of previous speaking engagements at conferences and symposia listed by

- 7.2.5.1. Invited speaker
- 7.2.5.2. Conference discussion
- 7.2.5.3. Other presentations

7.2.6. Proof of research achievements at the post-doctorate/habilitation level (or a comparable level)

7.2.7. Research concept with planned cooperation at the JKU as well as outside, maximum 5 pages

7.3. Teaching

7.3.1. List of all previously held university-level courses and/or activities as an educator at universities in and outside of Austria as well as at other institutions in the tertiary educational sector (information about: name of institution(s), course title, extend and duration of the activities).

7.3.2. List of any available course evaluation results

7.3.3. List of supervised

- 7.3.3.1. Master’s/Diploma degree theses (name, topic, year, including information about the percentage of supervising in the event of joint supervision)

7.3.3.2. Dissertations (name, topic, year, including information about the percentage of supervising in the event of joint supervision)

7.3.4. List of previously attended continual education courses and/or programs in the area of university-level didactics for professors (information about: name of institution(s), type and content of the continual education course(s), extend and duration)

7.3.5. Teaching concept for the academic area of Chemical Process Engineering (maximum of 3 pages)

7.4. List of Past Management Positions

Including the duration, name of institution(s), number of employees

7.5. Information about Additional Professional Experience

7.5.1. Qualifications in human resource management and development

7.5.2. Activities in support of the advancement of women as well as participation in gender mainstreaming projects

8. Information

If you have any questions in regard to the job profile, please contact Univ. Prof. Dr. Oliver Brüggemann (+43 (732) 2468 9082, oliver.brueggemann@jku.at).