Job requirements W2-Professorship for Process Control Technology

Application deadline: October, 15th 2023

Starting date: at the earliest opportunity

The Professorship is located in the Institute for Automisation Technology.

The general legal requirements in compliance with section 36 of the North Rhine-West-

phalia Higher Education Act (Hochschulgesetz – HG) are as follows:

- 1. University degree
- 2. Proven track record of teaching ability, or as an exception, the teaching ability is to be proven during the first year through a probation period.
- 3. Particular proficiency in scholarly work, usually demonstrated by the quality of the doctorate.
- 4. A strong track record in the application or development of academic findings and methods, gained during a minimum of five years of professional employment in a relevant field at least three years of these five years must have been outside of a university environment.

Professional, didactic and methodical profile:

Professional Competence

You have a university degree in electrical engineering, process engineering or mechanical engineering with a proven connection to automation and a doctorate in the field of automation technology, preferably Process Control Technology. You have at least five years of relevant professional experience, of which at least three years must have been outside the university sector.

Technical competence

You have experience in the automation of large process plants, preferably in the chemical or pharmaceutical industry, from planning to commissioning, and you can also demonstrate qualifications or publications in at least one of the four following topics in the field of process control engineering:

- Modular System- / Software Architectures
- Human-Technology Cooperation
- Cognitive Control (Information Integration)
- Al in the process industry

Research competence

You have a clear interest in research and transfer projects which is documented either by scholarly publications recognised by the research community, or individual research and development work carried out in at least one of the subject areas mentioned in the section "Technical Competence". Ideally, you already have a cooperation network for research and transfer projects. You intend and are clearly motivated to acquire external funding from national and international public and private funding bodies. Ideally, you have experience in managing projects, in collaborative research and in interdisciplinary research cooperation.

International competence

A good command of English is expected, as well as the willingness and ability to also present lectures in English. You are willing to actively engage in establishing and maintaining sustainable contacts with foreign universities, especially in English-speaking countries, to motivate students of the TH Köln to spend time abroad and to accompany them during this time, and to create a conducive environment for visiting students. You possess competences for international cooperation and can prove this through stays abroad or international contacts and cooperations as well as publications. If German is not your first language, you will be expected to prove German language competence at CFER B1 level at

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Didactic competences/communication skills

The professorship makes an important educational contribution to the Bachelor's and Master's degree programs in electrical engineering and computer engineering with courses in basic subjects as well as advanced subjects on special topics in Process Control Technology, Process Control Engineering and Automation Technology. Didactic skills are therefore of great importance. Ideally, you already have experience in teaching and can prove this, for example through teaching evaluations. An understanding of didactic principles relating to the interaction of learners and teachers is required, and competences in the area of project-based teaching and/or research-based learning are desirable. Many questions of "Human-Technology Cooperation" are of great relevance in the professorship's area of responsibility, in particular, those relating to the impact of conditions created by specific cultural settings. You use your intercultural and language skills to communicate appropriately and convincingly in public, vis-à-vis public bodies and in cooperation with industrial companies.

Management competence

You are characterised by systematic planning of teaching and research - also taking into account the available capacities and resources. You set priorities and show ways to realize goals. You formulate goals, can distinguish between what is desirable and what is achievable and can assume management responsibilities for staff. You think across disciplines and departments, for example when participating in expert committees and use university resources economically. You are not discouraged by failures but see them as a challenge.

Social skills

You have the ability to actively shape social contacts, to work in a team-oriented manner and to cooper-ate both internally and across disciplines. This includes communication and cooperation with internal and external institutions as well as active collaboration and integration in working groups. You adapt quickly to new tasks and develop further technical aspects. You have a professional demeanor and can present convincing arguments and coherent points of view. You meet deadlines and time limits. You are characterized by collegiality, the ability to deal with conflict, behave with integrity and the ability to be selfcritical. You use your social and linguistic skills to communicate issues of social relevance to process control technology to the public in an appropriate and convincing manner.

Self-development skills

You are prepared to develop yourself personally and professionally on an ongoing basis. You always reflect on your actions and are prepared to accept constructive criticism and express it yourself. You are interested in topics that go beyond the field of Process Control Technology and are willing to face and take on changes and new tasks with commitment. You are aware of your strengths and weaknesses and can develop or compensate for them.

The execution of other activities not part of the professorship is subject to the regulations governing additional employment.

With the advertisement of this position and the publication of the requirement profile, the TH Köln specifies which competencies must be exist to successfully fulfill the tasks of the professorship at the TH Köln. Depending on the focus of the professorship these competencies are weighted and checked in the selection procedure. The pre-selection is based on the written application documents. The necessary competencies of the shortlisted candidates will be determined in a lecture, a scientific presentation and a structured interview. The personal introduction is completed by an interview with a personnel psychologist. In case you are shortlisted and invited to a personal interview, you will be asked to

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submit a written teaching and research concept in advance. You will receive more detailed information with the invitation to the lecture, the scientific presentation and the structured interview.

Additional information

Place of residence

You are expected to move/relocate to the city in which your campus is located/situated or its greater area.

Remuneration

Professors are remunerated in accordance with the W2 remuneration scheme (www.lbv.nrw.de: the remuneration scale for North Rhine-Westphalia as well as information on the family supplement are available on the website of the North Rhine-Westphalia State Office for Salaries and Pensions – LBV NRW – at). In addition to the family supplement, the remuneration provisions make allowance for other benefits (performancerelated benefits), in particular benefits related to the appointment as well as benefits granted on the grounds of extraordinary contributions or for securing third-party funding for research purposes. The Provisions on Performance-related Benefits at Universities in North Rhine-Westphalia are in accordance with the law (Hochschul-Leistungsbezügeverordnung – HLeistBVO) of December 17, 2004. Additionally, Cologne University of Applied Sciences has introduced individual regulations in its guidelines on W2-remuneration. Detailed information on the W2-remuneration bracket is available here: <u>th-koeln.de/be-</u> <u>soldung</u>

Employment as a civil servant or as a non-civil servant

Professors may only be employed as tenured German civil servants if they hold a full-time position and comply with all legal provisions (e. g. being younger than 50 years old). The possibility of becoming a tenured German civil servant is always determined on an individual basis, and candidates should therefore contact the Head of Division for lecturers and assistants in the human resources department (Ms. Sigrun Weber / Phone: +49 221-8275-3120 / Email: sigrun.weber@th-koeln.de). When employed under non-civil-servant conditions, professors will be remunerated in accordance with W2 gross remuneration. In contrast to tenured civil servant contracts, professors employed under such provisions are required to pay social security contributions.

Additional employment

Full-time professorship: additional employment of up to eight hours per week may be authorized in compliance with the legal regulations for North Rhine-Westphalia (thus permitting work in positions of practical relevance). If you work on a freelance basis with your own office, then this is subject to specific conditions as laid down in the legal stipulations on additional employment for university personnel.

Part-time professorship (less than 50 %): If your work as a professor is less than 50 % then the legal stipulations on additional employment are not applicable.

Application information

Please apply via our application management system. Go back to the <u>job advertisement</u> and click here:

Apply here

Here we ask you for the personal data relevant for the processing of the application and to upload the following documents (maximum file size 10 MB per file):

- cover letter
- photo (optional)

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- curriculum vitae including list of publications and overview of the courses held (here or at the other documents)
- certificates (max. 5 files)
 - University certificates
 - job references or list of confirmed duties
 - certified translations in German or English for foreign certificates
- other documents
 - such as a publication list
 - such as list of taught courses (evaluation)

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