**Faculty Position in Clean Energy and Green Technologies**

1. **Introduction**

The School of Engineering and the Institute for Sustainable Development (IDS) at the Pontificia Universidad Católica de Chile, one of the leading engineering academic institutions in Latin America and ranked among the top four emerging leaders for engineering education worldwide, invites outstanding candidates for a full-time joint faculty position in the area of clean energy and green technologies. The position is in any field relevant for clean energy, sustainability or green technologies.

1. **Brief Context**

In 2021, the IPCC published a new report warning about the clear possibility of surpassing the global warming of 1.5°C in the next decades if no immediate actions are taken. The massive deployment of clean energy and its use for a sustainable development is one the keys for stopping the climate change threat. Moreover, this threat has implications and interacts with several economic, social, political, and environmental dimensions included in the sustainable development goals of the UN. Net-zero emission goals, which have been proposed in several countries, require a radical change in the way the energy is produced, transformed and used. The electrification of several economy sectors, jointly with the decarbonization of the power systems, will be needed for these purposes, especially in Chile´s mining sector – a leading driver of Chile’s economic growth. Power-to-X and other technologies can significantly contribute to these processes, but a lot more research is needed in this field. Chile has one of the best worldwide conditions for producing clean energy, considering a diversity of renewable resources, which make it a natural laboratory from where new innovative research developments can be conducted. Energy intensive process engineering technologies in chemical and mining sectors need to move on to this green paradigm as well.

1. **Duties**

High-quality teaching (at undergraduate and graduate levels), and conducting independent research. Additional duties include knowledge transfer, outreach, and university administrative tasks. The new position should conduct teaching, research, technological innovation activities, and outreach in any area related to clean energy, sustainability or green technologies. Mathematical modeling and simulation skills related to those areas are desirable.

The selected candidate is expected to develop high quality research, support doctoral programs, and teach three courses per year related to clean energy, sustainability, or mathematical modeling related to those areas, including undergraduate and graduate courses (half of them for each academic unit).

It is also desired that the selected candidate gets involved in some of the research and development activities leaded by the IDS and/or the UC Energy Research Center, such as the 2038 UC decarbonization plan, the UC power-to-X pilot project, or the Green Ammonia as Energy Vector initiative.

1. **Requirements**

Applicants must hold a Ph.D. in an engineering field related to clean energy, sustainability or green technologies. Due to the joint nature of the position, the applicant will have the opportunity and should be willing to work collaboratively with the IDS and one or more Departments of the School of Engineering. The appointment requires the selected candidate to have half of her/his workload in each of the two units (IDS and School of Engineering), maintaining a balance regarding the contribution to both units. Previous postdoctoral or international academic experience should be stated in the application.

If selected for the position, foreigners that apply from abroad must obtain the appropriate visa in their country of residence, to join the University faculty. Candidates do not need to be fluent in Spanish at the time of application, but should be prepared to learn the language well enough to teach in this language in the short term (two years maximum). English is a requirement.

Applicants must demonstrate a strong commitment to all aspects of academic life and the public good of the institution. They must be highly motivated to continuously improve their teaching skills, have a genuine interest in getting involved with our graduate programs (specially the doctoral program), and be able to develop and maintain an active research agenda leading to high-quality publications, securing research grants, generating and participating in interdisciplinary projects, leading scientific and industry-liaison initiatives, strengthening and creating national and international academic networks, etc. The candidate will also be expected to create new undergraduate and graduate courses and teach traditional courses in related areas.

1. **Application Instructions**

Applicants should submit the following documents to vacantes-academicas@ing.puc.cl (in the email subject line, please indicate: Faculty position in Clean Energy and Green Technologies; see note A) by September 30th, 2023 (late applications will be considered until the position is filled).

* A research statement (in English) indicating the immediate and long-term goals of the applicant’s research plan and detailing potential collaboration networks with other researchers and plans for interactions with scientists in Chile and other countries.
* A teaching statement of purpose (in English) indicating why the applicant should be considered for the position and the plans for teaching. The applicant should be as specific as possible by providing examples of the plan to transfer knowledge to undergraduate and graduate students.
* An updated curriculum vitae (in English, see note B).
* If available, copies of five recent Web of Science publications that are relevant to the context of the application (see note C).
* At least, three letters of recommendation, which must be e-mailed directly by the signatories to vacantes-academicas@ing.puc.cl.

Note A:

The applicant will get a response from this email address confirming that the documents have been received.

Note B:

The CV must be organized as follows:

* Personal information: name, address, contact telephone number (with country and city codes), email address, web page (if any).
* Education: all academic and professional degrees, indicating the granting institutions and dates. If the applicant is currently enrolled in a doctoral program, please indicate the expected date for the degree.
* Educational experience (university or institution, courses taught and years).
* Professional experience (employer, duties, years).
* Research:
  + List of Web of Science journal publications (see note C).
  + List of other publications such as reports, books or book chapters, conferences attended, research projects participated in, patents, etc.
* Other: awards, computer skills, languages, and any other relevant background information.

Note C:

Please avoid padding the list with other publications, such as those published in journals not indexed in the Web of Science database, conference presentations and alike.

Once the complete set of application materials has been received, the applicant will be contacted within two months and informed whether the application has been accepted for further consideration. If this initial screening is successful, the candidate will be asked to continue the process following the steps described in Appendix 1.

**Further information**

Additional information can be obtained by emailing to Tomás Reyes, Director of the Department of Industrial and Systems Engineering (threyes@ing.puc.cl)

**EEO/AAP Policy Statement**

The Pontificia Universidad Católica de Chile is committed to fostering an environment that welcomes and embraces diversity, and does not discriminate on the basis of race, color, creed, religion, origin, disability, age, sexual orientation, or marital status in its activities, including employment, admissions, and educational programs.

Other Chilean and University employment benefits may be found in:

* Foreign workers in Chile: https://www.dt.gob.cl/portal/1626/w3-article-93693.html
* Labor laws in Chile: https://www.thisischile.cl/labor-laws-in-chile/?lang=en
* University rules and regulations:

http://direcciondedesarrolloacademico.uc.cl/index.php?option=com\_content&view=article&id=286&Itemid=178

All members of the Pontificia Universidad Católica de Chile subscribe the Code of Ethics that can be found in https://www.uc.cl/codigodehonor

**Appendix 1. Application steps**

* Interviews/Seminar:
  + Interview with the Dean of the Faculty of Engineering
  + Interview with the Director of the IDS
  + Interview with faculty members and the Head of the Department that is closest to the candidate interests, within the School of Engineering
  + Interview with faculty members of the IDS
  + Interview with the Search Committee
  + Interview with the Technical Committee (IDS and School of Engineering)
  + Psychological Interview
  + Seminar (open to faculty members of the School of Engineering and the IDS and graduated student invited)

These interviews and presentation are generally carried out within a week.

* Selection of the final candidate by the Department and the Search Committee
* Approval the candidate by the School Council
* The successful candidate is informed (offer letter)

The time that elapses from the interviews until the final resolution is around two months.