

CALL FOR MERIT-BASED PROFESSORSHIP APPLICATIONS FOR THE DEPARTMENT OF PHYSICAL SCIENCES

Universidad EAFIT (http://www.EAFIT.edu.co/Paginas/index.aspx) hereby invites applications for a full-time professorship in Applied Optics, an area attached to the Department of Physical Sciences in the School of Sciences, to start activities as of the 10th of July 2016.

Professional profile

An appointee to a professorship shall hold a doctoral degree (PhD) in Sciences, Engineering
or related areas, have experience in Applied Optics research and development with an
emphasis in Biomedical Optics and/or Biophotonics, and/or Nanoscale Optics, with high
teamwork skills.

Occupational profile

• The appointed professor will be able to teach, do research and academic outreach, and administration in the Department of Physical Sciences, or in any other academic department in the University, especially in Physical Engineering and the Master's Program in Applied Physics.

Teaching profile

The appointed professor shall be able to teach different subjects related to the following areas of knowledge:

- Basic Physics
- Classical and Photonics Optics
- Electromagnetism
- Modern Physics
- Quantum Mechanics

Researcher Profile

The appointed professor will join the Applied Optics Group, which is two-fold: Holography and Optical Information Processing. The aim of the Holographic line is to develop technologies and methods for Exhibition of Holography in the short-term. The Optical Information Processing line mission is to do research on basic and applied sciences, especially in biomedicine issues in order to develop technologies and methods in the medium-term. Some of the duties of the appointed professor will include:

- To contribute to the experimental development of complex optical systems.
- To manage and implement research projects on the group's lines.
- To advise on undergraduate final papers, Master's thesis and doctoral dissertations.

Other desired skills

- Optoelectronic instrumentation knowledge
- Matlab/Octeve or Python Programming
- Optical Design



Employment Terms and Conditions:

- Type of contract: A one (1) year fixed-term contract which may be extended for one more year or changed to an open-ended contract with academic career entrance, following compliance with the requirements set out in Estatuto Profesoral de la Universidad EAFIT. (Universidad EAFIT Faculty Standards)
- Dedication: A full time exclusive contract.
- Workplace: Universidad EAFIT main campus in Medellín, with the possibility of temporary relocation to other cities and/or countries.

Wages:

• Between \$6'500.000 and \$8'600.000 COP (Colombian Pesos).

Documents Required:

Appended to the CV, applicants shall submit the documents listed below in order to advance in the professorship call process:

- Certificates of qualifications granted. Qualifications awarded abroad shall be duly attested
 in accordance with Colombian regulations. Procedures and requirements needed to gain
 recognition of degrees in Colombia may be found on the website of the Ministry of
 National Education: www.mineducacion.gov.co
- Through employment certificates, prove full-time university academic experience of over five (5) years and/or over 7 years of professional experience in the professional profile area the call requires.
- Research project formulation, development, participation and/or carrying out, as chief researcher or co-researcher, in the professional profile area the call requires.
- Prove through bibliographic reference or certification, in the case of patents, at least seven (7) research products developed during the last four (4) years. At least three (3) of these products shall be classified as A1 and A2 in accordance with Universidad EAFIT Faculty Standards.
- Submit a written proposal (maximum 7 pages) showing the applicant's contribution to the development of the Department of Physical Sciences in terms of teaching, research and innovation for a five (5) year period.

<u>Teaching:</u> Indicate which courses currently offered by the Physics Engineering undergraduate and the Master in Applied Physics programs you will be able to teach as well as a projection towards Doctoral courses.

<u>Research</u>: Describe the possible theses/dissertation topics, according to the profile area, that could go in line with the Physical Engineering Program and the Master's degree in Applied Physics, as well as with future graduate programs of the Department of Physical Sciences and a brief description of each topic.

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Mention the research topics that you will develop in the profile area, to be ideally implemented through external funding. Mention potential financing entities.

Outreach and Social Projection: Mention potential topics, included in the profile area, which are focused on the understanding and fulfillment of needs in institutions, companies, universities, public and/or private centers. A brief description of each topic should be included. The application sector of suggested issues shall be presented.



Determine the possible courses, seminars or workshops related to the profile area that could be offered through the Centro de Educación Continua (Center for continuous education) of the University

(http://www.EAFIT.edu.co/cec/Paginas/inicio.aspx).

• Second language accredited proficiency. A B2 minimum level according to the Common European Framework of Reference for Languages (CEFR) is required, valid at the moment of appointment. If the mother language is not Spanish, the latter shall be certified as B1 (CEFR) and shall reach B2 (CEFR) a year later.

The chart below shows the valid tests:

TEST	SCORE - LEVEL	
SPANISH (Universidad EAFIT)	B2	C1
DELE B2	Qualified	
DELE C1		Qualified
FRENCH (Alianza Francesa):	B2	C1
DELF B2	Approved	
DELF C1	• •	Approved
GERMAN (Goethe and Humbolt Institutes):	B2	C1
Goethe-Zertifikat B2	Approved	
Goethe-Zertifikat C1		Approved
ITALIAN (Through the Instituto Italiano di Cultura in		
Bogotá)	B2	C1
Knowledge of the Italian Language B2	Approved	
Knowledge of the Italian Language C1		Approved
Certicazione di Italiano Come Lingua Straniera CILS B2	Approved	
Certicazione di Italiano Come Lingua Straniera CILS C1		Approved
PLIDA - Progetto Lingua Italiana Dante Alighieri B2	72 Minimum	
PLIDA - Progetto Lingua Italiana Dante Alighieri C1		72Minimum
PORTUGUESE (IBRACO Bogotá and Universidad EAFIT		
Medellín):	B2	C1
CELPE-BRAS B2: intermediate high	Approved	
CELPE-BRAS C1: advanced		Approved
CHINESE-MANDARIN (Confucio Institutes)	B2	C1
HSK Level 4 (B2)	180	
HSK Level 5 (C1)		180
JAPANESE (Universidad de los Andes, Bogotá)	N3	
Noryoku Shiken 3 (Noken - JLPT)	Level 3 (N3)	
ENGLISH:	B2	C1
TOEFL Computer-Based ETS	180	220
TOEFL Paper-Based ETS	510	560
TOEFL IBT	87	110
FCE(First Certificate in English; Cambridge)	C Minimum	N/A
CAE(Certificate in Advanced English; Cambridge)	C Minimum	C Minimum
CPE(Certificate of Proficiency in English; Cambridge)	C Minimum	C Minimum
IELTS (International English Language Testing System; University of Cambridge)	Band 5.5	Band 6.5



Recruitment Criteria and stages

- Documents will be received until the 06th of May 2016. Submit documents to Mauricio Arroyave Franco, Head of the Department of Physical Sciences, School of Sciences, Universidad EAFIT, building 38-office 505, Cra 49 Nro. 7 sur 50. Medellín, Colombia. PO box 3300 or through a PDF file with the compiled information to the e-mail: marroya5@eafit.edu.co
- Pre-selected applicants will receive notification on the 20th of May 2016.
- An academic hearing presentation before the selection committee to be held between the 6th and 10th of June 2016. This presentation shall refer to the proposal about the candidate's contribution to the development of the Department of Physical Sciences in the fields of teaching, research and social projection for a 5-year period (details were mentioned above).
- Pre-selected candidates will be notified on the 14th of June 2016.
- Personal interview and final decision to be made on the 17th of June 2016.
- Start of activities on the 10th of July 2016.

For further information contact: Mauricio Arroyave Franco, Head of the Department of Physical Sciences: marroya5@EAFIT.edu.co Telephone: (4)2619400 ext 9835.