Open Faculty Position in Applied Mathematics and Computer Sciences

The School of Natural Sciences and Mathematics at the University of El Rosario, in Bogotá (Colombia), is opening one full-time faculty position for supporting and strengthening its research activities in Applied Mathematics and/or Computer Sciences. The Department of Mathematics is creating new academic programs in applied mathematics and computer sciences at the undergraduate, master's and doctoral levels.

The successful applicant is expected to be actively involved in the creation of the new programs in 2016 as well as the creation of a doctoral program involving key areas such as computer sciences, theory of computation, algorithms, complexity, graph theory, image and signal processing, simulation, ordinary and partial differential equations, data analysis, optimization, control, computational geometry and computational mechanics. Candidates must have a PhD degree and a good record of recently published research results. Interdisciplinary research experiences, abilities in mathematical modeling and a deep knowledge in computer systems will be highly regarded. Faculty members must develop a clear and strong research program and they must teach two undergraduate courses per semester. The successful candidate is expected to engage in scholarly activities, investigate specific questions related to applied mathematics or computer sciences, and establish multidisciplinary research projects that integrate mathematical and computational modeling.

The following specific topics in Applied Mathematics and Computer Sciences will be considered:

Design, Performance and Analysis of Algorithms, Graph Theory and its Applications, Applied Finite Mathematics, Mathematical Foundations of Computing or Computational Complexity Theory.

Computer Sciences, Computer Languages, Theory of Computation, Computability Theory, Computer Organization, Compilers Design, Computer Architecture, Parallel Computing, High Performance Computing, Scientific Computing, Automatic Reasoning, Machine Learning, Pattern Recognition or Computational Intelligence.

Fourier Analysis and its Applications, Signal Processing, Image Processing, Computational Geometry, Computer Graphics, Visual Computing, Mathematical Imaging, Computational Imaging or Artificial Vision.

Variational Analysis, Analysis of Partial and Ordinary Differential Equations, Dynamical Systems, Numerical Analysis, Optimal Control, Optimization, Numerical Methods, Finite Element Method, Mesh Generation, Computational Mechanics, Numerical Simulation or Computational Simulation of Physical Phenomena.

The application form should be written in English and include:

1) A detailed CV with a complete list of publications;

2) A research statement summarizing the candidate´s experience, interests and an outline of the research program that can be potentially developed at El Rosario (1-3 pages);

3) A teaching statement describing experience and teaching philosophy (1-3 pages);

4) The names, the institutional affiliations, and the emails of two outstanding scientists who can be asked for recommendation letters about the applicant's doctoral studies, research works or previous research positions. *Please do not include recommendation letters.*

Monthly salary is competitive for both local and international standards and will be determined by a University-wide points system, based on research and teaching experience. Applicants who do not speak Spanish will be given two years to strengthen their Spanish communication skills if they obtain the position. Applicants who do speak Spanish must have a good proficiency in another language, they must certify a B2 level of English, French, German, Italian, Russian, Portuguese or other language relevant in Science at the time of the opening.

Please send your application by e-mail to rene.meziat@urosario.edu.co no later than April 12, 2015. The starting date will be August 1th, 2015 or January 1th, 2016. For specific questions about these positions, contact Dr. René Meziat, Head of the Mathematics Department.

El Rosario is a prestigious University that typically ranks in the top five universities in the country and in the top 50 in Latin America. It was founded in 1653 and has a long tradition in the areas of Medicine, Law, Management, Economics and Social and Political Sciences. Its students enjoy three splendid, beautiful campuses in Bogotá which is a modern, huge and thriving capital city. The School of Natural Sciences and Mathematics was founded in 2008, with the goal of creating strong undergraduate and graduate programs that excel in

both teaching and research. More information about the University of El Rosario can be read at www.urosario.edu.co.