

# 2<sup>nd</sup> Colombian School on Magnetism and Magnetic Materials

3-6 December 2019, Bogotá, Colombia  
 Universidad de los Andes, Universidad ECCI

## Keynote Speakers

### Dr. Krzysztof Chwastek

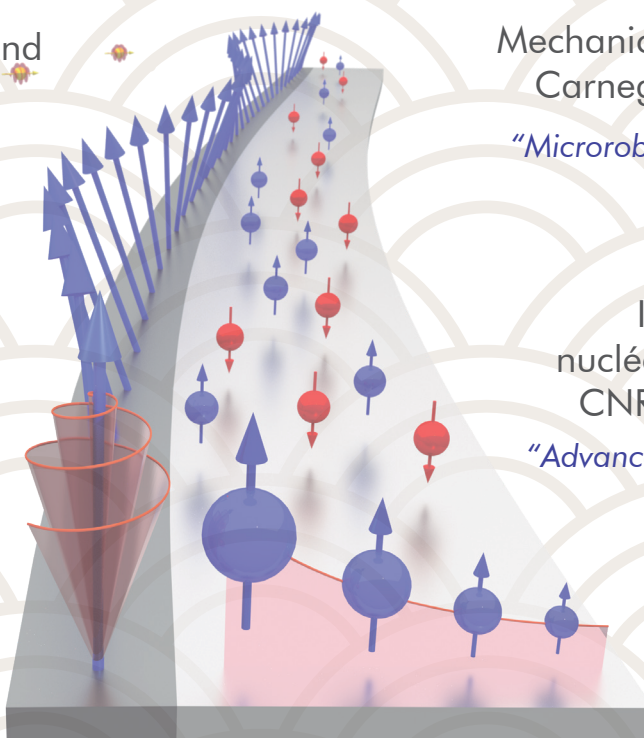
Czestochowa University of Technology, Poland  
*"Fundamentals on magnetism for science and engineering"*

### Dr. Daniel Salazar Jaramillo

BCMaterials,  
 Basque center for materials, applications & nanostructures, Spain  
*"Advance functional materials for magnetism"*

### Dr. Alex Frano

University of California San Diego, USA  
*"Advance X-ray based techniques in magnetism"*



### Dr. Camilo Vélez

Mechanical Engineering Department  
 Carnegie Mellon University, USA  
*"Microrobots and magnetic microsystems"*

### Dr. Andrés Santander

Institut national de physique nucléaire et de physique des particules  
 CNRS - Université Paris Sud, France  
*"Advance X-ray techniques: Spin-resolved ARPES"*

### Dr. Diego Muraca

IFGW - Campinas, Brazil  
*"Magnetism in nanostructures"*

## Experimental Sessions

- Growth of magnetic nanostructures (0D to 2D)
- Micromagnetic simulations
- Montecarlo and DFT methods in magnetism
- Nanostructures for magnetic hyperthermia
- Use of magnet nanoparticles for textile wastewater treatment inside microfluidics
- Scanning microscopy techniques for characterization of magnetic nanostructures
- Electronic transport of magnetic nanostructures (high fields and low temperatures)
- Synthesis and separation of magnetic nanoparticles by coprecipitation and microfluidics

## Tutorial Sessions

### "Fundamentals of Microrobots Fabrication and Applications"

by **Dr. Camilo Vélez**, Mechanical Engineering Department, Carnegie Mellon University, USA.

### "Functionalization of Magnetic Nanocompounds for their use in the Pharmaceutical, Chemical, Biological and Material Industries"

by **Dr. Johann Osma**, Electronic Engineering Department, Universidad de los Andes.

## Further information and registration:



<http://cs3m.uniandes.edu.co>

**Inscriptions open!**

## Organized by

**Juan Gabriel Ramírez** (Uniandes)  
**Mariana Rios Naranjo** (U. Santo Tomás)  
**Germán Álvarez Botero** (ECCI)

## Scientific committee

**Edwin Ramos** (Uniandes)  
**Johans Restrepo** (UdeA)  
**Andrés Rosales** (UN Manizalez)  
**Carlos Parra** (UPTC tunja)  
**Zulia Caamaño** (U Atlántico)  
**Ligia Zambrano** (Univalle)