



# Physics Department, Universidad Técnica Federico Santa María Av. España 1680, 2340000 Valparaíso

Mobile: +56 9 75 289 189 E-mail: patricio.vargas@usm.cl

## **Personal Profile**

Full Professor of Theoretical Physics at the Physics Department of USM. Main activities include the research in the fields of Magnetism and Electronic properties of modern Materials, including systems for Nanotechnology applications and Medical Physics. Main lecturer of Thermodynamics, Statistical Mechanics, and Quantum Physics courses at the graduate level.

## **Achievements**

#### > Awards

- Best Student, Magister en Ciencias Exactas, Award of P. Universidad Católica (1983)
- DAAD fellowship, Ph.D. student at the Max-Planck Institute for Metal Physics Stuttgart, Germany (1981-1985).
- Fulbright Fellowship, Medical Physics, Posdoc position at University of Colorado in Denver, Co. USA, (1991)

#### > Students Formation

- 10 Ph.D. graduate Students
- 3 Masters of Science graduate Students
- 4 "Licenciados en Ciencias" graduate Students
- 2 Engineers graduate Students

### Leadership

- General Director of research and Postgraduate Studies (2008-2011, 2013-2014)
- Academic Vice-president of the University (2011)
- Director of the International Incubator for Innovation in the Enterprises (3IE) at the USM (2009-2014)
- Member of the University Academic Council (2013-2016)
- Member of the NanoAndes initiative (Nanoscience and Nanotechnology organization in Latam)
- National Contact Point in Nanotechnology for the European Community (2008-2011)

## Work Experience

- Académico, Universidad de Santiago de Chile (Chile), 1978 2000
- Profesor Titular en Física Teórica, Universidad Técnica Federico Santa María (Valparaíso, Chile)
   2000 until present date.
- **Postdoctoral visits abroad,** MIT in Boston (USA), CERN in Switzerland-France, Max-Planck Institute in Stuttgart and Dresden (Germany) among many other institutions.
- International evaluator panels, German Research School for Simulation Sciences (GRS), Kern Forchung Zentrum Juelich and Aachen University, Germany (2011), "Doctorado en Física" en la Univ. de los Andes, Bogota, Colombia (2018)

## **Publications**