

## **Resumé**



**Marcia C Barbosa**

*Full Professor of Physics*

*Researcher 1B from CNPq*

*Director of the Brazilian Academy of Sciences*

*Member of The World Academy of Sciences (TWAS)*

### **Contact**

Email:

URL:

Professional Address: IF-UFRGS, Bento Gonçalves 9500, 91501-970, Porto Alegre, RS, Brazil

Nationality : Brazil Born: Rio de Janeiro, Brazil

### **Education**

1978-1981 – Bachelor in Physics by the Universidade Federal do Rio Grande do Sul (UFRGS)

1982-1984 – Master Degree in Physics by the Universidade Federal do Rio Grande do Sul (UFRGS)

1984-1988 – Doctoral Degree in Science by the Universidade Federal do Rio Grande do Sul (UFRGS)

### **Professional**

1989-1990 – Postdoctoral Fellow at the University of Maryland

1990-1991 – Postdoctoral Fellow at the Universidade Federal do Rio Grande do Sul

1991- Currently – Professor of Physics at the Universidade Federal do Rio Grande do Sul

1992- Currently – Researcher 1B from CNPq Agency

### **Selected Committees**

2000-2007 - Chair of the IUPAP Working Group on Women in Physics

2007-2013 – Vice-President of the International Union of Pure and Applied Physics (IUPAP)

2011- 2013 - Coordinator of the Advisory Committee in Physics and Astronomy from CNPq

2009-2016 – Director of the Physics Institute from the Universidade Federal do Rio Grande do Sul

2012 - 2015 – International Councilor from the American Physical Society

2012 – 2017 - Councilor from the Brazilian Physical Society

2011- 2013 Member of the Conselho Nacional de Ciência e Tecnologia from the Minister of Science and Technology of Brazil

2018 – 2019 Member of the Conselho Nacional de Desenvolvimento Econômico e Social from the Brazilian President

2017- 2019 - Member of the IUPAP Biological Physics Committee

2017- Currently – Director of the Brazilian Academy of Sciences

## **Supervision**

23 Undergraduate Students

11 Master Degrees

23 Doctoral Degrees

12 Postdoctoral Fellows

## **Publications**

ISI H-Index - 30

ISI Number of Citations - 2539

Number of Publications in Physics - 138

Number of Publications in Gender and Science Policy -13

Lattes -<http://lattes.cnpq.br/7216344229807186>

## **Recent Papers in Physics**

Atomistic model derived from ab initio calculations tested in Benzene-Benzene interaction potential  
Elizane E. de Moraes, Mariana Z. Tonel, Solange B. Fagan and Marcia C. Barbosa  
Physica A 537 122679 (2020).

Density functional theory study of aromatic interaction of benzene, phenol, catechol, dopamine isolated dimers and adsorbed on graphene surface  
Elizane E. de Moraes, Mariana Z. Tonel, Solange B. Fagan and Marcia C. Barbosa  
Journal of Molecular Modeling 25 302 (2019).

Dynamical aspects of supercooled TIP3P water in the grooves of DNA  
M. A. F. dos Santos, M. A. Habitzreuter, M. H. Schwade, R. Borrasca, M. Antonacci, G. K. Gonzatti, P. A. Netz, and Marcia C. Barbosa  
Journal of Chemical Physics 150 235101 (2019).

Dewetting in Associating Lattice Gas Model Confined by Hydrophobic Walls  
Tássylla O. Fonseca, Marcia M. Szorzyka, Patricia Ternes, Cristina Gavazzoni, Alan B. de Oliveira, and Marcia C. Barbosa  
SCIENCE CHINA : Physics, Mechanics and Astronomy 69 107009 (2019).

Water in nanotubes: The surface effect  
Mateus H. Köhler, José R. Bordin, Carolina F. de Matos, Marcia C. Barbosa  
Chemical Engineering Science 203 54 (2019).

Ion flocculation in water: From bulk to nanoporous membrane desalination  
Mateus H. Köhler, J. R. Bordin and M. C. Barbosa  
Molecular Liquids 277 516 (2019).

Diffusion behaviour of water confined in deformed carbon nanotubes  
Bruno Mendonça, Debora Freitas, Mateus Köhler, Marcia C. Barbosa and Alan B. de Oliveira  
Physica A 517 491 (2019).

## Recent Papers in Gender

Female Researchers in Science in Brazil: the Scissors Effect

Grasiele Bezerra, Daniela Lazaro, Aruquia Peixoto, Maria Margaret Lopes, Carolina Horta Andrade, Helena Nusseinzweig Lopes and Marcia C. Barbosa

In: La Brecha de Género en Matemática, Computación y Ciencias Naturales, Lilia Meza Montes and Silvina Ponce Dawson organizadoras, Sociedad Mexicana de Física (2019)

Energy and Gender: An assessment on gender equality in the energy sector in Brazil

Juliana Falcão Alexandre Strapasson, Hirdan Medeiros, Nathália Weber and Marcia Barbosa

Report to British Embassy, Prosperity Fund, (2019)

Teorema de Emmy Nother, 100 anos: Alegoria da Misoginia em Ciência

Roberta Areas, Marcia C. Barbosa, Ademir E. Santana

Rev. Bras. Ensino Física 41, 1 (2019)

Gender Diversity in the Brazilian Academy of Sciences

N. C. Ferrari, R. Martell, Daniela H. Okido, Grasiele Romanzini, Viviane Magnan, Marcia C. Barbosa and Carolina Brito

Anais de Academia Brasileira de Ciencias 90, 2243 (2018).

## Selected Prizes

2009 Nicholson Medal from the American Physical Society

2013 Loreal-Unesco Prize on Women in Physics

2016 Prize Anisio Teixeira from the Brazilian Agency Capes

2018 Medal from the Scientific Meritus from the Brazilian Presidency

## Advisory Editorial Board

1998 - Currently - Physica A

2013 - 2015 – Journal of Chemical Physics

## Selected Videos

2013 Petrobras Advertisement - <https://www.youtube.com/watch?v=RkzqPmFrar0>

2013 Loreal-Unesco - <http://www.youtube.com/watch?v=MvH8k3Ftrsw&list=PLUaofLG3eRjPDhR2OYM-vd3PIwILR6c-H>

2014 TEDx - <https://www.youtube.com/watch?v=-OLFwkpPxCg&list=UUsT0YIqwnpJCM-mx7-gSA4Q>

2015 Public Talk at the Perimeter Institute - [https://www.youtube.com/watch?v=Yvc8j\\_s\\_Jmw](https://www.youtube.com/watch?v=Yvc8j_s_Jmw)

2016 Abbott Company Advertisement - <https://www.youtube.com/watch?v=8n4hXwKIpx4>