Curriculum Vitae

PD Dr. rer. nat. habil. Rodica Borcia

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Scientific achievements:

2016	**Habilitation** in Theoretical Physics: "Phase field modelling in two–phase systems" at BTU Cottbus-Senftenberg
2016	**Venia legendi** for Theoretical Physics, BTU Cottbus-Senftenberg
since 2001	**Postdoctoral Researcher** at BTU Cottbus-Senftenberg LS Theoretische Physik II, LS Aerodynamik und Strömungslehre
1996-2000	**PhD Student** at "AL.I. Cuza" University, Department of Theoretical Physics, Iaşi (Romania)

Education:

2000	**PhD (Doctor in Physics)** at "AL.I. Cuza" University, Iaşi (Romania)
1995	**M.Sc** in in Plasma Physics and Spectroscopy at "AL.I. Cuza" University, Iaşi (Romania)
1994	**B.Sc (License in Physics)** at "AL.I. Cuza" University, Iaşi (Romania)

Grants/Fellowships/Memberships:

2020	Organizator of the "IMA10-10th Conference of the Marangoni Association: Interfacial Fluid Dynamics and Processes", June 14-18, Iasi (Romania)
2019	Co-organizator Section "Interfacial flows" at the GAMM 2019 Annual Meeting, February 18-22, Vienna (Austria)
2016	Co-organizator of the "IMA8-8th Conference of the Marangoni Association: Interfacial Fluid Dynamics and Processes", June 12-16, Bad Honnef (Germany)
2015	Co-organizator of the "19th International Couette-Taylor Workshop", June 22-24, Cottbus (Germany)
May 2013	**Visiting Fellow** at Isaac Newton Institute in the frame of the Programme: "Complex Fluids Modelling", Cambridge (UK)
1998-1999	**PhD Research Grant** at "Laboratoire de Physique des Gaz et des Plasmas" Université Paris Sud, Orsay (France)

Relevant publications:

(10) R. Borcia, M. Bestehorn, S. Uhlig, M. Gaudet, H. Schenk, *Liquid pumping induced by transverse forced vibrations of an elastic beam: A lubrication approach*, Phys. Rev. Fluids **3**, 084202 (2018)

(9) R. Borcia, I. D. Borcia, M. Helbig, M. Meier, C. Egbers, M. Bestehorn, *Dancing drops over vibrating substrates*, Eur. Phys. J. Special Topics **226**(6), 1297–1306 (2017)

(8) R. Borcia, M. Bestehorn, *Partial coalescence of sessile drops with different miscible liquids*, Langmuir **29**, 4426-4429 (2013)

(7) R. Borcia, I. D. Borcia, M. Bestehorn, *Nonlinear dynamics of thin liquid films consisting of two miscible components*, Phys. Rev. E **86**, 056319 (2012)

(6) R. Borcia, S. Menzel, M. Bestehorn, S. Karpitschka, H. Riegler, *Delayed coalescence of droplets with miscible liquids: lubrication and phase field theories*, Eur. Phys. J. E **34**(3), 24 (2011)

(5) R. Borcia, I. D. Borcia, M. Bestehorn, *Drops on an arbitrarily wetting substrate: A phase field description*, Phys. Rev. E **78**, 066307 (2008)

(4) R. Borcia, M. Bestehorn, *Phase field simulations for drops and bubbles*, Phys. Rev. E **75**, 056309 (2007)

(3) R. Borcia, M. Bestehorn, *Phase-field model for Marangoni convection in liquid-gas systems with a deformable interface*, Phys. Rev. E **67**, 066307 (2003)

(2) R. Ciurea-Borcia, G. Matthieussent, J. Solomon, E. le Bel, F. Simonet, *Oblique whistler waves generated in cold plasma by relativistic electron beams*, Phys. Plasmas **7**, 359–370 (2000)

(1) R. Ciurea-Borcia, G. Matthieussent, J. Solomon, E. le Bel, F. Simonet, *Pitch-angle diffusion of relativistic electrons due to resonant interactions with whistler waves*, Phys. Plasmas **6**, 4597–4606 (1999)