



ACADEMIC TEACHER PROFESSIONAL EXPERIENCE

DOCTORAL SCHOOL OF WROCLAW UNIVERSITY OF SCIENCE AND TECHNOLOGY

1. Basic information

Name, surname:	Antoni C. Mitus
Grade / Title:	professor
Scientific discipline	nauki fizyczne / physical sciences
Faculty:	W11 Wydział Podstawowych Problemów Techniki / Faculty of Fundamental Problems of Technology
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Link to home page and/or research profiles (Google Scholar, ResearchGate, etc.)	

2. Publication record

Up to 10 most important papers published over the period of previous 10 years.

No.	Description (authors, publication title, journal / conference, DOI)	Publication year
1.	G. Pawlik, A.C. Mitus Complex Monte Carlo Light-Driven Dynamics of Monomers in Functionalized Bond Fluctuation Model Polymer Chains Materials 2023, 16, 4373	2023
2.	A.C. Mitus, M. Saphiannikova, W. Radosz, V. Toshchevikow, G. Pawlik Modeling of nonlinear optical phenomena in host-guest systems using bond- fluctuation Monte Carlo model: a review Materials, 2021, 14, 1454.	2021
3.	M. Jarema, A.C. Mitus, J. Zyss Nanoscale ordering of planar octupolar molecules for nonlinear optics at higher temperatures Scientific Reports, (2021), 11:2234.	2021
4.	G. Pawlik, A.C. Mitus Photoinduced mass transport in azo-polymers in 2D: Monte Carlo study of polarization effects Materials, 2020, 13, 4274.	2020
5.	A.Z. Patashinski, M.A. Ratner, R. Orlik, A.C. Mitus Nanofluidic manifestations of structure of liquids: a toy model J. Phys. Chem. C 2019, 123, 16787-16795.	2019
6.	W. Radosz, R. Orlik, G. Pawlik, A.C. Mitus On complex structure of local free volume in bond fluctuation model polymer matrix Polymer 177, (2019) 1-9.	2019
7.	G. Pawlik, W. Radosz, A.C. Mitus Complex Dynamics of photo-switchable guest molecules in all-optical poling close to the glass transition: kinetic Monte Carlo modeling J. Phys. Chem. B 2018, 122, 1756-1765.	2018
8.	G. Pawlik, K. Tarnowski, W. Walasik, A.C. Mitus, I.C. Khoo	2014



	Liquid crystal hyperbolic metamaterial for wide-angle negative-positive refraction and reflection Optics Letters, 39, 1744, 2014.	
9.	G. Pawlik, A. Miniewicz, A. Sobolewska, A.C. Mitus Generic stochastic Monte Carlo model of the photoinduced mass transport in azo-polymers and fine structure of Surface Relief Gratings EPL, 105 (2014) 26002.	2014
10.	A.Z. Patashinski, M.A. Ratner, B.A. Grzybowski, R. Orlik, A.C. Mitus, Heterogeneous structure, heterogeneous dynamics, and complex behavior in two-dimensional liquids J. Phys. Chem. Lett. 2013, 3, 2431-2435.	2013

3. Projects and grants

List of the most important 5 projects/grants with basic description including: title, source(s) of funding, name of the call, role in the project (e.g., principal investigator).

1.	Role in the project (e.g., principal investigator, work package leader, etc.)	Principal Investigator
	Project title	Modeling of mechanisms of build-up of complex Surface Relief Gratings
	Sources of funding	National Science Center
	Name of the call	UMO-2014/13/B/ST5/04417
	Implementation period	2015-2017
2.	Role in the project (e.g., principal investigator, work package leader, etc.)	Principal Investigator
	Project title	Identification of basic parameters for photomechanical effects in doped photochromic polymers: modelling and Monte Carlo simulations
	Sources of funding	National Science Center
	Name of the call	N N507 514039
	Implementation period	2010-2011
3.	Role in the project (e.g., principal investigator, work package leader, etc.)	Principal Investigator
	Project title	Negative, zero and positive refractive index in nanosphere doped liquid crystals: Monte Carlo study
	Sources of funding	National Science Center
	Name of the call	N N507 356135
	Implementation period	20080-2009
4.	Role in the project (e.g., principal investigator, work package leader, etc.)	Principal Investigator
	Project title	Identification of basic nano- and mesoscopic processes accompanying inscription of surface relief gratings in photochromic polymers – Monte Carlo simulations
	Sources of funding	National Science Center
	Name of the call	N50708232/2358



	Implementation period	2007-2008
5.	Role in the project (e.g., principal investigator, work package leader, etc.)	Principal Investigator
	Project title	Percolation of local solid structure in 2D Lennard–Jones liquid and KTHNY scenario
	Sources of funding	National Science Center
	Name of the call	N202 039 31/1828
	Implementation period	2006-2007

4. International experience

Brief description of international cooperation and experience (e.g., research stays, cooperation with foreign entities, coordination or participation in international projects or programmes, keynote speeches and presentations delivered at renowned international conferences, visiting professor stays, invited lectures).

No.	Description	Year(s)
1.	Visiting Professor, ENS de Cachan & University Angers, 6 months	2006 - 2009
2.	Keynote & invited lectures (around 50, international conferences), Chair of French-Polish WOREN conferences, Session Chair at SPIE conferences	2000 - now
3.	Scientific cooperation with scientists from France and USA	2000 - now

5. Experience in teaching doctoral students

Brief description of experience in teaching doctoral students (e.g., courses in doctoral schools and PhD studies, summer/winter schools for doctoral students, tutorials, trainings, etc.).

No.	Description	Year(s)
1.	Lecturer at MONABIPHOT summer schools (France and Poland)	2006, 2007, 2008, 2009, 2012, 2018
2.	Courses: Introduction into Statistical Mechanics of Polymers, Modelling of Physical Processes and Phenomena with Maple, Introduction to Stochastic Processes in Physics, Conference Presentation, Literature Seminary, Mini Compendium of Classical Theoretical Physics	1997- now

6. List of supervised doctoral students

List of all supervised doctoral students that defended the PhD including: name of the student, dissertation title, year of awarding PhD.

No.	Name, surname	Dissertation title	Year of awarding PhD
1.	Wojciech Radosz	Characterization of local static and dynamic properties of polymer system in bond-fluctuation model	2018
2.	Michał Jarema	Analysis of effective non-centrosymmetric orientational ordering of a system of interacting octupolar molecules in an external electrostatic field	2015



3.	Rafał Orlik	Spatial and temporal scales related to local structure in computer-simulated 2D liquids	2007
4	Grzegorz Pawlik	Monte Carlo study of orientational molecular order relevant for light-induced diffraction gratings	2004

7. Prizes and awards

The most important national and international prizes and awards related to research, development and teaching activities.

No.	Description	Year
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8. Other significant achievements

Information on other significant achievements related to research, development and teaching activities.

- Regular referee of topical journals
- Active Teaching Staff Mobility lecturer
- Expert of European Commission Research Executive Agency FET-OPEN (2020, 2021, 2022)
- Member of the scientific committees of SPIE conferences