

Conferences in which I participated

1. Conference Mathematics in Technical and Natural Sciences, Krynica (1998), Talk: A finite difference method for a parabolic-elliptic system.
2. XXVII National Conference on Applied Mathematics, Zakopane-Kościelisko (1998), Talk: A finite difference method for a nonlinear parabolic-elliptic system with the Dirichlet condition.
3. XXVIII National Conference on Applied Mathematics, Zakopane-Kościelisko (1999), Talk: A finite difference method for a nonlinear parabolic-elliptic system with the nonlinear implicit initial-boundary conditions.
4. X Conference Mathematics in Technical and Natural Sciences, Krynica (2007), Talk: Existence and uniqueness of classical solutions of the first Fourier problem of a parabolic-elliptic system.
5. VI Forum of Partial Differential Equations, Będlewo (2008), Talk: A finite difference method for quasi-linear and nonlinear differential functional parabolic equations.
6. Dynamics, Topology and Computation, Będlewo (2009).
7. Eighth International Conference Symmetry in Nonlinear Mathematical Physics, Kiev, Ukraine (2009).
8. 11th Conference Mathematics in Technical and Natural Sciences, Krynica (2010), Talk: Explicit and implicit difference methods for differential functional parabolic equations.
9. 16th International Conference on Mathematical Modelling and Analysis, Sigulda, Latvia (2011), Talk: Difference methods for differential functional parabolic equations and estimates of solutions.
10. 12th Conference Mathematics in Technical and Natural Sciences, Krynica (2011), Talk: Estimates of solutions and applications to difference methods.
11. MAESTRO-Workshop, Włodowice (2013), Talk: Construction and properties of a real model of the quaternion diffusion equation.
12. Between Theory and Applications - Mathematics in Action, Będlewo (2013), Talk: Complex and quaternion diffusion equation.
13. Functional Differential Equations - Workshop dedicated to the memory of Professor Zdzisław Kamont, Gdańsk (2013), Talk: Recurrence inequalities and applications.
14. Mathematics, Mechanics and Modelling, a tribute to Zbigniew Peradzyński joint with 13th Conference Mathematics in Technical and Natural Sciences (2013), Talk: Existence, uniqueness and estimates of classical solutions to some evolutionary system.
15. Sixth Conference on Finite Difference Methods, Theory and Applications, Lozenetz, Bulgaria (2014), Talk: Recurrence inequalities and applications in finite difference methods; Poster: Molecular ion channel - a finite difference method.
16. 7th Symposium on Integrable Systems (2014), Kraków.
17. IX Forum of Partial Differential Equations, Będlewo (2014).

18. Spring of Differential Equations in Gdańsk (2015), Talk: Quaternionic quantum wave and the Klein–Gordon equations in Cauchy–Navier elastic solid.
19. Singular PDEs, Analytical Tools and Applications, Małe Ciche (2015), Talk: Existence and uniqueness of a weak solution to the Nernst–Planck–Poisson system.
20. 14th Conference Mathematics in Technical and Natural Sciences, Kościelisko (2015), Talk: Global existence and uniqueness of a classical solution to some differential evolution system.
21. X Forum of Partial Differential Equations, Będlewo (2016), Talk: On local weak solutions to Nernst–Planck–Poisson system; Poster Existence and uniqueness of global weak solutions to interdiffusion with Vegard rule.
22. 6th International Eurasian Conference on Mathematical Sciences and Applications, Budapest, Hungary (2017), Talk: Weak solutions to interdiffusion models with Vegard rule.
23. 15th Conference Mathematics in Technical and Natural Sciences, Kościelisko (2017), Talk: Weak solutions to interdiffusion models with Vegard rule.
24. 23th International Conference on Mathematical Modelling and Analysis, Sigulda, Latvia (2018), **Plenary talk**: Mathematical, numerical and physical analysis of some interdiffusion model.
25. XLVII National Conference on Applied Mathematics, Zakopane (2018).
26. XI Forum of Partial Differential Equations, Będlewo (2019), Talk: Mathematical models of biological ion channels.
27. 16th Conference Mathematics in Technical and Natural Sciences, Kościelisko (2019), Talk: Biological ion channels.
28. Workshop On Numerical Solution of Integral and Differential Equations, Gdańsk (2019), Talk: Difference methods to interdiffusion models with Vegard rule.
29. Jubilee Congress of Polish Mathematicians on the 100th anniversary of the Polish Mathematical Society, Kraków (2019), Talk: Mathematical models of interdiffusion.
30. Dynamics, Equations and Applications, Kraków (2019), Talk: Mathematical models of interdiffusion with Vegard rule.
31. LI Conference on Applications of Mathematics, Zakopane (2023), Talk: Interdiffusion in solids.

Co-authorship of talks at conferences

1. 12th International Conference on Diffusion in Solids and Liquids, Split, Croatia (2016), Lecturer: K. Tkacz-Śmiech, Nitrogen diffusion and stresses during nitriding of metals and alloys.
2. 13th International Conference on Diffusion in Solids and Liquids, Vienna, Austria (2017), Lecturer: M. Danielewski, Nonlinear boundary conditions in surface treatment.
3. 13th International Conference on Diffusion in Solids and Liquids, Vienna, Austria (2017), Lecturer: K. Tkacz-Śmiech, Plastic deformation during the expanded austenite growth.

4. 11th International Conference on Advanced Computational Engineering and Experimenting, Vienna, Austria (2017), Lecturer: M. Danielewski, Nonlocal boundary conditions in surface treatment.
5. 11th International Conference on Advanced Computational Engineering and Experimenting, Vienna, Austria (2017), Lecturer: K. Tkacz-Śmiech, Boundary conditions for nitriding in open system.
6. 15th Conference Mathematics in Technical and Natural Sciences, Kościelisko (2017), Lecturer: M. Danielewski, Quaternionic quantum wave and Klein-Gordon equations in Cauchy-Navier elastic solid.
7. 15th Conference Mathematics in Technical and Natural Sciences, Kościelisko (2017), Lecturer: K. Tkacz-Śmiech, Interdiffusion and plastic deformation.
8. International Conference on Differential Equations, Mathematical Physics and Applications, Cherkasy, Ukraine (2017), **Plenary talk**, Lecturer: M. Danielewski, Quaternionic quantum wave and gravity in the ideal elastic crystal.
9. XLVII National Conference on Applied Mathematics, Zakopane (2018), Lecturer: B. Bożek, One-dimensional mathematical model of the iron nitriding process.
10. 22th International Conference on Solid State Ionics, PyeongChang, South Korea (2019), Lecturer: M. Danielewski, High entropy oxides; microstructures, ionic conductivity and simulation.
11. 15th International Conference on Diffusion in Solids and Liquids, Athens, Greece (2019), **Plenary talk**, Lecturer: M. Danielewski, Augustin-Louis Cauchy precursor of diffusion; diffusion equation in Cauchy elastic solid.