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## CURRICULUM VITAE

- **Date of Birth:** April 18th, 1956
- **Place of Birth:** Elbląg, POLAND

### Education

- **M.Sc.:** Faculty of Mathematics, Informatics and Mechanics, University of Warsaw 1980
- **Ph.D.:** Faculty of Mathematics, Informatics and Mechanics, University of Warsaw 1985
- **Doctor of Science "Habilitation":** Faculty of Mathematics, Informatics and Mechanics, University of Warsaw 1993
- **State Title Full Professor:** Faculty of Mathematics, Informatics and Mechanics, University of Warsaw 2004

### Professional Employment

- 1980 to 1987: Assistant (*asystent*), Faculty of Mathematics, Informatics and Mechanics, University of Warsaw
- 1987 to 1994: Associate Professor (*adiunkt*), Faculty of Mathematics, Informatics and Mechanics, University of Warsaw
- 1998/1999: *Docent*, Institute of Mathematics, Polish Academy of Sciences, Warsaw
- 1994 to 2009: Professor of University of Warsaw, Faculty of Mathematics, Informatics and Mechanics, UW

- 2009 to present: Full Professor, Faculty of Mathematics, Informatics and Mechanics, UW

Honorary Professor in the School of Mathematical Sciences, Faculty of Science and Agriculture, University of KwaZulu–Natal, Westville (South Africa), 2006–2008, and 2012–2014

### Visiting Positions

- 1 month, 1981; Department of Mathematics, Lomonosov University of Moscow (Russia)
- 1 month, 1983; Department of Mathematics, Strathclyde University of Glasgow (Scotland)
- 3 months, 1986/1987; Institute of Mechanics, NTH Technical University of Trondheim (Norway)
- 2 months, 1987; 3 months, 1989; 1 month, 1990; 2 months, 1991; 1 month, 1994; 1 month, 1995; 1 week, 1997; 1 month, 1999; 1 week, 2000; 1 week, 2010, Dipartimento di Matematica, Politecnico di Torino, Turin (Italy);
- 2 weeks, 1990; Department of Mathematics, Academy of Sciences, Kiev (Ukraine)
- 2 weeks, 1990; Keldysh Institute of Applied Mathematics, Academy of Sciences, Moscow (Russia)
- 1 month, 1992; Dipartimento di Matematica, Università di Genova (Italy)
- 1 month, 1994; 1 month, 1995; 2 months, 1996; Dipartimento di Ingegneria Civile, Università di Udine (Italy)
- 1 week, 1996; Department of Mathematics, Technische Hochschule Darmstadt (Germany)
- 1 month, 1997; 1 month, 2001; Department of Mathematics and Applied Mathematics, University of Natal, Durban (South Africa)
- 2 weeks, 1999; Faculty of Integrated Human Studies, Kyoto University (Japan)
- 2 weeks, 1999; 2 weeks, 2000; Department of Mathematics, Göteborgs Universitet — Chalmers Tekniska Högskola, Gothenburg (Sweden)
- 4 days, 2001; Center for High Performance Computing at Dresden University of Technology (Germany)
- 4 days, 2004; 4 days, 2005; 4 days in 2006; Department of Mathematics, University of Dundee (Scotland)

- 4 days, 2010; Institut für Angewandte Analysis und Numerische Simulation, Universität Stuttgart (Germany)
- 4 days, 2010; Fakultät für Mathematik, Universität Bielefeld (Germany)
- 3 weeks, 2011; African Institute for Mathematical Sciences, Muizenberg (South Africa)
- 4 days, 2011; Fachbereich Mathematik und Informatik, Universität Münster (Germany)
- 1 month, 2013; Dip. Ingegneria Civile Informatica, Università di Messina (Italy)

### **Post-Doctoral Scholarships**

- 1 year 1987/1988; Dipartimento di Matematica Castelnuovo, Università di Roma, and Dipartimento di Matematica Pura ed Applicata, Università di L'Aquila (Italy), scholarship of Italian CNR
- 3 months, 1993; Department of Mathematics, Politecnico di Torino, Turin (Italy), "Go West" scholarship of European Community

### **Member of Editorial Boards**

- Abstract and Applied Analysis (Hindawi Publishing Corporation), Impact Factor 1.318 (2011)
- Mathematical Methods in the Applied Sciences (John Wiley & Sons), Impact Factor 0.743 (2011)
- Journal of Applied Mathematics (Hindawi Publishing Corporation), Impact Factor 0.656 (2011)
- Folia Mathematica (Acta Universitatis Lodziensis)
- Opuscula Mathematica (AGH University of Science and Technology)
- Series on Advances in Mathematics for Applied Sciences (World Sci.)
- Applied Mathematics (Annals of the Polish Mathematical Society).

### **Departmental Service**

- 2005 to present, Director of Institute of Applied Mathematics and Mechanics
- 1995 – 1996 and 1999 – 2005, Vice-Director of Institute of Applied Mathematics and Mechanics
- member of the Staff Committee

### Research Support

- Joint research grant under the South Africa / Poland Agreement on Cooperation in Science and Technology: UID 69188 *Dynamical Systems and Kinetic Models in Biomathematics*, 2009-2010.
- Co-ordinator of the Polish Team of European MC Research Training Network (MRTN-CT-2004-503661) *Modeling, Mathematical Methods and Computer Simulations of Tumor Growth and Therapy* — M3CS TuTh; 2004–2007
- Co-ordinator of the Polish Team of European Research Training Network (HPRN-CT-2000-00105) *Using Mathematical Modelling and Computer Simulation to Improve Cancer Therapy*; 2000-2003
- Various Polish grants, recently: *Nieskończenie-wymiarowe układy dynamiczne — asymptotyka, stabilność i chaos (Infinitely dimensional dynamical systems — asymptotics, stability and chaos)*, N N201 605640, 2011–2014 and *Matematyczne podstawy procesów wieloskalowych (Mathematical foundation of the multi-scale descriptions)*, N N201 362536, 2009–2012

### Supervisor of Ph.D. Theses

- **Marek Bodnar**, University of Warsaw (graduated in 2001)
- **Sławomir Jagodziński**, Technical University of Łódź (graduated in 2003, the award with distinction)
- **Remigiusz Kowalczyk** (co-supervisor together with Prof. L. Preziosi), Politecnico di Torino (graduated in 2005)
- **Cristian Morales Rodrigo**, University of Warsaw (graduated in 2008)

### Supervisor of M.Sc. Theses

- Supervisor of **19** M.Sc. theses at University of Warsaw

### Conferences co-organizer

- National Conference on Application of Mathematics in Biology and Medicine, 1998, Zwierzyniec
- National Conference (I Forum) on Partial Differential Equations, 1998, Będlewo
- Workshop *Modelling Complex Systems: Some Topics in Mathematical Description of Biological and Social Processes*, 2001, Warsaw
- Workshop *Cancer Growth and Progression, Mathematical Problems and Computer Simulations*, 2002, Będlewo
- Workshop *Cancer Research: From Genes to Tumour Growth*, 2002, Warsaw
- Course and Workshop *From a Microscopic to a Macroscopic Description of Complex Systems*, 2006, Będlewo
- School *From Genetics to Mathematics*, 2007, Zbąszyń
- Workshop *Recent Trends in Applications of Mathematics to Biology and Medicine V*, 2007, Warsaw
- Workshop *Mathematical Methods for Multiscale Description in the Applied Sciences*, 2010, Warsaw

### Research Interests

Partial Differential Equations, Integro-differential Equations, Singularly Perturbed Problems, Markov Processes, Applications in Kinetic Theory, Biology and Medicine

### Publications

- 5 monographs: [1], one chapter of 83 pages in book [2], co-author of book [3], one chapter of 68 pages in book [4], co-editor of book [5];
- Special issue of a journal [6];
- 75 research papers ([7]–[81]) — 49 papers in journals on the *ISI Master Journal List*;
- 11 other papers ([85]–[93]);
- one entry in Polish Great Encyclopedia PWN ([91]).

# PUBLICATIONS

## MONOGRAPHS

1. N. Bellomo, M. Lachowicz, J. Polewczak, G. Toscani, *Mathematical Topics in Nonlinear Kinetic Theory. The Enskog Equation*, World Scientific, Singapore 1991
2. M. Lachowicz, Asymptotic Analysis of Nonlinear Kinetic Equations: The Hydrodynamic Limit, in *Lecture Notes on the Mathematical Theory of the Boltzmann Equation*, World Scientific, Singapore 1995, 65–148
3. L. Arlotti, N. Bellomo, E. De Angelis, M. Lachowicz, *Generalized Kinetic Models in Applied Sciences*, World Sci., New Jersey 2003
4. M. Lachowicz, *Links Between Microscopic and Macroscopic Descriptions, in Multiscale Problems in the Life Sciences. From Microscopic to Macroscopic*, Eds. V. Capasso, M. Lachowicz, **Lecture Notes in Mathematics** 1940, Springer, Berlin, Heidelberg 2008, 201–268
5. M. Lachowicz, J. Miękiś (Eds.), *From Genetics to Mathematics*, World Sci., New Jersey 2009

## SPECIAL ISSUE

6. M. Kimmel, M. Lachowicz, A. Świerniak (Eds.), *International Journal of Applied Mathematics and Computer Science* 13, 3, 2003, Special Issue: Cancer Growth and Progression, *Mathematical Problems and Computer Simulations*.

## SCIENTIFIC ARTICLES

7. M. Lachowicz, On the local existence and uniqueness of solution of initial—value problem for the Enskog equation, *Bull. Polish Acad. Sci. Math.* 31, (1-2), 1983, 89–97
8. W. Fiszdon, M. Lachowicz, A. Palczewski, Existence problems of the non-linear Boltzmann equation, *Trends and Applications of Pure Mathematics to Mechanics*, Eds. P.G. Ciarlet, M. Roseau, *Lecture Notes in Physics*, 195, Springer 1984, 63–95

9. M. Lachowicz, Initial layer and existence of a solution of the non-linear Boltzmann equation, *Proc. XV Intern. Symp. RGD* (Grado 1986), Teubner, Stuttgart 1986, vol. I, 150–159
10. M. Lachowicz, On the initial layer and the existence theorem for the non-linear Boltzmann equation – Differentiability of the solution of the corresponding system of linear equations, **Arch. Mech.** 38, (1–2), 1986, 127–141
11. M. Lachowicz, On the initial layer and existence theorem for the nonlinear Boltzmann equation, **Math. Methods Appl. Sci.** 9, 3, 1987, 342–366
12. N. Bellomo, M. Lachowicz, Kinetic equation for dense gases: a review of physical and mathematical results, **Internat. J. Modern Phys. B** 1, (5–6), 1987, 1193–1206
13. N. Bellomo, M. Lachowicz, Kinetic equation for dense gases: a review of mathematical results, *Kinetic Theories and Extended Thermodynamics*, Eds. J. Müller, T. Ruggeri, Pitagora, Bologna 1987, 31–40
14. M. Lachowicz, On the limit of the nonlinear Enskog equation corresponding with fluid dynamics, **Arch. Rational Mech. Anal.** 101, 2, 1988, 179–194
15. N. Bellomo, M. Lachowicz, On the asymptotic equivalence between the Enskog and the Boltzmann equations, **J. Statist. Phys.** 51, (1–2), 1988, 233–247
16. M. Lachowicz, R. Monaco, Existence and quantitative analysis of the solutions to the initial value problem for the discrete Boltzmann equation in all space, **SIAM J. Appl. Math.** 49, 4, 1989, 1231–1241
17. N. Bellomo, M. Lachowicz, A. Palczewski, G. Toscani, On the initial – value problem for the Boltzmann equation with a force term, **Transport Theory Statist. Phys.** 18, 1, 1989, 87–102
18. M. Lachowicz, T. Ytrehus, Solutions of the Navier—Stokes equations in the case of evaporation, *Bull. Polish Acad. Sci. Tech.* 37, (7–12), 1989, 453–458
19. N. Bellomo, M. Lachowicz, Some mathematical results on the asymptotic behavior of the solutions to the initial value problem for the Enskog equation, **Rev. Math. Phys.** 1, (2), 1989, 183–196
20. M. Lachowicz, M. Pulvirenti, A stochastic particle system modeling the Euler equation, **Arch. Rational Mech. Anal.** 109, (1), 1990, 81–93
21. M. Lachowicz, Sul problema al valore iniziale per l’equazione di Enskog con campo esterno, *Boll. Un. Mat. Ital.* 5–B(7), 1991, 177–188

22. M. Lachowicz, On the asymptotic equivalence between the Enskog and the Boltzmann equations in the presence of an external force field, *Hokkaido Math. J.* 20, (1), 1991, 165–177
23. M. Lachowicz, R. Monaco, Analysis by the operator interpolation method of an initial — boundary value problem for the semidiscrete Boltzmann equation, *Operator Theory: Advances and Applications*, vol. 51, Eds. W. Greenberg & J. Polewczak, Birkhäuser, Basel 1991, 215–226
24. M. Lachowicz, On the asymptotic behaviour of solutions of nonlinear kinetic equations, **Ann. Mat. Pura Appl.** (IV), 160, 1991, 41–62
25. N. Bellomo, M. Lachowicz, On the asymptotic theory of the Boltzmann and Enskog equations. A rigorous H–Theorem for the Enskog equation, *Mathematical Aspects of Fluid and Plasma Dynamics*, Eds. G. Toscani, V. Boffi, S. Rionero, **Lecture Notes in Math.** 1460, Springer 1991, 15–30
26. M. Lachowicz, Solutions of nonlinear kinetic equations at the level of the Navier–Stokes dynamics, **J. Math. Kyoto Univ.** 32, 1992, 31–43
27. M. Lachowicz, Stochastic systems modeling the hydrodynamic equations, *Proc. V Polish – Italian Symp. Thermodynamics and Kinetic Theory*, Mađralin 1990, World Sci., Singapore 1992, 72–78
28. M. Lachowicz, On the Enskog equation and its hydrodynamic limit, *Kinetic Theory and Hyperbolic Systems*, Eds. V. Boffi, F. Bampi, G. Toscani, World Sci., Singapore 1992, 159–165
29. N. Bellomo, M. Lachowicz, Mathematical biology and kinetic theory: Evolution of the dominance in a population of interacting organisms, *Kinetic Theory and Hyperbolic Systems*, Eds. V. Boffi, F. Bampi, G. Toscani, World Sci., Singapore 1992, 11–20
30. N. Bellomo, M. Lachowicz, A Liapunov functional and dissipativity analysis for a kinetic model in mathematical biology, *Ricerche Mat.* 41, suppl., 1992, 65–76
31. M. Lachowicz, A system of stochastic differential equations modeling the Euler and the Navier–Stokes hydrodynamic equations, **Japan J. Indust. Appl. Math.** 10, 1993, 109–131
32. M. Lachowicz, Stochastic differential equations for the kinetic and hydrodynamic equations, **Nonlinear Dyn.** 5, 1994, 393–399
33. N. Bellomo, M. Esteban, M. Lachowicz, Nonlinear kinetic equations with dissipative collisions, **Appl. Math. Lett.** 8, (5), 1995, 47–52
34. L. Arlotti, M. Lachowicz, Qualitative analysis of an equation modelling tumor—host dynamics, **Math. Comput. Model.** 23, (6), 1996, 11–29



35. L. Arlotti, M. Lachowicz, On the hydrodynamic limit for quantum kinetic equations, **Compt. Rend. Acad. Sci. Paris** 323, Série I, 1996, 101–106
36. L. Arlotti, M. Lachowicz, Euler and Navier–Stokes limits of the Uehling–Uhlenbeck quantum kinetic equations, **J. Math. Phys.** 38, 1997, 3571–3588
37. N. Bellomo, M. Lachowicz, J. Polewczak, On a mathematical model in theoretical immunology, **Appl. Math. Lett.** 10, (4), 1997, 53–58.
38. M. Lachowicz, From kinetic to Navier–Stokes–type equations, **Appl. Math. Lett.** 10, (5), 1997, 19–23
39. M. Lachowicz, Hydrodynamic limits of stochastic kinetic equations I, *ARI* 50, (2), 1997, 131–140
40. M. Lachowicz, On the hydrodynamic limit of the Enskog equation, **Publ. Res. Inst. Math. Sci.** 34, 1998, 191–210
41. M. Lachowicz, Nonlocal coagulation and fragmentation, *Proceedings of the Fifth National Conference on Application of Mathematics in Biology and Medicine*, Ustrzyki Górne, September 14–17, 1999, 93–98
42. L. Arlotti, N. Bellomo, M. Lachowicz, Kinetic equations modelling population dynamics, **Transport Theory Statist. Physics** 29, (1–2), 2000, 125–139
43. M. Lachowicz, D. Wrzosek, A nonlocal coagulation–fragmentation model, *Appl. Math. (Warsaw)* 27, (1), 2000, 45–66
44. S. Jagodziński, M. Lachowicz, Incompressible Navier–Stokes limit for the Enskog equation, **Appl. Math. Lett.**, 13, 2000, 107–111
45. M. Lachowicz, Hydrodynamic limits of some kinetic equations, *First RIMS Workshop on Mathematical Analysis in Fluid and Gas Dynamics*, Kyoto, July 12–14, 1999, Eds. A. Matsumura & S. Kawashima, Surikaisekikenkyusho Kokyuroku N. 1146, 2000, RIMS Kyoto Univ., 121–143
46. M. Lachowicz, Competition tumor – immune system, *Proceedings of the Sixth National Conference on Application of Mathematics in Biology and Medicine*, Zawoja, September 12–15, 2000, 89–93
47. M. Lachowicz, Is the linearized Boltzmann–Enskog operator dissipative?, **Appl. Math. Lett.** 14, 2001, 291–295
48. M. Lachowicz, D. Wrzosek, Nonlocal bilinear equations. Equilibrium solutions and diffusive limit, **Math. Models Methods Appl. Sci.** 11, no. 8, 2001, 1393–1409

49. J. Banasiak, M. Lachowicz, Chaos for a class of linear kinetic models, **Compt. Rend. Acad. Sci. Paris**, Série IIB, 329, 2001, 439–444
50. M. Lachowicz, When topology meets medicine, *Proceedings of the Seventh National Conference on Application of Mathematics in Biology and Medicine*, Zawoja, September 25–28, 2001, 117–122
51. L. Arlotti, A. Gamba, M. Lachowicz, A kinetic model of tumor—immune system cellular interactions, *J. Theoret. Medicine* 4 (1), 2002, 39–50
52. J. Banasiak, M. Lachowicz, Topological chaos for birth–and–death–type models with proliferation, **Math. Models Methods Appl. Sci.** 12, 6, 2002, 755–775
53. M. Lachowicz, From microscopic to macroscopic description for generalized kinetic models, **Math. Models Methods Appl. Sci.** 12, 7, 2002, 985–1005
54. J. Banasiak, M. Lachowicz, Chaotic linear dynamical systems with applications, *The Proceedings of the 2nd International Conference on Semi-groups of Operators: Theory and Applications SOTA 2*, Rio de Janeiro, 10–14 September 2001, Eds. C. Kubrusly, N. Levan, and M. da Silveira, Optimization Software, Los Angeles, 2002, 32–44
55. M. Lachowicz, Describing competitive systems at the level of interacting individuals, *Proceedings of the Eighth National Conference on Application of Mathematics in Biology and Medicine*, Łąjs, September 24–27, 2002, 95–100
56. J. Banasiak, M. Lachowicz, M. Moszyński, Topological chaos: When topology meets medicine, **Appl. Math. Lett.** 16, 2003, 303–308
57. M. Lachowicz, Ph. Laurençot, D. Wrzosek, On the Oort–Hulst–Safra-nov coagulation equation and its relation to the Smoluchowski equation, **SIAM J. Math. Anal.** 34, 6, 2003, 1399–1421
58. M. Lachowicz, From microscopic to macroscopic descriptions of complex systems, **Compt. Rend. Acad. Sci. Paris**, Série IIB, 331, 2003, 733–738
59. M. Lachowicz, On bilinear kinetic equations. Between micro and macro descriptions of biological populations, *Banach Center Publ.*, 63, 2004, 217–230
60. S. Jagodziński, M. Lachowicz, On two incompressible hydrodynamic limits of the Boltzmann-Enskog equation I: Formal derivation, **Transport Theory Statist. Physics** 33, 2, 2004, 157–181
61. M. Lachowicz, A model of swarming and its macroscopic limit, *Proceedings of the X National Conf. Application of Math. to Biology and Medicine*, Święty Krzyż, Kielce 2004, 113–117

62. M. Kolev, E. Kozłowska, M. Lachowicz, A mathematical model for single cell cancer – immune system dynamics, **Math. Comput. Model.** 41, 10, 2005, 1083–1095
63. L. Arlotti, A. Deutsch, M. Lachowicz, On a discrete Boltzmann-type model of swarming, **Math. Comput. Model.** 41, 10, 2005, 1193–1201
64. M. Lachowicz, General population systems. Macroscopic limit of a class of stochastic semigroups, **J. Math. Anal. Appl.** 307/2, 2005, 585–605
65. M. Lachowicz, Stochastic semigroups and coagulation equations, *Ukrainian Math. J.* 57, 6, 2005, 770–777
66. M. Lachowicz, Micro and meso scales of description corresponding to a model of tissue invasion by solid tumours, **Math. Models Methods Appl. Sci.** 15, 2005, 1667–1683
67. S. Jagodziński, M. Lachowicz, On two incompressible hydrodynamic limits of the Boltzmann-Enskog equation II: A rigorous result, **Transport Theory Statist. Physics** 34, 2005, 447–474
68. J. Banasiak, M. Lachowicz, M. Moszyński, Semigroups for generalized birth–and–death equation in  $l^p$  spaces, **Semigroup Forum** 73, 2, 2006, 175–193
69. J. Banasiak, M. Lachowicz, M. Moszyński, Chaotic behavior of semigroups related to the process of gene amplification–deamplification with cell proliferation, **Math. Biosci.** 206, 2007, 200–215
70. J. Banasiak, M. Lachowicz, Around the Kato generation theorem for semigroups, **Studia Math.** 179, 3, 2007, 217–238
71. M. Lachowicz, Towards microscopic and nonlocal models of tumour invasion of tissue, Eds. N. Bellomo, M. Chaplain, E. De Angelis, Birkhäuser, Boston 2008, 49–63
72. Z. Szymańska, C. Morales Rodrigo, M. Lachowicz, M. Chaplain, Mathematical modelling of cancer invasion of tissue: The role and effect of nonlocal interactions, **Math. Models Methods Appl. Sci.**, 19 (2), 2009, 257–281
73. M. Chaplain, M. Lachowicz, Z. Szymańska, D. Wrzosek, Mathematical modelling of cancer invasion: The importance of cell-cell adhesion and cell–matrix adhesion, **Math. Models Methods Appl. Sci.**, 24 (4), 2011, 719–743
74. M. Lachowicz, Microscopic, mesoscopic and macroscopic descriptions of complex systems, **Prob. Engin. Mech.**, 26 (1), 2011, 54–60
75. J. Banasiak, M. Lachowicz, Multiscale approach in mathematical biology, **Phys. Life Reviews**, 8 (1), 2011, 19–20

76. M. Lachowicz, Individually-based Markov processes modeling nonlinear systems in mathematical biology, **Nonlinear Analysis Real World Appl.**, 12 (4), 2011, 2396–2407 (doi:10.1016/j.nonrwa.2011.02.014)
77. L. Arlotti, E. De Angelis, L. Fermo, M. Lachowicz, N. Bellomo, On a class of integro–differential equations modeling complex systems with nonlinear interactions, **Appl. Math. Letters**, 25 (2012), 490–495
78. M. Lachowicz, A. Quartarone, A general framework for modeling tumor–immune system competition at the mesoscopic level, **Appl. Math. Letters**, 25, 2012, 2118–2122, (doi:10.1016/j.aml.2012.04.021)
79. J. Banasiak, E. Kimba Phongi, M. Lachowicz, A singularly perturbed SIS model with age structure, **Math. Biosci. Engineering**, 10, 2013, 499–521, (doi:10.3934/mbe.2013.10.499)
80. M. Lachowicz, T. Ryabukha, Equilibrium solutions for microscopic stochastic systems in population dynamics, **Math. Biosci. Engineering**, 10, 2013, 777–786, (doi:10.3934/mbe.2013.10.777)
81. J. Banasiak, M. Lachowicz, On a macroscopic limit of a kinetic model of alignment, **Math. Models Methods Appl. Sci.**, to appear; arXiv:1207.2643v1 [math.AP]

## OTHER PUBLICATIONS

82. M. Lachowicz, A. Palczewski, Rachunek prawdopodobieństwa a fizyka, *Matematyka, Społeczeństwo, Nauczanie, OKM* 9, 1992, 30–38
83. M. Lachowicz, „Paradoksy” symetrii czasowej, *Delta* 7, 230, 1993, 2–4
84. M. Lachowicz, Recenzja książki J. Uchmańskiego „Klasyczna ekologia matematyczna”, *Wiadom. Mat.* 30, (1), 1993, 149–151
85. M. Lachowicz, D. Wrzosek, Matematyczne modele zjawisk przyrodniczych, *Matematyka, Społeczeństwo, Nauczanie, OKM* 15, 1995, 4–15
86. M. Lachowicz, Midzy mikroświatem a makroświatem — Analiza asymptotyczna, *Wiadom. Mat.* 32, s. II, 1996, 37–49
87. M. Lachowicz, Matematyka chaosu, *Matematyka, Społeczeństwo, Nauczanie, OKM* 22, 1999, 21–28
88. M. Lachowicz, Modele matematyczne w biologii, *Matematyka Stosowana — Matematyka dla społeczeństwa* 1, 42, 2000, 3–34
89. M. Lachowicz, Dziwny atraktor Lorenza, *Delta* 12(355), 2003, 1

90. M. Lachowicz, Book Review: „Proceedings of the Dynamical Systems Conference — Nonlinear Dynamical Systems and Chaos”, *Applied Math. (PTM)* 40, 1997, 89–92
91. M. Lachowicz, Model matematyczny, *Wielka Encyklopedia PWN*, tom 17
92. M. Lachowicz, Nieskończoność — nieskończenie użyteczna, *Delta*, to appear
93. M. Lachowicz, Matematyka stosowana i mechanika, *Delta*, 4 (467), 2013, 1

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