Dr. Piotr Skrzypacz

Curriculum Vitae

"An error becomes an error when born as truth."

Home address	Unterhorstweg 19e, Magdeburg 39122, Germany
Address at work	Kabanbay Batyr Ave. 53, Nur-Sultan 010000, Kazakhstan
email	*piotr.skrzypacz@nu.edu.kz*
Date and place of birth	03.12.1973, Wrocław, Poland
Nationality	Poland
Marital Status	Married with Kazakh wife, daughter Julia Alua Skrzypacz

Personal data

Home address	Unterhorstweg 19e, Magdeburg 39122, Germany
Address at work	Kabanbay Batyr Ave. 53, Nur-Sultan 010000, Kazakhstan
email	*piotr.skrzypacz@nu.edu.kz*
Date and place of birth	03.12.1973, Wrocław, Poland
Nationality	Poland
Marital Status	Married with Kazakh wife, daughter Julia Alua Skrzypacz

Education

2002–2010	**PhD in Applied Mathematics**, *Otto von Guericke University of Magdeburg*, Germany, accomplished with *magna cum laude (very good)*. Supervisor: Prof. Dr. Lutz Tobiska
PhD Thesis	*Finite element analysis for flows in chemical reactors*
1996-2002	**Bachelor and Master in Mathematics**, *Otto von Guericke University of Magdeburg*, Germany, *total score: sehr gut (very good)*. Specialized in Finite Element Methods
Master Thesis	*Superconvergence of finite element methods for scalar elliptic equations and stationary Stokes and Navier-Stokes problems*

Research Experience

2014–	**Assistant Professor**, *Department of Mathematics*, School of Science and Technology/School of Sciences and Humanities, Nazarbayev University in Astana, Kazakhstan. research work on finite elements in CFD and nonlinear elasticity, Micro-Electro-Mechanical-Systems (MEMS), interdisciplinary projects in Chemical Engineering

2013–2014	**Postdoc**, *Otto von Guericke University of Magdeburg*, Institute for Analysis and Numerical Mathematics, Germany.
	research work in the group of Prof. Lutz Tobiska on stabilized finite elements
2012–2013	**Postdoc**, *Max Planck Institute for Dynamics of Complex Technical Systems*, Magdeburg, Germany.
	research work in the group of Prof. Dr. Peter Benner on feedback stabilization for flow problems
2010–2012	**Postdoc**, *Otto von Guericke University of Magdeburg*, Institute for Analysis and Numerical Mathematics, Germany.
	research work on on the project *Non-conforming elements of higher order* under supervision of Prof. Dr. Friedhelm
2002–2010	**Research and Teaching Assistant**, *Otto von Guericke University of Magdeburg*, Institute for Analysis and Numerical Mathematics, Germany.
	research work on the interdisciplinary project *Membrane supported reaction engineering*

Miscellaneous

2019	Research visit funded by Horizon grant No 778360, RWTH Aachen, Germany, Coordination: Dr. Anna Kathrin Uffmann, *Fluvial Thermal Erosion*
2001	Advanced Training Course: Summer School in Prague *Simulation of Fluid and Structure Interaction*
2000	Student Research Project: *Some possibilities to handle domains with curved boundaries in finite element method*, Institute for Analysis and Numerical Mathematics, Otto-von-Guericke University of Magdeburg

Research Projects

2018–2020	**Finite Element Methods for Dirichlet feedback control problems in chemical reaction engineering**, *Faculty Development Competitive Research Grant Program*, Nazarbayev University, Nur-Sultan, 98,000 USD.
2018–2020	**Modeling and Simulation of Nonlinear Material Structures for Mechanical Pressure Sensing and Actuation Applications**, *Nazarbayev University Oak Ridge Associated Universities (ORAU) Grant*, Nazarbayev University, Nur-Sultan, 275,000 USD.
2015–2016	**Wire extrusion**, *Nazarbayev University Social Policy Grant*, Nazarbayev University, Nur-Sultan, 10,000 USD.
2010–2012	**Non-conforming elements of higher order**, *German Research Foundation (DFG) Grant*, Otto-von-Guericke University, Magdeburg, Germany.
2002–2009	**Membrane chemical reactors**, *German Research Foundation (DFG) Grant*, Otto-von-Guericke University, Magdeburg, Germany.

Reviewer Work

- Reviewer for Mathematical Reviews
- Reviewer of Journal of Low Frequency Noise, Vibration & Active Control
- Reviewer of Numerical Algorithms
- Reviewer of Industrial & Engineering Chemistry Research

- Reviewer of Journal of Liquid Chromatography & Related Technologies
- External reviewer of the Undergraduate and Master Programs in Applied Mathematics at KazNu Alfarabi University in Almaty

Teaching Experience

2014– **Assistant Professor**, *Department of Mathematics*, School of Science and Technology/School of Sciences and Humanities, Nazarbayev University in Astana, Kazakhstan.

administrative work
chairman of Curriculm Committee, developed Curriculum for Undergraduate and Master Programes, supervised Math Club, organized math olympiads and math competitions, supervised and provided trainings for students participating in international math olympiads (IMC), my students won the first gold medal in the history of Kazakhstan

taught classes
Calculus I, Calculus III, Ordinary Differential Equations, Numerical Methods with Applications, Partial Differential Equations, Fourier Analysis, Applied Finite Element Methods, Finite Element Analysis, Scientific Computing, Advanced Numerical Methods, Seminars for Senior Students, Capstone Projects, Directed Study in Mathematics

Capstone Project
- *A Short Note On Solving 1-D Porous Medium Equation by Finite Element Method*, Chingis Matayev
- *Analysis of Dynamic Pull-in for a Graphene-based MEMS Model*, Daniyar Omarov
- *Finite Elements Solutions to the Black-Scholes Equation*, Nazym Zhanatova
- *Analysis of Dead Core Phenomena in Reaction-Diffusion Problems*, Fariza Sabit

Master Thesis
- *The lumped model parameters approach static and dynamic power-law beam problems*, Madi Begzhigitov, 2019
- *Modeling and Numerical Analysis for Catalytic Membrane Reactors*, Nagima Chalkarova, 2020
- *Modeling and Finite Element Simulations of Ceramic Paste Extrusion in 3D Printing*, Kuralay Baiseitova, 2020

Awards of Students
- My Student and Research Assistant Fariza Sabit awared in *Student Paper Competition and Student Capstone Project Symposium 2018*. The competition at NU was sponsored by the embassy of South Korea.
- My Student and Research Assistant Fariza Sabit received the German Research Foundation DAAD Scholarship for graduate study in Germany.
- My Student and Research Assistant Mansur Shakipov was awarded by the *Yessenov Scholarship* and went for the internship at the prestigious Courant Institute in New York, 2019.

Miscellaneous	Personally trained and supervised students with my recommendations have been admitted to Master Programs at NU or abroad

- Serikbolsyn Duisembay (Applied Math, King Abdullah University of Science and Technology, Saudi Arabia)
- Chingis Matayev (Economics, NU)
- Adiya Makhambetova (Mathematical Finance, Boston University)
- Olzhas Sagimbekov (Mathematical Finance, Moscow University)
- Gulzhan Tumenbayeva (Applied Math, King Abdullah University of Science and Technology, Saudi Arabia)
- Symbat Aitakhanova (Mathematical Finance, NU)
- Askar Smagulov (Mathematical Finance, NU)
- Daniyar Omarov, (Applied Mathematics, PhD, Georgia Institute of Technology)
- Galymzhan Kenesbekov, (Actuarial Mathematics, PhD, Illinois State University)
- Tolkyn Abdildina (Master in Financial Mathematics at the University of Budapest)
- Nagima Chalkarova (Master in Applied Mathematics at NU)
- Marzhan Sagadiyeva (Master in Finance at NU)
- Yerzhan Imanmalik (Master in Data Science, Skolkovo, Russia)

2002–2014	**Teaching Assistant**, *Institute for Analysis and Numerical Mathematics*, Otto-von-Guericke-University of Magdeburg, Germany.
Duties	preparation of teaching materials for exercise courses, special seminars and lectures for undergraduate, graduate and PhD students, acting in place of supervisors to give lectures, preparation and supervision of written and oral exams for undergraduate and graduate students of mathematics, physics and engineering, evaluation of student projects and diploma thesis
Diploma Thesis	

- *Finite elements stabilisation by local projection for convection-diffusion-reaction problems*, Holger Stieler, defended with the highest mark, employed in EADS (European Aeronautic Defence and Space Company) in Manching, 2007

Student Project	

- *Axisymmetric Navier-Stokes equations with slip boundary condition*, Holger Stieler, 2006
- *Effect of order reduction in discretisation of instationary problems*, Fabian Wölk, 2013
- *The discontinuous Galerkin method for convection-diffusion-reaction equations in one space dimension*, Anja Quasdorf, 2013

List of held classes and tutorials

- Numerik für Ingenieure (Numerics for engineers) for Prof. Dr. Lutz Angermann, SS 2000
- Analysis I (Calculus I) for Prof. Dr. Lutz Tobiska, WS 2003/2004, WS 2009/2010
- Analysis II (Calculus II) for Prof. Dr. Lutz Tobiska, SS 2003, SS 2010
- Ergänzungsübung zu Analysis I (Calculus I Addendum) for Prof. Dr. Tobiska, WS 2003/2004
- Ergänzungsübung zu Analysis II (Calculus II Addendum) for Prof. Dr. Tobiska, SS 2004

- Mathematik III für Physiker (Math III for physicists) for Prof. Dr. Ben Schweizer WS 2004/2005, Priv. Doz. Matthias Kunik WS 2005/2006, WS 2006/2007
- Mathematik IV für Physiker (Math III for physicists) for Prof. Dr. Hannes Uecker SS 2006, Priv. Doz. Matthias Kunik SS 2006, SS 2007, SS 2008
- Mathematik I für Ingenieure (Math I for engineers) for Priv. Doz. Bernd Rummler WS 2007/2008
- Mathematik III für Ingenieure (Math III for engineers) for Prof. Dr. Friedhelm Schieweck, WS 2005/2006
- Numerik für Mathematik Studenten (Numerics for students of Mathematics) for Prof. Dr. Lutz Tobiska, WS 2008/2009
- Numerik für Ingenieure (Numerics for engineers) for Prof. Dr. Friedhelm Schieweck, SS 2009
- Numerik der Navier-Stokes-Gleichungen (Numerics of Navier-Stokes equations) for Prof. Dr. Friedhelm Schieweck, WS 2009/2010
- Partielle Differentialgleichungen I (Partial Differential Equations I) for Prof. Dr. Jörg Wolf, WS 2010/2011
- Numerics of Navier-Stokes Equations for Prof. Dr. Friedhelm Schieweck, SS 2011
- Numerik zeitabhängiger Differentialgleichungen (Numerics of time-dependent differential equations) for Prof. Dr. Friedhelm Schieweck, WS 2011/2012
- Analysis II (Calculus II/III) for Prof. Dr. Lutz Tobiska, SS 2014
- Calculus I Fall 2014
- Calculus III, Numerical Methods with Applications Spring 2015
- Ordinary Differential Equations, Numerical Methods with Applications Fall 2015, Spring 2016
- Numerical Methods with Applications Fall 2016, Partial Differential Equations Fall 2016
- Fourier Analysis, Calculus III Spring 2017
- Numerical Methods with Applications, Calculus III Fall 2018
- Applied Finite Element Methods, Calculus III Spring 2018
- Applied Finite Element Analysis (Graduate), Numerical Methods Fall 2018
- Applied Finite Element Methods, Scientific Computing (Graduate) Spring 2019
- Scientific Computing (Graduate), Numerical Methods, Directed Study in Mathematics Fall 2019
- Applied Finite Element Methods, Advanced Numerical Methods (Graduate), Capstone Project Spring 2020

Computer Skills

Basic	JAVA, PYTHON, HTML, FORTRAN 77, parallel programming (FORTRAN and C/C++ MPI)
Intermediate	C/C++, OpenOffice, Microsoft Windows, Mathematica, Comsol, R, PSTRICKS, TIKZ, vi
Advanced	Linux, Unix, LaTeX, Matlab/Octave, Maple

Languages

Polish	**Mothertongue**	
English	**Fluent**	*Written and conversationally fluent*
German	**Fluent**	*Written and conversationally fluent*
Russian	**Fluent**	*Conversationally fluent*

Interests

- Fishing
- Badminton
- Bicycle
- Table Tennis
- Books
- History

Conference Presentations

1. *Superconvergence of a 3d finite element method for stationary Stokes and Navier-Stokes problems*, Chemnitz FEM-Symposium 2003

2. *Finite element and matched asymptotic expansion methods for chemical reactor flow problems*, GAMM Conference, Luxembourg 2005

3. *Stabilisation methods of local projection type for convection-diffusion-reaction problems*, FEM 20th Symposium, Chemnitz 2007

4. *On the discrete maximum principle for local projection scheme*, LPS Workshop, Goettingen 2008

5. *Superconvergence results for Brinkman-Forchheimer-extended Darcy equation FEM Symposium*, Chemnitz 2010

6. *A new LPS method with shock capturing applied to Burgers' equation*, EFEF-2011, Paris, 2011

7. *A new oscillation free space-time discretization of higher order for non-stationary transport dominated convection diffusion equations*, Conference on Simulation and Optimization, Győr, 2011

8. *New variants of local projection stabilization for transport dominated problems*, European Finite Element Fair 2012, 8-9 June 2012, Bilbao, Basque Country, Spain

9. *Composite non-conforming elements and local projection stabilization for transport dominated flow problems*, 25th Chemnitz FEM Symposium, Chemnitz 2012

10. *On the construction of L_2 orthogonal elements of arbitrary order for Local Projection Stabilization*, Actual problems in mathematics and in mathematical modeling, 50-th anniversary of the foundation of the Institute of Mathematics and Mechanics in Almaty, Almaty, 2015

11. *On the construction of L_2 orthogonal elements of arbitrary order for Local Projection Stabilization*, Variational Multiscale and Stabilized Finite Elements (VMS), Magdeburg, Germany, 2016

12. *Superconvergence results for Brinkman-Forchheimer-extended Darcy equation*, 14th European Finite Element Fair (EFEF 2016), Bonn, Germany

13. *A way how to improve Local Projection Stabilization*, The Mathematics of Finite Elements and Applications, Brunel MAFELAP 2016, Brunel University London, UK

14. *On the way how to improve Local Projection Stabilization*, 11th EASIAM Conference, University

of Macao, China, 2016

15. *On the construction of L_2 orthogonal elements of arbitrary order for Local Projection Stabilization*, Asian Mathematical Conference AMC 2016, Bali, Indonesia

16. *A reaction-diffusion problem with dead-core at the boundary*, The 10th International Conference on Computational Physics, Macao, China, 16-20 January, 2017

17. *Generalized trigonometric functions*, *On numerical crimes in Computational Fluid Dynamics*, 1st Summer School on Mathematical Methods in Science and Technology, 5-10 June, 2017, Nazarbayev University, Astana

18. *Bifurcation Analysis of Micro-Electro-Mechanical Pull-in Device*, 5th International Conference on Nanomaterials and Advanced Energy Storage Systems (INESS-2017), Astana, 9-10 August, 2017

19. *A Mixed Finite Element Method for the Ramberg-Osgood Bar*, Modern Finite Element Technologies (MFET 2017), Bad Honnef, Germany, 21-23 August, 2017

20. *Local Projection Stabilization for Linearized Brinkman-Forchheimer-extended Darcy equation*, VI Congress of the TurkicWorld Mathematical Society (TWMS-2017), October 2-5, 2017 Astana, Kazakhstan

21. *Finite Element Discretizations for Transmission Problems*, VI Congress of the Turkic World Mathematical Society (TWMS-2017), October 2-5, 2017 Astana, Kazakhstan

22. *On Nonlinear MEMS Statics and Dynamics*, The Third International Conference on Applications of Mathematics and Informatics in Natural Sciences and Engineering Dedicated to the 80th Birthday of David Gordeziani AMINSE 2017, Tbilisi, Georgia, 6.12-9.12.2017

23. *Dynamic Pull-in for Micro-Electro-Mechanical Device with a Current-Carrying Conductor*, INESS 2018, 8-9 August, Astana, Kazakhstan

24. *Dead-Core Solutions to Simple Catalytic Reaction Problems in Chemical Engineering*, Poster Presentation at INESS 2018, 8-9 August, Astana, Kazakhstan

25. *Finite Element Solutions to Diffusion-Reaction Problems with Dead-Cores*, MaCKiE2018, 8-9 November 2018, Ghent, Belgium

26. *Vibrations of a Micro-Electro-Mechanical Resonator of the Platform Type Made of Power-law Materials*, International Conference Mathematics and its Applications in honor of the 90th birthday of Sergei. K. Godunov, 4-10 August 2019, Novosibirsk, Russia

27. *On Nonlinear MEMS Statics and Dynamics*, Invited plenary talk on the International Conference on Applied Mathematics, 19-21 August 2019, Lahore, Pakistan

28. *The Formation of Dead Zones in Nonisothermal Porous Catalyst*, Interational Conference on

Catalysis Science and Chemical Engineering, 2-4 December 2019, Melbourne, Australia

Publications

1. M. Kunik, P. Skrzypacz:
   Höhere Analysis durch Anwendungen lernen
   Für Studierende der Mathematik, Physik und Ingenieurwissenschaften,
   (Learning Higher Analysis by Applications)
   Springer Spektrum 2013, 407 pp, ISBN-10: 3658022655, <u>textbook</u> for students of Mathematics, Physics and Engineering, available in Amazon
   https://doi.org/10.1007/978-3-658-02266-2

2. D. Handtke, I. Mednev, J. Schmidt, P. Skrzypacz, L. Tobiska:
   Transport Phenomena in Membrane Reactors, Proceedings of the 20th European Symposium on Applied Thermodynamics, Lahnstein, Germany, (2003), 155–158

3. G. Matthies, P. Skrzypacz, L. Tobiska:
   Superconvergence of a 3D finite element method for stationary Stokes and Navier-Stokes problems. **Numer. Methods Partial Differential Equations** 21 (2005), no. 4, 701–725
   https://doi.org/10.1002/num.20058

4. P. Skrzypacz, L. Tobiska:
   Finite element method and matched asymptotic expansion methods for chemical reactor flow problems. **Proc. Appl. Math. Mech.** 5(2005), 843-844
   https://doi.org/10.1002/pamm.200510393

5. G. Matthies, P. Skrzypacz, L. Tobiska:
   A unified convergence analysis for local projection stabilisations applied to the Oseen problem. **M2AN Math. Model. Numer. Anal.** 41 (2007), no. 4, 713–742
   https://doi.org/10.1051/m2an:2007038

6. M. Kunik, P. Skrzypacz:
   Diffraction of light revisited. **Mathematical Methods in the Applied Sciences**, 31 (2008), no. 7, 793–820
   https://doi.org/10.1002/mma.945

7. G. Matthies, P. Skrzypacz, L. Tobiska:
   Stabilization of local projection type applied to convection-diffusion problems with mixed boundary conditions. **Electron. Trans. Numer. Anal.** 32 (2008), 90–105.

8. K. Georgieva-Angelova, V. Edreva, A. Hussain, P. Skrzypacz, L. Tobiska, A. Seidel-Morgernstern, E.Tsotsas, J. Schmidt:
   Transport phenomena in porous membranes and membrane reactors. A book chapter in Membrane Reactors. Distributing reactants to Improve Selectivity and Yield, 2010, **Wiley**-**VCH**, Weinheim
   https://doi.org/10.1002/9783527629725.ch4

9. Piotr Skrzypacz:
   Finite element analysis for flows in chemical reactors. Dissertation, date of defence 12.11.2010, available online in Digitale Hochschulbibliothek Sachsen-Anhalt
   http://edoc.bibliothek.uni-halle.de/servlets/DocumentServlet?id=9744

10. F. Schieweck, P. Skrzypacz:
    A Local Projection Stabilization method with shock capturing and diagonal mass matrix for solving non-stationary transport dominated problems. **Computational Methods in Applied Mathematics**, Vol. 12 (2012), No. 2, pp. 221–240
    https://doi.org/10.2478/cmam-2012-0019

11. P. Benner, J. Saak, F. Schieweck, P. Skrzypacz, H. Weichelt:
    A Non-Conforming Composite Quadrilateral Finite Element Pair for Feedback Stabilization of the Stokes Equations. **Journal of Numerical Mathematics**, Vol. 22(2014), No. 3, pp. 191–220
    https://doi.org/10.1515/jnma-2014-0009

12. P. Skrzypacz, D. Wei:
    On the discrete maximum principle for the local projection scheme with shock capturing. **Journal of Computational Mathematics**, Vol.35, No.5, 2017, 545–566
    doi:10.4208/jcm.1605-m2015-0479

13. P. Skrzypacz, D. Wei:
    Solvability of the Brinkman-Forchheimer-Darcy Equation. **Journal of Applied Mathematics**, Volume 2017, Article ID 7305230
    https://doi.org/10.1155/2017/7305230

14. P. Skrzypacz, D. Wei, X. Yu
    Nonlinear Waves in Rods and Beams of Power-Law Materials. **Journal of Applied Mathematics** Volume 2017 (2017), Article ID 2095425
    https://doi.org/10.1155/2017/2095425

15. P. Skrzypacz:
    Local Projection Stabilization for Linearized Brinkman-Forchheimer-Darcy Equation in International Conference Functional analysis in interdisciplinary applications (FAIA2017), **AIP Conference Proceedings** 1880, 060010 (2017); edited by Tynysbek Kalmenov and Makhmud Sadybekov (American Institute of Physics, Melville, NY, 2017)
    http://doi.org/10.1063/1.5000664

16. P. Skrzypacz, S. Kadirov, Y. Familiant:
    A simple analysis of flying capacitor converter. **COMPEL: The International Journal for Computation and Mathematics in Electrical and Electronic Engineering**, 37, Issue 3, 2018, 1244–1257
    https://doi.org/10.1108/COMPEL-07-2017-0282

17. Daniyar Omarov, Daulet Nurakhmetov, Dongming Wei, Piotr Skrzypacz:
    On the Application of Sturm's Theorem to Analysis of Dynamic Pull-in for a Graphene-based MEMS Model. **Applied and Computational Mechanics**, 12 (2018) 59–72
    https://doi.org/10.24132/acm.2018.413

18. P. Skrzypacz, S. Kadyrov, D. Nurakhmetov, D. Wei:
    Analysis of Dynamic Pull-in Voltage of a graphene MEMS Model. **Nonlinear Analysis: Real World Applications**, 45 (2019) 581–589
    https://doi.org/10.1016/j.nonrwa.2018.07.025

19. P. Skrzypacz, F. Schieweck, L. Tobiska:
    Construction of L2 orthogonal elements of arbitrary order for Local Projection Stabilization. **Applied Mathematics and Computation**, 337 (2018) 87–101
    https://doi.org/10.1016/j.amc.2018.04.070

20. F. Sabit, M. Shakipov, P. Skrzypacz, B. Golman:
    Dead-core solutions to simple catalytic reaction problems in chemical engineering. **Eurasian Chemico-Technological Journal**, 21 (2019) 19–23
    https://doi.org/10.18321/ectj784

21. W. Arriagada, P. Skrzypacz:
    Z2 equivariant analytic foliations. **Revue Roumaine de Mathematiques Pures et Appliquees**, 64(1),1, pp. 7–24

22. Vsevolod Andreev, Piotr Skrzypacz and Boris Golman:
    The Formation of Dead Zones in Non-isothermal Porous Catalyst with Temperaturedependent Diffusion Catalyst. **International Journal of Chemical Kinetics**, 2019, 1–12
    https://doi.org/10.1002/kin.21302

23. Ji-Huan He, Daulet Nurakhmetov, Piotr Skrzypacz and Dongming Wei:
    Dynamic Pull-in for Micro-Electro-Mechanical Device with a Current-Carrying Conductor. **Journal of Low Frequency Noise, Vibration & Active Control**, First published September 26, 2019
    https://doi.org/10.1177/1461348419847298

24. P. Skrzypacz, D. Nurakhmetov, D. Wei:
    Generalized Stiffness and Effective Mass Coeffcients for Power-Law Euler-Bernoulli Beams. **Acta Mechanica Sinica**, (2020) 36(1): 160–175
    https://doi.org/10.1007/s10409-019-00912-8

25. P. Skrzypacz, A. Bountis, D. Nurakhmetov, J. Kim:
    Analysis of the lumped mass model for the cantilever beam subject to Grob's swelling pressure. **Communications in Nonlinear Science and Numerical Simulation**, 85 (2020) 105230
    https://doi.org/10.1016/j.cnsns.2020.105230

26. P. Skrzypacz, V.V. Andreev, B. Golman:
Dead-core and non-dead-core solutions to diffusion-reaction problems for catalyst pellets with external mass transfer. **Chemical Engineering Journal**, 385 (2020) 123927
https://doi.org/10.1016/j.cej.2019.123927

27. B. Golman, P. Skrzypacz, W. Julklang:
Modeling and Numerical Study of Ceramic Paste Extrusion, accepted for publication in **Proceedings of APCChE 2019**, indexed in Conference Proceedings Citation Index (Web of Science)

28. B. Golman, V.V. Andreev, P. Skrzypacz:
Dead-core solutions for slightly non-isothermal diffusion-reaction problems with power-law kinetics. **Applied Mathematical Modelling**, 83 (2020) 576–589
https://doi.org/10.1016/j.apm.2020.03.016