

Curriculum vitae



1. Surname: **Cegielski**
2. First name: **Andrzej**
3. Date and place of birth:
February 23rd, 1953, Olsztyn (Poland),
married, two children
4. e-mail:
a.cegielski@wmie.uz.zgora.pl,
home page:
<http://staff.uz.zgora.pl/acegiels/research.html>
5. ORCID ID: <https://orcid.org/0000-0002-1840-4455>
6. **Study: Technical University Wrocław (Poland)**, Faculty of Fundamental Problems of Technology, **Master Degree in applied mathematics, 1976**, overall grade: **very good with distinction** (*starred A*)
7. **Scientific degrees**
 - **Ph.D. in mathematics, Technical University Wrocław (Poland), Institute of Mathematics 1981**, title of PhD Thesis: *Games of timing with incomplete information*
 - **Habilitation in mathematics, Adam Mickiewicz University, Poznań (Poland), Faculty of Mathematics and Computer Science, 1995**
 - **Associated Professor at the University of Zielona Góra, 1997**
 - **Full Professor, 2011**
8. **Employment**
 - 1976-1977 – Assistant, Institute of Mathematics, **Technical University Wrocław (Poland)**
 - 1977-2001 employed at the **Technical University of Zielona Góra (Poland)**:
 - 1977-1981 – Assistant
 - 1981-1997 – Assistant Professor
 - 1997-2001 – Associated Professor
 - 1998-1999 – Visiting Professor at the Institute of Mathematics, **Technical University Ilmenau (Germany)**
 - Since 2001 – employed at the **University of Zielona Góra (Poland)**:
 - 2001-2010 – Associated Professor
 - 2005-2012 – **Dean** of the Faculty of Mathematics, Computer Science and Econometrics
 - 2011 – **Full Professor**
 - 2014-2016 – Visiting Professor at the **Kuwait University, Faculty of Science**
9. **Teaching experience:**
 - Calculus I, II (1997-2018 with averaged load 4 hours per week for students of Electrical Engineering, Economics, Computer Science)
 - Calculus II (2014-2016, lectures at the Kuwait University)
 - Calculus III (2015-2016, lectures at the Kuwait University)
 - Ordinary Differential Equations (2015, lectures at the Kuwait University)
 - Linear Algebra (1997-2005 with averaged load 4 hours per week for students of Electrical Engineering, Economics, Computer Science)

- Foundations of Optimization (2005-2014 with averaged load 4 hours per week for students of Mathematics)
- Mathematical Programming (2001-2013 with averaged load 2 hours per week for students of Mathematics)
- Operations Research I, Operations Research II (2001-2024 with averaged load 4 hours per week for students of Mathematics, Computer Science, Economics)

10. Research interests and grants:

- Iterative methods for convex optimization problems
- Nondifferentiable minimization
- Iterative methods for fixed point problems
- Iterative methods for variational inequalities
- Grant: *Methods of convex minimization for semi-infinite optimization problems* supported by foundations DAAD (Germany) and KBN (Poland) 2004

11. Honors and Awards

- Award of the Ministry of Science, Poland (1987)
- Award of the Rector of the University in Zielona Góra, Poland (1997, 2010, 2012, 2014, 2015, 2016, 2017, 2018)
- Award of the Rector of the Jagiellonian University (Mlak and Opial Award), Poland (2014)

12. Invitations

- **Invitations to universities with series of lectures:**
 - Anadolu University, Eskisehir, Turkiye (2012)
 - Brandenburg Technical University, Cottbus, Germany (2001)
 - Technical University Ilmenau, Germany (2004, 2008)
 - Stefan Wyszynski University, Warsaw, Poland (2011)
 - Kuwait University (2013)
 - Naresuan University, Phitsanulok, Thailand (2015)
 - Chiang Mai University, Chiang Mai, Thailand (2017)
 - Hangzhou Dianzi University, Hangzhou, China (2019).
- **Invited speaker at mathematical conferences**
 - Functional Analysis and Optimization Conference dedicated to Professor Stefan Rolewicz on his 75 birthday, Będlewo (Poland), September, 17-22, 2007
 - Conference on Nonlinear Analysis and Optimization, Haifa (Israel), June 8-24, 2008
 - Interdisciplinary Workshop on Fixed-Point Algorithms for Inverse Problems in Science and Engineering, Banff (Canada), November 1-6, 2009
 - MAT-TRIAD 2009, Będlewo (Poland), March 23-27, 2009
 - Optimization Theory and Related Topics, Haifa (Israel), January 11-14, 2010
 - 10th International Conference on Fixed Point Theory and its Applications, Cluj-Napoca (Romania), June 9-15, 2012
 - Infinite Products of Operators and Their Applications, Haifa (Israel), May 21-24, 2012
 - 5th Minisymposium on Fixed Point Theory and Applications, Baia Mare (Romania), June 1-7, 2014
 - Symposium on Functional Analysis and Optimization Stefan Rolewicz in memoriam Banach Center, Warsaw, September 2nd, 2016
 - Splitting Algorithms, Modern Operator Theory, and Applications, Oaxaca (Mexico), September 17-22, 2017
 - German–Israeli Research Workshop on Optimization, Haifa (Israel), October 16-19, 2017
 - 10th Asian Conference on Fixed Point Theory and Optimization 2018, Chiang Mai (Thailand), July 16-18, 2018

- The 6th Asian Conference on Nonlinear Analysis and Optimization, Okinawa (Japan), November, 5-9, 2018
- The 13th International Conference on Fixed Point Theory and Its Applications, July, 9-13, 2019, XinXiang, HeNan (China)
- International conference on Digital Image Processing and Machine Learning (ICDIPML 2022), University of Phayao, Thailand, 8-9 September 2022
- 11th Asian Conference on Fixed Point Theory and Optimization 2023, Pattaya, (Thailand), August 2-5, 2023
- Numerical Linear Algebra, Luminy, France, 16 – 20 September, 2024
- 12th Asian Conference on Fixed Point Theory and Optimization 2025, Chiang Mai, Thailand, January 15-18, 2025

13. Membership in the scientific societies

- **Polish Mathematical Society** – since 1977
 - 1999-2002 – **Vice President**,
- **American Mathematical Society** – 1997-1999

14. Organizer of conferences and member in steering- and program-committees

- Congress of the Polish Mathematical Society, Zielona Góra (Poland), September 1997
- 1st German-Polish Conference on Optimization, Żagań (Poland), September 1999
- 11th French-German-Polish Conference on Optimization, Cottbus (Germany), September 2002
- 3rd German-Polish Conference on Optimization, Będlewo (Poland), November 2005
- 4th German-Polish Conference on Optimization, Moritzburg (Germany), March 2009
- 16th French-German-Polish Conference on Optimization, Kraków (Poland), September 2013
- 6th German-Polish Conference on Optimization, Wittenberg (Germany), March 2014
- 5th Congress of Young Polish Mathematicians, Zielona Góra (Poland), September 2014
- 7th German-Polish Conference on Optimization, Będlewo (Poland), August 27 - September 1st, 2017
- Projection Algorithms: Stefan Kaczmarz 125th birthday anniversary, Będlewo, Poland, August 31st - September 5th, 2020

15. Advisor of Ph.D. students

- Robert Dylewski (2003)
- Agnieszka Suchocka (2009)
- Rafał Zalas (2014)

16. Referee in Ph.D., Habilitation and Professorship Processes

- Wojciech Połowczuk, Ph.D. process at the Technical University Wrocław, Poland (2004)
- El Desouky El Tamimy El Said Rahmo, Ph.D. process at the University of Łódź, Poland (2005)
- Aleksandra Arkit, Ph.D. process at the University of Zielona Góra, Poland (2006)
- Tadeusz Antczak, habilitation process at the University of Łódź, Poland (2009)
- Tadeusz Ostrowski, Ph.D. process at the Adam Mickiewicz University, Poland (2009)
- Aleksandra Stasiak, Ph.D. process at the University of Łódź, Poland (2015)
- Przemysław Gospodarczyk, Ph.D. process at the University of Wrocław, Poland (2016)
- Ewa Bednarczuk, professorship process at the Warsaw Technical University, Poland (2019)
- Jerzy Legut, habilitation process at the Technical University Wrocław, Poland (2019)
- Najeeb Abbas Ahmed Abdulaleem, Ph.D. process at the University of Łódź, Poland (2024)

17. Member of Editorial Board

- *Discussiones Mathematicae. Differential Inclusions, Control and Optimization*
- *Numerical Algorithms*

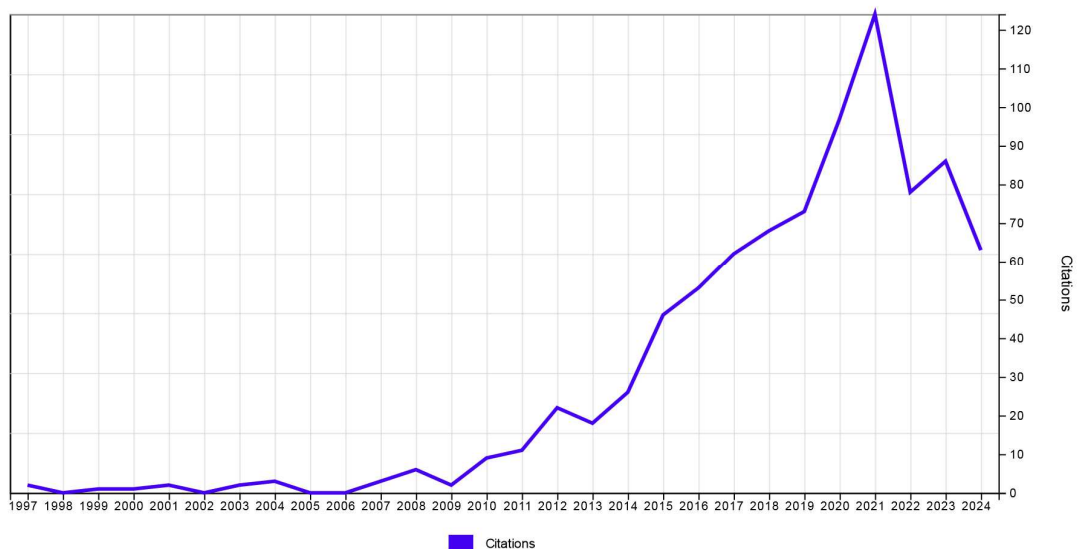
18. Referee for journals

- *Computational Optimization and Applications*
- *Fixed Point Theory*

- Fixed Point Theory and Applications
- Fixed Point Theory and Algorithms for Sciences and Engineering
- INFORMS Journal of Computing
- International Transactions in Operational Research
- Inverse Problems
- Inverse Problems in Science and Engineering
- Journal of Algorithms
- Journal of Computational and Applied Mathematics
- Journal of Global Optimization
- Journal of Mathematical Analysis and Applications
- Journal of Nonlinear and Convex Analysis
- Journal of Optimization Theory and Applications
- Linear Algebra and Applications
- Mathematical Programming
- Numerical Algorithms
- Numerical Functional Analysis and Optimization
- Optimization
- Optimization Letters
- Optimization Methods and Software
- Results in Mathematics
- SIAM Journal on Optimization
- SIAM Journal on Scientific Computing
- Topological Methods in Nonlinear Analysis
- Vietnam Journal of Mathematics
- Zeitschrift für Analysis und ihre Anwendungen

19. Publications:

- **MathSciNet:** 51 publications indexed, 693 citations in 396 publications, h-index = 15, <https://mathscinet.ams.org/mathscinet/author?authorId=46600>
- **Scopus:** 43 publications indexed, 780 citations in 496 articles, h-index = 16, <https://www.scopus.com/authid/detail.uri?authorId=23395921500>
- **Web of Science:** 40 publications indexed, 887 citations in 551 articles, h-index = 17, average citations per item = 22.18, <https://www.webofscience.com/wos/woscc/citation-report/5360a42c-110b-4977-bdf7-78dddc7c9b78-78ca02bb?page=1>
- **Google Scholar:** 1463 citations, h-index = 19, i10-index = 29



Sum of times cited per year. Source: Web of Science

20. List of publications

• Refereed Journal Publications

1. A. Cegielski, Strict pseudocontractions and demicontractions, their properties, and applications, *Numerical Algorithms*, **95** (2024) 1611-1642.
2. A. Cegielski and Y. Censor, On componental operators in Hilbert space, *Numerical Functional Analysis and Optimization*, **42** (2021), 1555-1571.
3. M. Mirzapour, A. Cegielski and T. Elfving, Convergence and semi-convergence of a class of constrained block iterative methods, *Numerical Functional Analysis and Optimization*, **42** (2021), 1718-1746.
4. H.-K. Xu and A. Cegielski, The Landweber operator approach to the split equality problem, *SIAM Journal on Optimization*, **31** (2021) 626-652.
5. A. Cegielski, A. Gibali, S. Reich, and R. Zalas, Outer approximation methods for solving variational inequalities defined over the solution set of a split convex feasibility problem, *Numerical Functional Analysis and Optimization*, **41** (2020) 1089-1108.
6. A. Cegielski, S. Reich and R. Zalas, Weak, strong and linear convergence of the CQ-method via the regularity of Landweber operators, *Optimization*, **69** (2020) 605-636.
7. A. Cegielski and N. Nimana, Extrapolated cyclic subgradient projection methods for the convex feasibility problems and their numerical behaviour, *Optimization*, **68** (2019) 145-161.
8. A. Cegielski, S. Reich and R. Zalas, Regular sequences of quasi-nonexpansive operators and their applications, *SIAM Journal on Optimization*, **28** (2018) 1508-1532.
9. A. Cegielski and F. Al-Musallam, Superiorization with level control, *Inverse Problems*, **33** (2017) 044009 (17pp).
10. A. Cegielski and F. Al-Musallam, Strong convergence of a hybrid steepest descent method for the split common fixed point problem, *Optimization*, **65** (2016) 1463-1476.
11. F. Al-Musallam, A. Cegielski and Ch. Grossmann, Simultaneous control of regularization, discretization and projected gradient steps for variational inequality problems, *Journal of Nonlinear and Convex Analysis*, **17** (2016) 349-364.
12. A. Cegielski, Landweber-type operator and its properties, *Contemporary Mathematics*, **658** (2016) 139-148.
13. A. Cegielski, Application of quasi-nonexpansive operators to an iterative method for variational inequality, *SIAM Journal on Optimization*, **25** (2015), 2165-2181.
14. A. Cegielski, General method for solving the split common fixed point problem, *Journal of Optimization Theory and Applications*, **165** (2015) 385-404.
15. Y. Censor and A. Cegielski, Projection methods: an annotated bibliography of books and reviews, *Optimization*, **64** (2015) 2343-2358
16. F. Al-Musallam, A. Cegielski and Ch. Grossmann, Contraction behavior of iteration-discretization based on gradient type projections, *Optimization*, **64** (2014) 25-39.
17. A. Cegielski, Extrapolated simultaneous subgradient projection method for variational inequality over the intersection of convex subsets, *Journal of Nonlinear and Convex Analysis*, **15** (2014) 211-218.
18. A. Cegielski and R. Zalas, Properties of a class of approximately shrinking operators and their applications, *Fixed Point Theory*, **15** (2014) 399-426.
19. A. Cegielski, A. Gibali, S. Reich and R. Zalas, An algorithm for solving the variational inequality problem over the fixed point set of a quasi-nonexpansive operator in Euclidean space, *Numer. Funct. Anal. Optimiz.*, **34** (2013) 1067-1096.
20. A. Cegielski and Ch. Grossmann, Iteration-discretization methods for variational inequalities over fixed point sets, *Nonlinear Analysis: Theory, Methods & Applications*, **85** (2013) 31-42.
21. A. Cegielski and R. Zalas, Methods for variational inequality problem over the intersection of fixed point sets of quasi-nonexpansive operators, *Numer. Funct. Anal. Optimiz.*, **34** (2013) 1-29.
22. A. Cegielski and Y. Censor, Extrapolation and local acceleration of an iterative process for common fixed point problems, *J. Math. Anal. Appl.*, **394** (2012) 809-818.

23. A. Cegielski, Generalized relaxations of nonexpansive operators and convex feasibility problems, *Contemporary Mathematics*, **513** (2010) 111-123.
24. A. Cegielski and R. Dylewski, Variable target value relaxed alternating projection method, *Computational Optimization and Applications*, **47** (2010) 455-476.
25. A. Cegielski, On the Kaczmarz method (in Polish), *Wiadomości Matematyczne*, **46** (2010) 27-36.
26. A. Cegielski and A. Suchocka, Relaxed alternating projection methods, *SIAM Journal on Optimization*, **19** (2008) 1093-1106.
27. A. Cegielski and A. Suchocka, Incomplete alternating projection method for large inconsistent linear systems, *Linear Algebra and Applications*, **428** (2008) 1313-1324.
28. A. Cegielski, Projection methods for the linear split feasibility problems, *Optimization*, **57** (2008) 491-504.
29. A. Cegielski, Convergence of the projected surrogate constraints method for the linear split feasibility problems, *Journal of Convex Analysis*, **14** (2007) 169-183.
30. A. Cegielski and Ch. Grossmann, Properties of projection and penalty methods for discretized elliptic control problems, *Discussiones Mathematicae. Differential Inclusions, Control and Optimization*, **27** (2007) 23-41.
31. A. Cegielski, A generalization of the Opial's Theorem, *Control and Cybernetics*, **36** (2007) 601-610.
32. A. Cegielski and R. Dylewski, Residual selection in a projection method for convex minimization problems, *Optimization*, **52** (2003) 211-220.
33. A. Cegielski and R. Dylewski, Selection strategies in a projection method for convex minimization problems, *Discussiones Mathematicae. Differential Inclusions, Control and Optimization*, **22** (2002) 97-123.
34. A. Cegielski, Obtuse cones and Gram matrices with nonnegative inverse, *Linear Algebra and Applications*, **335** (2001) 167-181.
35. Cegielski, A method of projection onto an acute cone with level control in convex minimization, *Mathematical Programming*, **85** (1999) 469-490.
36. A. Cegielski, Geometrically convergent subgradient projection method in matrix games, *Journal of Optimization Theory and Applications*, **85** (1995) 249-264.
37. A. Cegielski, The Polyak subgradient projection method in matrix games, *Discussiones Mathematicae* **13** (1993) 155-165.
38. A. Cegielski, Ellipsoid projection method in matrix games, *Optimization*, **23** (1992) 117-123.
39. A. Cegielski, A subgradient projection method in matrix games, *Discussiones Mathematicae*, **11** (1991) 143-149.
40. A. Cegielski, Toeplitz type theorems for double sequences and their applications to some iterative process in zero-sum continuous games, *Optimization*, **21** (1990) 433-443.
41. A. Cegielski, Approximation of some zero-sum non-continuous game by a matrix game, *Commentationes Mathematicae*, **30** (1990) 261-267.
42. A. Cegielski, Tactical problems involving uncertain actions, *Journal of Optimization Theory and Applications*, **49** (1986) 81-105.
43. A. Cegielski, Game of timing with uncertain number of shots, *Mathematica Japonica*, **31** (1986) 503-532.
44. A. Cegielski, A mixed game of timing of type 1×1 with uncertain actions (in Polish), *Roczniki PTM, Ser. III, Matematyka Stosowana* **16** (1980) 239-250.

- **Refereed Conference Publications**

1. A. Cegielski and Y. Censor, Opial-type theorems and the common fixed point problem, in: H. H. Bauschke, R. S. Burachik, P. L. Combettes, V. Elser, D. R. Luke and H. Wolkowicz (Editors), *Fixed-Point Algorithms for Inverse Problems in Science and Engineering*, Springer Optimization and Its Applications 49, New York, NY, USA, 2011, pp. 155-183.
2. A. Cegielski, Variable Target Subgradient Method of Projection onto an Acute Cone in Convex Minimization, Proceedings of the 20th Symposium on Operations Research, Passau, September 13-15, 1995, Springer-Verlag (1996).

3. A. Cegielski, Projection onto an acute cone and convex feasibility problems, in Lecture Notes in Control and Information Sciences 197, J. Henry i J.-P. Yvon (Eds.), Springer Verlag (1994) pp. 187-194.
 4. A. Cegielski, A convergence acceleration of the relaxation algorithm in convex minimization, in Operations Research '92, A. Karmann, K. Mosler, M. Schader, G. Uebe (Eds.), Proceedings of the 17. Symposium on Operations Research, Hamburg, Aug. 25-28, 1992, Physica Verlag (1993), pp. 173-176.
 5. A. Cegielski, A subgradient projection method in linear programming, in Operations Research '91, R. Güttmann, R. Hettich, R. Horst, E. Sachs (Eds.), Proceedings of the 16. Symposium on Operations Research, Trier, Sept. 9-11, 1991, Physica Verlag (1992) pp. 71-74
 6. A. Cegielski, Silent duel with accuracies less than 1, in: Lecture Notes in Economics and Mathematical Systems, Vol. 226, Selected Topics in Operations Research and Mathematical Economics, Proceedings, Karlsruhe, West Germany, (1983), Springer Verlag (1984) pp. 245-251.
- **Books**
 1. A. Cegielski, *Iterative Methods for Fixed Point Problems in Hilbert Spaces*, Lecture Notes in Mathematics 2057, Springer, Berlin, 2012.
 2. A. Cegielski, *Mathematical Programming. Part 1. Linear Programming* (in Polish), Oficyna Wydawnicza Uniwersytetu Zielonogórskiego, Zielona Góra, 2002.
 3. A. Cegielski, *Relaxation Methods in Convex Optimization Problems* (in Polish), Monographs, Vol. 67, Institute of Mathematics, Higher College of Engineering, Zielona Góra, 1993.
 - **Technical Reports, Conference Abstracts, PhD Thesis and other Publications**
 1. A. Cegielski, Numerical behavior of the projection method onto an acute cone in convex minimization, Workshop Stabilität und Sensitivität von Optimierungs- und Steuerungsproblemen, Burg (Spreewald) 1999 (conference abstracts).
 2. A. Cegielski, Projection Methods in Convex Minimization, 12th Conference on Variational Calculus, Optimal Control and Applications, Trassenheide (Germany), September 23-27, 1996 (conference abstracts).
 3. A. Cegielski, On a relaxation algorithm in convex optimization problems, Technical Report, Institute of Mathematics Higher College of Engineering, Zielona Góra (1995) 1-19.
 4. A. Cegielski, Methods of the projection onto an acute cone in convex minimization, 7th French-German Conference on Optimization, Dijon, France, June 27 - July 2, 1994 (conference abstracts).
 5. A. Cegielski, A method of projection onto an acute cone in convex feasibility problems, 16th IFIP Conference in System Modelling and Optimization, Compiègne, France, July, 5-9, 1993 (conference abstracts, pp. 429-432).
 6. A. Cegielski, On some subgradient and ellipsoid methods in matrix games, XIV International Conference on Mathematical Optimization – Theory and Applications, Eisenach, 1989 (conference abstracts, pp. 28-31).
 7. A. Cegielski, An iterative process in continuous games, in: Differential equations and optimal control, Proceedings of the Sixth Scientific Session of Mathematicians in Żagań (1986) pp. 7-13.
 8. A. Cegielski, Games of timing with incomplete information, PhD Thesis, (in Polish) Technical Report, Institute of Mathematics, Technical University Wrocław, Report nr 18 (1981).