NICOLAS HADJISAVVAS

CURRICULUM VITAE

PERSONAL DETAILS

Date of birth: June 5, 1953
Citizenship: Greek
Address: Department of Product and Systems Design Engineering
University of the Aegean
Syros, Greece
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EDUCATION

PhD: Doctorat d'Etat, University of Reims, France 1981. Thesis title: Critique des formulations logiques de la Mécanique Quantique – Inférence statistique et distance Hilbertienne entre états quantiques (Critique of quantum logics – Statistical inference and Hilbert distance of states in Quantum Mechanics)

MSc: DEA (Diplôme d'Études Approfondies) in Mathematical Physics, University of Reims, France 1977. Thesis title: Deux études sur la Mécanique Quantique: Généralisation de la notion d'état et emploi de la théorie des groupes en Mécanique Quantique (Two studies in Quantum Mechanics : a generalization of the notion of state and use of the theory of groups in Quantum Mechanics)

BSc Physics, University of Athens 1976

ACADEMIC POSITIONS

10/2013-	Professor Emeritus, University of the Aegean, Greece.
01/2015-06/2017	Professor, Department of Mathematics and Statistics, King Fahd University of Petroleum and Minerals, Kingdom of Saudi Arabia
08/2013-01/2014:	Visiting Professor, University of Concepción, Chile.
07/2002-09/2013:	Professor, Department of Product and Systems Design Engineering, University of the Aegean, Greece.
08/1995-06/2002:	Professor, Department of Mathematics, University of the Aegean, Greece
06/1989-08/1995:	Associate professor, Department of Mathematics, University of the Aegean
10/1986-05/1989:	Lecturer, National Technical University of Athens, Greece

10/1977-06/1980: Teaching assistant, University of Reims, France

TEACHING

At the University of the Aegean, Greece: Undergraduate and graduate courses on: Advanced Calculus (one and several variables), Real Analysis, Functional Analysis, Measure theory, Topology, Mathematical Logic, Mathematical Programming, Mathematical Economics

At the National Technical University of Athens, Greece: Advanced Calculus, Ordinary Differential Equations, Partial Differential Equations, Linear Algebra, Complex Analysis

At the National Sun Yat-Sen University, Kaohsiung, Taiwan: Advanced Calculus (undergraduate course) and Mathematical Programming (graduate course)

At the University of Concepcion, Chile: Asymptotic Analysis and Optimization (one course at the undergraduate level, and one full course at the PhD level)

At the University of Milano Bicocca, Italy: Some topics in nonlinear analysis: Fixed point theorems and variational inequalities (PhD level, intensive mini course to students from the University of Milan Bicocca, University of Milan, and Technical University of Milan).

At the King Fahd University of Petroleum and Minerals, KSA: Various courses in Calculus, Differential equations, Convex Analysis (graduate course), Special topics in Nonlinear Analysis (graduate course)

SUPERVISOR OF PHD THESIS

- Loai Shaalan, *Transformation of Quasiconvex Functions by Scaling: Construction, Properties and Uses*, King Fahd University of Petroleum and Minerals (co-supervisor with S. Al-Homidan, under preparation)
- Felipe Ignacio Lara Obreque, *Second order asymptotic directions*, University of Concepción, Chile (co-supervisor with F. Flores-Bazan), 2015
- Mohammad Hossein Alizadeh, *Monotone and Generalized Monotone Bifunctions and their Application to Operator Theory*, University of the Aegean, 2012
- Aris Daniilidis, *Applications of Generalized Convexity and Generalized Monotonicity to Variational Inequalities and Vector Optimization*, University of the Aegean, 1997

ADMINISTRATIVE POSITIONS

For several years, he has been in the University of the Aegean:

- Chair of the Department of Mathematics
- Vice chair of the Department of Product and Systems Design Engineering
- Member of the Research Committee
- Member of the board of Trustees

RESEARCH INTERESTS

Convex Analysis, Nonsmooth Analysis, Fixed Point Theory, Monotone and generalized monotone operators, Variational Inequalities, Equilibrium Problems, Mathematical Foundations of Quantum Mechanics.

EDITORIAL BOARDS

Member of the Editorial Board for the following Journals, belonging to the ISI Citation Index (WOS):

- Journal of Optimization Theory and Applications
- Optimization
- Journal of Global Optimization
- Optimization Letters

EDITOR OF SPECIAL JOURNAL ISSUES

- Journal of Global Optimization, Vol. 64, issue 4, 2016. Special issue for the proceedings of the 11th International Symposium on Generalized Convexity and Generalized Monotonicity (Rio de Janeiro, Brazil, August 25-30, 2014).
- Journal of Global Optimization, Vol. 60, issue 4, 2014. Special issue for the proceedings of the International Conference on Optimization Modelling and Applications (Delhi, India, Nov. 29 – Dec. 1, 2012).
- Journal of Global Optimization, Vol. 53 issue 2, 2012. Special issue for the proceedings of the International Conference on Optimization and Its Applications (Varanasi, India, Feb. 16-19, 2010).
- Journal of Global Optimization, Vol. 46 issue 4, 2010. Special issue on the occasion of Prof. Giannessi's 75th birthday.
- Journal of Global Optimization, Vol. 43 issue 4, 2009. Special issue for the proceedings of the International Conference on Nonlinear Analysis and Optimization, Isfahan, Iran (April 25-27, 2007).

REFEREE OF INTERNATIONAL JOURNALS

Mathematical Programming; SIAM Journal on Optimization; Mathematics of Operations Research; Journal of Convex Analysis; Journal of Mathematical Analysis and Applications; Journal of Optimization Theory and Applications; Journal of Global Optimization; Optimization; Optimization Letters; Mathematical Methods of Operations Research; Nonlinear Analysis; Acta Mathematica Hungarica; Pacific Journal of Optimization; Applied Mathematics Letters; Applicable Analysis; Journal of Statistics and Management Systems; Lecture Notes in Economics and Mathematical Systems; Annals of Operations Research; Computational Optimization and Applications; Journal of Interdisciplinary Mathematics; Journal of Nonlinear and Convex Analysis; Journal of Computational and Applied Mathematics; Journal of Inequalities in Pure and Applied Mathematics (Electronic); Serdica; International Journal of Mathematics and Mathematical Sciences; DCDIS Series A: Mathematical Analysis; Journal of Applied Mathematics and Informatics; Computers and

Mathematics with Applications; Optimization Methods and Software; Positivity; Abstract and Applied Analysis; Set-Valued and Variational Analysis; OPSEARCH; Journal of Inequalities and Applications; Control & Cybernetics.

REVIEWER

- Mathematical Reviews
- Zentralblatt für Mathematik

EXTERNAL EXAMINER OF PHD THESIS

- Indian School of Technology Madras, India, 2015
- Indian School of Mines, Dhanbad, India, 2015
- Department of Mathematical Engineering, Univesidad de Concepción, Chile, 2005
- Department of Operations Research, University of Delhi, India, 2003
- Department of Mathematics, Université Cadi Ayyad, Morocco, 2000

EVALUATOR OF BOOK PROPOSALS

Evaluator of book proposals for the following Editors:

- CRC Press (Taylor and Francis group)
- Lecture Notes in Economics and Mathematical Systems (Springer-Verlag)

EXTERNAL EVALUATOR OF RESEARCH PROPOSALS (RECENT)

<u>International</u>

- Evaluator of research proposals for the Italian Ministry for Education, University and Research

<u>National</u>

- Evaluator of research proposals at the National Technical University of Athens, P.E.D.E. program, 2012
- Evaluator of proposals at the National Scholarship Foundation, Greece (2010-2011-2012)

SCHOLARSHIPS

- Scholarship of the French Government (boursier du gouvernement Français) during the preparation of Doctorat d' Etat, 1977-1981
- Scholarship of the French Government (boursier du gouvernement Français) during the Master's program (DEA), 1976-1977
- Scholarship of the Greek National Scholarship Foundation, 1972-1976

DISTINCTIONS

<u>Chair of international scientific committee</u>

Chair (2003 – 2006 and 2015 - 2018) and Interim chair (October 2008 - June 2009) of the Working Group on Generalized Convexity (455 members from 52 countries,

http://www.genconv.org); elected 6 times as member of the Scientific Committee, 1997-2018.

Keynote speaker-invited speaker in international conferences (with coverage of at least the fees and accommodation)

- Optimization and related topics, 13/12/2019, Milano, Italy.
- 14th International Seminar on Optimization and Related Areas, 7-11/10/2019, Lima, Peru.
- 4th International Conference on Nonlinear Analysis and Optimization, 18-20/6/2018, Zanjan, Iran (Conference in honor of N. Hadjisavvas' 65th birthday).
- Advances on Variational Analysis, Optimization and Applications, 6/9/2018, Messina, Italy.
- Optimization and Related Topics, 17-18/5/2018, Milano and Pavia, Italy.
- 13th International Seminar on Optimization and Related Areas, 9-13/10/2017, Lima, Peru.
- Advances in Convex Analysis and Optimization, 5-12/7/2016, Erice. Italy.
- 7th International Seminar on Optimization and Variational Analysis, 1-3/6/2016, 2016, Alicante, Spain.
- XI International Symposium on Generalized Convexity and Monotonicity, 25-30/8/2014, Rio de Janeiro, Brazil.
- Optimization, Game theory and related topics, 8-9/5/2014, Genoa, Italy.
- 2nd International Conference on Variational Analysis and Optimization, 7-10/1/2014, Santiago, Chile.
- XI International Seminar on Optimization and Related Areas (XI ISORA), 7-12/10/2013, Lima, Peru.
- Optimization and variational analysis, 9-10/5/2013, L'Aquila, Italy.
- International Conference on Optimization, Modeling and their Applications, 29/11-1/12 2012, New Delhi, India.
- Workshop on Optimization and variational Analysis, 10-11/5/2012, Milan, Italy.
- International Conference on Numerical Analysis & Optimization Theory and Applications, 17-21/12/2011, Dhahran, Saudi Arabia.
- International Conference on Analysis and its Applications, 19-21/11/2011, Aligarh, India.
- Optimization, Theory, Algorithms and Applications in Economics, 24-28/10/2011, Barcelona, Spain.
- International Conference on Optimization and its Applications, 16-18/2/2010, Varanasi, India.
- 2nd ALEL meeting on Optimization and Applications, 23-28/6/2009, Alicante, Spain.
- 2nd International Conference on Nonlinear Analysis and Optimization, 13-15/5/2009, Isfahan, Iran.
- Five Universities' Joint Conference of Mathematics, 29/12/2008 – 1/1/2009, Hualian, Taiwan.
- International Symposium on Variational Analysis and Optimization, 28-30/11/2008, Kaohsiung, Taiwan.

- Sixièmes journées Franco-Chiliennes d' Optimisation, 18-21/5/2008, Toulon, France.
- Alicante - Elche – Limoges (ALEL) Meeting on Optimization, 19-20/6/2008, Limoges, France.
- International Symposium on Nonlinear Analysis and Convex Analysis, 22-24/11/2007, Kaohsiung, Taiwan.
- International Conference on Nonlinear Analysis and Optimization, 25-27/4/2007, Isfahan, Iran.
- International Conference on Nonlinear Programming with Applications, 29/5-1/6/2006, Shanghai, China.
- Workshop on Nonlinear and Convex Analysis, 10-13/5/2004, Isfahan, Iran.
- Workshop "Optimization", 13-14/6/2002, Insubria, Italy.
- Optimization and Control with Applications, 9-17/7/2001, Erice, Italy.

Invited speaker at international Summer or Winter Schools

- Training Programme on Optimization, Modeling and their Applications, 26/11-1/12 2012, New Delhi, India.
- Training Programme on Nonlinear Analysis with Applications to Optimization and Game Theory, 16-19/11/2011, Aligarh, India.
- Training Programme on Optimization Theory and Applications, 10-14/2/2010, Delhi, India.
- International Summer School on Actuarial Sciences, September 2003, Samos, Greece.
- International Summer School on generalized convexity/monotonicity, 25-28/8/1999, Samos, Greece.

Invited talks at foreign Universities

- Invited talk at the Universidad de Tarapacá, Chile: *Zero-Scale Asymptotic Functions*. September 2019.
- Invited talk at the university of Concepción, Concepción, Chile: *Getting rid of local minima of quasiconvex functions*, November 2017.
- Invited talk at the University of Naples, Italy: *Second order asymptotic analysis*, May 2014.
- Invited talk at the Catholic University of the Holy Concepción, Concepción, Chile: *On monotone and maximal monotone bifunctions*, January 2014.
- Invited talk at the University of Concepción, Concepción, Chile: *On the integrability problem in classical demand theory, in infinite dimensions*, November 2013.
- Invited talk at the Banaras Hindu University, Varanasi, India: *Solving the revealed preference problem of the consumer theory*, December 2012.
- Invited talk at the Chung Yuan Christian University, Taiwan: *Pseudomonotone maps: Survey of the theory and its applications*, February 2011.
- Invited talk at the National Cheng Kung University, Tainan, Taiwan: *Maximal Monotonicity of Bifunctions*, January 2009.

- Invited talk at the Universidad Miguel Hernández de Elche: *Second-order asymptotic directions and applications*, June 2009.
- Invited talk at the National Chiayi University, Taiwan: *Second-order asymptotic directions and applications*, December 2008.
- Invited talk at the University of Avignon, France: *Maximal Monotonicity of Bifunctions*, May 2008.
- Invited talk at the National Chiayi University, Taiwan: *Pseudomonotone* maps and the cutting plane property*, December 2007.
- Invited talk at the National Cheng Kung University, Tainan, Taiwan: *Generalized pseudomonotone operators*, November 2007.
- Invited talk at the University of Perpignan France, *Pseudomonotone* maps and the cutting plane property*, February 2003.
- Invited talk at the Catholic University of Milan, Italy: *Coercivity conditions and variational inequalities*, June 2003.
- Invited talk at the University of Pisa, Italy: *The use of subdifferentials to the study of generalized convex functions*, February 2001.

Member of international scientific committees of Conferences

- XII International Symposium on Generalized Convexity and Monotonicity, August 27-September 2, 2017, Hajdúszoboszló, Hungary.
- XI International Symposium on Generalized Convexity and Monotonicity, August 25-30, 2014, Rio de Janeiro, Brazil.
- International Conference on Optimization Modelling and Applications, 29/11-1/12 2012, New Delhi, India.
- 10th International Symposium on Generalized Convexity/Monotonicity, August 22-27, 2011, Cluj-Napoca, Romania.
- 2nd International Conference on Nonlinear Analysis and Optimization, May 13-15, 2009, Isfahan, Iran.
- 9th International Symposium on Generalized Convexity/Monotonicity, July 21-25, 2008, Kaohshiung, Taiwan.
- International Conference on Nonlinear Analysis and Optimization, April 25-27, 2007, Isfahan, Iran.
- 8th International Symposium on Generalized Convexity and Generalized Monotonicity, July 4-8, 2005, Varese, Italy.
- 7th International Symposium on Generalized Convexity and Generalized Monotonicity, August 27-31, 2002, Hanoi, Vietnam.
- International Conference on Advances in Convex Analysis and Global Optimization, June 5-9, 2000, Pythagorion, Samos, Greece.
- 6th International Symposium on Generalized Convexity/Monotonicity, August 30 - September 3, 1999 Karlovassi, Samos, Greece .
- 2nd Samos meeting on Cosmology, Geometry and Relativity, August 31 - September 4, 1998 Pythagorion, Samos, Greece.
- International Conference on the Teaching of Mathematics, July 3-6, 1998 Pythagorion, Samos, Greece.

Invited research visits in Universities (since 2002)

- Catholic University of Milan, December 12-20, 2019.
- University of Concepción, Chile, September 16 – October 3, 2019.
- University of Tarapacá, Chile, August 25-September 15, 2019.
- University of Messina, Italy, September 5-9, 2019.
- University of Concepcion, Chile, October 15-November 28, 2017.
- University of Concepcion, Chile, June 20 - July 14, 2014.
- Catholic University of Milan and University of Milano Bicocca (joint invitation), May 5-28, 2014.
- August 1, 2013 – January 31, 2014.
- Catholic University of Milan and University of Milano Bicocca (joint invitation), Italy, April 14-20, 2013.
- Universitat Autònoma de Barcelona, Spain, February 4-11, 2013.
- Catholic University of Milan and University of Milano Bicocca (joint invitation), Italy, May 7-13, 2012.
- National Sun Yat-Sen University, Kaohsiung, Taiwan, January 20- March 1, 2011.
- National Sun Yat-Sen University, Kaohsiung, Taiwan, September 13, 2008 – January 17, 2009.
- National Sun Yat-Sen University, Kaohsiung, Taiwan, September 18, 2007 – January 21, 2008.
- University of California at Riverside, USA, March 26 – April 23, 2007.
- University of California at Riverside, USA, January 16 – February 15, 2006.
- University of Concepcion, Chile, December 13, 2004 – January 30, 2005.
- University of Pau, France, September 19 – October 19, 2004.
- University of California at Riverside, USA, September 5 – 30, 2003.
- University of Perpignan, France, January 16 – February 16, 2003.
- Catholic University of Milan, Italy, June 9 – 23, 2002.
- University of California at Riverside, USA, March 18 – 31, 2002.

There were also 4 additional visits to the University of California at Riverside, and one additional visit to the Catholic University of Milan before 2002.

RESEARCH PROJECTS

- Maximal monotone operators and maximal monotone bifunctions, King Fahd University of Petroleum and Minerals, KSA, 2015.
- Second order asymptotic directions in optimization. Principal investigator: N. Hadjisavvas. CONICYT (Chile), 2013.
- Generalized convex analysis and applications (Greek-France common project). Principal investigator: N. Hadjisavvas. Funded by the Greek General Secretariat of Research and Technology and by the French government. 2007-2008.
- Vector variational inequalities-vector equilibrium problems. Principal investigator: N. Hadjisavvas. Research committee of the University of the Aegean, 1996-1997.

- Mutivalued differential equations and applications to optimal control; (Coordinator: G. Pantelidis). General Secretariat of Research and Technology, 1996-1998.
- Variational inequalities with quasimonotone operators; application to the study of a thin elastic plate. Principal investigator: N. Hadjisavvas. Research committee of the University of the Aegean, 1994-1995.

PUBLICATIONS

BOOKS

1. A. Eberhard, N. Hadjisavvas and D.T. Luc (Eds.), *Generalized Convexity, Monotonicity and Application*s, Springer, 2005.
2. N. Hadjisavvas, S. Komlosi and S. Schaible, *Handbook on Generalized Convexity and Generalized Monotonicity*, Springer, 2005.
3. N. Hadjisavvas, P. Pardalos (Eds). *Advances in Convex Analysis and Global Optimization,* Kluwer Academic Publishers, 2001.
4. N. Hadjisavvas, J.E. Martinez-Legaz, J.P. Penot (Eds): *Generalized Convexity/ Monotonicity*, Springer-Verlag, 2001.
5. N. Hadjisavvas, D. Hughes-Hallett, I. Vakalis (eds): Proceedings of the International Conference on the teaching of Mathematics (July 3-6, 1998 Pythagorion, Samos, Greece), John Wiley and Sons, Inc., 1998.
6. D. Kravvaritis, G. Pantelidis, N. Hadjisavvas: *Ordinary Differential Equations* (in Greek). Ziti Publications, 1990, Thessaloniki (Textbook in Greek).

CHAPTERS IN BOOKS

1. N. Hadjisavvas: Convexity, Generalized Convexity and Applications, in: Fixed Point Theory, Variational Analysis and Applications, S.A.R. Al-Mezel, F.R.M. Al-Solamy, Q.H. Ansari (eds.), CRC Press, Taylor and Francis (2014).
2. N. Hadjisavvas: *Introduction to Generalized Convexity and Generalized Monotonicity*, in: Topics in Nonlinear Analysis and Optimization, Q.H. Ansari (ed), World Education (2012).
3. N. Hadjisavvas: *Pseudomonotone Maps: Properties and Applications*, in: Encyclopedia of Optimization, P. Pardalos and G. Floudas (eds), Springer (2008).
4. N. Hadjisavvas: *Generalized Convexity, Generalized Monotonicity and Nonsmooth Analysis*, in: Handbook on Generalized Convexity and Generalized Monotonicity, Springer (2005).
5. N. Hadjisavvas, S. Schaible: *Generalized Monotone Maps*, in: Handbook on Generalized Convexity and Generalized Monotonicity, Springer (2004).
6. N. Hadjisavvas: *Maximal Pseudomonotone Operators*, in: Recent advances in Optimization, G.P. Crespi, A. Guerraggio, E. Miglierina, M. Rocca (eds), Datanova Editrice (2003).
7. N. Hadjisavvas and S. Schaible: *Generalized Monotone Single Valued Maps,* (ii) *Generalized Monotone Multi Valued Maps* (iii) *Generalized Monotonicity: Applications to Variational Inequalities and Equilibrium Problems*: three refereed

articles in: Encyclopedia of Optimization, P. Pardalos and G. Floudas (eds), Kluwer Academic Publishers (2001).

8. N. Hadjisavvas and S. Schaible: *Pseudomonotonicity and Quasimonotonicity in Variational Inequalities and Equilibrium Problems*, in "Generalized Convexity, Generalized Monotonicity", J.P. Crouzeix, J.E. Martinez-Legaz, M. Volle (eds). Kluwer (1998).
9. N. Hadjisavvas, D. Kravvaritis, G. Pantelides: *On nonlinear monotone Operators with values in L(X,Y),* in: Constantine Caratheodory: An international Tribute. Th. Rassias, Editor. Word Scientific Publications Company (1990).

PAPERS IN REFEREED JOURNALS

1. F. Flores-Bazán, Y. García and N. Hadjisavvas, Characterizing quasiconvexity of the pointwise infimum of a family of arbitrary translations of quasiconvex functions, with applications to sums and quasiconvex optimization, Math. Programming (to appear), https://doi.org/10.1007/s10107-021-01647-w .
2. N. Hadjisavvas, F. Lara and D.T. Luc, A general asymptotic function with applications in nonconvex optimization, J. Global Optim. 78, 49-68 (2020).
3. F. Flores-Bazán and N. Hadjisavvas, *Zero-scale asymptotic functions and quasiconvex optimization, J. Convex Anal*. 26, 1253-1274 (2019).
4. N. Hadjisavvas, F. Lara and J.E. Martínez-Legaz, *A Quasiconvex Asymptotic Function with Applications in Optimization*, J. Optim. Theory Appl. 180, 170-186 (2019).
5. S. Al-Homidan, N. Hadjisavvas and L. Shaalan, *Transformation of Quasiconvex Functions to Eliminate Local Minima*, J. Optim. Theory Appl. 177, 93-105 (2018).
6. M. Bianchi, N. Hadjisavvas and R. Pini, *Representative functions of maximally monotone operators and bifunctions*, Math. Programming B 168, 433-448 (2018).
7. F. Flores-Bazán, N. Hadjisavvas, F. Lara and I. Montenegro, *First- and Second-Order Asymptotic Analysis with Applications in Quasiconvex Optimization*, J. Optim. Theory Appl. 170, 372-393 (2016).
8. N. Hadjisavvas, F.M.O. Jacinto and J.E. Martínez-Legaz, *Some conditions for maximal monotonicity of bifunctions*, Set-Valued Var. Anal. 24, 323-332 (2016).
9. N. Hadjisavvas, J.B. Hiriart-Urruty and P.-J. Laurent, *A Characterization by Optimization of the Monge Point of a Tetrahedron*, J. Optim. Theory Appl 171, 856-864 (2016).
10. N. Hadjisavvas and J.-P. Penot, *Revisiting the problem of integrability in utility theory,* Optimization 64, 2495-2509 (2015).
11. F. Flores-Bazan, N. Hadjisavvas and F. Lara, *Second order asymptotic analysis: basic theory*. J. Convex Anal. 22, 1173-1196 (2015).
12. M. H. Alizadeh, M. Bianchi, N. Hadjisavvas and R. Pini, *On cyclic and n-cyclic monotonicity of bifunctions*, J. Global Optim. 60, 599-616 (2014).

13. M. H. Alizadeh, N. Hadjisavvas, *On the Fitzpatrick transform of a monotone bifunction*, Optimization 62, 693-701 (2013).
14. N. Hadjisavvas, S. Schaible and N.C. Wong, *Pseudomonotone Operators: a Survey of the Theory and its Applications*, J. Optim. Theory Appl. 152, 1-20 (2012) (invited paper).
15. H. Alizadeh, N. Hadjisavvas and M. Roohi, *Local Boundedness Properties for Generalized Monotone Operators*, J. Convex Analysis 19, 49-61 (2012).
16. M. H. Alizadeh and N. Hadjisavvas, *Local boundedness of Monotone Bifunctions*, J. Global Optim. 53, 231-241 (2012).
17. N. Hadjisavvas and D.T. Luc, *Second-order asymptotic directions of unbounded sets with application to optimization*, J. Convex Analysis 18, 181-202 (2011).
18. L.-C. Ceng, N. Hadjisavvas and N.C. Wong, *Strong convergence theorem by a hybrid extragradient-like approximation method for variational inequalities and fixed-point problems,* J. Global Optim. 46, 635-646 (2010).
19. N. Hadjisavvas and H. Khatibzadeh, *Maximal monotonicity of bifunctions*, Optimization 59, 147-160 (2010).
20. D. Aussel, Y. Garcia and N. Hadjisavvas, *Single-directional property of multivalued maps and variational systems*, SIAM J. Optim. 20, 1274-1285 (2009).
21. N. Hadjisavvas and S. Schaible*, Pseudomonotone* maps and the cutting plane property*, J. Global Optim. 43, 565 - 575 (2009).
22. L. C. Ceng, N. Hadjisavvas, S. Schaible, and J. C. Yao, *Well-Posedness for Mixed Quasivariational-Like Inequalities*, J. Optim. Theory Appl. 139, 109-125 (2008).
23. M.R. Bai and N. Hadjisavvas, *Relaxed quasimonotone operators and relaxed quasiconvex functions*, J. Optim. Theory Appl. 138, 329-339 (2008).
24. F. Flores-Bazán, N. Hadjisavvas and C. Vera, *An optimal alternative theorem and applications to mathematical programming*, J. Global Optim. 37, 229-243 (2007).
25. N. Hadjisavvas, *Translations of Quasimonotone Maps and Monotonicity,* Applied Mathematics Letters 19, 913-915 (2006).
26. N. Hadjisavvas and S. Schaible, *On a generalization of paramonotone maps and its application to solving the Stampacchia variational inequality*, Optimization 55, 593-604 (2006).
27. M. Bianchi, N. Hadjisavvas and S. Schaible, *Exceptional families of elements for variational inequalities in Banach spaces*, J. Optim. Theory Appl. 129, 23-31 (2006).
28. D. Aussel and N. Hadjisavvas, *Adjusted sublevel sets, normal operator and quasiconvex programming,* SIAM J. Optimization 16, 358-367 (2005).
29. M. Bianchi, N. Hadjisavvas and S. Schaible, *Minimal Coercivity Conditions and Exceptional Families of Elements in Quasimonotone Variational Inequalities*, J. Optim. Theory Appl. 122, 1-17 (2004).
30. D. Aussel and N. Hadjisavvas, *On Quasimonotone Variational Inequalities*, J. Optim. Theory Appl. 121, 223-228 (2004).

31. N. Hadjisavvas: *Continuity and Maximality Properties of Pseudomonotone Operators*, J. Convex Anal. 10, 465--475 (2003).
32. N. Hadjisavvas, *Hadamard-type inequalities for quasiconvex functions*, J. Inequal. Pure Appl. Math. Vol 4, Issue 1, Article 13 (2003). (electronic).
33. M. Bianchi, N. Hadjisavvas and S. Schaible, *On pseudomonotone maps T for which -T is also pseudomonotone,* J. Conv. Anal. 10, 465-475 (2003).
34. N. Hadjisavvas, *The use of subdifferentials for studying generalized convex functions*, Journal of Statistics and Management Systems 5, 125-139 (2002).
35. A. Daniilidis, N. Hadjisavvas and J.E. Martinez-Legaz: *An appropriate subdifferential for quasiconvex functions*, SIAM J. on Optimization 12, 407-420 (2002).
36. A. Daniilidis and N. Hadjisavvas: *On Generalized Cyclically Monotone Operators and Proper Quasimonotonicity*, Optimization Vol 47, 123-135 (2000).
37. A. Daniilidis and N. Hadjisavvas: *On the Subdifferentials of Pseudoconvex and Quasiconvex Functions and Cyclic Monotonicity*, J. Math. Anal. Appl. Vol. 237, 30-42 (1999).
38. A. Daniilidis and N. Hadjisavvas: *Characterization of Nonsmooth Semistrictly Quasiconvex and Strictly Quasiconvex Functions*, J. Optim. Theory Appl. Vol. 102, 525-536 (1999).
39. A. Daniilidis, N. Hadjisavvas: *Coercivity conditions and variational inequalities*. Mathematical Programming 86, 433-438 (1999).
40. N. Hadjisavvas, S. Schaible: *From Scalar to Vector Equilibrium Problems in the Quasimonotone Case* J. Optim. Theory Appl. Vol. 96, 297-309 (1998).
41. M. Bianchi, N. Hadjisavvas and S. Schaible: *Vector Equilibrium Problems with Generalized Monotone Bifunctions*. J. Optim. Theory Appl. 92, 527-542 (1997).
42. A. Daniilidis, N. Hadjisavvas and S. Schaible: *Connectedness of the efficient set for three-objective quasiconcave optimization problems*. J. Optim. Theory Appl 93, 517-524 (1997)).
43. A. Daniilidis, N. Hadjisavvas: *Existence Theorems for Vector Variational Inequalities,* Bull. Austr. Math. Soc. 54, 473-481 (1996).
44. N. Hadjisavvas, S. Schaible: *Quasimonotone Variational Inequalities in Banach Spaces*. J. Optim. Theory Appl. 90, 95-111 (1996).
45. N. Hadjisavvas, D. Kravvaritis and I. Polyrakis: *Weakly compact subsets of* L1(□,X) *and* bvca (□,X) . Rend. Circ. Mat. Palermo 48 (series II), 119-126 (1994).
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CITATIONS

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1128 times by 594 authors". Google Scholar gives 2699 citations (h index = 24). A lot of these papers were based mainly on his work and mention specifically that their main aim is to continue or generalize his results. Among these, the following papers mention his work in their abstract:

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The textbook of B.C. van Fraassen "Quantum Mechanics" mentions the "Hadjisavvas theorem" and makes this note: *This is a subject with a history, starting with an inspired guess by Schroedinger (1935a; 1936) and ending with the fully general results of Hadjisavvas (1981)*. The same result has been characterized by P. Bush (Studies in History and Philosophy of Modern Physics 33, 517-539, 2002) as "*fundamental*".