

## LISTĂ LUCRĂRI (PUBLICATIONS)

Constantin Paleologu

### CĂRȚI (BOOKS)

1. J. Benesty, **C. Paleologu**, T. Gänslер, S. Ciochină, “*A Perspective on Stereophonic Acoustic Echo Cancellation*”, **Springer-Verlag**, ISBN 978-3-642-22573-4, 2011.
2. **C. Paleologu**, J. Benesty, S. Ciochină, “*Sparse Adaptive Filters for Echo Cancellation*”, **Morgan & Claypool Publishers**, ISBN 978-1-598-29306-7, 2010.
3. **C. Paleologu**, J. Benesty, S. Ciochină, “*Variable step-size adaptive filters for echo cancellation*”, capitolul 4, pp. 89-125, în cartea “*Speech Processing in Modern Communication: Challenges and Perspectives*”, editori – I. Cohen, J. Benesty, S. Gannot), **Springer-Verlag**, ISBN 978-3-642-11129-7, 2010.
4. **C. Paleologu**, D. Munteanu, “*Prelucrarea semnalului vocal*”, 271 pagini, Editura Printech, ISBN 978-973-718-955-4, București, Romania, 2008.
5. **C. Paleologu**, S. Ciochină, A.A. Enescu, “*Algoritmi adaptivi de tip RLS*”, 223 pagini, Editura Printech, ISBN 978-973-718-942-4, București, Romania, 2007.
6. **C. Paleologu**, R. M. Udrea, A. A. Enescu, “*Prelucrarea numerică a semnalelor – Îndrumar de laborator*”, 153 pagini, Editura “ELECTRONICA 2000”, ISBN 973-86759-1-X, București, Romania, 2004. Editură recunoscută CNCSIS, cod 75.
7. M. Răducanu, **C. Paleologu**, “*Traitemet Numerique du Signal – Cahier de travaux pratiques*”, 115 pagini, Editura “ELECTRONICA 2000”, ISBN 973-86759-5-2, București, Romania, 2004.
8. N. Dumitriu, **C. Paleologu**, “*Prelucrarea semnalului vocal*”, 159 pagini, Editura Universității Politehnica din București, București, Romania, 2003.
9. F. Albu, **C. Paleologu**, R. M. Udrea, “*Prelucrarea semnalului vocal – Îndrumar de laborator*”, 62 pagini, Editura “ELECTRONICA 2000”, ISBN 973-99878-4-2, București, Romania, 2003.
10. E. Diaconescu, **C. Paleologu**, “*Prelucrarea numerică a semnalelor – Aplicații*”, 128 pagini, Editura Universității din Pitești, ISBN 973-690-065-7, București, Romania, 2002.
11. **C. Paleologu**, R. M. Udrea, M. Răducanu, D. N. Vizireanu, “*Prelucrarea numerică a semnalelor – Aplicații în MATLAB*”, 117 pagini, Editura Universității Politehnica din București, București, Romania, 2001.

12. C. Paleologu, “MATLAB – Ghid de utilizare pentru semnale și sisteme”, 253 pagini, Editura Universității Politehnica din București, București, Romania, 2000.
13. C. Paleologu, “Introducere în MATLAB”, 95 pagini, Editura Universității Politehnica din București, București, Romania, 1999.

#### **ARTICOLE REVISTE (JOURNAL PAPERS)**

1. C. Paleologu, J. Benesty, S. Ciochină, “Study of the General Kalman Filter for Echo Cancellation”, *IEEE Transactions on Audio, Speech, and Language Processing*, vol. 21, no. 8, pp. 1539-1549, Aug. 2013.
2. C. Stanciu, J. Benesty, C. Paleologu, T. Gänslor, S. Ciochină, “A Widely Linear Model for Stereophonic Acoustic Echo Cancellation,” *Signal Processing*, vol. 93, pp. 511-516, Feb. 2013.
3. J. Benesty, C. Paleologu, S. Ciochină, “Regularization of the RLS Algorithm”, *IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences*, vol. E94-A, pp. 1628-1629, Aug. 2011.
4. C. Paleologu, J. Benesty, S. Ciochină, “Regularization of the Affine Projection Algorithm”, *IEEE Transactions on Circuits and Systems-II: Express Briefs*, vol. 58, no. 6, pp. 366-370, June 2011.
5. J. Benesty, C. Paleologu, S. Ciochină, “On Regularization in Adaptive Filtering”, *IEEE Transactions on Audio, Speech, and Language Processing*, vol. 19, no. 6, pp. 1734-1742, Aug. 2011.
6. C. Oprea, C. Paleologu, I. Pirnog, R. M. Udrea, “Saliency Detection Making Use of Human Visual Perception Modelling”, *International Journal On Advances in Life Sciences*, vol. 2, no 3&4, pp. 200-208, 2010.
7. F. Albu, C. Paleologu, Y. Zakharov, “The Recursive Affine Projection Algorithm for Active Noise Control”, *Revue Roumaine des Sciences Techniques – Serie Electrotechnique et Energetique*, vol. 55, no. 4, pp. 416-425, 2010.
8. J. Benesty, C. Paleologu, S. Ciochină, “Proportionate Adaptive Filters from a Basis Pursuit Perspective”, *IEEE Signal Processing Letters*, vol. 17, no. 12, pp. 985-988, Dec. 2010.
9. C. Paleologu, S. Ciochină, J. Benesty, “An Efficient Proportionate Affine Projection Algorithm for Echo Cancellation”, *IEEE Signal Processing Letters*, vol. 17, no. 2, pp. 165-168, Feb. 2010.

- 10. C. Paleologu**, J. Benesty, S. Ciochină, “A Family of Variable Step-Size NLMS Algorithms for Echo Cancellation”, *Revue Roumaine des Sciences Techniques – Serie Electrotechnique et Energetique*, vol. 55, no. 1, pp. 49-58, 2010.
- 11. C. Paleologu**, S. Ciochină, A. A. Enescu, “A Family of Recursive Least-Squares Adaptive Algorithms Suitable for Fixed-Point Implementation”, *International Journal On Advances in Telecommunications*, vol. 2, no. 2&3, pp. 88-97, 2009.
- 12. C. Paleologu**, F. Albu, A. A. Enescu, S. Ciochină, “Modified SRF-QRD-LSL Adaptive Algorithm with Improved Numerical Robustness”, *International Journal On Advances in Systems and Measurements*, vol. 2, no. 1, pp. 56-65, 2009.
- 13. C. Paleologu**, J. Benesty, S. Ciochină, “A Variable Step-Size Affine Projection Algorithm Designed for Acoustic Echo Cancellation”, *IEEE Transactions on Audio, Speech, and Language Processing*, vol. 16, no. 8, pp. 1466-1478, Nov. 2008.
- 14. C. Paleologu**, J. Benesty, S. Ciochină, “A Robust Variable Forgetting Factor Recursive Least-Squares Algorithm for System Identification”, *IEEE Signal Processing Letters*, vol. 15, pp. 597-600, 2008.
- 15. C. Paleologu**, S. Ciochină, J. Benesty, “Variable Step-Size NLMS Algorithm for Under-Modeling Acoustic Echo Cancellation”, *IEEE Signal Processing Letters*, vol. 15, pp. 5-8, 2008.
- 16. C. Paleologu**, C. Vlădeanu, S. El Assad, “Fast Convergence Least-Mean-Square Algorithms for MMSE Receivers in DS-CDMA Systems”, *International Journal on Advances in Networks and Services*, vol. 1, no. 1, pp. 30-39, 2008.
- 17. C. Paleologu**, J. Benesty, S. Ciochină, “A Variable Step-Size Proportionate NLMS Algorithm for Echo Cancellation”, *Revue Roumaine des Sciences Techniques – Serie Electrotechnique et Energetique*, vol. 53, no. 3, pp. 309-317, 2008.
- 18. C. Vlădeanu, C. Paleologu**, I. Marghescu, “Multilevel Chaos-Based Spreading Sequences for DS-CDMA System Performance Improvement”, *Revue Roumaine des Sciences Techniques – Serie Electrotechnique et Energetique*, vol. 53, no. 3, pp. 319-328, 2008.
- 19. C. Paleologu**, S. Ciochină, “A Class of Variable Step-Size NLMS and Affine Projection Algorithms Suitable for Echo Cancellation”, *Scientific Bulletin of University Politehnica of Timisoara, Transactions on Electronics and Communications*, vol. 53 (67), fasc. 2, pp. 118-123, 2008.

- 20. C. Paleologu**, “Soluții de creștere a performanțelor compensatoarelor de ecou acustic multi-canal. Aplicații în sistemele de teleconferință”, *Revista de Politica Științei și Scientometrie*, vol. VI, număr special pe 2008, ISSN 1582-1218.
- 21. C. Paleologu**, S. Ciochină, A. A. Enescu, “A Family of RLSL Adaptive Algorithms Suitable for Fixed-Point Implementation”, *Revue Roumaine des Sciences Techniques – Serie Electrotechnique et Energetique*, vol. 52, no. 3, pp. 343-358, 2007.
- 22. C. Vlădeanu, C. Paleologu**, “Fast convergence adaptive MMSE receiver for asynchronous DS-CDMA systems”, *Revue Roumaine des Sciences Techniques – Serie Electrotechnique et Energetique*, vol. 52, no. 1, pp. 51-60, 2007.
- 23. C. Paleologu**, C. Vlădeanu, A. A. Enescu, “Lattice MMSE single user receiver for asynchronous DS-CDMA systems”, *Scientific Bulletin of University Politehnica of Timisoara, Transactions on Electronics and Communications*, vol. 51 (65), fasc. 2, pp. 113-118, 2006.
- 24. C. Vlădeanu, A. F. Păun, C. Paleologu**, “Analiza densității de probabilitate corespunzătoare interferenței medii per utilizator în sistemul DS-CDMA”, *Revista Telecomunicații*, no. 1, pp. 79-89, 2006.
- 25. C. Paleologu**, “Noi algoritmi adaptivi adecvați implementării în precizie finită. Aplicații în rețelele de comunicații”, *Revista de Politica Științei și Scientometrie*, vol. III, număr special pe 2005, ISSN 1582-1218.
- 26. C. Paleologu**, A. A. Enescu, S. Ciochină, “A Network Echo Canceler Based on a SRF QRD-LSL Adaptive Algorithm Implemented on Motorola StarCore SC140 DSP”, *Lecture Notes in Computer Science*, Springer Verlag, vol. 3124, pp. 560-567, 2004.
- 27. C. Paleologu**, S. Ciochină, A. A. Enescu, “A Low Dynamics Fast Transversal Filter Adaptive Algorithm”, *Scientific Bulletin of University Politehnica of Timisoara, Transactions on Electronics and Communications*, vol. 49 (63), fasc. 2, pp. 69-74, 2004.
- 28. A. A. Enescu, C. Paleologu**, S. Ciochină, “QRD-LSL Algorithm Suitable for Implementation on DSP”, *Scientific Bulletin of University Politehnica of Timisoara, Transactions on Electronics and Communications*, vol. 49 (63), fasc. 2, pp. 165-169, 2004.
- 29. S. Ciochină, C. Paleologu**, A. A. Enescu, “Algoritmi de tip RLS în configurația de suprimare a interferențelor. Fenomenul de scurgere a semnalului util în ieșirea filtrului adaptiv”, *Revista Telecomunicații*, nr. 2, pp. 15-24, 2004.

- 30.** M. Răducanu, **C. Paleologu**, C. Vlădeanu, “Applications of Wavelet Transforms in Digital Signal Processing”, *The Hyperion Scientific Journal, Mathematics, Physics, and Electrical Engineering*, vol. 4, nr. 1, pp. 28-35, 2004.
- 31.** **C. Paleologu**, C. Vlădeanu, M. Răducanu, “Algoritm de echivalare a structurii “latice asimetrică scară” a algoritmilor QRD-LSL fără radicali cu o structură transversală de filtru FIR numeric”, *Revista Telecomunicații*, nr. 2, pp. 52-58, 2003.
- 32.** **C. Paleologu**, S. Ciochină, “Algoritmi de tip LS bazați pe descompunerea QR, adecvați implementării în virgulă fixă”, *Revista Telecomunicații*, nr. 1, pp. 59-66, 2003.
- 33.** C. Vlădeanu, **C. Paleologu**, M. Răducanu, “Secvențe haotice periodice utilizate în sistemele DS-CDMA”, *Revista Telecomunicații*, nr. 1, pag. 44-53, 2003.
- 34.** **C. Paleologu**, S. Ciochină, A. A. Enescu, “On the Behaviour of Two Square Root Free QRD-LSL Adaptive Algorithms in Fixed-Point DSP Implementation”, *Revue Roumaine des Sciences Techniques – Serie Electrotechnique et Energetique*, vol. 47, nr. 4, pp. 387-399, 2002.
- 35.** **C. Paleologu**, S. Ciochină, A. A. Enescu, “On the Fixed-Point Implementation of the Square Root Free QRD-LSL Adaptive Algorithms”, *Scientific Bulletin of University Politehnica of Bucharest, Series C – Electrical Engineering*, vol. 64, nr. 3, pp. 33-44, 2002.
- 36.** **C. Paleologu**, S. Ciochină, A. A. Enescu, “Modified GAL Algorithm Suitable for D.S.P. Implementation”, *Scientific Bulletin of University Politehnica of Timisoara, Transactions on Electronics and Communications*, vol. 47 (61), fasc. 1, pp. 2-7, 2002.
- 37.** **C. Paleologu**, S. Ciochină, A. A. Enescu, “Modified versions of QRD-LSL Adaptive Algorithm with Lower Computational Complexity”, *Revue Roumaine des Sciences Techniques – Serie Electrotechnique et Energetique*, vol. 46, nr. 3, pp. 333-352, 2001.

## ARTICOLE CONFERINȚE (CONFERENCE PAPERS)

1. **C. Paleologu**, J. Benesty, S. Ciochină, “Robust General Kalman Filter for Echo Cancellation”, *Proc. European Signal Processing Conference (EUSIPCO)*, pp. 169-172, Marrakech, Maroc, Septembrie 2013, *în curs de apariție*.

2. C. Paleologu, J. Benesty, S. Ciochină, “Study of the Optimal and Simplified Kalman Filters for Echo Cancellation”, *Proc. IEEE Int. Conf. Acoustics, Speech, Signal Processing (ICASSP)*, pp. 580-584, Vancouver, Canada, Mai 2013.
3. M. Rotaru, S. Ciochină, C. Paleologu, J. Benesty, “Evaluation of Signal Distortion Methods for Stereophonic Acoustic Echo Cancellation”, *Proc. International Symposium on Electronics and Telecommunications (ISETC)*, pp. 303-306, Timișoara, România, Nov. 2012.
4. C. Paleologu, J. Benesty, “A Practical Data-Reuse Adaptive Algorithm for Acoustic Echo Cancellation”, *Proc. European Signal Processing Conference (EUSIPCO)*, pp. 2010-2014, București, România, August 2012.
5. C. Stanciu, C. Paleologu, J. Benesty, S. Ciochină, F. Albu, “Variable-Forgetting Factor RLS for Stereophonic Acoustic Echo Cancellation with Widely Linear Model”, *Proc. European Signal Processing Conference (EUSIPCO)*, pp. 1960-1964, București, România, August 2012.
6. C. Stanciu, C. Paleologu, J. Benesty, T. Gänslер, S. Ciochină, “An Efficient RLS Algorithm for Stereophonic Acoustic Echo Cancellation with the Widely Linear Model”, *Proc. Inter-Noise*, 12p., New York, August 2012.
7. F. Albu, C. Paleologu, S. Ciochină, “New Variable Step Size Affine Projection Algorithms”, *Proc. IEEE International Conference COMMUNICATIONS*, pp. 63-66, București, România, Iunie 2012.
8. C. Paleologu, J. Benesty, “Proportionate Affine Projection Algorithms from a Basis Pursuit Perspective”, *Proc. IEEE International Symposium on Circuits and Systems (ISCAS)*, pp. 2757-2760, Seul, Corea de Sud, Mai 2012.
9. C. Paleologu, J. Benesty, F. Albu, “Regularization of the Improved Proportionate Affine Projection Algorithm”, *Proc. IEEE Int. Conf. Acoustics, Speech, Signal Processing (ICASSP)*, pp. 169-172, Kyoto, Japonia, Martie 2012.
10. C. Stanciu, J. Benesty, C. Paleologu, T. Gänsler, S. Ciochină, “A Novel Perspective on Stereophonic Acoustic Echo Cancellation”, *Proc. IEEE Int. Conf. Acoustics, Speech, Signal Processing (ICASSP)*, pp. 25-28, Kyoto, Japonia, Martie 2012.
11. C. Anghel, V. Stanciu, C. Stanciu, C. Paleologu, “CTC Turbo Decoding Architecture for LTE Systems Implemented on FPGA”, *Proc. International Conference on Networks (ICN)*, pp. 199-204, St. Gilles, Reunion Island, Martie 2012.

- 12.** C. Paleologu, J. Benesty, S. Ciochină, “Practical Regularization of the Affine Projection Algorithm”, *Proc. European Signal Processing Conference (EUSIPCO)*, pp. 704-708, Barcelona, Spania, 2011.
- 13.** C. Stanciu, C. Anghel, C. Paleologu, J. Benesty, F. Albu, S. Ciochină, “FPGA Implementation of an Efficient Proportionate Affine Projection Algorithm for Echo Cancellation”, *Proc. European Signal Processing Conference (EUSIPCO)*, pp. 1284-1288, Barcelona, Spania, 2011.
- 14.** C. Stanciu, C. Anghel, C. Paleologu, J. Benesty, F. Albu, S. Ciochină, “A Proportionate Affine Projection Algorithm Using Dichotomous Coordinate Descent Iterations”, *Proc. IEEE International Symposium on Signals, Circuits and Systems (ISSCS)*, pp. 343-346, Iași, România, 2011.
- 15.** R. M. Udrea, C. Paleologu, S. Ciochină, “Background Speech Cancellation Using a Generalized Subspace Speech Enhancement Method”, *Proc. IEEE Int. Conf. on Computing in the Global Information Technology (ICCGI)*, pp. 27-30, Luxembourg, Iunie 2011 – **“Paper Award”**.
- 16.** C. Paleologu, J. Benesty, F. Albu, S. Ciochină, “An Efficient Variable Step-Size Proportionate Affine Projection Algorithm”, *Proc. IEEE Int. Conf. Acoustics, Speech, Signal Processing (ICASSP)*, pp. 77-80, Praga, Cehia, Mai 2011.
- 17.** C. Paleologu, J. Benesty, T. Gaensler, S. Ciochină, “A Class of Double-Talk Detectors Based on the Holder Inequality”, *Proc. IEEE Int. Conf. Acoustics, Speech, Signal Processing (ICASSP)*, pp. 425-428, Praga, Cehia, Mai 2011.
- 18.** F. Albu, C. Paleologu, J. Benesty, “A Variable Step Size Evolutionary Affine Projection Algorithm”, *Proc. IEEE Int. Conf. Acoustics, Speech, Signal Processing (ICASSP)*, pp. 429-432, Praga, Cehia, Mai 2011.
- 19.** V. Andrei, C. Paleologu, C. Burileanu, “Implementation of a Real-Time Reconfigurable Text Dependent Speaker Identification System”, *Proc. Int. Conference on Speech Technology and Human-Computer Dialogue (SpeD)*, pp. 121-126, Brașov, Romania, Mai 2011.
- 20.** S. Ciochină, C. Paleologu, A. A. Enescu, “Analysis of the Least-Squares Adaptive Algorithms in Interference Cancellation Configuration”, *Proc. IEEE International Conference on Digital Telecommunications (ICDT)*, pp. 36-40, Budapest, Ungaria, Aprilie 2011 – **“Paper Award”**.

21. I. Pirnog, C. Anghel, A. A. Enescu, **C. Paleologu**, “Evaluation of Fast Algorithms for Motion Estimation”, *Proc. IEEE Advanced International Conference on Telecommunications (AICT)*, pp. 107-111, St. Maarten, Martie 2011.
22. R. M. Udrea, **C. Paleologu**, J. Benesty, S. Ciocchină, “Estimation of the noise power in the NPVSS-NLMS algorithm”, *International Symposium on Electronics and Telecommunications (ISETC)*, pp. 385-388, Timișoara, România, Nov. 2010.
23. F. Albu, **C. Paleologu**, J. Benesty, “Efficient Implementation of a Variable Projection Order Affine Projection Algorithm”, *International Symposium on Wireless Communication Systems (ISWCS)*, pp. 369-373, York, U.K., Sept. 2010.
24. C. Anghel, **C. Paleologu**, J. Benesty, S. Ciocchină, “FPGA Implementation of a Variable Step-Size Affine Projection Algorithm for Acoustic Echo Cancellation”, *Proc. European Signal Processing Conference (EUSIPCO)*, pp. 532-536, Aalborg, Danemarca, Aug. 2010.
25. F. Albu, **C. Paleologu**, J. Benesty, S. Ciocchină, “A Low Complexity Proportionate Affine Projection Algorithm for Echo Cancellation”, *Proc. European Signal Processing Conference (EUSIPCO)*, pp. 6-10, Aalborg, Danemarca, Aug. 2010.
26. F. Albu, **C. Paleologu**, “New Filtered-X Recursive Least Square Algorithm for Active Noise Control”, *Proc. Internoise*, pp. 1-10, Lisabona, Portugalia, Iunie 2010.
27. A. A. Enescu, S. Ciocchină, **C. Paleologu**, “Reduced Complexity Decoder for Orthogonal Space-Time Codes When Using QAM Constellations and Multiple Receive Antennas”, *Proc. IEEE International Conference on Digital Telecommunications (ICDT)*, pp. 143-148, Atena, Grecia, Iunie 2010.
28. C. Oprea, **C. Paleologu**, I. Pirnog, R. M. Udrea, “Saliency detection based on human perception of visual information”, *Proc. IEEE Advanced International Conference on Telecommunications (AICT)*, pp. 96-99, Barcelona, Spania, Mai 2010, – “**Paper Award**”.
29. C. Anghel, A. A. Enescu, **C. Paleologu**, S. Ciocchină, “CTC Turbo Decoding Architecture for H-ARQ Capable WiMAX Systems Implemented on FPGA”, *Proc. IEEE International Conference on Networks (ICN)*, pp. 65-70, Menuires, Franța, Aprilie 2010.
30. **C. Paleologu**, J. Benesty, S. Ciocchină, “An Improved Proportionate NLMS Algorithm Based on the  $l_0$  Norm”, *Proc. IEEE Int. Conf. Acoustics, Speech, Signal Processing (ICASSP)*, pp. 309-312, Dallas, U.S.A., 2010.

31. C. Paleologu, J. Benesty, S. L. Grant, Chris Osterwise, “Variable Step-Size NLMS Algorithms Designed for Echo Cancellation”, *Proc. IEEE Asilomar Conference on Signals, Systems, and Computers*, pp. 633-637, Pacific Grove, CA, S.U.A., 2009.
32. F. Albu, C. Paleologu, J. Benesty, “Gauss-Seidel based Variable Step-Size Affine Projection Algorithms for Acoustic Echo Cancellation”, *Proc. European Signal Processing Conference (EUSIPCO)*, pp. 2007-2011, Glasgow, Scoția, 2009.
33. S. Ciochină, C. Paleologu, J. Benesty, A. A. Enescu, “On the Influence of the Forgetting Factor of the RLS Adaptive Filter in System Identification”, *Proc. IEEE International Symposium on Signals, Circuits and Systems (ISSCS)*, pp. 205-208, Iași, România, 2009.
34. C. Anghel, C. Paleologu, J. Benesty, S. Ciochină, “FPGA Implementation of an Acoustic Echo Canceller Using a VSS-NLMS Algorithm”, *Proc. IEEE International Symposium on Signals, Circuits and Systems (ISSCS)*, pp. 369-372, Iași, România, 2009.
35. A. Nedelcu, R. Lupoiae, A. A. Enescu, C. Anghel, C. Paleologu, “Spatial Multiplexing Turbo Receiver with Reduced Complexity”, *Proc. IEEE SENSORCOMM*, pp. 490-495, Atena, Grecia, 2009.
36. C. Paleologu, J. Benesty, S. Ciochină, C. Vlădeanu, “Practical Variable Step-Size Adaptive Algorithms for Echo Cancellation”, *Proc. Int. Conference on Speech Technology and Human-Computer Dialogue (SpeD)*, pp. 181-188, Constanța, Romania, Mai 2009.
37. C. Paleologu, A. A. Enescu, S. Ciochină, F. Albu, “QRD-LSL Adaptive Algorithms Suitable for Fixed-Point Implementation”, *Proc. IEEE Advanced International Conference on Telecommunications (AICT)*, pp. 163-167, Venetia, Italia, 2009 – “[Paper Award](#)”.
38. C. Oprea, I. Pirnog, C. Paleologu, R. M. Udrea, “Perceptual Video Quality Assessment Based on Salient Region Detection”, *Proc. IEEE Advanced International Conference on Telecommunications (AICT)*, pp. 232-236, Venetia, Italia, 2009.
39. C. Vlădeanu, S. El Assad, J. C. Carlach, R. Quéré, C. Paleologu, “Chaotic Digital Encoding for 2D Trellis-Coded Modulation”, *Proc. IEEE Advanced International Conference on Telecommunications (AICT)*, pp. 152-157, Venetia, Italia, 2009.
40. F. Albu, C. Paleologu, J. Benesty, Y. V. Zakharov, “Variable Step Size Dichotomous Coordinate Descent Affine Projection Algorithm”, *Proc. IEEE EUROCON*, pp. 1366-1371, St. Petersburg, Rusia, 2009.

- 41.** F. Albu, Y. V. Zakharov, **C. Paleologu**, “Modified Filtered-X Dichotomous Coordinate Descent Recursive Affine Projection Algorithm”, *Proc. IEEE Int. Conf. Acoustics, Speech, Signal Processing (ICASSP)*, pp. 257-260, Taipei, Taiwan, 2009.
- 42.** F. Albu, **C. Paleologu**, “The Variable Step-Size Gauss-Seidel Pseudo Affine Projection Algorithm”, pp. 642-645, *Proc. ICCSE*, Dubai, E.A.U, 2009.
- 43.** I. Pirnog, C. Oprea, **C. Paleologu**, “Image Content Extraction Using a Bottom-Up Visual Attention Model”, *Proc. IEEE International Conference on Digital Society (ICDS)*, pp. 300-303, Cancun, Mexic, 2009.
- 44.** **C. Paleologu**, J. Benesty, S. Ciochină, “Robust Variable Step-Size Affine Projection Algorithm Suitable for Acoustic Echo Cancellation”, *Proc. European Signal Processing Conference (EUSIPCO)*, pp. 173-177, Lausanne, Elveția, Aug. 2008.
- 45.** F. Albu, **C. Paleologu**, “New multichannel modified filtered-x algorithms for active noise control using the dichotomous coordinate descent method”, *Proc. Acoustics*, pp. 5721-5725, Paris, Franța, 2008.
- 46.** F. Albu, **C. Paleologu**, “A Recursive Least Square Algorithm for Active Noise Control based on the Gauss-Seidel Method”, *Proc. IEEE Int. Conf. on Electronics, Circuits, and Systems (ICECS)*, pp. 830-833, Malta, 2008.
- 47.** I. Pirnog, C. Oprea, **C. Paleologu**, D.N. Vizireanu, “Improved Minkowsky Metric for Image Region Partition”, *Proc. IEEE Int. Conf. on Computing in the Global Information Technology (ICCGI)*, pp. 80-84, Atena, Grecia, 2008.
- 48.** **C. Paleologu**, S. Ciochină, J. Benesty, “Double-talk robust VSS-NLMS algorithm for under-modeling acoustic echo cancellation”, *Proc. IEEE Int. Conf. Acoustics, Speech, Signal Processing (ICASSP)*, pp. 245-248, Las Vegas, U.S.A., Apr. 2008.
- 49.** **C. Paleologu**, F. Albu, A. A. Enescu, S. Ciochină, “Square-Root-Free QRD-LSL Adaptive Algorithm with Improved numerical Robustness”, *Proc. IEEE Int. Conf. on Networking (ICN)*, pp. 572-577, Cancun, Mexic, Apr. 2008 – **“Paper Award”**.
- 50.** I. Pirnog, R. M. Udrea, **C. Paleologu**, “Efficient Method for Content Extraction Applied in Multimedia Communication”, *Proc. IEEE Int. Conf. on Networking (ICN)*, pp. 202-206, Cancun, Mexic, Apr. 2008.
- 51.** A. F. Păun, S. Ciochină, **C. Paleologu**, “LISS Algorithm with Modified Length Bias Term in Turbo Equalization”, *Proc. IEEE Int. Conf. on Networking (ICN)*, pp. 562-566, Cancun, Mexic, Apr. 2008.
- 52.** **C. Paleologu**, S. Ciochină, A. A. Enescu, C. Vlădeanu, “Gradient Adaptive Lattice Algorithm Suitable for Fixed-Point Implementation“, *Proc. IEEE International*

*Conference on Digital Telecommunications (ICDT)*, pp. 41-46, Bucureşti, România, 2008.

53. A. A. Enescu, S. Ciochină, **C. Paleologu**, “Reduced Complexity Decoder for Orthogonal Space-Time Codes When Using QAM Constellations”, *Proc. IEEE International Conference on Digital Society (ICDS)*, pp. 190-194, Martinique, Caraibele Franceze, 2008.
54. I. Pirnog, R. M. Udrea, **C. Paleologu**, „An Improved Region Growth Method”, *Proc. IEEE International Conference COMMUNICATIONS*, pp. 129-132, Bucureşti, România, 2008.
55. R. Assaf, S. El Assad, **C. Paleologu**, Y. Harkous, M. Zoaeter, “Adaptive RBFNN Equalizer for Nonlinear Time-varying Channels”, *Proc. International Symposium on Image/Video Communications over Fixed and Mobile Networks (ISIVC)*, Bilbao, Spania, 2008.
56. **C. Paleologu**, C. Vlădeanu, S. Ciochină, A. A. Enescu, ”Generalized Normalized Gradient Descent Algorithm with Direct Update of the Step-Size Parameter”, *Proc. IEEE International Symposium on Signals, Circuits and Systems (ISSCS)*, vol. 1, pp. 181-184, Iaşi, România, Iulie 12-13, 2007.
57. **C. Paleologu**, C. Vlădeanu, I. Bacalu, “Gradient Adaptive Lattice Algorithm for MMSE Receivers in DS-CDMA Systems“, *Proc. IEEE International Conference on Services and Networks Communications (ICSNC)*, pp. 27-32, Cap Esterel, Franţa, 25-31 August, 2007.
58. **C. Paleologu**, C. Vlădeanu, “On the Behavior of LMS Adaptive Algorithm in MMSE Receivers for DS-CDMA Systems“, *Proc. IEEE International Conference on Computing in the Global Information Technology (ICCGI)*, pp. 12-17, Guadeloupe, Caraibele Franceze, Martie 2007 – “**Paper Award**”.
59. C. Vlădeanu, **C. Paleologu**, “Optimum Multilevel Chaotic Sequences for Asynchronous DS-CDMA Systems Over Rician Selective Fading Channel“, *Proc. European Signal Processing Conference (EUSIPCO)*, pp. 474-478, Poznan, Polonia, Sept. 3-7, 2007.
60. **C. Paleologu**, S. Ciochină, C. Vlădeanu, “A Family of QRD-LSL Adaptive Algorithms Suitable for Fixed-Point Implementation”, *Proc. of Int. Workshop “Infrastructures and Engineering for Knowledge Society”*, – Academia Română, pp. 72-79, Bucureşti, România, Dec. 2007.

- 61.** C. Paleologu, C. Vlădeanu, “Variable Step-Size NLMS Algorithms for Acoustic Echo Cancellation“, *Proc. of Int. Workshop “Services and software architectures, infrastructures and communications engineering for enhancing EU citizen's quality of life”* – Academia Romana, pp. 117-131, Bucureşti, Mai 18, 2007.
- 62.** C. Vlădeanu, C. Paleologu, “Fast Adaptive MMSE-PIC Multiple User Detection Receiver for DS-CDMA Systems“, *Proc. of Int. Workshop “Services and software architectures, infrastructures and communications engineering for enhancing EU citizen's quality of life”* – Academia Romana, pp. 132-139, Bucureşti, Mai 18, 2007.
- 63.** C. Paleologu, A. A. Enescu, S. Ciochină, “Recursive Least-Squares Lattice Adaptive Algorithm Suitable for Fixed-Point Implementation”, *Proc. IEEE International Conference on Electronics, Circuits, and Systems (ICECS)*, pp. 1105-1108, Nisa, Franța, Dec. 2006.
- 64.** C. Paleologu, S. Ciochină, A. A. Enescu, “Low Dynamics RLSL Adaptive Algorithm Using A Priori Estimation Errors”, *Proc. IEEE International Conference on Computing in the Global Information Technology (ICCGI)*, pp. 47-52, Bucureşti, Romania, Aug. 2006 – “**Paper Award**”.
- 65.** S. Ciochină, C. Paleologu, A. A. Enescu, “On the Behaviour of LS Adaptive Algorithms in Interference Cancellation Configuration”, *Proc. International Conference on Signals and Electronic Systems (ICSES)*, vol. 2, pp. 725-729, Lodz, Polonia, Sept. 2006.
- 66.** C. Vlădeanu, C. Paleologu, “MMSE Single User Iterative Receiver for Asynchronous DS-CDMA Systems”, *Proc. IEEE International Conference COMMUNICATIONS*, pp. 227-230, Bucureşti, România, Iun. 8-10, 2006 – “**Outstanding Paper**”.
- 67.** A. A. Enescu, S. Ciochină, C. Paleologu, “Adaptive Interference Cancellation: A Unitary Approach”, *Proc. IEEE International Symposium on Signals, Circuits and Systems (ISSCS)*, vol. 2, pp. 569-572, Iaşi, Romania, Iulie 14-15, 2005.
- 68.** C. Paleologu, S. Ciochină, A. A. Enescu, “A Low Dynamics Recursive Least-Squares Lattice Adaptive Algorithm”, *Proc. International Conference on Signals and Electronic Systems (ICSES)*, pp. 195-198, Poznan, Poland, Sept. 2004.
- 69.** C. Paleologu, S. Ciochină, “A Class of QRD-LSL Adaptive Algorithms with Reduced Dynamics of Parameters”, *Proc. IEEE International Conference COMMUNICATIONS*, vol. 1, pp. 81-86, Bucureşti, România, 2004.

- 70.** C. Paleologu, A. A. Enescu, “A Family of Square-Root Free QRD-LSL Adaptive Algorithms Suitable for Fixed-Point Implementation”, *Proc. IEEE International Conference COMMUNICATIONS*, vol. 1, pp. 87-90, Bucureşti, România, 2004.
- 71.** S. Ciocchină, C. Paleologu, A. A. Enescu, “On the Behaviour of RLS Adaptive Algorithm in Fixed-Point Implementation”, *Proc. IEEE International Symposium on Signals, Circuits and Systems (ISSCS)*, vol. 1, pp. 57-60, Iaşi, Romania, Iulie 10-11, 2003.
- 72.** C. Paleologu, S. Ciocchină, A. A. Enescu, “A Simplified QRD-LSL Adaptive Algorithm in Echo Cancelling Configuration”, *Proc. IEEE International Conference on Telecommunications (ICT)*, vol. 1, pp. 240-244, Beijing, China, Iun. 2002.
- 73.** F. Albu, C. Paleologu, S. Ciocchină, “Analysis of LNS Implementation of QRD-LSL Algorithms”, *Proc. IEEE International Symposium CSNDSP*, pp. 364-367, Stafford, U.K., Iulie 15-17, 2002.
- 74.** C. Paleologu, S. Ciocchină, A. A. Enescu, “Modified Square Root Free QRD-LSL Adaptive Algorithm Suitable for D.S.P. Implementation”, *Proc. IEEE International Conference COMMUNICATIONS*, pp. 475-480, Bucureşti, România, 2002 – “*Outstanding Paper*”.
- 75.** C. Paleologu, S. Ciocchină, “Modified QRD-LSL Adaptive Algorithm with Lower Computational Complexity”, *Proc. IEEE International Symposium on Signals, Circuits and Systems (ISSCS)*, pp. 269-272, Iaşi, Romania, Iulie 10-11, 2001.
- 76.** S. Ciocchină, C. Paleologu, “On the Performances of QRD-LSL Adaptive Algorithm in Echo Cancelling Configuration”, *Proc. IEEE International Conference on Telecommunications (ICT)*, vol. 1, pp. 563-567, Bucureşti, Romania, Iun. 2001 – “*Paper Award*”.
- 77.** M. Răducanu, C. Paleologu, A. Mateescu, “Modified Compression Algorithm Using Linear Predictive Coding”, *Proc. IEEE International Conference COMMUNICATIONS*, pp. 19-22, Bucureşti, România, Dec. 7-9, 2000.
- 78.** M. Răducanu, C. Paleologu, A. Mateescu, “Wavelet Packets Compression Using Variable Multirate for ECG Signals”, *Proc. IEEE International Conference COMMUNICATIONS*, pp. 15-18, Bucureşti, România, Dec. 7-9, 2000.
- 79.** S. Ciocchină, C. Paleologu, C. Budianu, “The IIR-RLS Adaptive Algorithm: A General Approach and Simplified Versions”, *Proc. IEEE International Symposium on Signals, Circuits and Systems (ISSCS)*, pp. 171-174, Iaşi, Romania, Iulie 6-7, 1999.

**CONTRACTE DE CERCETARE în calitate de responsabil  
(RESEARCH GRANTS – as manager)**

- 1.** *Noi algoritmi adaptivi cu convergență variabilă*, Contract UEFISCSU, PN-II-RU-TE, 2010-2013 (3 ani).
- 2.** *Contribuții la teoria și implementarea metodelor de reducere adaptivă a zgomotului de fond în sistemele multi-canal de comunicații de voce*, Contract UEFISCSU, PN-II-PCE-Idei, 2007-2010 (3 ani).
- 3.** *Soluții de creștere a performanțelor compensatoarelor de ecou acustic multi-canal. Aplicații în sistemele de teleconferință*, Grant CNCSIS, tip AT, 2007-2008.
- 4.** *Contribuții la creșterea performanțelor compensatoarelor de ecou acustic utilizate în sistemele de comunicații cu mâini libere (hands-free)*, contract tip CEEX-ET, MEC-UEFISCSU, 2006-2008 (2 ani).
- 5.** *Noi receptoare adaptive pentru sistemele de comunicații cu acces multiplu cu diviziune în cod*, contract tip CEEX-ET, MEC-UEFISCSU, 2006-2008 (2 ani).
- 6.** *Noi algoritmi adaptivi adecvați implementării în precizie finită. Aplicații în rețelele de comunicații*, Grant CNCSIS, tip AT, 2004-2005.