# CURRICULUM VITAE

## PERSONAL INFORMATION


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|---|---|---|
| Name and Surname | : | Abdullah Yücel ÖZTOPRAK |
| Date of Birth | : | 25 March 1951 |
| Place of Birth | : | Gaziveren, Turkish Republic of Northern Cyprus |
| Academic Status | : | Professor in Electric and Electronic Engineering (EEE) |
| Current Status | : | Faculty member, EEE (EMU) |
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## EDUCATIONAL QUALIFICATIONS

**Ph.D.** : University College London, University of London EEE (1977)

Thesis : A New Form of Microwave Band Branching Filter

**B.Sc.** : University College London, University of London EEE (1973)

## ACADEMIC QUALIFICATIONS

- Professor in EEE. 1997 - To date
- Associate Professor in EEE. 1988 - 1997
- Assistant Professor in EEE. 1986 - 1988

## RESEARCH INTERESTS

- Microwaves and Millimeter waves
- Lens Antennas
- Multibeam Array Antennas
- FDTD Methods
- ABC's for FDTD

## ADMINISTRATIVE DUTIES

- Rector of EMU, October 2009 – October 2014
- Dean, Faculty of Engineering EMU, 2003 – 2004
- Vice Rector-Academic Affairs EMU, 1992 - 2003
- Director, Institute of Graduate Studies and Research EMU, 1991 -1993
- Chairman of the Department of EEE, EMU, 1989 – 1992
- Director of Cypruvex London (UK), 1983 -1986
- Marconi Space and Defence Systems, Antenna Research Division 1981 - 1983

## TEACHING EXPERIENCE

### Taught Courses

- EENG 232 Electromagnetics I
- EENG 331 Electromagnetics II
- EE 332 Electromechanical Energy Conversion I
- EENG 432 Microwave Theory
- EENG 433 Microwave Applications
- EENG 463 Antenna Theory
- EE 465 High Frequency Techniques
- EE 532 Advanced Antenna Theory

## SUPERVISED Ph. D and M.Sc. THESES

### Ph. D. Theses

1. Ramadan, O., "**Analyzing and Improving the Performance of ABCs for Truncating FDTD Domains**", EMU., 1999
2. Uyguroğlu, R., "**Study of Microstrip Lines with the FDTD Method and Modification of the FDTD Method for Improved Performance**", EMU, 2002
3. Kuşaf, M., "**A new Symplectic FDTD Scheme for Optimizing the Courant Stability and Dispersion Performance**", EMU, 2005

### M.Sc. Theses

1. Uyguroğlu, R., "**Beam Forming Lenses for Curved Arrays**", Doğu Akdeniz Üni., 1991

## COMPLETED RESEARCH PROJECTS

1. Sonlu Farklar Zaman Rejimi Yöntemi Kullanılarak Nano Teknolojik Boyutlarında Entegre Devre Ara-Bağlantılarının Analizi, B-türü araştırma projesi, Yardımcı Araştırmacı (Proje yürütücüsü: R. Uyguroğlu)
2. Band Branching Microwave Filters Using Antenna Tecniques (Unıversıty College London ,RSRE)
3. Development of High Gain Millimetre Wave Antennas at 94 GHz (MSDS)
4. Development of Beam Forming Networks on Microstrip (MSDS)
5. Designing and Establishing Indoor and Outdoor Millimetre Wave Antenna Measurement Facilitios at MSDS

## PUBLICATIONS IN PEER REVIEWED JOURNALS

### All of the following journals are in SCI

1. R. Uyguroğlu, A.Y. Öztoprak and C. Ergün, "**Improved Phase Performance for Rotman Lens,"** *Inter. Journal of RF and Microwave Computer-Aided Engineering*, vol. 23, no. 6, pp. 634–638, 2013.
2. M. Kusaf and A. Y. Oztoprak, "**Zero Phase Velocity Error Finite-difference Time-domain Method for Small Space Step and Large Time Step Sizes**", Microwave and Optical Technology Letters, vol.54, no. 2, pp 423-426, Feb. 2012.
3. M. Kusaf and A. Y. Oztoprak, "**Multi Split-step Unconditionally Stable Finite Difference Time Domain Methods**", Microwave and Optical Technology Letters, vol.51, no. 11, pp 2646-2649, Nov. 2009.

4. M. Kusaf and A. Y. Oztoprak, "**Dispersion Analysis of the ADI-FDTD and S-FDTD Methods**", Turkish Journal of Electrical Engineering & Computer Sciences, vol.16, no. 3, pp 201-206, Nov. 2008.
5. M. Kusaf and A. Y. Oztoprak," **An Unconditionally Stable Split-Step FDTD Method for Low Anisotropy**", IEEE Microw. Wireless Compon. Lett., vol. 18, pp 224-226, Apr. 2008.
6. O. Ramadan and A. Y. Öztoprak "**Unconditionally stable Crank-Nicolson wave-equation PML formulations for truncating FDTD domains**", Electrical Engineering, vol. 89, pp 89-93, Dec. 2006.
7. M. Kusaf and A. Y. Oztoprak, "**Higher stability limits for the symplectic FDTD method by making use of Chebyshev polynomials,**"IEEE Microw. Wireless Compon. Lett., vol. 16, pp. 579–581, Nov. 2006.
8. M. Kusaf, A.Y. Öztoprak and D.Daoud, "**Optimized Exponential Operator Coefficients for Symplectic FDTD Method**", IEEE Microwave and Wireless Components Letters, vol 15, no 2, pp 86-88, Feb 2005.
9. O.Ramadan,O.Akaydin,M.Salamah,A.Y.Öztoprak, "**Parallel Implementation of the Wave-Equation Finite-Difference Time-Domain Method Using the Message Passing Interface**", Lecture Notes in Computer Science (LNCS),vol 3280, pp 810-818, Oct 2004.
10. O. Ramadan and A. Y. Öztoprak , "**Z-Transform Implementation of the Perfectly Matched Layer for Truncating FDTD Domains** ", IEEE Microwave and Wireless Components Letters, vol 13,no 9, pp 402-404, Sep 2003.
11. O. Ramadan and Öztoprak, A.Y., "**An Efficient Implementation of the PML for Truncating FDTD**", Microwave and Optical Technology Letters, vol 13, no 1, pp 55-60, Jan 2003 .
12. O. Ramadan and Öztoprak, A.Y. , "**DSP techniques for implementation of perfectly matched layer for truncating FDTD domains**", Electronics Letters , vol 38 , no 5, pp 211-212, Feb 2002.
13. R. Uyguroglu and Niazi (Öztoprak), A.Y., " **Designing Microstrip Transitions into Parallel-Plate Regions Using the FDTD Method**", Microwave and Optical Technology Letters , vol 22, no 1, pp 81-84 Jun 1999.
14. Naser A. Abu-Zaid, Niazi (Öztoprak), A.Y., and Haluk Tosun **," State-space formulation of two-dimensional electromagnetic scattering from dielectric cylinders**", Radio Science , vol 34, pp 297-309, Mar 1999.
15. O. Ramadan and Niazi (Öztoprak), A.Y., "**Truncating FDTD computational domains with PML regions backed by lossy ABCs** ", Microwave and Optical Technology Letters , vol 18, no 5, pp 328-331, Jan 1998.
16. O.Ramadan and Niazi (Öztoprak), A.Y., "**One way wave equation type ABCs for terminating low loss media**", IEE Electronics Letters , vol 33, no 24, pp 2052-2054, Jan.,1997.

17. O.Ramadan and Niazi (Öztoprak), A.Y., " **Improved formulations for higher order absorbing boundary conditions,**" IEE Electronics Letters , vol 33, no 7, pp 568-570, Jan 1997.
18. Davies, D.E.N.,Niazi (Öztoprak), A.Y., **" Studies of a focused filter for multiplexing microwave signals,**" IEE Proceeding – Part H , vol 127, no 4, pp 173- 181 , Aug 1980.
19. Davies, D.E.N.,Niazi (Öztoprak), A.Y ., "**A novel approach to production of band branching filters for microwave frequencies**", Electronics Letters , vol. 11 , no 1, pp 10-11, Jan., 1975.

## INTERNATIONAL CONFERENCES

1. R. Uyguroglu, A. Y. Oztoprak, "**A Method for Minimizing the Phase Errors of Rotman Lenses**" ELECO'2009 6th International Conference on Electrical and Electronics Engineering, Bursa, Nov., 2009
2. M.Kusaf, A.Y. Öztoprak, "**Zero Error Split Step FDTD Method for Narrow Band Applications**" ELECO'2009 6th International Conference on Electrical and Electronics Engineering, Bursa, Nov., 2009
3. M. Kusaf and A. Y. Oztoprak, "**Comparison of the Performances of ADI-FDTD and Exponential Coefficient Optimised Symplectic FDTD Methods**", ELECO'2007 5th International Conference on Electrical and Electronics Engineering, Bursa, Dec., 2007
4. Ramadan,O., and Öztoprak, A.Y," **Generalized PML Formulations for the Termination of the Wave-Equation FDTD Domains**", The 2003 IEEE International Symposium on Electromagnetic Compatibility,Istanbul ,May 2003, Turkey.
5. Ramadan,O., and Öztoprak, A.Y," **An Efficient FD-TD lossy absorbing boundary condition**", Proceedings of AP2000 Millenium Conference on Antennas & Propagation, Switzerland,April,2000.
6. Ramadan,O., and Öztoprak, A.Y," **A simple method to improve the Performance of FDTD absorbing boundary conditions**", Proceedings of AP2000 Millenium Conference on Antennas & Propagation, Switzerland, April 2000.
7. Niazi (Öztoprak), A.Y., Uyguroglu,R**.," Bootlace Lenses for Curved Arrays**", IEEE Antennas and Propagation Society International Symposium,Ann Arbor, USA, June, 1993
8. Andrew, B.J., Moore, T.S.,Niazi (Öztoprak), A.Y.,"**Millimetre Wave Microstrip Antennas for Dual Polar and Monopulse Applications**", IEE International Conference on Antennas and Propagation,January,1983
9. Niazi (Öztoprak),A.Y., Moore, T.S.," **Millimetre Wave Reflector Scanning Antenna**", IEE International Conference on Antennas and Propagation,January,1983

10. Niazi (Öztoprak),A.Y., Mitchell, P.J.," **Millimetre Wave Reflector Scanning Antenna**", IEE International Conference on Antennas and Propagation,January,1983
11. Niazi (Öztoprak),A.Y," **Rotman Lens Fed Multiple Beam Array**", IEE International Conference on Antennas and Propagation,January,1981
12. Davies, D.E.N.,Niazi (Öztoprak), A.Y,Smith,M.S.," **Microstrip and Triplate Rotman Lenses**", Conference Proceedings, Military Microwaves,January,1980
13. Davies, D.E.N., Niazi (Öztoprak), A.Y.," **The Field Focusing Filter. A new form of microwave hand branching filter**", 6th European Microwave Conference ,January, 1976

## NATIONAL CONFERENCES

1. Öztoprak, A.Y., Uyguroğlu, R.," **Sonlu Farklar Zaman Rejimi (FDTD) Yönteminin Mikroşerit Devrelerine Uygulanması**", Elektrik Mühendisliği 6. Ulusal Kongresi, Bursa, Eylül, 1995
2. Öztoprak, A.Y., Uyguroğlu, R," **Eğri Anten Dizileri için Zorunlu Yollu Mercek Anten**", Elektrik Mühendisliği 4.Ulusal Kongresi, Izmir, Eylül, 1991
3. Öztoprak, A.Y.," **Üç Boyutlu Çok Odaklı Mercek Anten**", Elektrik Mühendisliği 2. Ulusal Kongresi, Ankara,Eylül, 1987

## PROFESSIONAL MEMBERSHIPS

1. Institute of Electrical and Electronics Engineers, USA
2. Elektrik Mühendisleri Odası, KKTC