

CURRICULUM VITAE

Last Name: BOUREGAA

First name: Mouweffeq

Date and place of birth: 29/05/1986 in Tlemcen- Algeria

University degree:

- [1]. Magister in Telecommunications (Master+2), Option: Telecommunications Systems. University of Tlemcen-Algeria, December 2011.
Thesis title: "Comparative study in optical CDMA codes"
- [2]. PhD in Telecommunications, Option: Telecommunications Systems. University of Tlemcen-Algeria, July 2015.
Thesis title: "Study and characterization of all optical components for multiple access"

Function:

University teacher and researcher, University of Mustapha Stambouli Mascara, Algeria and Laboratory of Telecommunications Tlemcen (LTT), University of Tlemcen, Algeria.

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Languages: Arabic, French and English.

RESEARCH ACTIVITIES

- [1]. Research team member at the Laboratory of Telecommunications Tlemcen (LTT), optical telecommunications systems, (2010 to date).
- [2]. Member of University Training Research Projects: *Study, Modeling and Simulation of photonic crystals based on new non-linear materials: Application and Contribution to the Improvement of Optical Telecommunications Systems (Laser Sources, Fiber Optics, Dispersion Compensation, Switching...)*, code B00L02UNI30120180009 approved in 2018.

TEACHING ACTIVITIES

- [1]. Teaching of optical communications modules, signal processing, coding and compression, operator networks and optoelectronics in several post-graduations (since 2013 to date).
- [2]. Supervision of several PFE in the department of electrical engineering and telecommunications at the universities of Mascara and Tlemcen (Algeria).

DOCTORAL THESES FRAMED

- [1]. "*Modeling and simulation of optical transport networks in telecoms*", HAMADOU CHE HADJIRA, doctoral thesis science in telecommunications 2018-2021.

MASTER THESES FRAMED (2017-2019)

- [1]. "*Network structure and configuration of FTTH-GPON*"
- [2]. "*Performance of OCDMA-FTTH system*"
- [3]. "*Study of Optical CDMA System*"
- [4]. "*Orthogonal Optical Codes (OOC)*"
- [5]. "*Optical Access networks and PON technologies*"



BOOK

- [1]. Course Handout: “*Optical Communications*”, this course is intended for Master students, specialization: Telecommunications Systems.

PUBLICATIONS

- [1]. M. BOUREGAA, M. CHIKH BLED, and M. DEBBAL, “*Optical Code Division Multiple Access for FTTH system*”, Journal of Photonics Letters of Poland (PLP), vol. 10 (4), pp.121-123, 2018.
- [2]. M. DEBBAL, M. BOUREGAA, H. CHIKH-BLED, M. CHIKH-BLED and M. OUADAH, “*Influence of Temperature on the Chromatic Dispersion of Photonic Crystal Fiber by Infiltrating the Air Holes with Water*”, Journal of Optic Communication (JOC 2019).
- [3]. H. CHIKH-BLED, M. DEBBAL, M. CHIKH-BLED, C. OUADAH, V. CALERO and M. BOUREGAA, “*Refractive index sensor in eccentric fiber Bragg gratings using a point-by-point IR femtosecond laser*”, Journal Optical Society of America (OSA 2019).
- [4]. M. BOUREGAA and M. CHIKH-BLED, “*Comparative Study of Optical Unipolar Codes for Incoherent DS-OCDMA system*”, International Journal of Hybrid Information Technology (IJHIT), vol. 6, pp. 225-236, Nov.2013.
- [5]. M. BOUREGAA and M. CHIKH-BLED, “*The performance of a DS-OCDMA system using Orthogonal Optical Codes (OOC)*”, European Scientific Journal (ESJ), 9 (2013), 322-335.
- [6]. A. IKHLEF, M. CHIKH-BLED, M. BOUREGAA and A. MOKHDAR, “*Bragg Networks Analysis for OCDMA Encoding. Using Prime Sequence Codes*”, Journal of Mediterranean Telecommunication (JMT), vol. 3, n°2, July 2013, 109-112.

COMMUNICATIONS

- [1]. M. Bouregaa, M. Debbal, H. Chikh-bled, M.C. Ouadah and M. Chikh-bled, “*Optical transmission system using Fiber Bragg Grating*”, 6th International Energy Technologies Conference, Istanbul, Turkey (2019).
- [2]. M. Debbal, M. Bouregaa, H. Chikh-bled, M.C. Ouadah and M. Chikh-bled, “*Energy confinement in Nanostructured Materials*”, 6th International Energy Technologies Conference, Istanbul, Turkey (2019).
- [3]. M. Bouregaa, M. Debbal, S. Ghouali, Z. Baba-Ahmed, A. Miraoui Abdelfettah, H. Hamadouche, “*Optical Local Area Network performance analysis using OptiSystem Software*”, 5th International Conference on Advances in Mechanical Engineering, Istanbul, Turkey (2019).
- [4]. M. Bouregaa, M. Debbal, A. Miraoui, S. Ghouali, H. Hamadouche, M. Moulay and F. Benzerga, “*Optical Code Division Multiple Access (OCDMA) solution for FTTH Passive Optical Network (FTTH-PON)*”, 5th International Conference on Advances in Mechanical Engineering, Istanbul, Turkey (2019).
- [5]. M. Debbal, M. Bouregaa, H. Chikh-bled, M.C. Ouadah and M. Chikh-bled, “*Design of a capillary electrophoresis sensor based on microstructured fiber*”, 5th International Conference on Advances in Mechanical Engineering, Istanbul, Turkey (2019).
- [6]. M. Debbal, M. Bouregaa, H. Chikh-bled, M.C. Ouadah and M. Chikh-bled, “*Study and modeling of long period grating in SMF28: change of ambient refractive index*”, 5th International Conference on Advances in Mechanical Engineering, Istanbul, Turkey (2019).

- [7]. M. Debbal, M. Bouregaa, H. Chikh-bled, M.C. Ouadah and M. Chikh-bled, "*Circular photonic crystal fiber used for dispersion compensation in S+C+L+U bands*", 5th International Conference on Advances in Mechanical Engineering, Istanbul, Turkey (2019).
- [8]. H. Hamadouche, M. Bouregaa, B. Merabet, A. Miraoui, S. Ghouali and M. Moulay, "*Numerical simulation of High Speed Optical Local Area Network*", International Conference on Intelligent Systems and Advanced Computing Sciences, Taza, Morocco (2019).
- [9]. M. Debbal, M. Bouregaa, H. Chikh-bled, M. Chikh-bled and M.C. Ouadah, "*Effect of temperature on dispersion properties in a water-filled photonic crystal fibers*", 6th International Conference on Image and Signal Processing and their Applications, Mostaganem, Algeria (2019).
- [10]. H. Hamadouche, B. Merabet, M. Bouregaa, "*Performance Comparison of APD and PIN Photodiodes using RZ and NRZ*", Electrical Engineering International Conference, Bejaia, Algeria (2019).
- [11]. Z. Baba-Ahmed, S. Tahraoui, M. Bouregaa and A. Rabah, "*Self-Management of autonomous agents dedicated to cognitive radio networks*", 3th International Conference on Artificial Intelligence in Renewable Energetic Systems, Bechar, Algeria (2019).
- [12]. M. DEBBAL, M. BOUREGAA and M. OUADAH, "*Development of an interface for analysing the properties of photonic crystal fiber*", thematic school: Nano Optics and Plasmonic, Tizi-Ouazou, Algeria (2018).
- [13]. M. OUADAH, M. DEBBAL and M. BOUREGAA, "*The effect of temperature on chromatic dispersion in hexagonal microstructures*", thematic school: Nano Optics and Plasmonic, Tizi-Ouazou, Algeria (2018)
- [14]. M. BOUREGAA, M. DEBBAL and M. OUADAH, "*Fiber To The Home system*", thematic school: Nano Optics and Plasmonic, Tizi-Ouazou, Algeria (2018).
- [15]. M. BOUREGAA, M. CHIKH BLED and M. DEBBAL, "*BER Performance in an Optical CDMA LAN with Incoherent Sources* ", International Conference Optic and Photonic, Algeria (ICOPA'2018).
- [16]. M. BOUREGAA, M. CHIKH BLED and M. DEBBAL "*DS-OCDMA system with Fiber Bragg Gratings*", International Conference Optic and Photonic, Algeria (ICOPA'2016).
- [17]. M. BOUREGAA and M.CHIKH-BLED, "*Performance analysis of OCDMA communication system*", International Conference on Advanced Communication Systems and Signal Processing, Algeria (ICOSIP'2015).
- [18]. A.IKHLEF, M.CHIKH-BLED, M.BOUREGAA and A. MOKHDAR, "*Bragg Network Encoder Modeling for All-optical CDMA System*", Conference Mediterranean of Telecommunications, Morocco (CMT'2012).