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# Dr. Zouhir MOKHTARI

## Curriculum Vitae

### Personal Data

Surname: MOKHTARI  
First name: Zouhir  
Place of Birth: North Zelato Algeria.  
Date of birth: 07-09- 1975.  
Present Nationality: Algerian.  
Adress: Cité 177 logts, App 89,  
Zone ouest, Biskra, Algeria.  
Marital status: Married (3 Children)  
Grade: Professor.

### Fields of Interest

Approximation Theory, Signal and Image processing, Remote sensing, Wavelets Transform

### Academic Positions

- **Professor of Mathematics:** 09/01/2017 until now
- **Associate Professor of Mathematics:** 15/01/2012 until 09/01/2017
- **Assistant Professor of Mathematics:** 29/11/2009 until 14/01/2012
- **Lecturer of Mathematics:** 16/10/2000 to 29/11/2009.
- **Assistant Lecturer of Mathematics:** 15/11/1999 to 15/10/2002.

### Administrative Responsibilities

- Head of the scientific Council of the Faculty of Sciences since may 2017 until today.
- Head of the department of mathematics, since 06 may 2009 until 06 may 2013.
- Assistant Head of the department of mathematics, since October 2008 until may 2009.
- Assistant Head of the department of fundamental sciences, technologies and computer sciences (SETI) since January 2005 to December 2007.

## Education

- **Research Supervision Habilitation (HDR)**, University of Biskra, Algeria, 2012
- **Doctor of Science**, 2009. University of Biskra, Algeria.  
Construction et Approximation numérique des Ondelettes sur l'intervalle.  
Doctorate Thesis, University of Biskra, Algeria 2009.
- **Master of Sciences**, 1999. Mosul university, Iraq.  
A Theoretical Study Of Karmarkar's Algorithm.  
Master of sciences Thesis, Mosul University, Iraq, 1999.
- **D.E.S Degree**, 1996. University of Batna, Algeria.

## Publications – Communications

### Papers published in international journals

- Multilabel Conditional Random Field Classification for UAV Images  
IEEE Geoscience and Remote Sensing Letters  
volume. 15, Issue 3, 399-403, (2018)  
With ZEGGADA Abdallah, BENBRAIKA Souad, MELGANI Farid, *et al.*
- Novel Crypting Methods Based on Singular Values Decomposition.  
Journal of Applied Computer Science & Mathematics,  
Volume 10, Issue 22, 15-20. (2016).  
With HOUAS, A. and SOUALHI, S.
- Blind Source Separation Based on Wavelet and Spearman's Rho.  
Journal of numerical mathematics and stochastics  
Vol 8, Issue 1, 1-8, (2016).  
With Boussaad, A and SOUALHI, S.
- A Novel Binary Image Encryption Algorithm Based on Diffuse Representation.  
Engineering Science and Technology, an International Journal (Elsevier)  
Volume 19, Issue 4, 1887-1894, (2016).  
With Houas, A., Melkemi, K. E., and Boussaad, A.
- Spatial Contextual Gaussian Process Learning for Remote-Sensing Image Classification  
Remote Sensing Letters, Taylor & Francis.  
Volume 7, Issue 6, 519-528, (2015).  
DOI:10.1080/2150704X.2015.1051628  
With H. Hassouna and F. Melgani.
- A New Watermarking Algorithm Based on EntropyConcept.  
Acta Applicandae Mathematicae. Springer Verlag .  
Volume 116, Number 1, 65-69, (2011)  
DOI: 10.1007/s10440-011-9629-3.  
With K. Melkemi.
- Wavelet Bases on the Interval: A New Approach.  
International Journal of Mathematical Analysis.  
Vol.1, No. 21 1019-1030.(2007)  
With K. Melkemi

## International conferences with reading committees

- Approximation properties of wavelet bases of the interval.  
Proceeding of the international conference on approximation methods and numerical modelling in environment and natural resources, Pau, France.(MAMERN 2009); pp 677-680  
With K. Melkemi. ISBN 978-84-338-5008-9

## International Conferences

- A lossy compression Algorithm for Data basis Images Based on DCT Decomposition  
Congrès International Modélisation et Calcul Scientifique pour L'Ingénierie Mathématiques à MOCASIM 2014
- Novel Crypting Method based on Singular Values Decomposition International Conference on Applied Analysis and Mathematical Modeling (ICAAMM) 8-12 June 2015 in the Davut Pasa Campus of Yıldız Technical University , ISTANBUL (TÜRK )  
With S.Soualhi
- Une Nouvel Approche d'Application des Ondelettes à la Compression des Images Binaires Workshop de probabilités et statistique: "à la mémoire du professeur: Said Bahlali"
- Separation des Source par les Ondelettes Workshop de Mathématiques: "à la mémoire du professeur: Said Bahlali"
- Blind-source Separation based on Wavelet Trans. and Spearman's Rho  
The Third Conference on Mathematical Sciences 27- 28 April, 2011, Zarqa University, Zarqa - Jordan  
With A. Boussaad, K. Melkemi et K E. Melkemi
- Color Image Compression based on the DCT. The Third Conference on Mathematical Sciences 27- 28 April, 2011, Zarqa University, Zarqa - Jordan  
With A. Boucetta et K. E. Melkemi.
- A new wavelet bases on the interval Séminaire international de Mathématiques appliquées 28-30 octobre 2008 Université de Jijel  
With K. Melkemi.
- Un algorithme pour le tatouage de l'image. Colloque internationale RAMA6 Avril 2006 Université de M'sila  
With K. Melkemi.

## Involvement in Funded Research Projects And Academic Activities

1. Member of the National Research Project CNEPRU entitled « Approche Déterministes et Aléatoires pour l'analyse d'Image » 2009-2012
2. Responsable of the National Research Project CNEPRU entitled « Analyses Multiresolution Non Stationnaires et Application » 2013, 2014, 2015
3. Member of the National Research Project PNR entitled « Méthodes Evolutionnaire distribuées pour l'analyse d'image » 02-05-2011 au 001-05-2013
4. Member of the National Research Project CNEPRU entitled « Mathématiques pour les images et les signaux ». Code : **B\*0701/50/06** de 01/01/2005 completed on 31/12/2008.
5. Member of the National Research project CNEPRU entitled « Analyse variationnelle, ondelettes, et traitement de l'image numérique» Code **B01420080013** Since 01/01/2009 to 31/12 /2011
6. Member of research team "ANALYSE" of the applied mathematics laboratory . University of Biskra. (Since march 2005 until today).
7. Member of the national Research project PNR entitled « Méthodes évolutionnaires distribuées pour l'analyse d'images fondamentales» code 8/u07/4971 since june 2011 until june 2013.
8. Member of the scientific committee of the mathematics department (2005-2008).
9. Member of the scientific committee of the mathematics department Since may 2009 until May 2013.

10. Member of the Scientific Council of the Faculty of Sciences since may 2009 until may 2013.
11. Head of the scientific Council of the Faculty of Sciences since may 2017 until today.
12. Head of the applied mathematics laboratory. University of Biskra. (Since November 2018 until today).

## Supervised Theses

### PHD Dissertations

- Graphical Models for Image classification defended by Ben Braika Souad, Biskra university, 14 june 2018
- Multi -resolution Analysis Theory and Signal Decomposition on Wavelets Basis, defended by Soualhi Sarra, Biskra university, 23 february 2017
- Gaussian Proccess for Image Classification, defended by Hassouna Houda, Biskra university 10 july 2016.
- Wavelets and Singularity Detection for Image Processing, defended by Haoues Amrane, Biskra university 10 july 2016.

### Master Theses

- MANSOURI Alaeddine , Ondelettes et Equations Différentielles, 01-06-2014
- BARKAT Nadjib, Transformée en Ondelettes dans ZN, 02-06-2014
- ROUIBI Asma, Interpolation par Fonctions Splines, 07-06-2014
- SAIBI Khedoudj, Cryptographie, 02-06-2015
- BENBRAIKA Souad, Compression d'Image par la DCT, 03-06-2015
- MANSOURI Sarra, Transformée de Fourier Discrète, 03-06-2015
- MAZOUZI Imene, Sur Quelques Méthodes Itératives de Résolution des Equations Non Linéaires, 01-06-2016
- TELLI Abdeljalil, Sur Quelques Méthodes d'Approximation, 01-06-2016

## Teaching Activities

### Teaching provided in the University of Biskra.

- General and linear algebra.
- Mathematics for Economists.
- Lebesgue integral.
- Calculus.
- Sequences and series of functions.
- Differential calculus on Banach space.
- Metric and Topological Spaces
- Hilbert spaces.
- Approximation theory.
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## Languages

- Arabic: Mother tongue.
- French : Good.
- English : Good.