

## 0.1 CURRICULUM VITAE

Full Name : **Abdelmejid BAYAD**  
Family situation : Married  
Citizen : French  
Current Position : Professor in Mathematics  
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### Education :

M.S. Université Bordeaux 1, 1988 (Pure Mathematics).

Ph.D. Université Bordeaux 1, 1992 ( Number Theory).

**Research :** Number theory.

Currently : Adviser of 3 PHD Thesis.

**Award 2012 :** Prize of the Excellence in Research by French Gouvernement.

## 0.2 Recents Internationals invited Talks

1. July 2005 : International Congress of Janjgeon Mathematical society, Antalya
2. February 2006 : Workshop "Théorie des nombres et cryptologie", Marrakech, Morocco.
3. April 2007 : Workshop au CIRM "Fomes de Jacobi et applications", Marseille, France.
4. August 2008 : International Congress of Janjgeon Mathematical society, Bursa, Turkey.
5. February 2009 : International Congress Euro-Maghreb "Algèbre, Théorie des Nombres et Calcul Formel", Marrakech
6. August 2009 : International Congress of Janjgeon Mathematical society, Inde
7. October 2009 : Workshop " Dedekind sums and applications" Banff, Canada.
8. February 2010 : International Congress of Janjgeon Mathematical society, Iran , "New applications of Hecke operators in number theory".
9. April 2010 : Workshop "Cryptologie, codes et leurs mathématiques", ENSAM/ Meknès-Morocco.
10. October 2010 : Workshop "Arithmetics of L-functions", University Moulay Ismail Meknès-Morocco.
11. July 2011 : "International Congress of Janjgeon Mathematical society" Konya, Turkey.
12. September 2011 : Workshop "Number theory conference" Brock University, Canada
13. October-November 2011 : Workshop "Analytic Number Theory", RIMS Kyoto(Japan)
14. Avril 2012 : Workshop à Oujda-Maroc "Number Theory, Cryptography, Codes and Communication Systems".
15. July 2012 : "International Congress of Janjgeon Mathematical society" Seoul, South Korea.
16. August 2012 : "International conference on Honor of Prof. M.H. Srivastava", Bursa Turkey.
17. November 2012 : Workshop on "Number theory and cryptography", Alger , Algeria.
18. December 2012 : International conference on "The Lagacy of Srinivasa Ramanujan", Delhi University India.
19. July 2013 : "International conference on "Journées Arithmétiques" Université Grenoble 1, France.
20. August 2013 : "International Congress of Janjgeon Mathematical society", Bangalore Acharya Institute, India.
21. August 2013 : International conference on "Number theory and Applications", NIMS Dangeon, South Korea.

22. 4–6 August 2014 : International Congress of Janjgeon Mathematical Society, NIMS Daejeon, South Korea.
23. 8–12 August 2014 : 22nd International Conference on Finite or infinite Dimensional Complex Analysis and Applications, Dongguk University, Geongju, South Korea.
24. 6–9 November 2014 : International conference on recent advances and applied mathematics, Antalya, Turkey.

### 0.3 International scientific responsibilities

1. **2014–2018** : Responsable of "*Accord-Programme PHC CMEP-Tassili 14MDU914 Théorie des nombres et applications*", entre France/Algérie.
2. **2011** : Organisator International conference : "*Algebra and Number Theory* ", 19 oct–22 oct 2011 at Université d'Evry.
3. **2008–** : Coordinator of Erasmus program "Evry-Antalya" : "Mobilité enseignant-Chercheur" et "Mobilité étudiants" entre "Université d'Evry Val d'Essonne" et "Université Akdeniz à Antalya" en Turquie, depuis 2008.
4. **2014–** : Coordinator of Erasmus program "Evry-Belkiser" : "Mobilité enseignant-Chercheur" et "Mobilité étudiants" entre "Université d'Evry Val d'Essonne" et "Université Belkiser/Turquie, depuis 2014
5. **2012–2014** : Coordinator of project "Coopération en mathématiques entre Europe-Turquie-CIMPA".
6. **2009–** : Member of "Editorial Board" of international Journals : *Proceeding of Jangeon Mathematical Society, Advanced Studies in Contemporary Mathematics, Memoirs of Jangjean Mathematical Society*.
7. **2012–2013** : Membere of "Editorial Board" : *International Journal of Combinatorics, International Journal of Mathematics and Mathematical Sciences* : Editions 2012-2013.
8. **2009–2014** : Member in Scientific Committee several international Congress and Conferences.
9. **May 2015** : Speaker in "CIMPA-School" 2015 Oujda, Morroco : *Théorie des nombres et cryptographie*.
10. **July 2015** : Speaker in "Summer-School" in Benin, "*Arithmetics of L-functions*".
11. **August 2015** : Organisator of "Summer School" à CAMP/NIMS ,on "Complex multiplication, Dedekind sums,  $L$ -functions and Modular forms", Daejeon, South Korea.
12. **2016** : Organisator of CIMPA-Scholl in Algeria, Alger 2016, " Number Theory and its Applications".

#### 0.3.1 Scientific stays abroad

1. 15 oct-3 Nov 2014 : Invited researcher at Purdue University, USA.
2. July–August 2014 : Invited researcher at NIMS/CAMP Daejeon, South Korea.
3. 16-29 April 2014 : Invited researcher at Purdue University, USA.
4. 1-15 April 2014 : Invited researcher at States San Francisco University, USA.
5. August 2013 : Invited researcher at NIMS Daegu, South Korea.
6. February 2012 : Invited researcher at University of Mysore, Inde.
7. February 2011 : Invited researcher at university kwangpoon, seoul, Corée du sud.
8. April 2009 : Invited researcher at Akdeniz University Antalya, Turquie.
9. July 2008 : Invited researcher at University Antalya and University Uludag in Bursa, Turquie.
10. June 2006 : Invited researcher at Uiversity ElPais Bilbao, Spain.
11. July-August 2001 : Invited researcher at Concordia University , Montréal.
12. February-Mars 1994 : Invited researcher at Institut Fields Waterloo, Canada.

# List of my Selected Publications in SCI And Scopus internationals Journals

- [1] *Structure galoisienne d'anneaux d'entiers et courbes elliptiques sans multiplication complexe*, **J. Number Theory** **52**, (1995), no. 2, pp. 267-279.
- [2] ( avec Ph. Cassou-Noguès et W. Bley), *Sommes arithmétiques et éléments de Stickelberger*, **J. Algebra** **179**, (1996), no. 1, pp. 145-190.
- [3] *Loi de réciprocité quadratique dans les corps quadratiques imaginaires*, **Ann. Inst. Fourier** **45**, (1995), no. 5, pp. 1223-1237.
- [4] *Valuation  $p$ -adique et relation de distribution additive pour certaines fonctions  $q$ -périodiques*, **J. Number Theory** **65**, (1997), no. 1, pp.1-22.
- [5] (avec G. Robert), *Amélioration d'une congruence pour certains éléments de Stickelberger quadratiques*, **Bull. Soc. Math. France** **125**, (1997), no. 2, pp.249-267.
- [6] avec G. Robert), *Note sur une forme de Jacobi méromorphe*, **C.R.A.S Paris, Ser. I** **325**, (1997),no.5, pp. 455-460.
- [7] *Formes de Jacobi et formules de Weber  $p$ -adiques*, **J. Théor. Nombres Bordeaux** **11**, (1999), no.2, pp. 317-329.
- [8] *Sommes de Dedekind elliptiques et formes de Jacobi*, **Ann. Inst. Fourier** **51**, (2001), no. 1, 29-42.
- [9] *Sommes elliptiques multiples d'Apostol-Dedekind-Zagier*, **C.R.A.S Paris, Ser. I** **339**, fascicule 7, (2004), pp. 457-462.
- [10] *Applications aux sommes elliptiques multiples d'Apostol-Dedekind-Zagier*, **C. R. Math. Acad. Sci. Paris** **339**, (2004), no. 8, pp. 529-532.
- [11] (avec J. E. Gomez-Ayala), *Formes de Jacobi et formules de distribution*, **J. Number theory** **109**, (2004), pp. 136-162.
- [12] (avec L. Perret), *A differential approach to a polynomial equivalence problem*, **IEEE International Symposium on Information Theory** 2004.
- [13] *On values of Jacobi forms and elliptic Dedekind sums*, **Proc. Jangjeon Math. Soc.** **12**, (2009), no. 2, pp.119-139.
- [14] *Arithmetical properties of elliptic Bernoulli and Euler numbers.* , **Int. J. Algebra** **4**, (2010), no. 5-8, pp. 353-372.
- [15] *Un problème d'alignement dans la variété de Kummer-Wirtinger*, **International Journal of Algebra**, Vol. 4, N°. 8 (2010), pp.373 - 382.
- [16] ( with A. Raouj), *Reciprocity formulae for general multiple Dedekind-Rademacher sums and enumeration of Lattice points*, **Acta Arith.** **145**, (2010), pp. 137-154.
- [17] (with A. Ganesh and G.Balasubramanian), *On the  $|\overline{N}, p_n|_k$  Summability of factoried Fourier Series*, **Int. Math. Forum** **5**, (2010), no. 21-24, pp.1067-1073.
- [18] (with A. Ganesh and G.Balasubramanian), *On the  $|\overline{N}, p_n, \delta|_k$  summability of factored Fourier series*, **Int. Journal of Contemp. Math. Sciences**, Vol. 5, N°. 29-32 ,(2010), pp. 1577-1582.
- [19] ( with T. Kim), *Identities for the Bernoulli, the Euler and the Genocchi numbers and polynomials*, **Adv. Studies Contemp. Math.** volume **20** (2), (2010), pp. 247-253.
- [20] *Modular properties of elliptic Bernoulli and Euler functions*, **Adv. Stud. Contemp. Math.** **20**, (2010), no. 3, pp. 389-401.

- [21] ( with A. Aygunes), *Hecke operators and generalized Bernoulli-Euler polynomials*, **J. of Algebra, Number Theory : Advances and Applications**, Vol. 3 N<sup>o</sup>. 2 , (2010), pp. 111-122.
- [22] (with Y. Hamahata), *Arakawa-Kaneko L-functions and generalized poly-Bernoulli polynomials*, **RIMS proceedings of Kyoto "Analytic Number Theory"** (2010).
- [23] (with V. Lokesha), *New means and its properties*, **Proc. Jangjeon Math. Soc.** **13**, (2010), no. 2, pp. 243-254.
- [24] (with Y. Simsek ) *q-Frobenius-Euler Polynomials Related to the (q-)Bernstein Type Polynomials*, **AIP Conf. Proc.** **1281**, (2010), pp. 1156-1159.
- [25] *Special values of Lerch zeta function and their Fourier expansions*, **Adv. Stud. Contemp. Math.** **21**, (2011), no. 1, pp. 1-4.
- [26] (with A.Raouj), *Reciprocity formulae for multiple Dedekind-Rademacher sums*, **C. R. A. S, Paris, Ser. I, Vol. 349**, Issues 3-4 (2011), pp. 131-136.
- [27] ( with T. Kim), *On the symmetry Properties of the generalized higher-order Euler polynomials*, **J. Appl. Math. Inform.** **29**, (2011), no. 1-2, pp. 511-516.
- [28] (with T. Kim), *A study on the p-adic q-integral representation on  $\mathbb{Z}_p$  associated with the weighted q-Bernstein and q-Bernoulli polynomials*, **J. Inequal. Appl.** **2011**, Art. ID 513821, 8 pp.
- [29] *Fourier expansions for Apostol-Bernoulli, Apostol-Euler and Apostol-Genocchi polynomials* , **Math. Comp.** **80**, (2011), no. 276, pp.2219-2221.
- [30] (with Y. Hamahata), *Polylogarithms and poly-Bernoulli polynomials*, **Kyushu J. Math.** **65** , (2011), no. 1, pp.15-24.
- [31] (with Y. Hamahata), *Arakawa-Kaneko L-functions and generalized Bernoulli polynomials*, **J. Number Theory Vol.** **131**, Issue 6, (2011), pp.1020-1036.
- [32] (with S-H.Rim), *A new construction on the q-Bernoulli polynomials* , **Adv. Difference Equ.** 2011, 2011 :34, 6 pp.
- [33] ( with Y. Simsek), *Note on the Hurwitz Zeta Function of Higher Order*, **Numerical Analysis and Applied Mathematics ICNAAM 2011**, AIP Conf. Proc. 1389, 389-391 (2011) ; doi : 10.1063/1.3636744.
- [34] ( with T. Kim), *A note on the generalized Bernstein polynomials*, **Honam Math. J.** **33** (2011), N<sup>o</sup>. 3, pp.431-439.
- [35] ( with T. Kim), *Some identities on Bernstein polynomials associated with q-Euler polynomials*, **Abstr. Appl. Anal.** **2011**, Art. ID 294715, 10 pp.
- [36] (with T. Kim), *Identities involving values of Bernstein, q-Bernoulli and q-Euler polynomials*, **Russ. J. Math. Phys.** **18**, (2011), no. 2, pp. 133-143.
- [37] ( with Y. Simsek , V. Lokesha), *q-Bernstein polynomials related to q-Frobenius-Euler polynomials, l-functions and q-Stirling Numbers*, **Math. Methods Appl. Sci.** **35**, (2012), no. 8, pp.877-884.
- [38] ( with T. Kim), *q-extension of Bernstein polynomials with weight  $(\alpha, \beta)$* , **J. Comput. Anal. Appl.** **14** (2012), no. 2, pp.374-382.
- [39] (with Y. Hamahata), *Higher dimensional Dedekind sums in finite fields*, **Finite Fields Appl.** **18** (2012), no. 1, pp.19-25.
- [40] (with Y. Hamahata), *Multiple polylogarithms and multi-poly-Bernoulli polynomials* , **Funct. Approx. Comment. Math.** **46** (2012), part 1, pp. 45-61.
- [41] ( with Y. Hamahata), *Higher dimensional Dedekind sums in function fields*, **Acta Arith.** **152**, (2012), no. 1, pp. 71-80.
- [42] ( with Y. Simsek) *On the special values of Jacobi modular forms and Barnes zeta functions*, **Ann. Inst. Fourier** **61**, (2011), no. 5, pp. 1977-1993
- [43] ( with A. Raouj), *Arithmetic of higher dimensional Dedekind-Rademacher sums*, **J. Number Theory Vol.** **132** (2) (2012), pp. 332-347.
- [44] ( with A. Raouj), *Means values of L-functions and Dedekind sums*, **J. Number Theory, Volume** **132**, Issue 8 (2012), pp. 1645-1652.
- [45] ( with N. Cangul), *The Minimal Polynomial of  $2\cos(\pi/q)$  and Dickson Polynomials*, **Appl. Math. Comput.** **218** (2012), no. 13, pp. 7014-7022.

- [46] ( with J. Chikhi), *Non linear recurrences for Apostol-Bernoulli-Euler numbers of higher order*, **Adv. Studies Contemp. Math. Volume 22** (1), (2012), pp. 1-6.
- [47] ( with C. Adiga), *A note on Mycielskian type of a graph*, **Adv. Studies Contemp. Math**, 22 (2012), no. 1, pp. 85-91.
- [48] (with T. Kim), *Identities on the Bernoulli and the Euler numbers and polynomials*, **Ars Combinatoria** **107** , (2012), pp.455-463.
- [49] (with T. Kim), *Higher recurrences for Apostol-Bernoulli-Euler numbers*, **Russ. J. Math. Phys.** 19 (2012), no. 1, pp. 1-10.
- [50] (with T. Kim), *Arithmetic of  $q$ -Barnes polynomials*, **J. Comput. Anal. Appl.** **15** (2013), no. 1, pp.111-117.
- [51] (with Y. Hamahata), *Identities involving on two kind of  $q$ -Euler polynomials and numbers*, **J. Integer Seq.** **15** (2012), no. 4, Article 12.4.6, 14 pp.
- [52] (with C. Adiga), *The minimum covering energy of a graph*, **Kragujevac J. Sci.** **34** (2012).
- [53] *Dedekind sums and values of  $L$ -functions at positive integers*, Analytic Number Theory : related Multiple aspects of Arithmetic Functions, RIMS Kokyuroku, **RIMS proceedings of Kyoto**, No. **1806** (2012).
- [54] (with T. Kim), *Identities involving Bernoulli and Euler polynomials arising from Chebyshev polynomials*, **Proc. Jangjeon Math. Soc. Vo 15** (4), 2012.
- [55] (with J. Chikhi), *Reduction and Duality of the generalized Hurwitz–Lerch zetas*, **Fixed Point Theory Appl**, (2013), 2013 :82, 14 pp.
- [56] (with D. Kim), *Convolution identities for twisted Eisenstein series and twisted divisor functions*, **Fixed Point Theory Appl**, 2013, 2013 :81, 23 pp.
- [57] (with A. Aygunes, Y.Simsek), *Hecke Operators type and generalized Apostol-Bernoulli Polynomials* , **Fixed Point Theory Appl**, 2013, 2013 :92, 11 pp.
- [58] (with M. Goubi), *Proof of the Mobius conjecture revisited*, **Proc. Jangjeon Math. Soc.** **16** (2013), no. 2, pp. 237-243.
- [59] (with Y. simsek), *Values of twisted Barnes zeta functions at negative integers*, **Russ. J. Math. Phys.** **20** (2013), no. 2, pp.129-137
- [60] ( with J. Chikhi), *Möbius inversion formulae for Apostol-Bernoulli type polynomials and numbers*, **Math. Comp.** **82** (2013), no. 284, pp. 2327-2332.
- [61] (with S. Gaboury), *Generalized Dirichlet  $L$ -function of arbitrary order with applications*, **Adv. Stud. Contemp. Math.** **23** (2013), no. 4, pp. 607-619.
- [62] (with T. Kim), *Results on values of Barnes polynomials*, **Rocky Mountain J. Math.** **43** (2013), no. 6, pp 1857- 1869.
- [63] (with S. Gaboury), *Series representations at special values of generalized Hurwitz-Lerch zeta function*, **Abstr. Appl. Anal.** 2013, Art. ID 975615, 8 pp.
- [64] (with V. Lokesha), *Relation connecting Zagreb co-indices on three graph operators*, **Math. Aeterna** **3** (2013), no. 5-6, pp 433-448.
- [65] (with Y. Hamahata), *Multiple Dedekind-Rademacher sums in finite fields*, **Ramanujan Journal** (2014) DOI 10.1007/s11139-013-9527-6.
- [66] (with J. Chikhi), *Apostol-Euler polynomials and asymptotics for negative binomial reciprocals*, **Adv. Stud. Contemp. Math.** **24**, (2014), no. 1, pp.33-37.
- [67] (with M. Beck), *Relations for Bernoulli-Barnes numbers and Barnes zeta functions*, **Int. J. Number Theory** **10** (2014), no. 5, pp. 1321-1335.
- [68] (with Y. Simsek, *Convolution identities on the Apostol-Hermite base of two variables polynomials*, **Differ. Equ. Dyn. Syst.** **22** (2014), no. 3, pp. 309-318.
- [69] (with Y. Hamahata), *Multiple Dedekind-Rademacher sums in function fields*, **Int. J. Number Theory** **10** (2014), no. 5, pp. 1291-1307.
- [70] (with D.Kim ; J. Park), *Euler Polynomials and Combinatoric Convolution Sums of Divisor Functions with Even Indices*. **Abstr. Appl. Anal.** (2014), Art. ID 289187, 6 pp.
- [71] (with Y. Simsek, Yilmaz ; H.M. Srivastava), *Some array type polynomials associated with special numbers and polynomials*. **Appl. Math. Comput.** **244** (2014), pp. 149-157.

- [72] (with H.M. Srivastava;S. Gaboury), *Expansion formulas for an extended Hurwitz-Lerch zeta function obtained via fractional calculus*. **Adv. Difference Equ.** (2014), 2014 :169, 17 pp.
- [73] (with A. Ayad, O. Kihel), *Denominators of algebraic numbers in a number field*, **J. Number Theory** **149** (2015), pp.1-14.