

**Professor. Dr. Mostefa NADIR**  
**Department of Mathematics**  
**Faculty of Mathematics and Informatics**  
**University of Msila**

Msila; February 25, 2018

## CURRICULUM VITAE

### GENERAL INFORMATION

First Name	<b>NADIR</b>
Last Name	<b>Mostefa</b>
Date of Birth	<b>25<sup>th</sup> February 1958</b>
Place of Birth	<b>Bousaada w (Msila)</b>
Nationality	<b>Algerian</b>
Present position	<b>Professor of Mathematics</b>
Address	<b>Department of Mathematics</b>
Contact	Tel. <b>+(213) 7 72 69 07 86</b> Fax <b>+(33) 8 26 32 33 32</b>
Email	<b>mostefanadir@yahoo.fr</b> <b>mostefanadir@gmx.com</b> <b>mostefa.nadir@univ-msila.dz</b>

### ACADEMIC QUALIFICATIONS

#### UNDER-GRADUATION

- **Final Exam** from Bousaada 1977
- **B.A** (Mathematics "A" and "B" courses) from the University of Constantine **1982**

#### POST-GRADUATION

- **M.A** from the University of Annaba 1983
- **MAGISTER** from the Universities of Setif, Annaba and Tbilissi **1986**
- **Ph.D.** from the Universities of Setif and of Marseille III **1999**

## ACADEMIC POSITIONS

- **Assistant Professor** *Since 1999*
- **Full Professor** *Since 2004*
- **President of the Scientific Council** of the Faculty of Sciences and Sciences of Engineering, University of Msila
- **President of the Cell L.M.D** (Licence-Master-Doctorat), University of Msila
- **President of the Council of ethics and the Deontology** University of Msila
- **President of the Scientific Council** of the Faculty of Mathematics and Informatics, University of Msila
- **Member of the national academic commission** (CUN) Ministry of the superior teaching and the scientific research

## FIELD OF SPECIALIZATION

- **Differential Equations**
- **Functional Analysis**
- **Fixed point**
- **Integral Equations**
- **Numerical Analysis**
- **Operators theory**
- **Singular Integral Equations**
- **Wavelets**

## ACADEMIC ACTIVITIES

- Editor in chief for the Malaya Journal of Matematik (MJM)
- Editor for the journal of Statistics and Mathematics
- Editor for the European Scientific journal
- Editor for the Global journal of Mathematics
- Editor for the Journal of Approximation Theory and Applied Mathematics (JATAM)
- Reviewer for Mathematical Reviews/MathSciNet number **095171**
  
- Potential Reviewer in the Journal of Mathematical Analysis and Applications (**JMAA**) Elsevier
- Potential Reviewer in the Journal of Computational and Applied Mathematics (**JCAM**) Elsevier
- Potential Reviewer in Mathematical and Computer Modelling (**MCM**) Elsevier
- Potential Reviewer in the International Journal of Applied Mathematics & Statistics (**IJAMAS**)
- Potential Reviewer in the International Journal Mathematical Manuscripts (**IJMM**)
- Potential Reviewer in the Applied Mathematics & Information Sciences (**AMIS**)
- Potential Reviewer in the International Journal of Computer Mathematics (**IJCM**) Taylor & Francis
- Potential Reviewer in Optimal Control Applications and Methods (**OCAM**) Wiley Editing services
- Potential Reviewer in Transactions on Mathematics WSEAS (**TSW**)
- Potential Reviewer in International Journal of the Physical Sciences (**IJPS**)
- Potential Reviewer in Journal of Mathematics and Statistics (**JMS**) Elsevier
- Potential Reviewer in Journal of Mathematics and Computer Science (**JMCS**) ISI-SCI

## EDUCATIONAL AND SCIENTIFIC ACTIVITIES

### COURSES TAUGHT AT VARIOUS LEVELS SINCE 1982 AT THE FOLLOWING UNIVERSITIES

- University of Constantine (ALGERIA)
- University of Setif (ALGERIA)
- University of Marseille III (FRANCE)
- University of Borj Bouarerrij (ALGERIA)
- University of Msila (ALGERIA)

#### Under-Graduation

<i>M001</i>	<b>Analysis 1</b>	<i>SEM300</i>	<b>General Analysis</b>
<i>M002</i>	<b>Analysis 2</b>	<i>SEM302</i>	<b>General Topology</b>
<i>M003</i>	<b>Algebras 1</b>	<i>SEM304</i>	<b>Measure and Integration</b>
<i>M015</i>	<b>Algebras 2</b>	<i>SEM308</i>	<b>Differential Equations</b>
<i>M018</i>	<b>Numerical Analysis</b>	<i>SEM322</i>	<b>Geometric</b>
<i>M020</i>	<b>Mechanics</b>	<i>SEM323</i>	<b>Mechanics</b>
<i>MSP</i>	<b>Math Physics</b>	<i>SEM324</i>	<b>Diff Equ &amp; Diff Geo</b>
<i>MAT1</i>	<b>Math Economic</b>	<i>ANA1</i>	<b>Functional Analysis</b>
<i>MAT2</i>	<b>Maths Informatics</b>	<i>ANA2</i>	<b>Matrices Analysis</b>

#### Post-Graduation (Masters, Magisters and Ph.D)

2001 – 2002	<b>Operators theory; Wavelets</b>
2002 – 2010	<b>Functional Analysis, Integrals Equations</b>
2010 – 2018	<b>ODE &amp; PDE, Functional Analysis, Integrals Equations</b>

# SCIENTIFIC ACTIVITIES

## I. ARTICLES

1. **M. NADIR, A. ZADOROJNYI**, Sur l'effet d'autogravitation des planètes, *Magreb Math. Rev.* 1(1) (1992), 69-78.
2. **M. NADIR**, Sur l'approximation des intégrales singulières, *Far East J.Sci.* 6(4) (1998), 663-670.
3. **M. NADIR**, Opérateurs intégraux et bases d'ondelettes, *Far East J.Sci.* 6(6) (1998), 977-995.
4. **M. NADIR**, Opérateurs de Hilbert et bases d'ondelettes sur un intervalle, *Far East J.Appl.Math.* 4(1) (2000), 19-42.
5. **M. NADIR**, Opérateurs de Cauchy pour des fonctions affines par morceaux et bases d'ondelettes sur un intervalle, *Far East J. Appl.Math.* 8(3) (2002), 231-252.
6. **M. NADIR**, On the approximation of the Hilbert transform, *Far East J.App.math.* 6(1) (2003), 71-78.
7. **M. NADIR, J. ANTIDZE**, On the numerical solution of singular integral equations using Sanikidze's approximation, *Comp Meth in Sc Tech.* 10(1) (2004), 83-89.
8. **M. NADIR**, Endpoint Values of Wavelets on an Interval, in *Dynamic System and Applications.* (2004)
9. **M. NADIR**, On the approximation of singular integrals of Cauchy types, in *Dynamic System and Applications.* (2004)
10. **M. NADIR, B. LAKEHALI**, An approximation for singular integrals of Cauchy type, in *Advance in algebra and analysis (AAA).* 1(1) (2006)
11. **M. NADIR**, The Derivation of the Scaling Function on an Interval, in *Advance in algebra and analysis (AAA).* 1(3) (2006), 1-7.
12. **M. NADIR**, Valeurs des Ondelettes aux Bords d'un Intervalle, in *Matemat-icki Vesnik.* 58 (2006), 77-83.
13. **M. NADIR, B. LAKEHALI**, On the approximation for singular integrals, in *Fen DERGISI (E-DERGI).* 2(2) (2007), 269-273

14. **M. NADIR, B. GAGUI**, Two Points for the Adaptive Method for the Numerical Solution of Volterra Integral Equations , in International Journal Mathematical Manuscripts. (IJMM) 1(2) (2007), 133-140.
15. **M. NADIR, A. RAHMOUNE**, Modified Method for Solving Linear Volterra Integral equations of the Second Kind Using Simpson's Rule , in International Journal Mathematical Manuscripts. (IJMM) 1(2) (2007), 133-140.
16. **M. NADIR**, A Modified Splines for an Approximation of Singular Integrals of cauchy type, in Ovidius Univ. Annals, series, Civil Engineering, Numerical Methods. 1(11) (2009), 267-274.
17. **M. NADIR**, On the Existence and the Uniqueness of Solutions of the Fredholm Integral Equationsof the Second Kind on the Curve, in Journal of the Association of Arab Univ. for Basic and Applied Sciences. 7(1) (2009), 110-114.
18. **M. NADIR**, On the Existence and the Uniqueness of Solutions of the Fredholm Integral Equationsof the Second Kind on the Interval, in Ovidius Univ. Annals, series, Civil Engineering, Differential and Integral Operators and equations. 1(11) (2009) 335-339.
19. **M. NADIR, A. RAHMOUNE**, Solving linear Fredholm integral equations of the second kind using Newton divided difference interpolation polynomial, in International journal of Mathematics and Computation. (IJMC) 7(10) (2010), 1-6.
20. **M. NADIR**, Adapted Quadratic Approximation for Singular Integrals, in Journal of mathematical Inequalities. 4(3) (2010) 423-430.
21. **M. NADIR**, Adapted Quadratic Approximation for Singular Integrals Equations, in IJAMAS. 29(5) (2012) 84-89.
22. **M. NADIR**, Quadratic Approximation for Singular Integrals, in Journal of Mathematics and Statistics. 8(2) (2012), 292-295.
23. **M. NADIR**, Adapted Linear Approximation for Singular Integrals, in Mathematical sciences. 6(36) (2012),
24. **M. NADIR**, Adapted Quadratic Approximation for Logarithmic kernel Integrals, in Fasciculi mathematici. 49(1) (2012), 75-85.
25. **M. NADIR**, Inversion of the Cauchy singular integral on the curve, in Demonstratio Mathematica. old (3)(2013),
26. **M. NADIR**, Numerical Solution of the Singular Integral Equations of the First Kind on the Curve, in Analele Universitatii de Vest,Timisoara Seria Matematica-Informatica. 51(1) (2013), 109-119.

27. **M. NADIR**, Adapted linear Approximation for Logarithmic kernel Integrals, in Journal of Approximation Theory and Applied Mathematics. 3 (2014), 37-44.
28. **M. NADIR**, Solving Fredholm integral equations with application of the four Chebyshev polynomials, in Journal of Approximation Theory and Applied Mathematics. 4 (2014), 37-44.
29. **M. NADIR, B. GAGUI**, Numerical Approximation for Solutions of Hammerstein Integral Equations in  $L_p$  Spaces, in Sao Paulo Journal of Mathematical Sciences. 8(1) (2014), 23-31.
30. **M. NADIR, B. LAKEHALI**, Adapted linear approximation for singular integral equations, in Malaya J. Mat. 2(4) (2014) 497–501.
31. **M. NADIR, M. CHEMCHAM**, A Numerical Approach for Solution of Hammerstein Integral Equations In  $L_2$  Spaces, in Applied Mathematics E-Notes. 14 (2014), 127-134.
32. **M. NADIR, B. GAGUI**, Numerical solution of Solutions of Hammerstein Integral Equations in  $L_p$  Spaces, in Fasciculi mathematici. 52(2) (2014), 82-91.
33. **M. NADIR**, A variational form with Bernoulli series for linear integral equations, in Journal of Theoretical and Applied Computer Science. 8(3) (2014), 31–36.
34. **M. NADIR**, Numerical solution of weakly singular integro-differential equations, in Malaya J. Mat. 3(2) (2015), 187-190.
35. **M. NADIR**, A Numerical approach for solving Hammerstein integral equations in Banach spaces, in Journal of Prime Research in Mathematics. 10 (2015), 37-44.
36. **M. NADIR, B. LAKEHALI**, Adapted Quadratic Approximation For Weakly Singular Integrals, in Applied Mathematics E-Notes. 15 (2015), 225-232.
37. **M. NADIR**, A modified linear approximation for weakly singular integrals, in Journal of Theoretical and Applied Computer Science. 9(4) (2015), 19-25.
38. **M. NADIR**, Bernoulli series solutions for linear integral equations, in Asian Journal of Mathematics and Computer Research. 10(3) (2016), 203-209.
39. **M. NADIR, C. BENSALLOUA**, General note on the theorem of Stampfli, in Journal of Inequalities and Applications. 55(1)(2016), 1-12.
40. **M. NADIR, M. GUESBA**, On  $n$ -power-hyponormal operators, in Global Journal of Pure and Applied Mathematics. 12(1) (2016), 473-479.
41. **M. NADIR**, A new technical for solving a weakly singular integro-differential equations, in Journal of Taibah University for Science. (2016),

42. **M. NADIR, A. KHIRANI**, Adapted Newton-Kantorovich Methods for Nonlinear Integral Equations, in *Journal of Mathematics and Statistics*. 12(3) (2016), 176-181.
43. **M. NADIR, M. GUESBA**, On operators for which  $T^2 \geq -T^{*2}$ , in *The Australian Journal of Mathematical Analysis and Applications*. 13(1) (2016), 1-5.
44. **M. NADIR, S. GUECHI**, The combination of modified Simpson and Newton-Kantorovich methods for solving nonlinear integral equations, in *Advanced Studies in Contemporary Mathematics*. 26(3) (2016), 547-554.
45. **M. NADIR, S. GUECHI**, Integral Equations and their Relationship to Differential Equations with Initial Conditions, in *General Letters in Mathematics*. 1(1) (2016), 23-31.
46. **M. NADIR**, Approximation solution for singular integral equations with logarithmic kernel using adapted linear spline, in *Journal of Theoretical and Applied Computer Science*. 10(1) (2016), 19-25.
47. **M. NADIR, M. CHEMCHAM**, Numerical solution of linear integral equations using hat function basis, in *Asian Journal of Mathematics and Computer Research*. 15 (1) (2017), 1-8.
48. **M. NADIR**, Some Results on the Bounded Nadir's Operator, in *Biomedical Statistics and Informatics*. 2(5) (2017), 128-130.
49. **M. NADIR, M. DILMI**, Euler series solutions for linear integral equations, in *The Australian Journal of Mathematical Analysis and Applications*. 14(2) (2017), 1-7.
50. **M. NADIR**, Some results on the Nadir's operator  $N = AB^* - BA^*$ , in *Journal of Scientific and Engineering Research*. 4(8) (2017), 176-177.
51. **M. NADIR**, Lucas polynomials for solving linear integral equations, in *Journal of Theoretical and Applied Computer Science*. 11(1) (2017), 13-19.
52. **M. NADIR, B. LAKEHALI**, A variational form with Legendre series for linear integral equations, in *Malaya Journal of Matematik* : 6(1), 2018, 49-52.
53. **M. NADIR, B. GAGUI**, Quadratic numerical treatment for singular integral equations with logarithmic kernel, in *Int. J. Computing Science and Mathematics*. x(x) (2018), xxx-xxx.
54. **M. NADIR, A. SMATI**, Closedness and Skew self-adjointness of Nadir's operator, in *The Australian Journal of Mathematical Analysis and Applications*. 15(1) (2018), 1-5.
55. **M. NADIR, A. BENDJABRI**, On the Invertibility of the Cauchy singular integral, in *International Journal of Mathematics and Computation*. 29(2) (2018), 113-118.



56. **M. NADIR, A. KHIRANI**, Adapted solution with Newton-Kantorovich method for nonlinear Volterra integral equations, in *Tamsui Oxford Journal of Informational and Mathematical Sciences* 32(1) (2018), 69-76.
57. **M. NADIR, N. DJAIDJA**, Approximation method for Volterra integral equation of the first kind, in *International Journal of Mathematics and Computation*. 29(4) (2018), 67-72.

## II. COMMUNICATIONS WITH PROCEEDINGS

1. **M. NADIR**, *A new approximation for singular integrals*, 20th GAMM-Seminar January, 22th-24th, 2004 (Leipzig)
2. **M. NADIR**, *On the approximation of singular integrals of Cauchy type*, Dynamic System and Applications 05-10 July 2004 Antalya (Turkey)
3. **M. NADIR**, *Splines for singular integral of Cauchy type*, The First Arab Conference in Mathematics 06-08 October 2004 Amman (Jordan)
4. **M. NADIR**, *Wavelets on an interval*, Dynamic System and Applications 05-10 July 2004 Antalya (Turkey)
5. **M. NADIR**, *Bords des ondelettes sur un intervalle*, December 14-16, 2005 Beirut (Lebanon)
6. **M. NADIR**, *Edges on wavelets on an interval*, Conference on Positivity 2006 Carthage (Tunusia)
7. **M. NADIR**, *Résolution des Equations intégrales par la méthode adaptative*, 2007 Izmir (Turkey)
8. **M. NADIR**, *On the Existence and the Uniqueness of Solution of the Fredholm Integral Equations of the Second Kind on the Contour*, in The Second Conference on Mathematical Sciences CMS'2008 (2008) Zarqa (Jordan)
9. **M. NADIR**, *On the Existence and the Uniqueness of Solution of the Fredholm Integral Equations of the Second Kind*, (2009) Constanta (Romania)
10. **M. NADIR**, *Linear Approximation For Singular Integrals equations*, (2009) Sohag (Egypt)
11. **M. NADIR**, *Adapted Linear Approximation for singular integral equations*, in The Fourteenth International Conference on Applied Mathematics Cluj-Napoca, August 29–31, 2013 (Romania)
12. **M. NADIR**, *Adapted linear approximation for logarithmic kernel integrals*, in The International Arab Conference on Mathematics and computations (IACMC-2014) April 23-25 2014 Zarqa (Jordan)
13. **M. NADIR** and **S. GUECHI**, *Integral equations and their relation ship to differential equations with initial conditions*, in *The International Arab Conference on Mathematics and computations* (IACMC-2014) April 23-25 2014 Zarqa (Jordan)

14. **M. NADIR** and **T. HARAIZ**, *On closed and closable operators*, in The Second International Conference on Mathematics and Statistics, in (AUS-ICMS'15) April 2–5, 2015 American university of Sharjah
15. **M. NADIR** and **N. DJAIDJA**, *On ill posed problems*, in *The Second International Conference on Mathematics and Statistics*, in (AUS-ICMS'15) April 2–5, 2015 American university of Sharjah
16. **M. NADIR**, **A. KHIRANI**, *Bounded and Summable Solutions of Non-linear Volterra Integral Equations*, in *The International Arab Conference on Mathematics and computations (IACMC-2016)* May 18-21 2016 Zarqa (Jordan)
17. **M. NADIR**, **S. GUECHI**, *Solutions of integral equations in the Urysohn form via some numerical methods*, in *The International Arab Conference on Mathematics and computations (IACMC-2016)* May 18-21 2016 Zarqa (Jordan)
18. **M. NADIR**, **T. HARAIZ**, *On semi regular operator*, in *The International Arab Conference on Mathematics and computations (IACMC-2016)* May 18-21 2016 Zarqa (Jordan)
19. **M. NADIR**, **B. GAGUI**, *Approached solution for a linear integro-differential equation using the finite element method*, in *The International Arab Conference on Mathematics and computations (IACMC-2016)* May 18-21 2016 Zarqa (Jordan)

### III. BOOKS

1. Rappels et Exercices sur la mesure et l'intégration (**O.P.U**) (**1992**)
2. Cours sur la mesure et l'intégration (**O.P.U**) (**1993**)
3. Premier cours d'analyse (**Université de M'sila**) (**2002**)
4. Cours d'analyse fonctionnelle ( **Université de M'sila**) (**2003**)
5. Equations différentielles ordinaires ( **Université de M'sila**) (**2004**)

## RESEARCH GUIDANCE

### I. Guidance for Magister

1. **CHEMCHAM Madani.** *Analyse Multirésolution d'ordre de Multiplicité  $d > 1$ .* **Magister presented in 2002**
2. **RAHMOUNE Azedine.** *Résolution Numérique des Equations Intégrales.* **Magister presented in 2005**
3. **MENNOUNI Abdelaziz.** *Equations intégrales à noyau peu régulier.* **Magister presented in 2006**
4. **GAGUI Bachir.** *Résolution des Equations intégrales par la méthode adaptative.* **Magister presented in 2007**
5. **KHELOUFI Yasmina.** *Opérateurs Quasi-compacts et Alternative de Fredholm.* **Magister presented in 2007**
6. **BOUNAB Nora.** *Les Splines pour Equations intégrales.* **Magister presented in 2007**
7. **BELMECHERI Fairouz.** *Equations intégrales sur les espaces fonctionnels.* **Magister presented in 2008**
8. **BENMERROUCHE Soraya amel.** *La compacité dans les espaces d'Orlicz.* **Magister presented in 2008**
9. **DJAIDJA Neoui.** *Transformation et résolution de certaines équations de première espèce.* **Magister presented in 2008**
10. **ALLAL Ali.** *Equations Intégrales liées aux Systèmes Différentiels.* **Magister presented in 2009**
11. **MOUSSAI Miloud.** *Sur les Solutions des Equations Intégrales et Différentielles.* **Magister presented in 2009**
12. **DAHIA El hadj.** *Sur les Equations Correctement Solvables.* **Magister presented in 2009**
13. **ADJALAT Mohamed Khemisti.** *Sur le Problème Abstrait de Cauchy.* **Magister presented in 2009**
14. **BENDJABRI Ammar.** *Sur les Opérateurs Inverses Généralisés.* **Magister presented in 2009**

15. **DEHIMAT Raouia.** Sur l'Existence des Solutions Continues des Equations Intégrales non Linéaires. **Magister presented in 2011**
16. **HARAIZ Toufik.** Sur l'étude des opérateurs semi réguliers. **Magister presented in 2011**
17. **HAMIDI Khaled.** Sur l'étude du spectre de Kato. **Magister presented in 2011**
18. **KHIRANI Amina.** Résolution des Equations Intégrales non linéaires type Volterra. **Magister presented in 2011**
19. **SEGHIRI Nabila.** Résolution des Equations Intégrales non linéaires type Fredholm. **Magister presented in 2012**
20. **MECHTER Rabah.** Etude d'un problème parabolique anisotrope à données mesures. **Magister presented in 2013**
21. **BOUGUETAYA Amar.** Relations entre opérateurs compacts et opérateurs normaux. **Magister presented in 2013**
22. **MANI Abdelwahab.** Les applications des polynômes orthogonaux aux équations intégrales. **Magister presented in 2013**
23. **BENYOUCEF Soufiane.** Résolution numérique des équations intégro différentielles de Fredholm. **Magister presented in 2014**
24. **LAMRI rachid.** Résolution des équations intégro différentielles de type Volterra. **Magister presented in 2014**

## II. Guidance for Ph.D

1. **RAHMOUNE Azedine.** *Résolution Numérique des Equations Intégrales singulière.* **Ph.D presented in 2010**
2. **GAGUI Bachir.** *Sur les équations intégrales dans les espaces d'Orlicz.* **Ph.D presented in 2015**
3. **CHEMCHAM Madani.** *Les Equations du type Hamm Erstein dans l'espace d'Orlicz.* **Ph.D presented in 2015**
4. **BENSALLOUA Cheniti.** *Correction compacte d'opérateurs de Fredholm.* **Ph.D presented in 2016**

5. **LAKEHALI Belkacem.** *Sur les équations intégrales singulières.* **Ph.D presented in 2016**
6. **KHIRANI Amina.** *Etude des équations intégrales non linéaires de Volterra dans les espaces fonctionnels.* **Ph.D presented in 2016**
7. **GUECHI Somia.** *Méthodes computationnelles pour la résolution des équations intégrales non linéaires.* **Ph.D présenté in 2017**
8. **GUESBA Messaoud.** *Traitement sur les opérateurs normaux et les opérateurs compacts.* **Ph.D présenté in 2017**
9. **DILMI Mustapha.** *Sur la convergence des méthodes spectrales pour les équations intégrales.* **Ph.D présenté in 2018**
10. **GUCHI Ahmed.** *Analyse et rapproche la résolution d'une classe des'équations integrales singulières.* **Ph.D presented in 2018**
11. **SMATI Abdelletif.** *Etude des conditions entre les opérateurs compacts, normaux et positifs.* **Ph.D presented in 2018**

## **EXPERTISES**

President, Reporter and examiner for many Magisters, Ph.D and Doctorats d'Etat