

CURRICULUM VITAE

Abdelaziz Soufyane

Department of mathematics

University of Sharjah, UAE.

Email: asoufyane@sharjah.ac.ae

PERSONAL DATA

Last Name: Soufyane

First Name: Abdelaziz

Marital status: Married

Citizenship: French and Moroccan.

EDUCATION:

- 1999 **Ph.D., Mathematics and its applications, University of Franche Comte, Besancon, France**
- 1994 **M.Sc., Mathematics and its applications, University of Franche Comte, Besancon, France**
- 1993 **Bachelor, Applied Mathematics, University Mohamed V, Rabat, Morocco**

ACADEMIC EXPERIENCE

December 2018- Now: **Deputy Director** for office of international relations, University of Sharjah, UAE

2016- Now: **Professor and Chair**, Mathematics department, College of Sciences, University of Sharjah, Sharjah, UAE.

2015-2016 : **Professor and Director of Quality Assurance Unit**, AL HOSN University, Abu Dhabi, UAE.

Summer 2015: **Acting Vice Chancellor for Academic Affairs**, AL HOSN University, Abu Dhabi, UAE.

2014-2015: **Professor and chair**, Mathematics and natural sciences department, Faculty of Engineering & Applied Sciences, AL HOSN University, Abu Dhabi, UAE.

2013- 2014: **Associate Professor**, Department of Mathematics, University of Sharjah, UAE.

2012-2013: **Professor and chair**, Mathematics and natural sciences department, Faculty of Engineering & Applied Sciences, AL HOSN University, Abu Dhabi, UAE.

2011-2012: **Director** of the University general requirements (UGR), AL HOSN University, Abu Dhabi, UAE.

2009- 2011: **Coordinator of Mathematics Unit**, Faculty of Engineering & Applied Sciences, AL HOSN University, Abu Dhabi, UAE.

2007-2011: **Associate Professor**, Faculty of Engineering & Applied Sciences, AL HOSN University, Abu Dhabi, UAE.

2006-2007: **Assistant Professor**, Faculty of Engineering & Applied Sciences, AL HOSN University, Abu Dhabi, UAE.

2001 – 2006: **Assistant Professor**, Mathematics Department, College of Science, UAE University.

1999-2000: **Research Engineer**, National center for Scientific research (CNRS), Besancon, France.

1998 – 1999: **Lecturer, University of Franche Comte**, Besancon, France

Undergraduate Courses Taught :

- Operations research I
- Graduate project.
- Mathematics for Engineers.
- Calculus I for Sci.
- Partial Differential Equations.
- Differential equations for Engineers.
- Calculus III.
- Calculus I for Engineering.
- Calculus II for Engineering.
- Calculus III for Engineering.
- Numerical Analysis I.
- Analytical Methods for Nuclear Engineers.
- Mathematics (For Urban Planning and Interior Design).
- Algebra for Business.
- Calculus for Business.
- Matrix Algebra for Engineers.
- Mathematics for teachers I.
- Mathematics for teachers II.
- Statistics for Business.
- Introduction to Statistics.
- Statistics for Engineering.
- Modern Control Theory and Applications.
- Advanced Calculus.
- Mathematical Modeling.
- Introduction to Linear Algebra and Ordinary Differential Equations.

- Linear Algebra 1.
- Set theory.
- Ordinary differential equations.

Senior Project

- Senior Project, Mathematics Department, University of Sharjah, Fall semester, 2017
- Senior Project, Mathematics Department, United Arab Emirates University, Spring semester , 2005
- Senior Project, Mathematics Department, United Arab Emirates University, Fall semester , 2003

Training of Students

- Mathematics Department, United Arab Emirates University, Winter 2003 (Cities: Al Ain, Sharjah, Ajman).
- Mathematics Department, United Arab Emirates University, Summer 2005 (Cities: Sharjah, Ajman , Ras Al Khaimah)

Thesis Committee (President of the Jury)

Student name	Degree / Year	Department / University
Ms. Maya Bassam	Ph.D. December 2014	Math Department. / Univ. of Valenciennes, France/

RESEARCH AND SCHOLARSHIP

Areas of research interest:

- Partial Differential Equations (P.D.E) of Hyperbolic Type;
- Integro-Differential Equations;
- Partial Differential Equations (P.D.E) of Parabolic Type;
- Partial Differential Equations (P.D.E) of Mixed Type;
- Control Theory;
- Numerical analysis;
- Optimal control;
- Modeling of surface acoustic waves using finite element analysis;
- Applied optimization Problem.

Postdoctoral Experience:

2000 - 2001: **Postdoctoral Fellow:** CNRS With Thomson Microsonics Company, LPMX, Besancon, France.

Subject: Modeling of Surface Acoustic waves using Finite Element (FEM) and Boundary Element (BEM).

Research grants:

1. **Principal Investigator:** "Burgers as turbulence model: Domain decomposition modeling of the Burgers equation with local perturbation and global control", AED 37,000, 2018-2020, **Funded, University of Sharjah.**
2. **Member of the research group** (Modeling Analysis of Evolutionary Phenomena) , **University of Sharjah, 2018 - Now.**
3. **Member of the research group** (Autonomous Robotics and active vision), **2017-Now.**
4. **Co- Investigator:** "Development of Conceptual and Physically based Rainfall-Runoff Models for selected arid ungagged basins of United Arab Emirates", AED 80,000 , 2018-2020. **Funded, University of Sharjah.**
5. **Principal Investigator:** "Stabilization of a linear Systems", AED 13,000, **2001-2002, Funded, United Arab Emirates University.**
6. **CO- Principal Investigator:** "Controllability of a linear Functional Differential Equation", AED 15,000, 2002-2003, **Funded, United Arab Emirates University.**
7. **CO- Principal Investigator:** "Modeling and measurement of interferences for Wireless LAN at UAE University," AED 16,800, 2002-2003, **Funded. United Arab Emirates University.**

PUBLICATIONS

- **Articles published in refereed journals**

- a- Control and Stabilization of Coupled systems**

- [1]. A. Bchatnia, S. Chebbi, M. Hamouda & **A. Soufyane:** Lower Bound and optimality for a nonlinearly damped Timoshenko system with thermoelasticity. **Accepted** in Asymptotic Analysis, **January 2019.**
- [2]. M. Afilal & **A. Soufyane:** General decay for a porous thermoelastic system with a memory. *Applicable Analysis*, **Applicable Analysis**, Volume 98, Issue 3, **2019.**
- [3]. M. Afilal, S. Messaoudi & **A. Soufyane:** Stabilization of a coupled hyperbolic equations with a heat equation with second sound. *Mediterr. J. Math.* 14- 39, **2017.**
- [4]. A. Guesmia & **A. Soufyane:** On the stability of Timoshenko-type systems with internal frictional dampings and discrete time delays. *Applicable Analysis*, , 2075-2101, volume 96, Issue 12, **2017.**
- [5]. M. Afilal, T. Merabtene, K. Rhofir & **A. Soufyane:** Decay rates of the solution of the Cauchy thermoelastic Bresse system. *Z. Angew. Math. Phys.* 67- 119, **2016.**
- [6]. M. L. Santos, **A. Soufyane** & D. S. A. Júnior: Exponential and polynomial decay to Bresse system with past history. *Quart. Appl. Math.* **73**, 23-54, **2015.**
- [7]. S-H Belkacem & **A. Soufyane:** The Bresse system in thermoelasticity. *Math. Meth. Appl. Sci.*, Vol 38, Issue 17, 3642-3652, **2015.**
- [8]. **A. Soufyane** & S-H Belkacem: The effect of the wave speeds and the frictional damping terms on the decay rate of the Bresse system. *Evolution Equations and Control Theory*, Vol. 3, Issue 4, 713 - 738, **2014.**

- [9]. M. Chacha, N. Hassan & **A. Soufyane**: Porous Thermoelasticity with Applications. Encyclopedia of Thermal Stresses Springer, **2014**.
- [10]. M. Afilal & **A. Soufyane**: Polynomial stability of Timoshenko-type system of Thermoelasticity of type III using Frequency Domain Approach. Dynamic Systems and Applications 23,15-30, **2014**.
- [11]. M. Aouadi & **A. Soufyane**: Decay of Timoshenko beam with thermal effect and memory boundary conditions. Journal of Dynamical and Control Systems, Vol 19, issue 1, 33-46, **2013**.
- [12]. S-H Belkacem & **A. Soufyane**: Stability result of the Timoshenko system with a delay and a boundary feedback. IMA J. Math. Control & Information 29(3): 383-398, **2012**.
- [13]. J. E. Munoz Rivera, **A. Soufyane** & M.L. Santos: General decay for full von Karman system with memory. Nonlinear Analysis: Real World Applications, 13, Issue 6, 2633-2647, **2012**.
- [14]. A. Guessmia, S. Messaoudi & **A. Soufyane**: On the stabilization for linear Timoshenko system with infinite history and applications to the heat-Timoshenko systems. Electron. J. Diff. Equ., Vol. 2012, No. 193, pp. 1-45, **2012**.
- [15]. M. L. Santos & **A. Soufyane**: General Decay to a van Karman plate system with memory boundary conditions. Differential and Integral Equations, Volume 24, Numbers 1-2, 69-81, **2011**.
- [16]. M. Afilal & **A. Soufyane**: General Decay Estimates for Second Order Evolution Equations. Dynamics of Continuous, Discrete and Impulsive Systems Series A: Mathematical Analysis, 18, 41-52, **2011**.
- [17]. S. Messaoudi & **A. Soufyane**: General decay of solutions of a wave equation with a boundary control of memory type. Nonlinear Analysis: Real World Applications, 11, Issue 4, 2896-2904, **2010**.
- [18]. **A. Soufyane**, M. Afilal, T. Aouam & M. Chacha: General decay of solutions of a linear one-dimensional porous-thermo-elasticity system with a boundary control of memory type. Nonlinear Analysis Series A: Theory, Methods and Applications, 7, 3903-3910, **2010**.
- [19]. M. Aouadi & **A. Soufyane**: Polynomial and exponential stability for one-dimensional problem in thermo-elastic diffusion theory. Applicable Analysis, Volume 89, Number 6, 935-948, **2010**.
- [20]. **A. Soufyane**: Exponential stability of the linearized nonuniform Timoshenko beam. Nonlinear Analysis: Real World Applications 10, 1016–1020, **2009**.
- [21]. **A. Soufyane**, M. Afilal & T. Aouam: General decay of solutions of nonlinear Timoshenko systems with a boundary control of memory type. Differential and Integral Equations, 22, 1125-1139, **2009**.
- [22]. **A. Soufyane**, M. Afilal & M. Chacha: Boundary Stabilization of Memory Type for the Porous-Thermo-Elasticity System. Abstract and Applied Analysis, 17 pages, **2009**.
- [23]. **A. Soufyane**: Energy decay for Porous-Thermo-Elasticity systems of memory type. Applicable Analysis, Volume 87, Issue 4, 451-463, **2008**.
- [24]. S. A. Messaoudi & **A. Soufyane**: Boundary stabilization of memory type in thermoelasticity of type III. Applicable Analysis, Volume 87, Issue 1, 13-28, **2008**.
- [25]. S. A. Messaoudi & **A. Soufyane**: Boundary stabilization of solutions of a nonlinear system of Timoshenko type. Nonlinear Analysis Series A: Theory, Methods and Applications, Vol 67, 2107-2121, **2007**.

- [26]. F. Ammar Khodja, S. Kerbal and **A. Soufyane**: Stabilization of The Nonuniform Timoshenko. Journal of Mathematical Analysis and Applications, Vol 327 (1), 525-538, **2007**.
- [27]. **A. Soufyane** & M. Boulmalf: Solution of Linear and Nonlinear Parabolic Equations by the decomposition method. Applied Mathematics & Computation. Vol 162 (2) , 687-693, **2005**.
- [28]. **A. Soufyane** & A. Wehbe: Uniform stabilization for the Timoshenko beam by a locally distributed damping, Electron. Journal of Diff. Eqns., Vol 29, 1-14, **2003**.
- [29]. **A. Soufyane**: Uniform stability of coupled second order equations. Electron. Journal of Diff. Eqns, Vol 25, 1-10, **2001**.
- [30]. A. Benabdallah & **A. Soufyane**: Uniform stability and stabilization of linear thermo-elastic systems. Journal of Dynamical and Control Systems, 543-560, **2000**.
- [31]. **A. Soufyane**: Stabilisation de la poutre de Timoshenko. Comptes Rendues d'Academie des Sciences, tome 328, serie I, 731-734, **1999**.

b- Surface Acoustic waves

- [32]. S. Ballandras, T. Pastureaud, A. Reinhart, V. Laude, **A. Soufyane**, S. Camou, W. Steichen, W. Daniau, R. Lardat, M. Solal, and P. Ventura: Simulations of SAW devices built on stratified media using a mixed finite element/boundary integral formulation. Journal of Applied Physics, Vol 96, 7731-7741, **2004**.
- [33]. S. Ballandras and M. Wilm and P.-F. Edoa and **A. Soufyane** and V. Laude and W. Steichen and R. Lardat: Finite element analysis of periodic piezoelectric transducers. Journal of Applied Physics, Vol 93, 702-711, **2003**.
- [34]. F. Semond, D. Schenck, M. Jibard, S. Camou, T. Pastureaud, **A. Soufyane** and S. Ballandras: Heteroepitaxy of AlN and GaN thin films on Silicon or Sapphire for the development of high frequency SAW devices. Journal of. Ann. Chim. Sci. Mat, 177-182, **2001**.

c- Applied optimization

- [35]. T. Aouam, A. Diabat, M. Boulmalf & **A. Soufyane**: Linear Incentive Contracts for Natural Gas LDC Regulation. Int. J. of Applied Decision Sciences- Vol. 2, No.1, 57 – 73, **2009**.

- **Submitted papers**

- [1] M. Aouadi & **A. Soufyane**. Some qualitative properties of a nonsimple thermoelastic diffusion problem within Gurtin-Pipkin model.
- [2] M. Afilal, A. Guesmia, **A. Soufyane**, and M. Zahri. On the exponential and polynomial stability for a linear Bresse system.
- [3] M. Afilal, A. Guesmia and **A. Soufyane**. New stability results for a linear thermoelastic Bresse system with second sound.
- [4] T. Apalara and **A. Soufyane**. Energy decay for a weakly nonlinear damped porous system with a nonlinear delay.

- **Conference Presentations**

- [1]. Recent stability results for the linear thermoelastic Bresse system. **Plenary Talk**, Third spring school on Numerical Methods for Partial Differential Equations, April 16-20, Tetouan, Morocco.
- [2]. Stabilization of a coupled hyperbolic equations with a heat equation with second sound. 15th UAE Mathematics Day, University of Sharjah, March 2017.
- [3]. The effect of the wave speeds and the frictional damping terms on the decay rate of the Bresse system. Workshop on Nonlocal operators, Morocco, 27-30 April, 2015.
- [4]. Bresse system in thermoelasticity. UAE Math day, March 2015, Abu Dhabi, UAE.
- [5]. Stability of Bresse system with infinite memory damping. UAE Math day, April 2014, Dubai, UAE.
- [6]. Decay of solutions of a coupled equations with a boundary feedback of memory type. The International Meeting on Applied Mathematics in Errachidia, Morocco, April 23-26, 2012.
- [7]. General Decay to a van Karman plate system with memory boundary conditions. The First Int'l Conference on Mathematics and Statistics (AUS-ICMS'10), American University of Sharjah, March 18-20, 2010
- [8]. General decay of solutions of a wave equation with a boundary control of memory type. International Conference on Partial Differential Equations, Poitiers, France, February 18-20, 2010.
- [9]. General decay of solutions of nonlinear Timoshenko systems with a boundary control of memory type. $T=\infty$ Evolution Equations and Dynamical Systems, Tunisia March 23 -27, 2009.
- [10]. Energy decay for Porous-Thermo-Elasticity systems of memory type. Sixth UAE, Math-day, Abu Dhabi, April 26th, 2008.
- [11]. Boundary stabilization of memory type in thermo-elasticity of type III, International conf. PICOF, Marrakech, Morocco, April 2008.
- [12]. Nonlinear Frictional damping for the linearized non-uniform Timoshenko systems. The third UAEU International Conference of Mathematical Sciences, 2008.
- [13]. Energy decay for Porous-Thermo-Elasticity systems of memory type. UAEMath Day 2007.
- [14]. Boundary stabilization of memory type in thermoelasticity of type III. Second international, ICMSAO-07, Abu Dhabi, 2007.
- [15]. Stabilization of The Nonuniform Timoshenko. Fourth UAEMath Day, Al Ain, 2006.
- [16]. Uniform stability of a partially coupled Timoshenko Heat equation in one dimension. The 2nd UAEU International Conference of Mathematical Sciences, Al Ain, January 2005.
- [17]. Measured Throughput and SNR of IEEE 802.11g in a Small Enterprise Environment, the IEEE 61st Semiannual Vehicular Technology Conference (VTC2005), May 30 - June 1, 2005, Stockholm, Sweden
- [18]. The Uniform stabilization of the non-uniform Timoshenko beam. International Conference, Dynamical Systems and Applications, Antalya, July 5-10, 2004.
- [19]. Boundary and local stabilization of the Timoshenko beam. WSEAS Int. Conf. on Electronics, Control & Signal Processing. Singapore, December 9-12, 2002

- [20]. Stabilization of the simulation of SAW devices on stratified structures: Application for transverse Plate Mode Resonators. Frequency Control and PDA Exhibition, 6-8 June, Seattle, 2001.
- [21]. Mixed finite element/ boundary element computations of 2D and 3D piezoelectric transducers radiating in fluids. Medical ultrasonic transducers, August 15-17, Pennsylvania state university, 2001.
- [22]. A full 3D Plane-Wave-Expansion model for the simulation of piezo-composite materials. Medical ultrasonic transducers, August 15-17, Pennsylvania state university, 2001.
- [23]. Excitation of acoustic wave under periodic Metal Gratings Deposited on AlN/Si substrate. Material congres 2000, Cirencestor, Gloucesterhire, UK, April 2000.
- [24]. Uniform stability of coupled second order equations. International congres NSF-CBMS-Mathematical Control Theory of Coupled Systems of Partial Differential Equations at Lincoln(U.S.A), August 1999.

VISITS

- One week, April 2014, KFUPM, KSA.
- One Month, Summer 2004, CNRS-LPMX, Besancon, France.
- Two Weeks, July 2004, Konstanz University, Germany.
- One Week, July 2003, Konstanz University, Germany.
- One Month, Summer 2002, CNRS-LPMX, Besancon, France.

PROFESSIONAL ACTIVITIES

1. Member of the organizing committee for the Second Sharjah International Spring school in Mathematics, March 24-25, 2019, University of Sharjah.
2. Member of the Scientific committee for the First Sharjah International Conference in Particle Physics, November 11-13, 2018, University of Sharjah.
3. Member of the organizing committee for the First Sharjah International Spring school in Mathematics, March 25-27, 2018, University of Sharjah.
4. Member of the Editorial Board of the International Journal of Applied Physics and Mathematics (IJAPM) <http://www.ijapm.org/>
5. 2017: Mamber of the technical program committee, International conference on Mathematics computational Sciences and Engineering. July 27-28. Japan. <http://www.icmce.opensociety.org/icmce/>
6. 2016: Member of the organizing committee for the 9th international conference on Thermal Engineering: Theory and Applications. <http://www.ictea.ca/>
7. 2015: Member of the Advisory and Scientific Board of the Conference: 4th international conference: Mathematics and its applications. <http://www.adu.ac.ae/en-us/icmsa2015.aspx>
8. 2015: Member of the organizing committee for the LICMA'15 international conference on mathematics and applications, Labanese University, Beirut 26-29 May 2015.
9. 2008- 2011: Editorial Board Member of ALHOSN University Journal of Engineering and Applied Sciences.

10. 2009- Now: Referee of papers for Journal of Applied Mathematics Letters, USA.
11. 2010- Now: Referee of papers for Journal of Applied Mathematics and Computing, USA.
12. 2004- Now: Referee of papers for Electronic J. Differential Equations, USA.
13. 2008- Now: Referee of papers for Journal of Math. Analysis and Applications, USA.
14. 2007- Now: Referee of papers for Journal of Applied Math and Computations, USA.
15. 2008- Now: Referee of papers for Journal of Applicable Analysis, USA.
16. 2004- Now: Member of Research Group in Mathematical Inequalities and Applications.
17. 2005- Now: Research evaluator of funded project from King Fahd of Petroleum and Minerals, KSA.
18. 2010: Chair session at the first international Conference on Mathematics and Statistics (AUS-ICMS'10), American University of Sharjah, March 18-2, 2010.
19. 2008: Member of the organizing committee for the Sixth UAE-Math Day, Petroleum Institute.
20. 2006: Member of the organizing committee for the Fourth UAE-Math Day, UAEU.
21. 2005: Member of the Scientific committee of the 2nd ICMA2004 (the 2nd UAEU International Conference of Mathematical Sciences). Al Ain, UAE University.
22. 2004: Member of the organizing committee for the 2nd UAEU Math Day.

COMMITTEES MEMBERSHIP

I am serving / served as a member of the following:

- Member of the College Promotion committee, University of Sharjah (2016-Now).
- Member of the College recruitments committee, University of Sharjah (2016-Now)
- Member of the college council, University of Sharjah (2016-Now)
- Member of department Hiring committee, University of Sharjah (2016-Now).
- Member of the placement exam committee, department of Mathematics , University of Sharjah (2016- 2017) .
- Member of European Mathematical society (2012-2014).
- Member of Faculty affairs and Promotion committee, ALHOSN Univ. (2014-2015)
- Member of the teaching schedule committee, department of Mathematics , University of Sharjah (2013- 2014) .
- Member of the placement exam committee, department of Mathematics , University of Sharjah (2013- 2014) .
- Member of the Examinations committee, department of Mathematics , University of Sharjah (2013- 2014) .
- Member of the Curriculum committee at ALHOSN Univ. (2011-2013).
- Member of the Research committee at ALHOSN Univ. (2008 - 2011).
- Member of the Research & Faculty Affairs committee at ALHOSN Univ. (2006 -2008).
- Member of the Curriculum committee at ALHOSN Univ. (2006 - 2007).
- Member of the graduation committee at ALHOSN Univ. (2008-2009).

- Member of the Exam committee at ALHOSN Univ. (2007 - 2010).
- Member of the Student Affairs Committee at ALHOSN Univ. (2007-2008).
- Coordinator for the Students advising committee, Mathematics Department at UAE Univ. (2004 - 2006).
- Member of the Alumni committee, Faculty of Science, at UAE Univ. (2005 - 2006).
- Member of Graduate Studies and Scientific Research Committee, Mathematics Department at UAE Univ. (2004 - 2005).
- Member of the Academic Outcomes committee, Mathematics Department at UAE Univ. (2004 - 2005).

AWARDS

- **1994-1999:** Teaching and Research Assistantship (Univ. Franche Comte, France).
- **1994-1999:** Moroccan government Scholarship for graduate studies abroad.

COMPUTER SKILLS

Fortran 90, Matlab, Mathematica, Maple, FemLab, Microsoft office, Latex, Scientific Workplace.