Curriculum Vitae of
Farida MOKCHAHA-HMISSI

Full Name: Farida Chedly MOKCHAHA-HMISSI
Date / Place of Birth: March 15, 1959 / Ras Jebel (Tunisia)
Citizenship: Tunisia
Martial Status: Married, one son (17 years).
Function: : Mathematics Professor

Present Address: Department of Mathematics and Statistics, College of Science, Al-Imam Muhammad Ibn Saud Islamic University, P.O. Box 90950, Riyadh 11623, Saudi Arabia
E-mail: fcmokchaha@imamu.edu.sa
Web site: https://members.imamu.edu.sa/staff/fcmokchaha/Pages/default.aspx

Current Address: Institut Préparatoire aux Etudes d'Ingénieurs de Nabeul (I.P.E.I.N.) Campus Universitaire, TN-8000 El Mrazga, Nabeul, Tunisia
E-mail: Farida.Hmissi@fst.rnu.tn

Field of Specialization: Potential Analysis; Stochastic Analysis.

Languages: Arabic: native; French: very good; English: good; German: good

ACADEMIC QUALIFICATIONS

2005 : Habilitation: University of Tunis Elmanar.
Title: Bochner Subordination, Additive Kernels and Ergodicity
Scientific Committee: Juergen Bliedtner, Klaus Janssen (Germany)
Med Salah Khalgui, Hedi Bensaad, Ezeddine Haouala (Tunisia).

1993 : These of Speciality: University of Tunis Elmanar (with high honors).
Prepared at the University of Frankfurt .
Title: An analytical and probabilistic study of Fatou-Naim-Doob theorem
Advisor: Juergen Bliedtner (Frankfurt)

1985 : Master of Sciences in Mathematics: (with honors)
University of Tunis Elmanar.
Title: Markov processes with identical exit laws
Advisor: Klaus Janssen (Duesseldorf).

1983 : Bachelor of Sciences in Mathematics: (with high honors)
University of Tunis Elmanar.

POSITIONS

2014-Now : Professor at Al-Imam University, Riyadh (Saudi Arabia)
2012-2014 : Professor at the University of Tunis Carthage (Tunisia).
2007-2012 : Associate Professor at the University of Tunis Carthage (Tunisia).
1994-2007 : Assistant Professor at the university of Tunis Elmanar (Tunisia).
1992-1994 : Assistant at the university of Tunis Elmanar (Tunisia).
1990-1992 : Assistant (Lecturer) at the university of Frankfurt (Germany).
1985-1989 : Assistant at the university of Tunis Elmanar (Tunisia).

UNIVERSITY TEACHING

Bachelors Degree in Mathematics:
- Abstract algebra; Linear algebra; Calculus; Real Analysis.
- Differential Equations; Measures Theory; Probability, Mathematical Statistics.

Master in Mathematics: Stochastic Analysis
- **Probability:** Conditional Expectation, Stopping Time, Martingale.

- **Markov Processes:** Transition Function, Brownian Motion, Lévy Process, Markov Chains.
- **Potential Theory:** Resolvent, Semigroup, Excessive Functions, Potentials, Integral Representation.

Manuscripts (In French)
- Probability for Bachelors (with Mohamed Hmissi).
- Probability for Master (with Mohamed Hmissi).

INTERNATIONAL CONFERENCES

- European Conference on Iteration Theory (ECIT): Batschuns (Austria) 1989, Gargnano (Italy) 2006, Nant (France) 2010.
- International Conference on Potential Analysis: Utrecht (Holland) 1991 et Kouti (Czech Republic) 1994, Hammamet (Tunisia) 1998 (Local Organizer), Bielefeld (Germany) 2003.
- The conferences of the Tunisian Mathematical Society: I often attended this annual conference since 1998.
- International Conference on Stochastic Analysis and Applications (ICSAA): Hammamet (Tunisia) 2007,2009,2011 and 2013.
- Connected International Meetings Professional Association: CIMPA School and Conference, Lévy Processes and Self-Similarity, Tunis and Hammamet 2013.

AWARDS AND SCHOLARSHIPS

- Invited from the Universities of Dusseldorf and Francfurt (Germany), June 2007 and June 2013.
- Grand from the CNRS (National Center for Scientific Research), University of Every (France), June 1998.
- Grant from the DAAD (German Academic Excange Service), University of Dusseldorf, June-July 1985, June-July 1986.
- Tunisian Government Scholarship for graduate studies in France, 1979.
- The first regional award for excellence diploma from high school in the governorate of Bizerte, 1978.

RESEARCH EXPERIENCE

- Supervised Master Theses: 3 (achieved).
- Supervised Ph. D These: 1 (co-supervisor) +1 (in preparation).

RESEARCH INTERESTS

- **Potential Analysis:** Fatou-Naim-Doob Theorem, Harmonic Functions, Riesz Potentials, Energy Formulas, Additive Kernels, Integral Representation, Exit Laws, Entrance Laws, Bochner Subordination, S-Subordination.
- **Stochastic Analysis:** Infinite Dimensional Dynamical Systems, Ergodicity, Random Dynamical Systems (RDS), Gradient-like RDS.

PUBLICATIONS

1. Hmissi F.: Théorèmes aux limites cofines sur les H-cônes de fonctions. Revue Roumaine Math. pures appli. 39, 659-666 (1994)

2. Hmissi F.: Fonctions harmoniques pour les potentiels de Riesz sur la boule unité. Expo. Math. 12, 281-288 (1995)

3. Hmissi F., Hmissi M.: Additive Kernels and Integral Representation of Potentials. Potential Analysis 15, 123-132 (2001)

4. Hmissi F., Hmissi M.: Bochner Subordination and Ergodicity. Grazer Math. Berichte 346 , 211-221 (2004)

5. Hmissi F.: On Energy Formulas for Symmetric Semigroups. Ann. Math. Sielesianae 19, 7-18 (2005)

6. Hmissi F., Maaouia W.: On Bochner Subordination for Contraction Semigroups with Sector Condition. Int. J. of Applied Math.18 No. 4, 429-445 (2005)

7. Hmissi F., Hmissi M.: On Dynamical Systems generated by Homogeneous Processes. Grazer Math. Berichte 350, 144-155 (2006)

8. Hmissi F., Hmissi M., Maaouia W.: On Bochner Subordination of Densities. Grazer Math. Berichte 351, 52-65 (2007)

9. Hmissi F., Hmissi M.: On subordination of resolvent and application to right processes. Stochastics: An International Journal of Probability and Stochastic Processes 351, Taylor and Francis, 52-65 (2009)

10. Hmissi A., Hmissi F., Hmissi M.: On gradient-like random dynamical systems. in: Fournier-Prunaret D. et al.(eds.), European Conference on Iteration Theory, Nant 2010, ESAIM: Proceedings and Surveys, Vol. 36, 217-228 (2012)

11. M. Hmissi, F. Mokchaha, A. Hmissi: On potential kernels associated with random dynamical systems. Opuscula Math. 35, No. 4, 499-515 (2015)

12. M. Hmissi, F. Mokchaha, A. Hmissi: On locally parallelizable random dynamical systems. Submitted (2016)