

Curriculum Vitae

April 2015

Name: Attouchi Mourad

Present Position: Assistant Professor: Seafood quality and valorization

Nationality: Tunisian

Date of Birth: January 7th 1973

Sex: Male

Marital status: Married, four children

Home Address: Appt. 1, Bloc Mabrouk 2, Cité de la Banque, Megrine, 2033, Tunisia.

Present employment: Department of Marine Biodiversity and Biotechnology,

Division of Aquatic Products Quality and Valorization,

National Institute of Sea Sciences and Technologies (INSTM), La Goulette Center

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Education qualifications

2004-2012: Doctorate Degree (Ph.D) in Biological Sciences and Biotechnology, (Fish quality and valorization), Higher Institute of Biotechnology, Monastir University, Tunisia.

Thesis: “Study of sea bream (*Sparus aurata*) quality based on storage condition; comparison between wild and farmed fish”

1997-2000: Advanced Studies Degree (DEA) in General Ecology, (Animal Physiology), Faculty of Sciences, Tunis El Manar University, Tunisia.

1992-1997: Bachelor's Degree of Natural Sciences, Faculty of Sciences, Tunis El Manar University, Tunisia.

1985-1992: High School Diplomas in Experimental Sciences, Menzel Bou Zelfa secondary School, Tunisia

Qualification and skills

1) Employment history

February 2013-present: Assistant professor of seafood quality and valorization, Department of Marine Biodiversity and Biotechnology, National Institute of Sea Sciences and Technologies, Tunisia.

2004-2013: Researcher (seafood quality and valorization), Department of Marine Biodiversity and Biotechnology, National Institute of Sea Sciences and Technologies, Tunisia.

2000-2004: Natural Sciences teacher, Fériana Secondary School, Kasserine, Tunisia.

2) Skills

Language

Arabic: mother tongue

French: Fluent written and spoken (language of instruction)

English: Fairly written and spoken

Equipments

High Performance liquid chromatography (HPLC)

Liquid chromatography-coupled to tandem mass spectrometry (LC-MS/MS)

Inductively coupled plasma atomic emission spectroscopy (ICP-AES)

Gas chromatography (GC)

Electrophoresis and protein analysis

Flow injection analysis (FIA)

Spectrophotometer, plate reader

Techniques and protocols

Flow injection analysis of TVB-N, TMA-N, TMAO, Nitrites/Nitrates...

Analysis of amino-acids, biogenic amines, nucleotides, vitamins by HPLC

Analysis of fatty acids by GC

Proximate composition analysis

Analysis of lipophilic marine biotoxins by LC-MS/MS

Analysis of elemental composition by ICP-AES

Electrophoresis 2D and 3D

Fish sensory evaluation

Microbiological analysis

Seafood processing technologies (refrigeration, freezing, smoking, vacuum packaging, addition of natural antioxidant and antibacterial, irradiation...)

Teaching Experience

2008-2009: Teaching Assistant, part time

Title: Seafood technology and processing

Bachelor of Applied Animal Biotechnology (3rd grade), Higher Institute of Biotechnology of Beja, Jendouba University, Tunisia

2008-2009: Teaching Assistant, part time

Title: Seafood technology

Master of vegetal and animal resources biotechnology and exploitation, Higher Institute of Biotechnology of Beja, Jendouba University, Tunisia

2000-2004: Secondary school teaching

Title: Natural sciences

Fériana Secondary School, Kasserine, Tunisia

Organization of conferences

-International seminar: “Fatty Acids from Marine Sources. Opportunities for Health, Education, Training and Investment” jointly organized by INSTM, CE.NA.FF.IF and London Metropolitan University. May 2006, Rades, Tunisia. Member of the organizing committee.

- International seminar: “The School of Marine Chemistry and its Application” CMAPP 2011, jointly organized by CNRS (INC), Université Paris-Est Marne-La-Vallée, Faculté des Sciences de Tunis, Université de Tunis El Manar, Institut Préparatoire aux Etudes Scientifiques et Techniques de la Marsa, Université de Carthage and INSTM. November /December 2011, Tunis, Tunisia. Member of the organizing committee.

Computer

Windows, Microsoft Office, Internet research...

Statistics: SPSS, The Unscrambler (Multivariate data analysis)

Professional qualifications and training

Research interests:

Seafood chemistry

Seafood composition and analysis: nutritional and freshness traits evaluation by chemical, microbiological and organoleptic methods.

Study of generic and specific quality of fish

Fish processing technologies and extending shelf life

Improvement of fish quality/safety

Fish and fish by-product valorization

Impact of the implementation of new technologies on the quality, safety and nutritional value of fish

Extraction of bio-active molecules of industrial/commercial interest from underutilized marine species or by-products

Active contribution in national and international research projects conducted within the National Institute of Sea Sciences and Technologies (INSTM)

Collaboration with socio-economic environment and stakeholders in the field of seafood production and industry

Trainings and Certifications:

2010 Research Training period on lipophilic marine biotoxins analysis by LC-MS/MS. Phycotoxin Research Labrotory (Ifremer, Nantes, France), supervised by Pr. Zouher Amzil. (1 month).

2010: Course on Advanced security in the field, United Nations Department of Safety and Security, United Nations Organization (online).

2008: Training period on liquid chromatography-coupled to tandem mass spectrometry (LC-MS-MS), Applied Biosystem/INSTM, supervised by Dr. Houssain El Aribi and Mr. Sylvan Ronzoni. (3 weeks).

2005: Bio-mathematics and statistics course: Second school of bio-mathematics, Institut Pasteur de Tunis, Tunisia. (9 days)

1999-2000: Training period on Medical and biological analysis. Laboratoire d'analyses médicales de Dr. Zeineb Kamoun Fourati, Centre Ibn Zohr, Voie X2, Cité El Khadhra, Tunis, Tunisia.

1999: Certificate of Aptitude for Secondary School Teaching (CAPES), Natural sciences, Tunisian Ministry of Education.

Selected research project references

National projects:

- 1) 2011-present:** Project member of: “Innovative bio-products and seafood quality” (BIONQA), funded by Tunisian higher education and scientific research ministry. Project coordinator: Pr. Saloua Sadok.
- 2) 2008-2009:** Contributing to the project: “Sardine and Sardinella in post capture sector: Contribution to quality improvement”, funded by Inter-professional Group of Fishery Products (GIPP). Project coordinator: Pr. Saloua Sadok.
- 3) 2007-2010:** Project member of: “Seafood quality and anti-stress treatment” (QUALITAS), funded by Tunisian higher education and scientific research ministry. Project coordinator: Pr. Saloua Sadok.
- 4) 2006-2010:** Contributing to the project: “Study of post-mortem quality preservation in white and royal shrimp”, Research/development action IRESA/GIPP (06-680), Project coordinator: Pr. Saloua Sadok. Funded by the reinforcement of agriculture support services programme, World Bank.
- 5) 2004-2006:** Project member of: “Stress indicators and marine animals alterations monitoring” (ISSALAMA), funded by Tunisian higher education and scientific research ministry. Project coordinator: Pr. Saloua Sadok.

International projects:

- 1) 2012-present:** Contributing to the strategic project: “Marine biotechnology ,Vector of innovation and quality” (BioVecQ) project n°1.3_08. Cross border cooperation (CBC) Italy-Tunisia (2007-2013). European Neighbourhood and Partnership Instrument (ENPI programme). Project manager: INSTM, Coordinator: Pr. Saloua Sadok <http://www.italietunisie.eu/>
- 2) 2011-present:** Contributing to the project:” Development of an integrated biorefinery for processing chitin rich biowaste to specialty and fine chemicals » -ChiBio- project n° 289284. Seventh Framework Programme for Research and Technological Development (FP7), coordinated by Fraunhofer IGB. INSTM coordinator: Pr. Saloua Sadok. <http://www.chibiofp7.fraunhofer.de/>
- 3) 2011-2013:** Contributing to the project:” Fish and shellfish authentication and quality using chemical and molecular fingerprinting methods”, Tunisian-Egyptian scientific cooperation (INSTM- CEAS). INSTM coordinator: Pr. Saloua Sadok.

4) 2009-2012: Project member of: “Health, quality and valorization of marine organisms”, Tunisian-French scientific cooperation (INSTM-Ifremer). INSTM coordinator: Pr. Saloua Sadok.

5) 2006-2008: Project member of: “Shelf life extension of fresh fish using essential oils and MAP: chemical, microbiological and sensory attributes”, Tunisian-Greece scientific cooperation (INSTM-Ioannina University), Project n° 25/TG/05.

Publications

- Anastasio A., Marrone R., Chirollo C., Smaldone G., Attouchi M., Adamo, P., Sadok S. & Pepe T. (2014). Swordfish steaks vacuum-packed with *Rosmarinus officinalis*. Ital. J. Food Sci., 26, 390-397.

-Mourad Attouchi & Saloua Sadok (2012). The Effects of essential oils addition on the quality of wild and farmed sea bream (*Sparus aurata*) stored in ice. Food & Bioprocess Technology, 5, 1803-1816.

-Mourad Attouchi & Saloua Sadok (2011). Effets de la congélation sur le profil protéique des filets de la Dorade royale (*Sparus aurata*): comparaison entre le poisson sauvage et d'élevage. Bulletin de l'Institut National des Sciences et Technologies de la Mer de Salammbô. Vol. n°38, 151-159.

-Mourad Attouchi & Saloua Sadok (2010). The effect of powdered thyme sprinkling on quality changes of wild and farmed gilthead sea bream fillets stored in ice. Food Chemistry, 119, 1527-1534.

-Mourad Attouchi, Saloua Sadok & Ahmed Slaheddine Masmoudi (2006). Comparative quality assessment of Tunisian wild and farmed gilthead sea bream (*Sparus aurata*) stored at +8°C. Biologia Tunisie, n° 4, 50-51.

Conference/meeting:

-Mourad Attouchi & Saloua Sadok. Evolution des propriétés lipidiques chez la dorade royale (*Sparus aurata*) d'origine sauvage et d'élevage au cours du stockage à l'état congelé. 15^{ème} Journées Tunisiennes des Sciences de la Mer, 3^{ème} Rencontre Tuniso-Française d'Ictyologie. December 2013, Mahdia, Tunisia (Oral).

-Mourad Attouchi & Saloua Sadok. Capacité de rétention de liquide du muscle de la dorade (*Sparus aurata*) sauvage et d'aquaculture en phase post-mortem: Effet d'un antibactérien naturel. 20èmes Journées Biologiques ATSB, 5^{ème} Congrès Maghrébin de Biotechnologie AMB. March 2009, Hammamet, Tunisia. (Oral).

-Mourad Attouchi & Saloua Sadok. Muscle protein changes in wild and farmed sea bream (*Sparus aurata*) fillets stored under vacuum packaging and essential oil treatment. International Symposium: Tunisia-Japan Symposium on Society, Science & Technology. TJASSST, November 2008, Sousse, Tunisia (Poster).

- Attouchi M., Sadok S., Masmoudi A. S. Comparaison de la variation de l'état de fraîcheur de la dorade (*Sparus aurata*) sauvage et cultivée au cours du stockage réfrigérée (+8°C). 17èmes Journées Biologiques, 1^{er} Congrès Maghrébin de Biologie et de Biotechnologie. ATSB. March 2006, Hammamet, Tunisia. (Oral).

-Attouchi M., Sadok S., Masmoudi A. S. The effect of an antioxidant (*Thymus vulgaris*) on the lipid profile of wild and cultured gilthead sea bream (*Sparus aurata*) stored at +8°C. International seminar: Fatty acids from marine sources, Opportunities for health, Education, Training and Investment. May 2006, Rades, Tunisia (Poster).

- Attouchi M., Sadok S., Masmoudi A. S. Suivi de la qualité biochimique des filets de la dorade (*Sparus aurata* L. 1758) sauvage et d'élevage stockée à (+2°C). 3ème congrès international Franco-tunisien de Zoologie. November 2006, Tabarka, Tunisia. (Poster)

- Attouchi M., Sadok S. Influence de l'exposition chronique aux ions nitrites, sur l'excrétion ammoniacale chez un mollusque bivalve : la palourde (*Redutapes decussatus*). 3ème congrès international Franco-tunisien de Zoologie. November 2006, Tabarka, Tunisia (Poster).

- Mourad Attouchi, Ahmed Slaheddine Masmoudi & Saloua Sadok. Profile lipidique des filets de la dorade (*Sparus aurata*) sauvage et d'élevage entreposés à une température de +2°C : Effet du traitement par le thym (*Thymus vulgaris*). 8ème Journées Tunisiennes des Sciences de la Mer. December 2006, Hammamet, Tunisia. (Poster) (2th award of best poster).

-Attouchi M., Gharbi N., Kamoun A., El Fazaa S. Effect of chronic fasting on the growth and the sexual maturation of newborn rat. 12ème journées nationales de biologie. SSNT. November 2001, Monastir, Tunisia (poster).

Association membership

- Since 2006: Tunisian association of biological sciences (ATSB)
- Since 2006: Tunisian association of marine sciences (ATSMer)