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University of Fort Hare, South Africa*

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The Tunisian Society for Microbial Ecology, ATEM

The Arabian-African Desert Microbial Ecology Network

**1st Tunisian-South African International-Workshop
Microbial Ecology and Biotechnology in Stressful Environments
November 4th - 6th 2016, ISBST, Sidi Thabet, Tunisia**

Workshop: 04th-06th November 2016

Thursday 03th November, Arrival day

Transport will be assured for the speakers from airport to the hotel

Friday 04th November, Workshop conferences (day 1: at ISBST)

08h00-08h30: Registration

08h30-08h40: **Abdellatif Boudabous**, President of the CNEAR (National Committee for Scientific Research Activities Assessment): Conference opening.

08h40-08h50: **Ahmed Slaheddine Masmoudi**, ISBST Director: Conference opening and welcoming the participants.

08h50-09h00: **Ameur Cherif**: Presentation of the TN-SA project I: AADMEN: An African Desert Soils Microbial Ecology Research Network.





09h00-09h10: **Atef Jaouani:** Presentation of the TN-SA project II: Bact-BIOVAL: Exploration for Novel Xylanases and Ligninases Produced by Actinobacterial Species for Biomass Valorization.

09h10-09h40: Plenary lecture 1: **Donald Arthur Cowan:** The microbial ecology of the Namib Desert.

09h40-10h10: Plenary lecture 2: **Uchechukwu U. Nwodo:** Actinobacteria species-Anti-infective Compounds: Present and Future Prospect.

09h10-10h40: Plenary lecture 3: **Daniele Daffonchio:** The rhizosphere of desert plants and the associated microbiota.

10h40-11h10: Coffee break

11h10-11h30: Invited speaker 1: **Angel Valverde:** Deciphering microbial diversity using sequencing data.

11h30-11h50: Invited speaker 2: **Afef Najjari,** Haloarchaeal ecology in Tunisian desert ecosystems.

11h50-12h10: Invited speaker 3: **Ramona Marasco:** Date palm root microbiome: the ecological services involved in plant growth, survival and tolerance to abiotic stresses.

12h10-12h30: Invited speaker 4: **Ameur Cherif:** Insights for behavioral ecology of Haloalkaliphilic bacterium *Oceanobacillus* sp E9, through whole genome and secretome analysis.

12h30-14h00: Lunch

14h00-14h20: Invited speaker 5: **Anthony I. Okoh:** The Water Research Initiatives of the University of Fort Hare.

14h20-14h40: Invited speaker 6: **Atef Jaouani:** Microfungi of extreme Saharan environments in southern Tunisia

14h40-15h00: Invited speaker 7: **George Tsiamis:** Pesticides: Felicity or curse for the soil microbial community?





15h00-15h20: Invited speaker 8: **Yasmine Souissi:** An efficient analytical strategy for the characterization of the transformation products of anthropogenic compounds under extreme conditions of UV irradiation.

15h20-15h40: Invited speaker 9: **Haitham Sghaier:** Ionizing-radiation resistance and desiccation tolerance: Old wine in a new bottle.

15h40-16h00: Invited speaker 10: **Mohamed Neifar,** Halomonas desertis G11, a new halophilic bacterium with bioremediation potential.

16h00-16h30: Coffee break

16h30-16h40: Oral communication 1: **Nadra Korbi:** Unusual laccase activity from Cladosporium.

16h40-16h50: Oral communication 2: **Refka Askri:** Electroactive biofilms generated by electrochemically active microorganisms from tunisian hypersaline sediments.

16h50-17h00: Oral communication 3: **Ayodeji O. Falade:** Ligninolytic and Peroxidase Production Potentials of Novel Bacterial Strains Isolated from the Aquatic and Terrestrial Milieux of the Nkonkobe Municipality, Eastern Cape, South Africa.

17h00-17h10: Oral communication 4: **Rania Ouertani:** Azo dye decolourization by laccase-producing Microbacterium sp. strains isolated from leather industry.

17h10-17h20: Oral communication 5: **Nontongana N:** Prevalence and antibiogram profiling of Escherichia coli pathotypes isolated from the Kat River and Fort Beaufort abstraction water.

17h20-17h30: Oral communication 6: **Soukayna Abdelwahed:** Miniaturization PGP tests.

17h30-17h40: Oral communication 7: **Fatma Arous:** Potential utilization of starch rich by-products for lipid production by the oleaginous yeast Candida lipolytica.

17h40-17h50: Oral communication 8: **Marwa Cherni:** Endophytic bacterial community associated to Citrus roots and their effects to alleviate plant salt stress.

17h50-18h00: Oral communication 9: **Fatma Neili:** Alleviation of salt stress in wheat by extremely halotolerant plant growth-promoting bacteria.





18h00-18h10: Oral communication 10: **Wafa Hassan:** Production, characterization and potential application in pesticide solubilization of a glycolipid biosurfactant from a PGPB bacterial isolate *Pseudomonas brassicacearum* D11.

18h10-18h20: Oral communication 11: **Amal Hafsi:** Actinomycetes from Forests of Northern Tunisia.

18h20-18h30: Oral communication 12: **Soumaya Boudagga:** The *in vitro* cultivation of some macromycete species and exploration of their biotechnological potential.

18h30-19h00: General Discussion – Closing of the conference session

20h00: Dinner

Poster session: All the day

Saturday 05th November, Workshop Practical session (day 1 at ISBST laboratories)

09h00-13h00: **Practical session 1:** Molecular microbial ecology methods to assess microbial diversity in extreme environments (DNA extraction, PCR, DGGE gel preparation): Hanene Cherif, Khaled Elmnasri and Mouna Mahjoubi (University of Manouba).

13h00-14h00: Lunch

14h00-18h00: **Practical session 2:** Molecular microbial ecology methods to assess microbial diversity in extreme environments (DGGE gel running, 16S rRNA libraries, and ARISA): Hanene Cherif, Khaled Elmnasri and Mouna Mahjoubi (University of Manouba).

20h00: Dinner

Sunday 06th November, Workshop Practical session (day 2 at ISBST laboratories)

09h00-13h00: **Practical session 3:** Metagenomic analysis: Afef Najjari (University of Tunis El Manar) and Angel Valverde (University of Pretoria, South Africa).

13h00-14h00: Lunch

14h00-16h00: **Practical session 4:** Screening for plant growth promoting activities, PGPR formulation, effects on wheat seed germination under stressful conditions: Hanene Cherif, Amel Guesmi and Fatma Neili (University of Manouba).





16h00-18h00: **Practical session 5:** Screening for enzyme and antimicrobial activities:
Chadlia Hamdi, Amani Ayari and Amel Hafsi (University of Tunis El Manar),
Rania Ouertani and Wafa Hassen (University of Manouba)

14h00-15h00: General Discussion

