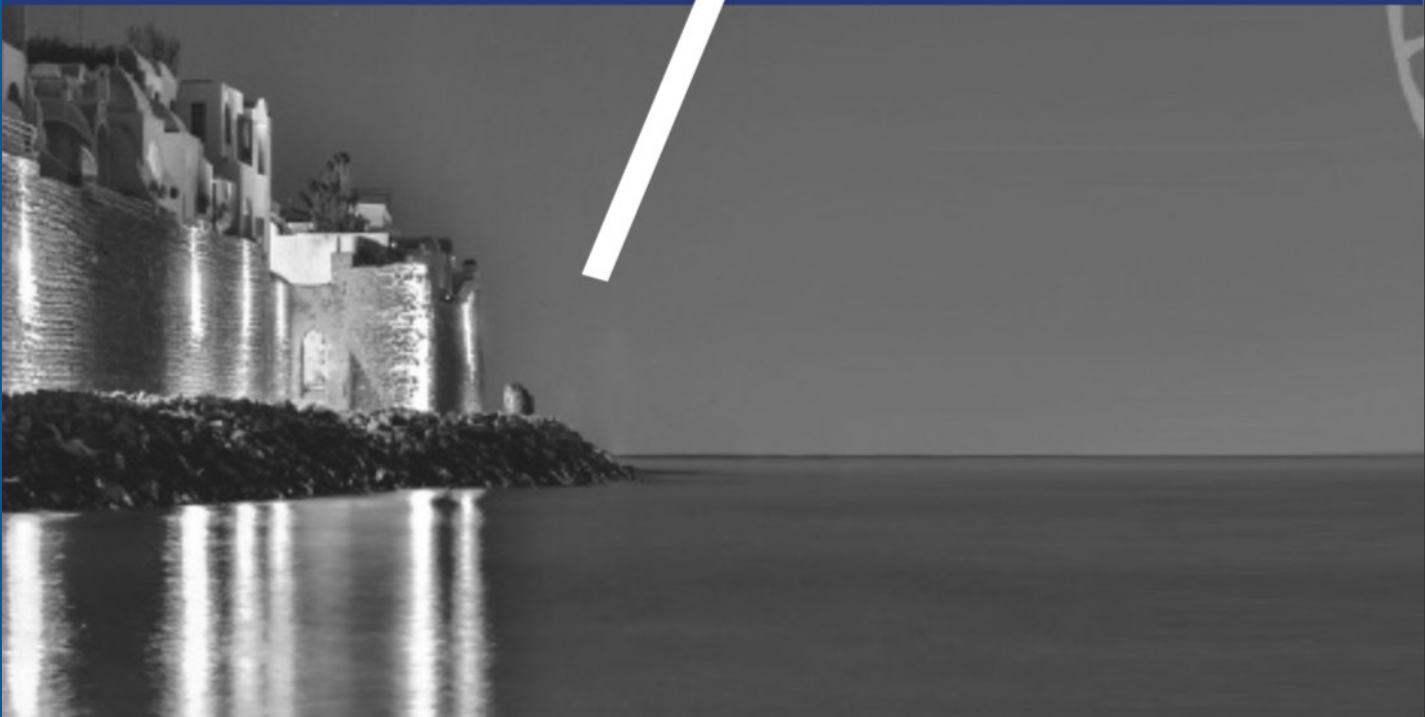


5<sup>th</sup>.

5<sup>th</sup> International Congress of  
Biochemistry and Microbiology  
Applied Technologies  
4-6 November 2022,  
Occidental Marco Polo Hotel,  
Hammamet, Tunisia

BMAT 2022



[www.aeaenvironnement.com/BMAT2022.html](http://www.aeaenvironnement.com/BMAT2022.html)



# WELCOME TO BMAT-2022

On behalf of the Organizing Committee and AEAE Executive Office, we wish to welcome you at the 5<sup>th</sup> International Congress of **Biochemistry and Microbiology Applied Technologies**, BMAT'2022, which is taking place at Hotel Occidental Marco Polo Hotel, Hammamet, from 4 to 6 November 2022. Our main aim has been to set up a discussion platform between researchers relating to Biochemistry and Microbiology from different institutions.

We are proud that due to excellent submissions we have been able to put together an outstanding scientific program that highlights the current state of knowledge in Biochemistry & Microbiology. A Scientific Committee that discussed the conference topics was established. It was constituted of eminent academicians and renowned researchers from several countries. Around 140 abstracts for 3 thematic sessions have been handed in. The speakers will come from various European countries, Algeria, Libya as well as from Tunisia. In this copy, the abstracts are presented categorised by the individual sessions.

We wish to all participants a successful conference and pleasant time in the charming town Hammamet as well as in Tunisia.

Taoufik GHRAIRI and Chedly CHOUCANI  
on behalf of the organisers

PUBLISHER  
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Taoufik GHRAIRI

EDITORS  
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GRAPHIC DESIGN  
Taoufik GHRAIRI

**ISBN:**

**The Publisher and the Editors are not to be held responsible for any substantial or linguistic imperfections that might be found in the abstracts published in this book.**

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- Nedra ASSES (ISSTE, Carthage University)
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- Hannen SALLAMI (CERTÉ, Tunisia)
- Lotfi LOUCIF (Batena University, Algeria)
- Wided MEGDICHE (CBBC, Borj-Cedria, Tunisia)

## **BMAT2022 Speakers**

### **Intranasal effects of an analogue of the gliopeptide ODN on mice body weight**



**Omayma Dlimi<sup>1</sup>, Damien Lanfray<sup>1</sup>, Arnaud Arabo<sup>2</sup>, Julie Maucotel<sup>2</sup>, Myriam Spajer<sup>1</sup>, Amine Bourzam<sup>1,3</sup>, Karthi Duraisamy<sup>1</sup>, Benjamin Lefranc<sup>1,2</sup>, Nicolas Chartrel<sup>1</sup>, Jérôme Leprince<sup>1,2</sup>**

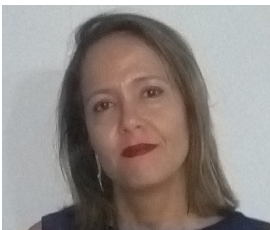
<sup>1</sup>Inserm U1239, Laboratory of Neuronal and Neuroendocrine Differentiation and Communication, Normandy University, 76000 Rouen, France

<sup>2</sup>Inserm US51, CNRS UAR 2026, HeRacLeS, Rouen Normandie Université, Rouen, France

<sup>3</sup>Laboratoire de Neurophysiologie et Physiopathologie Cellulaire et Valorisation des Biomolécules, Université de Tunis El Manar, Tunis, Tunisie

[jerome.leprince@univ-rouen.fr](mailto:jerome.leprince@univ-rouen.fr)

### **Use of food by-products in biopackaging for food preservation**



**Khaoula KHWALDIA**

Laboratoire des Substances Naturelles (LSN), Institut National de Recherche et Analyse Physico-chimique (INRAP), Tunisia

[khaoula.khwaldia@inrap.rmt.tn](mailto:khaoula.khwaldia@inrap.rmt.tn)

### **Epigenetic Mechanisms Controlling Ionic Homeostasis in Brain Ischemia**



**Lucio Annunziato**

University of Naples Federico II, Italy

[lannunzi@unina.it](mailto:lannunzi@unina.it)

### **Mobile genetic elements responsible for Antibiotic resistance in Gram negative bacteria**



**Allaaeddin El Salabi**

University of Benghazi, Libya

[allaadeein.elsalabi@uob.edu.ly](mailto:allaadeein.elsalabi@uob.edu.ly)

## Taste receptors as the target of anti-obesity strategy: role of plant taste modifiers



### **Naim-Akhtar Khan**

UMR 1231 INSERM/UB/AgroSup, Université de Bourgogne, France

[Naim-Akhtar.Khan01@u-bourgogne.fr](mailto:Naim-Akhtar.Khan01@u-bourgogne.fr)

## Impact of pesticides use on the emergence and evolution of antimicrobial resistance



### **Lotfi LOUCIF**

Batna 2 University, Algeria

[ihenriques@ua.pt](mailto:ihenriques@ua.pt)

## Is reproducibility of scientific results the current major challenge for biological research?



### **David Vaudry**<sup>1,2</sup>

<sup>1</sup>Brain and Cancer Genomic Laboratory, UNIROUEN, INSERM U 1245, Normandie University, France

<sup>2</sup>Regional Cell Imaging Platform of Normandy (PRIMACEN), HeRacLeS, Inserm US 51

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# The 5<sup>th</sup> International congress of Biochemistry and Microbiology Applied Technologies “BMAT-2022”

04-06 November 2022, Occidental Marco Polo Hotel, Hammamet, Tunisia

## BMAT-2022 PROGRAM

[Friday 04 November 2022](#)

**09h00 - 12h30** : Reception and Registration of the BMAT-2022 participants

**12h30 - 14h00** : Lunch

**14h00 - 14h30** : Official Opening Speechs

- Speech of BMAT-2022 Chair, **Pr. Taoufik GHRAIRI**
- Speech of Carthage University President, **Pr. Nadia MZOUGHFI**
- Speech of Tunis El-Manar University President, **Pr. Moez CHAFRA**
- Speech of Faculty of Sciences of Tunis Dean, **Pr. Nouredine AMDOUNI**

**Chairwomen : Pr. Olfa MASMOUDI and Pr. Maha MEZGHANI**

**14h30 - 15h15**: **Plenary Lecture, Pr. Lucio ANNUNZIATO**, University of Naples Federico II, Italy  
«Epigenetic Mechanisms Controlling Ionic Homeostasis in Brain Ischemia»

**15h15 – 16h20** : Oral presentations : **HO-01 to HO-6**

**16h20 - 17h00** : **Coffee Break**

**Chairmen : Pr. Nedra ASSES and Pr. Haythem MHADHBI**

**17h00 - 17h30**: **Plenary Lecture, Pr. Allaaeddin EL SALABI**, University of Benghazi, Libya  
«Mobile genetic elements responsible for Antibiotic resistance in Gram negative bacteria»

**17h30 – 18h30** : Oral presentations : **BO-01 to BO-06**

**18h30 – 19h30** : Poster Session : **(Biotechnology)**

**19h30 – 21h00** : **Dinner**

## Saturday 05 November 2022

Chairmen : Pr. Riadh KSOURI and Pr. Ameer CHERIF

09h00 - 09h30 : Plenary Lecture, Pr. Naim-Akhtar Khan, University of Bourgogne, France  
«Taste receptors as the target of anti-obesity strategy: role of plant taste modifiers»

09h30 - 11h00 : Oral presentations : **BO-07 to BO-15**

11h00 - 12h30 : Pr. Lucio ANNUNZIATO and Pr. Olfa MASMOUDI

- Pr. Jérôme LE PRINCE, INSERM, University of Rouen  
«Intranasal effects of an analogue of the gliopeptide ODN on mice body weight»
- Pr. David Vaudry, INSERM, University of Rouen  
«Is reproducibility of scientific results the current major challenge for biological research?»

12h30 - 14h00 : Lunch

Chairmen: Pr. Imen OUZARI-CHERIF and Pr. Lotfi LOUCIF

14h00 - 14h30 : Pr. Khaoula KHWALDIA, INRAP, Tunisia

«Use of food by-products in biopackaging for food preservation»

14h30 - 16h00 : Oral presentations : **IAO-1 to IAO-7**

16h00 - 16h30 : Coffee Break

Chairmen: Pr. Karim BEN SLAMA and Leila ABBAZA

16h30 - 17h15 : Plenary Lecture: Seydina Dienne, University Aix-Marseille, France

«Origin, diversity, and multiple roles of metallo- $\beta$ -lactamase fold enzymes from the different domains of life»

17h15 - 18h00 : Oral presentations : **HO-07 to HO-12**

18h00 – 19h30 : Poster Session : **(Health + Industry Application)**

19h30 – 21h00 : Dinner



## Sunday 06 November 2022

Chairmen: Pr. Yacine MABROUK and Pr. Olfa TABBENE

09h00 - 09h30 : Pr. Lotfi LOUCIF, Batna 2 University, Algeria :

*«Impact of pesticides use on the emergence and evolution of antimicrobial resistance»*

09h30 - 10h30 : Oral presentations : **BO-16 to BO-22**

10h30 - 11h00 : **Coffee Break**

11h00 - 12h00 :

Award ceremony for the best Oral Communication

Award ceremony for the best Poster Communication

12h00 : **Official Closing of BMAT-2022**



## ORAL AND POSTER COMMUNICATIONS LIST

HEALTH			
Oral Communication		Poster Communication	
H-O-01	<b>Yosra Hamdi</b>	H-P-01	<b>Amel Abderrahim</b>
H-O-02	<b>Asma Hamdi</b>	H-P-02	<b>Amel Abidi</b>
H-O-03	<b>Hatice Hale Gümüş</b>	H-P-03	<b>Amel Benbouza</b>
H-O-04	<b>Ines Othman</b>	H-P-04	<b>Amel Romdhani</b>
H-O-05	<b>Lazhar Zourgui</b>	H-P-05	<b>Ameni Kochbati</b>
H-O-06	<b>Mohamed Salah Abbassi</b>	H-P-06	<b>Amine Cherif</b>
H-O-07	<b>M. Nadjib Rahmoun</b>	H-P-07	<b>Amira Bouaziz</b>
H-O-08	<b>Raouaa Maaroufi</b>	H-P-08	<b>Amira Bouaziz</b>
H-O-09	<b>Saloua Benlabidi</b>	H-P-09	<b>Amira Bouaziz</b>
H-O-10	<b>Sana Dhaouadi</b>	H-P-10	<b>Amira Bouaziz</b>
H-O-11	<b>Allaeddin El Salabi</b>	H-P-11	<b>Anis Raddaoui</b>
H-O-12	<b>Idir Bitam</b>	H-P-12	<b>Anissa Yahyaoui</b>
		H-P-13	<b>Asma Hakem</b>
		H-P-14	<b>Assia Boudebza</b>
		H-P-15	<b>Assia Boudebza</b>
		H-P-16	<b>Azza Boulifi</b>
		H-P-17	<b>Bouthaina Hasnaoui</b>
		H-P-18	<b>Chahrazed Belarbi</b>
		H-P-19	<b>Dhouha Miniaoui</b>
		H-P-20	<b>Zoubida Soualem Mami</b>
		H-P-21	<b>Fatima Zohra Bali Djihane</b>
		H-P-22	<b>Fouzia Mostefa Sari</b>
		H-P-23	<b>Ghada Ochi</b>
		H-P-24	<b>Housseem Ben Yahia</b>
		H-P-25	<b>Imene Rajhi</b>
		H-P-26	<b>Imene Rajhi</b>
		H-P-27	<b>Khouloud Bouhalouene</b>
		H-P-28	<b>Khouloud Slimene</b>
		H-P-29	<b>Maha Mezghani</b>
		H-P-30	<b>Melika Dhenbri</b>
		H-P-31	<b>Meriam Milka</b>
		H-P-32	<b>Meriem Belarbi</b>
		H-P-33	<b>Meriem Souyah</b>
		H-P-34	<b>Mohamed Ksila</b>
		H-P-35	<b>Noria Meliani</b>
		H-P-36	<b>Rania Bouraoui</b>
		H-P-37	<b>Samar Ben Miloud</b>

**BMAT'2022**Biochemistry and Microbiology  
Applied Technology Congress5<sup>th</sup> edition of the Congress■ 4-6 November 2022  
■ Hammamet, Tunisia

		<b>H-P-38</b>	<b>Sara Bouchouicha</b>
		<b>H-P-39</b>	<b>Sarah Cheriet</b>
		<b>H-P-40</b>	<b>Souhir Hmissi</b>
		<b>H-P-41</b>	<b>T. Mohammed Chaouche</b>
		<b>H-P-42</b>	<b>Tasnim Chagrani</b>
		<b>H-P-43</b>	<b>Waffa Bouali</b>
		<b>H-P-44</b>	<b>Widad Chelaghma</b>
		<b>H-P-45</b>	<b>Widad Chelaghma</b>
		<b>H-P-46</b>	<b>Widad Chelaghma</b>
		<b>H-P-47</b>	<b>Youssef Torjmane</b>
		<b>H-P-48</b>	<b>Zahoua Mentfakh Laced</b>
		<b>H-P-49</b>	<b>Zineb Cherak</b>
		<b>H-P-50</b>	<b>Zineb Cherak</b>
		<b>H-P-51</b>	<b>Zineb Cherak</b>



## ORAL AND POSTER COMMUNICATIONS LIST

<b>BIOTECHNOLOGY</b>			
<b>Oral Communication</b>		<b>Poster Communication</b>	
<b>B-O-01</b>	<b>Afoua Gorrab</b>	<b>B-P-01</b>	<b>Abdelkrim Limane</b>
<b>B-O-02</b>	<b>Amal Souii</b>	<b>B-P-02</b>	<b>Abdelmalek Lekired</b>
<b>B-O-03</b>	<b>Chiraz Abbas</b>	<b>B-P-03</b>	<b>Amira Bergal</b>
<b>B-O-04</b>	<b>Fateh Aljane</b>	<b>B-P-04</b>	<b>Chahnez Naccache</b>
<b>B-O-05</b>	<b>Fatma Nouira</b>	<b>B-P-05</b>	<b>Chaïma Chammakhi</b>
<b>B-O-06</b>	<b>Hanene Bouchiha</b>	<b>B-P-06</b>	<b>Chaima Saadi</b>
<b>B-O-07</b>	<b>Hayet Ben Haj Koubaier</b>	<b>B-P-07</b>	<b>Donia Mourali</b>
<b>B-O-08</b>	<b>Ilhem Saadouli</b>	<b>B-P-08</b>	<b>El Hafedh El Mouhab</b>
<b>B-O-09</b>	<b>Imen Ben Atitallah</b>	<b>B-P-09</b>	<b>Faouzi Sakouhi</b>
<b>B-O-10</b>	<b>Karima Jalali</b>	<b>B-P-10</b>	<b>Farah Aounallah</b>
<b>B-O-11</b>	<b>Khaoula Fouzai</b>	<b>B-P-11</b>	<b>Farah Haddouchi</b>
<b>B-O-12</b>	<b>Malika Mankai</b>	<b>B-P-12</b>	<b>Ferjani Dhaouadi</b>
<b>B-O-13</b>	<b>Marwa khammassi</b>	<b>B-P-13</b>	<b>Fouzia Mostefa Sari</b>
<b>B-O-14</b>	<b>Neji Tarchoun</b>	<b>B-P-14</b>	<b>Ghada Ben Khedher</b>
<b>B-O-15</b>	<b>Rachid Azzi</b>	<b>B-P-15</b>	<b>Ghazwa Boudali</b>
<b>B-O-16</b>	<b>Rania Ouertani</b>	<b>B-P-16</b>	<b>Hanen Falleh</b>
<b>B-O-17</b>	<b>Rim Ben Youssef</b>	<b>B-P-17</b>	<b>Hiba Dlail</b>
<b>B-O-18</b>	<b>Sabrina Ghazouani</b>	<b>B-P-18</b>	<b>Imen Rajhi</b>
<b>B-O-19</b>	<b>Safa Rguez</b>	<b>B-P-19</b>	<b>Insaf Djebbi</b>
<b>B-O-20</b>	<b>Said Galai</b>	<b>B-P-20</b>	<b>Ismail Amri</b>
<b>B-O-21</b>	<b>Sami H. Almabrok</b>	<b>B-P-21</b>	<b>Maha Mezghani Khemakhem</b>
<b>B-O-22</b>	<b>Saoussem Harrabi</b>	<b>B-P-22</b>	<b>Majdi Hammami</b>
		<b>B-P-23</b>	<b>Mariem Ben Ouirane</b>
		<b>B-P-24</b>	<b>Marwa Batnini</b>
		<b>B-P-25</b>	<b>Marwa khammassi</b>
		<b>B-P-26</b>	<b>Marwa khammassi</b>
		<b>B-P-27</b>	<b>Meriem Benameur</b>
		<b>B-P-28</b>	<b>M. S. Oussama Belahmadi</b>
		<b>B-P-29</b>	<b>Mouna Mahjoubi</b>
		<b>B-P-30</b>	<b>Nabil Charcha</b>
		<b>B-P-31</b>	<b>Naceur Mejri</b>
		<b>B-P-32</b>	<b>Nahla Mejri</b>
		<b>B-P-33</b>	<b>Radhia Bouazizi</b>
		<b>B-P-34</b>	<b>Rahma Kazdaghli</b>
		<b>B-P-35</b>	<b>Sabrina Ben Moussa</b>
		<b>B-P-36</b>	<b>Sabrina Ghazouani</b>
		<b>B-P-37</b>	<b>Sada Al-Mashhadani</b>
		<b>B-P-38</b>	<b>Sihem Haj Kacem</b>

# ■ **BMAT'2022**

Biochemistry and Microbiology  
Applied Technology Congress

**5<sup>th</sup> edition of the Congress**

■ 4-6 November 2022

■ Hammamet, Tunisia



		<b>B-P-39</b>	<b>Sonia Al Bouali</b>
		<b>B-P-40</b>	<b>Souad Hammadi</b>
		<b>B-P-41</b>	<b>Souheila Ouilia</b>
		<b>B-P-42</b>	<b>Takwa Maatallah</b>
		<b>B-P-43</b>	<b>Yassine Mabrouk</b>
		<b>B-P-44</b>	<b>Yosra Amara</b>
		<b>B-P-45</b>	<b>Malika Mankai</b>
		<b>B-P-46</b>	<b>Malika Mankai</b>



## ORAL AND POSTER COMMUNICATIONS LIST

INDUSTRY APPLICATION			
Oral Communication		Poster Communication	
<b>IA-O-01</b>	<b>Hanen Sellami</b>	<b>IA-P-01</b>	<b>Abdelmalek Meribai</b>
<b>IA-O-02</b>	<b>Hanen Sellami</b>	<b>IA-P-02</b>	<b>Ali Salem</b>
<b>IA-O-03</b>	<b>Manel Mechmeche</b>	<b>IA-P-03</b>	<b>Amal Thebti</b>
<b>IA-O-04</b>	<b>Mouna Souihi</b>	<b>IA-P-04</b>	<b>Amira Ayed</b>
<b>IA-O-05</b>	<b>Olfa Ben Salem</b>	<b>IA-P-05</b>	<b>Imene Rajhi</b>
<b>IA-O-06</b>	<b>Ahmed Snoussi</b>	<b>IA-P-06</b>	<b>Meriem Habibi</b>
<b>IA-O-07</b>	<b>Taha Barkaoui</b>	<b>IA-P-07</b>	<b>Oumaima Kochti</b>
		<b>IA-P-08</b>	<b>Rania Nasra</b>
		<b>IA-P-09</b>	<b>Rayen Ben Aoun</b>
		<b>IA-P-10</b>	<b>Moncef Chouaibi</b>
		<b>IA-P-11</b>	<b>Z. Cheikh El Mehdi</b>
		<b>IA-P-12</b>	<b>Meriem Saada</b>