

Mostafa Rateb  
Lecturer  
School of Computing, Engineering and Physical Sciences  
School of Computing, Engineering and Physical Sciences



## Area of academic expertise - outline

Drug Discovery from different natural sources including marine and terrestrial organisms. Special emphasis is given to deep Sea and hyper-arid desert microbes in addition to microbial endophytes.

Structure elucidation of natural products using advanced one- and two-dimensional NMR and different High resolution MS techniques.

Applying different microbiological approaches such as OSMAC, microbial co-culture, and epigenetic modifiers for induction and isolation of novel microbial secondary metabolites from “cryptic gene clusters”.

Purification of complex mixtures of natural products using diverse chromatographic approaches mainly preparative HPLC and other chromatographic techniques such as VLC, SEC, SPE, and flash system.

GCMS analysis of volatile organic compounds from micro-organisms.

## Qualifications

University of Aberdeen  
PhD in natural product chemistry

## Employment

### Lecturer

Lecturer  
School of Computing, Engineering and Physical Sciences  
University of the West of Scotland  
1 Oct 2015 → present

### School of Computing, Engineering and Physical Sciences

University of the West of Scotland  
1 Oct 2015 → present

### Honorary Research Fellow, University of Aberdeen

1 Oct 2015 → 30 Sep 2020

## Research output

### ***Olea europaea* L. root endophyte *Bacillus velezensis* OEE1 counteracts oomycete and fungal harmful pathogens and harbours a large repertoire of secreted and volatile metabolites and beneficial functional genes**

Cheffi, M., Bouket, A. C., Alenezi, F. N., Luptakova, L., Belka, M., Vallat, A., Rateb, M. E., Tounsi, S., Triki, M. A. & Belbahri, L., 3 Sep 2019, In : *Microorganisms*. 7, 9, 29 p., 314.

### **Durum wheat stress tolerance induced by endophyte *pantoea agglomerans* with genes contributing to plant functions and secondary metabolite arsenal**

Cherif-Silini, H., Thissera, B., Bouket, A. C., Saadaoui, N., Silini, A., Eshelli, M., Alenezi, F. N., Vallat, A., Luptakova, L., Yahiaoui, B., Cherrad, S., Vacher, S., Rateb, M. E. & Belbahri, L., 16 Aug 2019, In : *International Journal of Molecular Sciences*. 20, 16, 36 p., 3989.

#### **Bioactive brominated oxindole alkaloids from the Red Sea sponge *Callyspongia siphonella***

El-Hawary, S. S., Sayed, A. M., Mohammed, R., Hassan, H. M., Rateb, M. E., Amin, E., Mohammed, T. A., El-Mesery, M., Bin Muhsinah, A., Alsayari, A., Wajant, H., Anany, M. A. & Abdelmohsen, U. R., 9 Aug 2019, In : *Marine Drugs*. 17, 8, 13 p., 465.

#### **Extreme environments: microbiology leading to specialized metabolites**

Sayed, A. M., Hassan, M. H. A., Alhadrami, H. A., Hassan, H. M., Goodfellow, M. & Rateb, M. E., 16 Jul 2019, In : *Journal of Applied Microbiology*. 28 p.

#### **New antiproliferative cembrane diterpenes from the Red Sea sarcophyton species**

Hassan, H. M., Rateb, M. E., Hassan, M. H., Sayed, A. M., Shabana, S., Raslan, M., Amin, E., Behery, F. A., Ahmed, O. M., Bin Muhsinah, A., Gulder, T. A. M. & Ramadan Abdelmohsen, U., 11 Jul 2019, In : *Marine Drugs*. 17, 7, 411.

#### **An online resource for marine fungi**

Jones, E. B. G., Pang, K-L., Abdel-Wahab, M. A., Scholz, B., Hyde, K. D., Boekhout, T., Ebel, R., Rateb, M. E., Henderson, L., Sakayaroj, J., Suetrong, S., Dayarathne, M. C., Kumar, V., Raghukumar, S., Sridhar, K. R., Bahkali, A. H. A., Gleason, F. H. & Norphanphoun, C., 31 May 2019, In : *Fungal Diversity*. 96, 1, p. 347-433 87 p.

#### ***Candelariella vitellina* extract triggers in vitro and in vivo cell death through induction of apoptosis: a novel anticancer agent**

El-Garawani, I. M., Elkhateeb, W. A., Zaghlol, G. M., Almeer, R. S., Ahmed, E. F., Rateb, M. E. & Abdel Moneim, A. E., 31 May 2019, In : *Food and Chemical Toxicology*. 127, p. 110-119 10 p.

#### **Discovery of kirromycins with anti- wolphachia activity from streptomyces sp. CB00686**

Xu, Z., Fang, S-M., Bakowski, M. A., Rateb, M. E., Yang, D., Zhu, X., Huang, Y., Zhao, L-X., Jiang, Y., Duan, Y., Hull, M. V., McNamara, C. W. & Shen, B., 10 May 2019, In : *ACS Chemical Biology*. 14, 6, p. 1174-1182 9 p.

#### **Microbial secondary metabolites: recent developments and technological challenges**

Singh, B. P., Rateb, M. E., Rodriguez-Couto, S., Teixeira de Moraes Polizeli, M. D. L. & Li, W-J., 26 Apr 2019, In : *Frontiers in Microbiology*. 10, 2 p., 00914.

#### **Chemical profiling and biological screening of some River Nile derived-microorganisms**

Lotfy, M. M., Hassan, H. M., Mohammed, R., Hetta, M., El-Gendy, A. O., Rateb, M. E., Zaki, M. A. & Gamaleldin, N. M., 12 Apr 2019, In : *Frontiers in Microbiology*. 10, 10 p., 787.

#### **Characterization of natural bioactive compounds produced by isolated bacteria from compost of aromatic plants**

El-Helw, N. O., El-Gendy, A. O., El-Gebaly, E., Hassan, H. M., Rateb, M. E. & El-Nesr, K. A., 28 Feb 2019, In : *Journal of Applied Microbiology*. 126, 2, p. 443-451 9 p.

#### **Screening for fusarium antagonistic bacteria from contrasting niches designated the endophyte bacillus halotolerans as plant warden against fusarium**

Slama, H. B., Cherif-Silini, H., Chenari Bouket, A., Qader, M., Silini, A., Yahiaoui, B., Alenezi, F. N., Luptakova, L., Triki, M. A., Vallat, A., Oszako, T., Rateb, M. E. & Belbahri, L., 11 Jan 2019, In : *Frontiers in Microbiology*. 9, 24 p., 3236.

#### **New pim-1 kinase inhibitor from the co-culture of two sponge-associated actinomycetes**

El-Hawary, S. S., Sayed, A. M., Mohammed, R., Khanfar, M. A., Rateb, M. E., Mohammed, T. A., Hajjar, D., Hassan, H. M., Gulder, T. A. M. & Abdelmohsen, U. R., 15 Nov 2018, In : *Frontiers in Chemistry*. 6, 11 p., 538.

#### **Current status and future opportunities of omics tools in mycotoxin research**

Eshell, M., Qader, M. M., Jambi, E. J., Hursthouse, A. S. & Rateb, M. E., 26 Oct 2018, In : *Toxins*. 10, 11, 26 p., 433.

#### **Natural product diversity of actinobacteria in the Atacama Desert**

Rateb, M. E., Ebel, R. & Jaspars, M., 31 Aug 2018, In : *Antonie van Leeuwenhoek*. 111, 8, p. 1467-1477 11 p.

**Terezine E, bioactive prenylated tryptophan analogue from an endophyte of *Centaurea stoebe***

Abdou, R., Shabana, S. & Rateb, M. E., 9 Aug 2018, In : Natural product research. 8 p.

**Epigenetic modifiers induce bioactive phenolic metabolites in the marine-derived fungus *penicillium brevicompactum***

El-Hawary, S. S., Sayed, A. M., Mohammed, R., Hassan, H. M., Zaki, M. A., Rateb, M. E., Mohammed, T. A., Amin, E. & Abdelmohsen, U. R., 30 Jul 2018, In : Marine Drugs. 16, 8, 13 p., 253.

**Date palm trees root-derived endophytes as fungal cell factories for diverse bioactive metabolites**

Ben Mefteh, F., Daoud, A., Chenari Bouket, A., Thissera, B., Kadri, Y., Cherif-Silini, H., Eshelli, M., Alenezi, F. N., Vallat, A., Oszako, T., Kadri, A., Ros-García, J. M., Rateb, M. E., Gharsallah, N. & Belbahri, L., 7 Jul 2018, In : International Journal of Molecular Sciences. 19, 7, 1986.

**Balanites aegyptiaca ameliorates insulin secretion and decreases pancreatic apoptosis in diabetic rats: role of SAPK/JNK pathway**

Hassanin, K. M. A., Mahmoud, M. O., Hassan, H. M., Abdel-Razik, A-R. H., Aziz, L. N. & Rateb, M. E., 1 Jun 2018, In : Biomedicine & Pharmacotherapy. 102, p. 1084 - 1091

**Ganoderma applanatum secondary metabolites induced apoptosis through different pathways: in vivo and in vitro anticancer studies**

Elkhateeb, W. A., Zaghlol, G. M., El-Garawani, I. M., Ahmed, E. F., Rateb, M. E. & Abdel Moneim, A. E., 1 May 2018, In : Biomedicine & Pharmacotherapy. 101, p. 264-277 14 p.

**Zebrafish-based discovery of antiseizure compounds from the Red Sea: pseurotin A2 and azaspirofuran A**

Copmans, D., Rateb, M., Tabudravu, J. N., Pérez-Bonilla, M., Dirkx, N., Vallorani, R., Diaz, C., Pérez Del Palacio, J., Smith, A. J., Ebel, R., Reyes, F., Jaspars, M. & de Witte, P. A. M., 19 Apr 2018, In : ACS Chemical Neuroscience. 9, 7, p. 1652-1662 11 p.

**Herbicidins from *Streptomyces* sp. CB01388 showing anti-Cryptosporidium activity**

Chen, J-J., Rateb, M. E., Love, M. S., Xu, Z., Yang, D., Zhu, X., Huang, Y., Zhao, L-X., Jiang, Y., Duan, Y., McNamara, C. W. & Shen, B., 22 Feb 2018, In : Journal of Natural Products. 81, 4, p. 791-797

**Asenjonamides A-C, antibacterial metabolites isolated from *Streptomyces asenjonii* strain KNN 42.f from an extreme-hyper arid Atacama Desert soil**

Abdelkader, M. S. A., Philippon, T., Asenjo, J. A., Bull, A. T., Goodfellow, M., Ebel, R., Jaspars, M. & Rateb, M. E., 23 Jan 2018, In : The Journal of Antibiotics. 71, p. 425-431 7 p.

**Chitosan-coated cinnamon/oregano-loaded solid lipid nanoparticles to augment 5-fluorouracil cytotoxicity for colorectal cancer: extract standardization, nanoparticle optimization, and cytotoxicity evaluation**

Kamel, K. M., Khalil, I. A., Rateb, M. E., Elgendy, H. & Elhawary, S., 16 Aug 2017, In : Journal of Agricultural and Food Chemistry. 65, 36, p. 7966-7981 16 p.

**Acylated iridoids and rhamnopyranoses from *prema odorata* (Lamiaceae) as novel mesenchymal-epithelial transition factor receptor inhibitors for the control of breast cancer**

Elmaidomy, A. H., Mohyeldin, M. M., Ibrahim, M. M., Mokhtar Hassan, H., Amin, E., Rateb, M. E., Hetta, M. H. & El Sayed, K. A., 15 Aug 2017, In : Phytotherapy research : PTR. 31, 10, p. 1546-1556 11 p.

**Does osmotic stress affect natural product expression in fungi?**

Overy, D., Correa, H., Roullier, C., Chi, W-C., Pang, K-L., Rateb, M., Ebel, R., Shang, Z., Capon, R., Bills, G. & Kerr, R., 13 Aug 2017, In : Marine Drugs. 15, 8, 254.

**Comparative genomics of *Bacillus amyloliquefaciens* strains reveals a core genome with traits for habitat adaptation and a secondary metabolites rich accessory genome**

Belbahri, L., Chenari Bouket, A., Rekik, I., N. Alenezi, F., Vallat, A., Luptakova, L., Petrovova, E., Oszako, T., Cherrad, S., Vacher, S. & Rateb, M. E., 3 Aug 2017, In : Frontiers in Microbiology. 8, 1438.

**Antagonistic properties of some halophilic thermoactinomycetes isolated from superficial sediment of a solar saltern and production of cyclic antimicrobial peptides by the novel isolate paludifilum halophilum**

Dammak, D. F., Zarai, Z., Najah, S., Abdennabi, R., Belbahri, L., Rateb, M., Mejdoub, H. & Maalej, S., 27 Jul 2017, In : Biomed Research International. 2017, 13 p., 1205258.

**Dual induction of new microbial secondary metabolites by fungal bacterial co-cultivation**

Wakefield, J., Mokhtar Hassan, H., Jaspars, M., Ebel, R. & Rateb, M. E., 11 Jul 2017, In : Frontiers in Microbiology. 8, p. 1-10 10 p., 1284.

**Cardiopreventive effect of ethanolic extract of Date Palm Pollen against isoproterenol induced myocardial infarction in rats through the inhibition of the angiotensin-converting enzyme**

Daoud, A., Ben Mefteh, F., Mnafigui, K., Turki, M., Jmal, S., Ben Amar, R., Ayadi, F., Elfeki, A., Abid, L., Rateb, M. E., Belbahri, L., Kadri, A. & Gharsallah, N., 20 Jun 2017, In : Experimental and toxicologic pathology . 69, 8, p. 656-665 10 p.

**Secondary metabolites from fungal endophytes of Solanum nigrum**

El-Hawary, S. S., Sayed, A. M., Rateb, M. E., Bakeer, W., AbouZid, S. F. & Mohammed, R., 22 May 2017, In : Natural product research. p. 1-4 4 p.

**Increased biological activity of aneurinibacillus migulanus strains correlates with the production of new gramicidin secondary metabolites**

N. Alenezi, F., Rekik, I., Chenari Bouket, A., Luptakova, L., Weitz, H. J., Rateb, M. E., Jaspars, M., Woodward, S. & Belbahri, L., 7 Apr 2017, In : Frontiers in Microbiology. 8, 517.

**Fungal root microbiome from healthy and brittle leaf diseased date palm trees (Phoenix dactylifera L.) reveals a hidden untapped arsenal of antibacterial and broad spectrum antifungal secondary metabolites**

Mefteh, F. B., Daoud, A., Chenari Bouket, A., N. Alenezi, F., Luptakova, L., Rateb, M. E., Kadri, A., Gharsallah, N. & Belbahri, L., 28 Feb 2017, In : Frontiers in Microbiology. 8, 307.

**Competition and co-regulation of spirotoamide and tautomycin biosynthesis in Streptomyces griseochromogenes, and isolation and structural elucidation of spirotoamide C and D**

Yang, D., Rateb, M. E., Wang, N. & Shen, B., 15 Feb 2017, In : The Journal of Antibiotics. 70, 5, p. 710-714 5 p.

**Opuntia ficus-indica cladodes as a functional ingredient: bioactive compounds profile and their effect on antioxidant quality of bread**

Msaddak, L., Abdelhedi, O., Kridene, A., Rateb, M., Belbahri, L., Ammar, E., Nasri, M. & Zouari, N., 7 Feb 2017, In : Lipids in health and disease. 16, 1, 32.

**Anti-HCV protease of diketopiperazines produced by the Red Sea sponge-associated fungus Aspergillus versicolor**

Ahmed, E., Rateb, M., El-Kassem, L. T. A. & Hawas, U., 1 Jan 2017, In : Applied Biochemistry and Microbiology. 53, 1, p. 101-106

**The mallow, Malva aegyptiaca L. (Malvaceae): Phytochemistry analysis and effects on wheat dough performance and bread quality**

Fakhfakh, N., Jdir, H., Jridi, M., Rateb, M., Belbahri, L., Ayadi, M. A., Nasri, M. & Zouari, N., Jan 2017, In : LWT- Food Science and Technology. 75, p. 656-662

**Evaluation of the Antioxidant Activity of the Marine Pyrroloiminoquinone Makaluvamines**

Alonso, E., Alvariano, R., Leirós, M., Tabudravu, J. N., Feussner, K., Dam, M. A., Rateb, M. E., Jaspars, M. & Botana, L. M., 27 Oct 2016, In : Marine Drugs. 14, 11, 197.

**Spongionella Secondary Metabolites, Promising Modulators of Immune Response through CD147 Receptor Modulation**

Sánchez, J. A., Alfonso, A., Rodriguez, I., Alonso, E., Cifuentes, J. M., Bermudez, R., Rateb, M. E., Jaspars, M., Houssen, W. E., Ebel, R., Tabudravu, J. & Botana, L. M., 24 Oct 2016, In : Frontiers in immunology. 7, 452.

**Germicidins H-J from *Streptomyces* sp. CB00361**

Ma, M., Rateb, M., Yang, D., Rudolf, J. D., Zhu, X., Huang, Y., Zhao, L-X., Jiang, Y., Duan, Y. & Shen, B., 10 Aug 2016, In : The Journal of Antibiotics.

**Phoenix dactylifera L. sap enhances wound healing in Wistar rats: Phytochemical and histological assessment**

Abdennabi, R., Bardaa, S., Mehdi, M., Rateb, M., Raab, A., N. Alenezi, F., Sahnoun, Z., Gharsallah, N. & Belbahri, L., Jul 2016, In : International Journal of Biological Macromolecules. 88, p. 443-450

**Isolation and anti-HIV-1 integrase activity of lentzeosides A-F from extremotolerant lentzea sp. H45, a strain isolated from a high-altitude Atacama Desert soil**

Wichner, D., Idris, H., Houssen, W. E., McEwan, A. R., Bull, A. T., A Asenjo, J., Goodfellow, M., Jaspars, M., Ebel, R. & Rateb, M., 29 Jun 2016, In : The Journal of Antibiotics.

**Identification of Spongionella compounds as cyclosporine A mimics**

Sánchez, J. A., Alfonso, A., Leirós, M., Alonso, E., Rateb, M., Jaspars, M., Houssen, W. E., Ebel, R., Tabudravu, J. & Botana, L. M., May 2016, In : Pharmacological Research. 107, p. 407-414

**NMR characterisation of natural products derived from under-explored microorganisms**

Rateb, M., Tabudravu, J. & Ebel, R., 28 Apr 2016, *Nuclear Magnetic Resonance*. Ramesh, V. (ed.). Royal Society of Chemistry, Vol. 45. p. 240-268

**Solamargine production by a fungal endophyte of *Solanum nigrum***

El-Hawary, S. S., Mohammed, R., AbouZid, S. F., Bakeer, W., Ebel, R., Sayed, A. M. & Rateb, M., Apr 2016, In : Journal of Applied Microbiology. 120, 4, p. 900-911

**Harpulliasides A and B: Two new benzeneacetic acid derivatives from *Harpullia pendula***

Abdelkader, M. S. A., Rateb, M., Mohamed, G. A. & Jaspars, M., Mar 2016, In : Phytochemistry Letters. 15, p. 15

**Alkyl Polyglycosides for Efficient Heat Transfer in Water Heating Systems: SafeSol Ltd - Alkyl Polyglucosides**

Yaseen, M., Saleemia, S., Hursthouse, A. & Rateb, M., 2016, Scottish Funding Council. 68 p.

**Comparative biochemical study on two marine endophytes, *Bacterium SRCnm* and *Bacillus* sp. JS, Isolated from redsea algae**

Ahmed, E. F., Mokhtar Hassan, H., Rateb, M., Abdel-Wahab, N., Sameer, S., Ebel, R., Taie, H. A. A., Abdel Hameed, M. S. & Hammouda, O., 2016, In : Pakistan Journal of Pharmaceutical Sciences. 29, 1, p. 17-26

**Biosynthesis of neocarazostatin A reveals the sequential carbazole prenylation and hydroxylation in the tailoring steps**

Huang, S., Elsayed, S. S., Lv, M., Tabudravu, J., Rateb, M., Gyampoh, R., Kyeremeh, K., Ebel, R., Jaspars, M., Deng, Z., Yu, Y. & Deng, H., 17 Dec 2015, In : Chemistry & Biology. 22, 12, p. 1633-1642

**Complete genome sequence of *Aneurinibacillus migulanus* E1, a gramicidin S- and D-phenylalanyl-L-propyl diketopiperazine-deficient mutant**

Belbahri, L., N. Alenezi, F., Luptakova, L., Rateb, M. & Woodward, S., Nov 2015, In : Genome Announcements. 3, 6, e01441-15.

**Angucyclines and Angucyclinones from *Streptomyces* sp. CB01913 Featuring C-ring Cleavage and Expansion**

Ma, M., Rateb, M., Teng, Q., Yang, D., Rudolf, J. D., Zhu, X., Huang, Y., Zhao, L-X., Jiang, Y., Li, X., Rader, C., Duan, Y. & Shen, B., 23 Oct 2015, In : Journal of Natural Products. 79, 9, p. 2471-2480

**Legonardin, a new member of linaridin RiPP from a Ghanaian *Streptomyces* isolate**

Rateb, M., Zhai, Y., Ehrner, E., Rath, C. M., Wang, X., Tabudravu, J., Ebel, R., Bibb, M., Kyeremeh, K., Dorrestein, P. C., Hong, K., Jaspars, M. & Deng, H., 7 Oct 2015, In : Organic & Biomolecular Chemistry. 37, p. 9585-9592

**The Streptomyces metabolite anhydroexfoliamycin ameliorates hallmarks of Alzheimer's disease in vitro and in vivo**  
Leirós, M., Alonso, E., Rateb, M., Ebel, R., Jaspars, M., Alfonso, A. & Botana, L. M., 1 Oct 2015, In : Neuroscience. 305, p. 26-35

**Spongionella Secondary Metabolites Regulate Store Operated Calcium Entry Modulating Mitochondrial Functioning in SH-SY5Y Neuroblastoma Cells**

Sánchez, J. A., Alfonso, A., Leirós, M., Rateb, M., Jaspars, M., Houssen, W. E., Ebel, R. & Botana, L. M., Sep 2015, In : Cellular Physiology and Biochemistry. 37, 2, p. 779-792

**Antibacterial activity of diketopiperazines isolated from a marine fungus using t-Butoxycarbonyl group as a simple tool for purification**

Rateb, M. & El-Gendy, B. E-D. M., 15 Aug 2015, In : Bioorganic & Medicinal Chemistry Letters. 25, 16, p. 3125-3128

**Gracilins: Spongionella-derived promising compounds for Alzheimer disease**

Leirós, M., Alonso, E., Rateb, M., Houssen, W. E., Ebel, R., Jaspars, M., Alfonso, A. & Botana, L. M., Jun 2015, In : Neuropharmacology. 93, p. 285-293

**Bromoalkaloids protect primary cortical neurons from induced oxidative stress**

Leirós, M., Alonso, E., Rateb, M., Ebel, R., Jaspars, M., Alfonso, A. & Botana, L. M., 18 Feb 2015, In : ACS Chemical Neuroscience. 6, 2, p. 331-338

**Scalarane Sesterterpenes from the Egyptian Red Sea Sponge Phyllospongia lamellose**

Hassan, M. H. A., Rateb, M., Hetta, M., Abdelaziz, T. A., Sleim, M. A., Jaspars, M. & Mohammed, R., 28 Jan 2015, In : Tetrahedron. 71, 4, p. 577-583

**Adipostatins A-D from Streptomyces sp. 4875 inhibiting Brugia malayi asparaginyl-tRNA synthetase and killing adult Brugia malayi parasites**

Rateb, M., Yang, D., Vodanovic-Jankovic, S., Yu, Z., Kron, M. A. & Shen, B., 2015, In : The Journal of Antibiotics. 68, 8, p. 540-542

**Chaxapeptin, a lasso peptide from the extremotolerant Streptomyces leeuwenhoekii strain C58 from the hyper-arid Atacama Desert**

Elsayed, S. S., Trusch, F., Deng, H., Raab, A., Prokes, I., Busarakam, K., A Asenjo, J., Andrews, B. A., van West, P., Bull, A. T., Goodfellow, M., Yi, Y., Ebel, R., Jaspars, M. & Rateb, M., 2015, In : The Journal of Organic Chemistry. 80, 20, p. 10252-10260

**Decorosides A and B: Cytotoxic flavonoid glycosides from the leaves of rhododendron decorum**

Rateb, M., HM, H., el Arafa, SA., Jaspars, M. & Ebel, R., Apr 2014, In : Natural Product Communications. 9, 4, p. 473-476 4 p.

**Disruption of a methyltransferase gene in actinomycin G gene cluster in streptomyces iakyrus increases the production of phenazinomycin**

Qin, Z., Wang, X., Rateb, M. E., Ass'ad, L. A., Jaspars, M., Deng, Z., Yu, Y. & Deng, H., 7 Mar 2014, In : FEMS Microbiology Letters. 352, 1, p. 62-68 7 p.

**Biosynthetic potential-based strain prioritization for natural product discovery: a showcase for diterpenoid producing actinomycetes**

Xie, P., Ma, M., Rateb, M., Shaaban, K. A., Yu, Z., Huang, S-X., Zhao, L-X., Zhu, X., Yan, Y., Peterson, R. M., Lohman, J. R., Yang, D., Yin, M., Rudolf, J. D., Jiang, Y., Duan, Y. & Shen, B., 31 Jan 2014, In : Journal of Natural Products. 77, 2, p. 377-387 11 p.

**Spongionella secondary metabolites protect mitochondrial function in cortical neurons against oxidative stress**

Leirós, M., Sánchez, J. A., Alonso, E., Rateb, M., Houssen, W. E., Ebel, R., Jaspars, M., Alfonso, A. & Botana, L. M., 27 Jan 2014, In : Marine Drugs. 12, 2, p. 700-718 19 p.

**Mitigation of ROS insults by streptomycetes secondary metabolites in primary cortical neurons**

Leirós, M., Alonso, E., Sánchez, J. A., Rateb, M. E., Ebel, R., Houssen, W. E., Jaspars, M., Alfonso, A. & Botana, L. M., 12 Nov 2013, In : ACS Chemical Neuroscience. 5, 1, p. 71-80 10 p.

**Induction of diverse secondary metabolites in *Aspergillus fumigatus* by microbial co-culture**

Rateb, M. E., Hallyburton, I., Houssen, W. E., Bull, A. T., Goodfellow, M., Santhanam, R., Jaspars, M. & Ebel, R., 10 Jun 2013, In : RSC ADVANCES. 3, 34, p. 14444-14450 7 p.

**Synthesis, anti-breast cancer activity, and molecular modeling of some benzothiazole and benzoxazole derivatives**

Abdelgawad, M. A., Belal, A., Omar, H. A., Hegazy, L. & Rateb, M. E., 5 Jun 2013, In : Archiv der Pharmazie - Chemistry in Life Sciences. 346, 7, p. 534-541 6 p.

**Medium optimization of streptomycetes sp. 17944 for tirandamycin B production and isolation and structural elucidation of tirandamycins H, I and J**

Rateb, M. E., Yu, Z., Yan, Y., Yang, D., Huang, T., Vodanovic-Jankovic, S., Kron, M. A. & Shen, B., 29 May 2013, In : The Journal of Antibiotics. 67, p. 127-132 6 p.

**Isolation and structural elucidation of glucoside congeners of platencin from *Streptomyces platensis* sb12600**

Yu, Z., Rateb, M. E., Smanski, M. J., Peterson, R. M. & Shen, B., May 2013, In : The Journal of Antibiotics. 66, 5, p. 291-294 4 p.

**Identification and characterization of the actinomycin G gene cluster in *Streptomyces iakyrus***

Wang, X., Tabudravu, J., Rateb, M. E., Annand, K. J., Qin, Z., Jaspars, M., Deng, Z., Yu, Y. & Deng, H., 2013, In : Molecular BioSystems. 6, p. 1286-1289 4 p.

**Diverse metabolic profiles of a *Streptomyces* strain isolated from a hyper-arid environment**

Rateb, M. E., Houssen, W. E., Harrison, W. T. A., Deng, H., Okoro, C. K., Asenjo, J. A., Andrews, B. A., Bull, A. T., Goodfellow, M., Ebel, R. & Jaspars, M., 31 Aug 2011, In : Journal of Natural Products. 74, 9, p. 1965-1971 7 p.

**Chaxamycins A-D, bioactive Ansamycins from a hyper-arid desert *Streptomyces* sp.**

Rateb, M. E., Houssen, W. E., Arnold, M., Abdelrahman, M. H., Deng, H., Harrison, W. T. A., Okoro, C. K., Asenjo, J. A., Andrews, B. A., Ferguson, G., Bull, A. T., Goodfellow, M., Ebel, R. & Jaspars, M., 9 May 2011, In : Journal of Natural Products. 74, 6, p. 1491-1499 9 p.

**Lecythomycin, a new macrolactone glycoside from the endophytic fungus *Lecythophora* sp**

Sugijanto, N. E., Diesel, A., Rateb, M., Pretsch, A., Gogalic, S., Zaini, N. C., Ebel, R. & Indrayanto, G., 2011, In : Natural Product Communications. 6, 5, p. 677-678 2 p.

**Secondary metabolites of fungi from marine habitats**

Rateb, M. E. & Ebel, R., 2011, In : NATURAL PRODUCT REPORTS. 28, 2, p. 290-344 55 p.

**Dibenzofurans from the marine sponge-derived ascomycete Super1F1-09**

Rateb, M. E., Houssen, W. E., Legrave, N. M., Clements, C., Jaspars, M. & Ebel, R., Dec 2010, In : Botanica Marina. 53, 6, p. 499-506 8 p.

**Bioactive diterpene derivatives from the marine sponge spongionella sp.**

Rateb, M. E., Houssen, W. E., Schumacher, M., Harrison, W. T. A., Diederich, M., Ebel, R. & Jaspars, M., 14 Jul 2009, In : Journal of Natural Products. 72, 8, p. 1471-1476 6 p.

**Production of parthenolide in organ and callus cultures of *Tanacetum parthenium* (L.)**

Rateb, M. E. M., El-Hawary, S. S., El-Shamy, A. M. & Yousef, E. M. A., 4 Jun 2007, In : African Journal of Biotechnology. 6, 11, p. 1306-1316 11 p.

**Quantitative estimation of parthenolide in *Tanacetum parthenium* (L.) Schultz-Bip. cultivated in Egypt**  
El-Shamy, A. M., El-Hawary, S. S. & Rateb, M. E. M., 2007, In : Journal of AOAC International. 90, 1, p. 21-27 7 p.

## Activities

### **30th International Symposium on the Chemistry of Natural Products**

Mostafa Rateb (Speaker), Gaia Burgio (Participant)  
25 Nov 2018 → 29 Nov 2018

### **Elsevier Academic Press Inc (Publisher)**

Mostafa Rateb (Peer reviewer)  
Nov 2018 → ...

### **1st Euroindoamerican Natural Products Meeting**

Mostafa Rateb (Speaker), Bathini Thissera (Participant)  
29 May 2018 → 1 Jun 2018

### **Biomedicine & Pharmacotherapy (Journal)**

Mostafa Rateb (Peer reviewer)  
2018 → ...

### **Journal of Applied Microbiology (Journal)**

Mostafa Rateb (Peer reviewer)  
2018 → ...

### **Microbiological Research (Journal)**

Mostafa Rateb (Peer reviewer)  
2018 → ...

### **Scientific Reports (Journal)**

Mostafa Rateb (Peer reviewer)  
1 Mar 2017 → ...

### **The Journal of Organic Chemistry (Journal)**

Mostafa Rateb (Peer reviewer)  
20 Feb 2017 → ...

### **Organic letters (Journal)**

Mostafa Rateb (Peer reviewer)  
Feb 2017 → ...

### **Frontiers in Microbiology (Journal)**

Mostafa Rateb (Guest editor)  
1 Jun 2016 → 30 May 2017

### **Natural product research (Journal)**

Mostafa Rateb (Peer reviewer)  
May 2016 → ...

### **Renewable Energy Technology: Future, Opportunity, and Challenges for the UK and Turkey**

Mostafa Rateb (Speaker)  
5 Apr 2016 → 7 Apr 2016



**Molecules : A Journal of Synthetic Chemistry and Natural Product Chemistry (Journal)**

Mostafa Rateb (Peer reviewer)

Mar 2016 → ...

**Marine Drugs (Journal)**

Mostafa Rateb (Peer reviewer)

Jan 2016 → ...

**Royal Society of Chemistry (External organisation)**

Mostafa Rateb (Member)

Jan 2016 → ...

**Member at the Royal Society of Chemistry**

Mostafa Rateb (Member)

1 Dec 2015 → ...

**9th European Conference on Marine Natural Products**

Mostafa Rateb (Speaker)

1 Sep 2015

**Symposium on NMR Applications in Industry**

Mostafa Rateb (Invited speaker)

19 Jun 2015

**Journal of Natural Products (Journal)**

Mostafa Rateb (Peer reviewer)

May 2015 → ...

**Tetrahedron Letters (Journal)**

Mostafa Rateb (Peer reviewer)

May 2015 → ...

**Medicinal Chemistry Research (Journal)**

Mostafa Rateb (Peer reviewer)

Apr 2015 → ...

**FEMS Microbiology Letters (Journal)**

Mostafa Rateb (Peer reviewer)

2015

**Member at the Marine Alliance for Science and Technology Scotland**

Mostafa Rateb (Member)

10 Dec 2014 → ...

**Member at the Marine Fungal Natural Products Consortium**

Mostafa Rateb (Member)

15 Jun 2014 → ...

**Member at the American Society of Pharmacognosy**

Mostafa Rateb (Member)

1 Feb 2012 → ...

**Member in the Egyptian Pharmaceutical Society**

Mostafa Rateb (Member)

1 Oct 2000 → ...