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Employment

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Publications

Kineochelins-A New Group of Siderophores From an Antarctic Bacterium
Kralova, S. (Corresponding author), Spacek, P., Gafriller, J., Bezdicek, M., Medvedcova, V., Séneca, J., Osvatic, J., Grienke, U., Rattei, T., Sekurova, O. N., Zotchev, S. B., Zehl, M. (Corresponding author) & Loy, A., Jun 2026, In: Microbial Biotechnology. 19, 6, p. 1-24 24 p., e70386.

Unveiling the genomes and secondary metabolomes of *Streptomyces* spp. from freshwater sediments
Tocino-Márquez, I., Zehl, M., Batajic, J., Seneca, J., Pjevac, P., Murillo-Alba, J., Martín, J., Sekurova, O. N. & Zotchev, S. B. (Corresponding author), 20 Apr 2026, In: Frontiers in Microbiology. 17, p. 1-12 12 p., 1793713.

Identification and Characterisation of the Gene Cluster Governing Biosynthesis of the Anti-Mycobacterial Antibiotic Acidomycin
Vignolle, A., Zehl, M., Garzón, J. F. G., Schneider, O., Gafriller, J., Grienke, U., Kirkegaard, R. H. & Zotchev, S. B. (Corresponding author), Apr 2026, In: Microbial Biotechnology. 19, 4, e70357.

Inter-species horizontal transfer of biosynthetic gene clusters: an evolutionary driver for chemical diversity in bacterial communities
Zotchev, S. B., 18 Mar 2026, (E-pub ahead of print) In: Essays in biochemistry.

Heterologous Expression and CRISPR/Cas9-Assisted Manipulation of the Hybrid Gene Cluster Specifying the Biosynthesis of Meroterpenoids and Phenazines
Schneider, O., Zehl, M., Miele, M., Pace, V., Brungs, C., Cheng, J.-F., Hummelbrunner, S., Dirsch, V. M. & Zotchev, S. B. (Corresponding author), 16 Jan 2026, In: ACS Synthetic Biology. 15, 1, p. 137-148 12 p., PMID: 41433963.

Genome mining of Streptomyces bambergiensis AC-800 unravels the biosynthetic gene cluster for inhibitors of prolyl hydroxylase fibrostatins
Guerrero Garzón, J. F., Zehl, M., Schneider, O., Marquez, I. T., Rückert-Reed, C., Kalinowski, J. & Zotchev, S. B. (Corresponding author), 1 Sept 2025, In: Scientific Reports. 15, 1, 32142.

The bacterial community of the freshwater bryozoan *Cristatella Mucedo* and its secondary metabolites production potential
Tocino-Márquez, I., Zehl, M., Séneca Cardoso Da Silva, J., Pjevac, P., Felkl, M., Becker, C. F. W., Loy, A., Rattei, T., Ostrovsky, A. N. & Zotchev, S. B. (Corresponding author), 26 Aug 2025, In: Scientific Reports. 15, 1, 31456.

Saarvienin A - A Novel Glycopeptide with Potent Activity against Drug-resistant Bacteria
Kaur, A., Guerrero-Garzón, J. F., Rasheed, S., Zehl, M., Fries, F., Morgenstern, B., Zotchev, S. B. (Corresponding author) & Müller, R. (Corresponding author), 17 Jun 2025, In: Angewandte Chemie (International ed. in English). 64, 25, e202425588.

Secondary Metabolite Biosynthesis Potential of *Streptomyces* Spp. from the Rhizosphere of *Leontopodium nivale* Subsp. alpinum
Vignolle, A., Zehl, M., Kirkegaard, R. H., Vignolle, G. A. & Zotchev, S. B. (Corresponding author), 25 Feb 2025, In: ACS Omega. 10, 7, p. 7163-7171 9 p.

Deletions of conserved extracytoplasmic function sigma factors-encoding genes in Streptomyces have a major impact on secondary metabolism
Sekurova, O. N., Zehl, M., Predl, M., Hunyadi, P., Rattei, T. & Zotchev, S. B. (Corresponding author), 18 Jul 2024, In: Microbial Cell Factories. 23, 1, 201.

Genomes and secondary metabolomes of Streptomyces spp. isolated from *Leontopodium nivale ssp. alpinum*
Malfent, F., Zehl, M., Kirkegaard, R. H., Oberhofer, M. & Zotchev, S. (Corresponding author), 14 Jun 2024, In: Frontiers in Microbiology. 15, 1408479.

Impact of Phylogenetically Diverse Bacterial Endophytes of Bergenia pacumbis on Bergenin Production in the Plant Cell Suspension Cultures
Wawrosch, C., Oberhofer, M., Steinbrecher, S. & Zotchev, S. B., 6 Jun 2024, In: Planta Medica. 90, 7-8, p. 651-657 7 p.

Unlocking the potential of bacterial endophytes from medicinal plants for drug discovery
Zotchev, S. B. (Corresponding author), Feb 2024, In: Microbial Biotechnology. 17, 2, e14382.

Discovery of novel natural products from endophytic *Streptomyces* spp. isolated from *Leontopodium nivale* ssp. alpinum
Malfent, F., Niedermayr, V., Oberhofer, M., Zehl, M., Pjevac, P. & Zotchev, S., 16 Nov 2023, In: Planta Medica. 89, 14, p. 1318-1318

***Streptomyces* spp. from the rhizosphere of *Leontopodium nivale* subsp. alpinum - uncovering potential for the biosynthesis of secondary metabolites**
Vignolle, A., Zehl, M., Pjevac, P. & Zotchev, S., Nov 2023, In: Planta Medica. 89, 14, p. 1361-1361

Secondary Metabolite Production Potential in a Microbiome of the Freshwater Sponge Spongilla lacustris
Graffius, S., Garzón, J. F. G., Zehl, M., Pjevac, P., Kirkegaard, R., Flieder, M., Loy, A., Rattei, T., Ostrovsky, A. & Zotchev, S. B., 13 Apr 2023, In: Microbiology Spectrum. 11, 2, e04353-22.

Developing co-cultures of bacterial isolates from the bryozoan Cristatella mucedo for the discovery of novel secondary metabolites
Tocino Márquez, I., Zehl, M., Pjevac, P., Kirkegaard, R., Flieder, M., Loy, A., Rattei, T. & Zotchev, S., Dec 2022, In: Planta Medica. 88, 15, p. 1438-1438 1 p.

Targeted Metabolomics and High-Throughput RNA Sequencing-Based Transcriptomics Reveal Massive Changes in the Streptomyces venezuelae NRRL B-65442 Metabolism Caused by Ethanol Shock
Sekurova, O. N., Zehl, M., Predl, M., Hunyadi, P., Rattei, T. & Zotchev, S. B. (Corresponding author), 31 Oct 2022, In: Microbiology Spectrum. 10, 6, 19 p., e0367222.

N-Succinyltransferase Encoded by a Cryptic Siderophore Biosynthesis Gene Cluster in Streptomyces Modifies Structurally Distinct Antibiotics
Schneider, O., Zehl, M., Ueoka, R., Rückert, C., Buche, T., Jiang, Y., Li, Q.-Y., Piel, J. & Zotchev, S. B. (Corresponding author), 26 Oct 2022, In: mBio. 13, 5, 15 p., e0178922.

Biosynthetic Potential of the Endophytic Fungus Helotiales sp. BL73 Revealed via Compound Identification and Genome Mining
Oberhofer, M., Malfent, F., Zehl, M., Urban, E., Wackerlig, J., Reznicek, G., Vignolle, G. A., Rückert, C., Busche, T., Wibberg, D. & Zotchev, S. B. (Corresponding author), Mar 2022, In: Applied and Environmental Microbiology. 88, 6, 13 p., e02510-21.

Production of bioactive plant secondary metabolites through in vitro technologies-status and outlook
Wawrosch, C. (Corresponding author) & Zotchev, S. B., 1 Sept 2021, (E-pub ahead of print) In: Applied Microbiology and Biotechnology. 105, 18, p. 6649-6668 20 p.

Coupling of the engineered DNA "mutator" to a biosensor as a new paradigm for activation of silent biosynthetic gene clusters in Streptomyces
Sekurova, O. N., Sun, Y.-Q., Zehl, M., Rueckert, C., Stich, A., Busche, T., Kalinowski, J. & Zotchev, S. B. (Corresponding author), 20 Aug 2021, In: Nucleic Acids Research. 49, 14, p. 8396-8405 10 p.

Natural products in drug discovery: advances and opportunities
Atanasov, A. G. (Corresponding author), Zotchev, S. B., Dirsch, V. M., the International Natural Product Sciences Taskforce & Supuran, C. T. (Corresponding author), Mar 2021, In: Nature Reviews Drug Discovery. 20, p. 200-216 17 p.

Endophytic Akanthomyces sp. LN303 from Edelweiss Produces Emestrin and Two New 2-Hydroxy-4 Pyridone Alkaloids
Oberhofer, M. (Corresponding author), Wackerlig, J., Zehl, M., Buyuk, H., Cao, J., Prado-Roller, A., Urban, E. & Zotchev, S. B., 26 Jan 2021, In: ACS Omega. 6, 3, p. 2184-2191 8 p.

Piperazic acid containing peptides produced by an endophytic Streptomyces sp. isolated from the medicinal plant Atropa belladonna
Bekiesch, P. (Corresponding author), Oberhofer, M., Sykora, C., Urban, E. & Zotchev, S., 2021, In: Natural Product Research. 35, 7, p. 1090-1096 7 p.

Class IV Lasso Peptides Synergistically Induce Proliferation of Cancer Cells and Sensitize Them to Doxorubicin
Guerrero-Garzón, J. F., Madland, E., Zehl, M., Singh, M., Rezaei, S., Aachmann, F. L., Courtade, G., Urban, E., Rückert, C., Busche, T., Kalinowski, J., Cao, Y. R., Jiang, Y., Jiang, C. L., Selivanova, G. (Corresponding author) & Zotchev, S. B. (Corresponding author), 18 Dec 2020, In: iScience. 23, 12, 41 p., 101785.

Viennamycins: Lipopeptides Produced by a Streptomyces sp
Bekiesch, P., Zehl, M., Domingo-Contreras, E., Martín, J., Pérez-Victoria, I., Reyes, F., Kaplan, A., Rückert, C., Busche, T., Kalinowski, J. & Zotchev, S. B. (Corresponding author), 28 Aug 2020, In: Journal of Natural Products. 83, 8, p. 2381–2389 9 p.

Streptomyces spp. From the Marine Sponge Antho dichotoma: Analyses of Secondary Metabolite Biosynthesis Gene Clusters and Some of Their Products
Guerrero-Garzón, J. F., Zehl, M., Schneider, O., Rückert, C., Busche, T., Kalinowski, J., Bredholt, H. & Zotchev, S. B. (Corresponding author), 18 Mar 2020, In: Frontiers in Microbiology. 11, p. 437 15 p., 437.

Corrigendum: Prauserella flavalba sp. nov., a novel species of the genus Prauserella, isolated from alkaline soil (vol 70, pg 380, 2020)
Li, Q., Rückert, C., Li, G., Huang, P., Schneider, O., Kalinowski, J., Jiang, Y., Zotchev, S. B. & Jiang, C. L., 1 Jan 2020, In: International Journal of Systematic and Evolutionary Microbiology. 70, 1, p. 703-703 1 p., 003886.

Prauserella flavalba sp. nov., a novel species of the genus Prauserella, isolated from alkaline soil
Li, Q., Rückert, C., Li, G., Huang, P., Schneider, O., Kalinowski, J., Jiang, Y., Zotchev, S. B. & Jiang, C., 2020, In: International Journal of Systematic and Evolutionary Microbiology. 70, 1, p. 380-387 8 p., 003768.

Exploring Actinobacteria Associated With Rhizosphere and Endosphere of the Native Alpine Medicinal Plant Leontopodium nivale Subspecies alpinum
Oberhofer, M., Hess, J., Leutgeb, M., Gössnitzer, F., Rattei, T., Wawrosch, C. & Zotchev, S. B., 8 Nov 2019, In: Frontiers in Microbiology. 10, 13 p., 2531.

Novel bioactive natural products from bacteria via bioprospecting, genome mining and metabolic engineering
Sekurova, O. N., Schneider, O. & Zotchev, S. B., Sept 2019, In: Microbial Biotechnology. 12, 5, p. 828-844 17 p.

Noursamycins, Chlorinated Cyclohexapeptides Identified from Molecular Networking of Streptomyces noursei NTR-SR4
Mudalungu, C. M., Törne, W. J. V., Voigt, K., Rückert, C., Schmitz, S., Sekurova, O. N., Zotchev, S. B. & Süssmuth, R. D., 7 Jun 2019, In: Journal of Natural Products. 82, 6, p. 1478-1486 9 p.

Genome Mining of Streptomyces sp. YIM 130001 Isolated From Lichen Affords New Thiopeptide Antibiotic
Schneider, O., Simic, N., Aachmann, F. L., Rueckert, C., Kristiansen, K. A., Kalinowski, J., Jiang, Y., Wang, L., Jiang, C.-L., Lale, R. & Zotchev, S. B. (Corresponding author), 19 Dec 2018, In: Frontiers in Microbiology. 9, 12 p., 3139.

Genomics-based insights into the biosynthesis and unusually high accumulation of free fatty acids by Streptomyces sp. NP10
Schneider, O., Ilic-Tomic, T., Rückert, C., Kalinowski, J., Gencic, M. S., Živković, M. Z., Stankovic, N., Radulović, N. S., Vasiljevic, B., Nikodinovic-Runic, J. (Corresponding author) & Zotchev, S. B. (Corresponding author), 19 Jun 2018, In: Frontiers in Microbiology. 9, 10 p., 1302.

Streptomyces spp. From Ethiopia producing antimicrobial compounds: Characterization via bioassays, genome analyses, and mass spectrometry
Kibret, M., Guerrero-Garzón, J. F., Urban, E., Zehl, M., Wronski, V. K., Rückert, C., Busche, T., Kalinowski, J., Rollinger, J. M., Abate, D. & Zotchev, S. B. (Corresponding author), 12 Jun 2018, In: Frontiers in Microbiology. 9, 13 p., 1270.

An orthogonal system for heterologous expression of actinobacterial lasso peptides in Streptomyces hosts
Mevaere, J., Goulard, C., Schneider, O., Sekurova, O. N., Ma, H., Zirah, S., Afonso, C., Rebuffat, S., Zotchev, S. B. & Li, Y., 2018, In: Scientific Reports. 8, 1, 11 p., 8232.

Conservation biotechnologies for endangered plants in Austria – using Artemisia laciniata (Asteraceae) as a model species.
Kodym, A., Schumacher, F., Senula, A., Paun, O., Köllner, E., Temsch, E., Hood-Novotny, R., Hatfaludi, T., Sekurova, O., Zotchev, S. & Kiehn, M., 2018, *Book of Abstracts. Eight European Botanic Gardens Congress.*. Lisboa, p. 51-52

Micropropagation and cryoconservation of the endangered plant species Artemisia laciniata (Asteraceae).
Kodym, A., Senula, A., Temsch, E., Hood-Novotny, R., Schumacher, F., Sekurova, O., Zotchev, S. & Kiehn, M., 2018, In: CryoLetters. 39, 3, p. 177-189

Actinoalloteichus fjordicus sp. nov. isolated from marine sponges: phenotypic, chemotaxonomic and genomic characterisation
Nouioui, I., Rückert, C., Willemse, J., van Wezel, G. P., Klenk, H. P., Busche, T., Kalinowski, J., Bredholt, H. & Zotchev, S. B. (Corresponding author), Dec 2017, In: Antonie van Leeuwenhoek: international journal of general and molecular microbiology. 110, 12, p. 1705–1717 13 p.

Development of a Biosensor Concept to Detect the Production of Cluster-Specific Secondary Metabolites
Sun, Y.-Q., Busche, T., Rückert, C., Paulus, C., Rebets, Y., Novakova, R., Kalinowski, J., Luzhetskyy, A., Kormanec, J., Sekurova, O. N. & Zotchev, S. B. (Corresponding author), 16 Jun 2017, In: ACS Synthetic Biology. 6, 6, p. 1026–1033 8 p.

New natural products identified by combined genomics-metabolomics profiling of marine Streptomyces sp. MP131-18
Paulus, C., Rebets, Y., Tokovenko, B., Nadmid, S., Terekhova, L. P., Myronovskyi, M., Zotchev, S. B., Rückert, C., Braig, S., Zahler, S., Kalinowski, J. & Luzhetskyy, A., 10 Feb 2017, In: Scientific Reports. 7, 11 p., 42382.

Identification of a New Phosphatase Enzyme Potentially Involved in the Sugar Phosphate Stress Response in Pseudomonas fluorescens
Maleki, S., Hrudikova, R., Zotchev, S. B. & Ertesvåg, H., 15 Jan 2017, In: Applied and Environmental Microbiology. 83, 2, 12 p., e02361-16.

Complete genome sequence of the actinomycete Actinoalloteichus hymeniacidonis type strain HPA 177(T) isolated from a marine sponge
Schaffert, L., Albersmeier, A., Winkler, A., Kalinowski, J., Zotchev, S. B. & Rückert, C., 20 Dec 2016, In: Standards in Genomic Sciences. 11, p. 91 8 p., 91.

New Deferoxamine Glycoconjugates Produced upon Overexpression of Pathway-Specific Regulatory Gene in the Marine Sponge-Derived Streptomyces albus PVA94-07
Sekurova, O. N., Pérez-Victoria, I., Martín, J., Degnes, K. F., Sletta, H., Reyes, F. & Zotchev, S. B. (Corresponding author), Sept 2016, In: Molecules. 21, 9, 14 p., 1131.

Cloning and Heterologous Expression of the Grecocycline Biosynthetic Gene Cluster
Bilyk, O., Sekurova, O. N., Zotchev, S. B. & Luzhetskyy, A. (Corresponding author), 13 Jul 2016, In: PLoS ONE. 11, 7, p. e0158682 17 p., e0158682.

Activation of chloramphenicol biosynthesis in Streptomyces venezuelae ATCC 10712 by ethanol shock: insights from the promoter fusion studies
Sekurova, O. N., Zhang, J., Kristiansen, K. A. & Zotchev, S. B. (Corresponding author), 20 May 2016, In: Microbial Cell Factories. 15, p. 85 10 p., 85.

Alginate Biosynthesis Factories in Pseudomonas fluorescens: Localization and Correlation with Alginate Production Level
Maleki, S., Almaas, E., Zotchev, S., Valla, S. & Ertesvåg, H., Feb 2016, In: Applied and Environmental Microbiology. 82, 4 , p. 1227-1236 10 p.

Metagenomics of Marine Actinomycetes: From Functional Gene Diversity to Biodiscovery
Zotchev, S., Sekurova, O. & Kurtböke, I., 2016, *Marine OMICS Principles and Applications.* Kim, S.-K. (ed.). 1 ed. Boca Raton : Taylor & Francis, p. 165-186 744 p. 9

Minimum Information about a Biosynthetic Gene cluster
Medema, M. H., Kottmann, R., Yilmaz, P., Cummings, M., Biggins, J. B., Blin, K., de Bruijn, I., Chooi, Y. H., Claesen, J., Coates, R. C., Cruz-Morales, P., Duddela, S., Duesterhus, S., Edwards, D. J., Fewer, D. P., Garg, N., Geiger, C., Gomez-Escribano, J. P., Greule, A. & Hadjithomas, M. & 134 others, Haines, A. S., Helfrich, E. J. N., Hillwig, M. L., Ishida, K., Jones, A. C., Jones, C. S., Jungmann, K., Kegler, C., Kim, H. U., Koetter, P., Krug, D., Masschelein, J., Melnik, A. V., Mantovani, S. M., Monroe, E. A., Moore, M., Moss, N., Nuetzmann, H.-W., Pan, G., Pati, A., Petras, D., Reen, F. J., Rosconi, F., Rui, Z., Tian, Z., Tobias, N. J., Tsunematsu, Y., Wiemann, P., Wyckoff, E., Yan, X., Yim, G., Yu, F., Xie, Y., Aigle, B., Apel, A. K., Balibar, C. J., Balskus, E. P., Barona-Gomez, F., Bechthold, A., Bode, H. B., Borriss, R., Brady, S. F., Brakhage, A. A., Caffrey, P., Cheng, Y.-Q., Clardy, J., Cox, R. J., De Mot, R., Donadio, S., Donia, M. S., van der Donk, W. A., Dorrestein, P. C., Doyle, S., Driessen, A. J. M., Ehling-Schulz, M., Entian, K.-D., Fischbach, M. A., Gerwick, L., Gerwick, W. H., Gross, H., Gust, B., Hertweck, C., Hofte, M., Jensen, S. E., Ju, J., Katz, L., Kaysser, L., Klassen, J. L., Keller, N. P., Kormanec, J., Kuipers, O. P., Kuzuyama, T., Kyrpides, N. C., Kwon, H.-J., Lautru, S., Lavigne, R., Lee, C. Y., Linquan, B., Liu, X., Liu, W., Luzhetskyy, A., Mahmud, T., Mast, Y., Mendez, C., Metsa-Ketela, M., Micklefield, J., Mitchell, D. A., Moore, B. S., Moreira, L. M., Mueller, R., Neilan, B. A., Nett, M., Nielsen, J., O'Gara, F., Oikawa, H., Osbourn, A., Osburne, M. S., Ostash, B., Payne, S. M., Pernodet, J.-L., Petricek, M., Piel, J., Ploux, O., Raaijmakers, J. M., Salas, J. A., Schmitt, E. K., Scott, B., Seipke, R. F., Shen, B., Sherman, D. H., Sivonen, K., Smanski, M. J., Sosio, M., Stegmann, E., Suessmuth, R. D., Tahlan, K., Thomas, C. M., Tang, Y., Truman, A. W., Viaud, M., Walton, J. D., Walsh, C. T., Weber, T., van Wezel, G. P., Wilkinson, B., Willey, J. M., Wohlleben, W., Wright, G. D., Ziemert, N., Zhang, C., Zotchev, S. B., Breitling, R., Takano, E. & Gloeckner, F. O., 18 Aug 2015, In: Nature Chemical Biology. 11, 9, p. 625-631 7 p.

Engineering Terpene Biosynthesis in Streptomyces for Production of the Advanced Biofuel Precursor Bisabolene
Phelan, R. M., Sekurova, O. N., Keasling, J. D. & Zotchev, S. B., Apr 2015, In: ACS Synthetic Biology. 4, 4, p. 393-399 7 p.

Genomics of Sponge-Associated Streptomyces spp. Closely Related to Streptomyces albus J1074: Insights into Marine Adaptation and Secondary Metabolite Biosynthesis Potential
Ian, E., Malko, D. B., Sekurova, O. N., Bredholt, H., Rueckert, C., Borisova, M. E., Albersmeier, A., Kalinowski, J., Gelfand, M. S. & Zotchev, S. B., 12 May 2014, In: PLoS ONE. 9, 5, 11 p., e96719.

Genomics-based insights into the evolution of secondary metabolite biosynthesis in actinomycete bacteria
Zotchev, S. B., 1 Jan 2014, *Evolutionary Biology: Genome Evolution, Speciation, Coevolution and Origin of Life.* Springer International Publishing, p. 35-45 11 p.

Anti-microbial and cytotoxic 1,6-dihydroxyphenazine-5,10-dioxide (iodinin) produced by Streptosporangium sp DSM 45942 isolated from the fjord sediment
Sletta, H., Degnes, K. F., Herfindal, L., Klinkenberg, G., Fjaervik, E., Zahlsen, K., Brunsvik, A., Nygaard, G., Aachmann, F. L., Ellingsen, T. E., Doskeland, S. O. & Zotchev, S. B., Jan 2014, In: Applied Microbiology and Biotechnology. 98, 2, p. 603-610 8 p.

Structure-Antifungal Activity Relationships of Polyene Antibiotics of the Amphotericin B Group
Tevyashova, A. N., Olsufyeva, E. N., Solovieva, S. E., Printsevskaya, S. S., Reznikova, M. I., Trenin, A. S., Galatenko, O. A., Treshalin, I. D., Pereverzeva, E. R., Mirchink, E. P., Isakova, E. B., Zotchev, S. B. & Preobrazhenskaya, M. N., Aug 2013, In: Antimicrobial Agents and Chemotherapy. 57, 8, p. 3815-3822 8 p.

Alkaloids from Marine Bacteria
Zotchev, S. B., 2013, *NEW LIGHT ON ALKALOID BIOSYNTHESIS AND FUTURE PROSPECTS.* GiglioliGuivarch, N. (ed.). ACADEMIC PRESS LTD-ELSEVIER SCIENCE LTD, p. 301-333 33 p. (Advances in Botanical Research, Vol. 68).

Genome-based bioprospecting of microbes for new therapeutics
Zotchev, S. B., Sekurova, O. N. & Katz, L., Dec 2012, In: Current Opinion in Biotechnology. 23, 6, p. 941-947 7 p.

Antibiotics
Zotchev, S. B., 14 May 2012, *Natural Products in Chemical Biology.* Civjan, N. (ed.). Hoboken, NJ: Wiley, p. 269-285 17 p.

Marine actinomycetes as an emerging resource for the drug development pipelines
Zotchev, S. B., 30 Apr 2012, In: Journal of Biotechnology. 158, 4, p. 168-175 8 p.

Initiation of Polyene Macrolide Biosynthesis: Interplay between Polyketide Synthase Domains and Modules as Revealed via Domain Swapping, Mutagenesis, and Heterologous Complementation
Heia, S., Borgos, S. E. F., Sletta, H., Escudero, L., Seco, E. M., Malpartida, F., Ellingsen, T. E. & Zotchev, S. B., Oct 2011 , In: Applied and Environmental Microbiology. 77, 19, p. 6982-6990 9 p.

New Nystatin-Related Antifungal Polyene Macrolides with Altered Polyol Region Generated via Biosynthetic Engineering of Streptomyces noursei
Brautaset, T., Sletta, H., Degnes, K. F., Sekurova, O. N., Bakke, I., Volokhan, O., Andreassen, T., Ellingsen, T. E. & Zotchev, S. B., Sept 2011, In: Applied and Environmental Microbiology. 77, 18, p. 6636-6643 8 p.

Weaving a synthetic harness for the biosynthesis of natural products
Zotchev, S. B., Mar 2011, In: Microbial Biotechnology. 4, 2, p. 135-137 3 p.

Isolation and Characterization of the Gene Cluster for Biosynthesis of the Thiopeptide Antibiotic TP-1161
Engelhardt, K., Degnes, K. F. & Zotchev, S. B., Nov 2010, In: Applied and Environmental Microbiology. 76, 21, p. 7093-7101 9 p.

Production of a New Thiopeptide Antibiotic, TP-1161, by a Marine Nocardiopsis Species
Engelhardt, K., Degnes, K. F., Kemmler, M., Bredholt, H., Fjaervik, E., Klinkenberg, G., Sletta, H., Ellingsen, T. E. & Zotchev, S. B., Aug 2010, In: Applied and Environmental Microbiology. 76, 15, p. 4969-4976 8 p.

Synthesis and study of the antifungal activity of new mono- and disubstituted derivatives of a genetically engineered polyene antibiotic 28,29-didehydronystatin A(1) (S44HP)
Preobrazhenskaya, M. N., Olsufyeva, E. N., Tevyashova, A. N., Printsevskaya, S. S., Solovieva, S. E., Reznikova, M. I., Trenin, A. S., Galatenko, O. A., Treshalin, I. D., Pereverzeva, E. R., Mirchink, E. P. & Zotchev, S. B., Feb 2010, In: Journal of Antibiotics. 63, 2, p. 55-64 10 p.

Insights into the Evolution of Macrolactam Biosynthesis through Cloning and Comparative Analysis of the Biosynthetic Gene Cluster for a Novel Macrocyclic Lactam, ML-449
Jorgensen, H., Degnes, K. F., Dikiy, A., Fjaervik, E., Klinkenberg, G. & Zotchev, S. B., Jan 2010, In: Applied and Environmental Microbiology. 76, 1, p. 283-293 11 p.

Violacein-Producing Collimonas sp from the Sea Surface Microlayer of Costal Waters in Trondelag, Norway
Hakvag, S., Fjaervik, E., Klinkenberg, G., Borgos, S. E. F., Josefsen, K. D., Ellingsen, T. E. & Zotchev, S. B., Dec 2009, In: Marine Drugs. 7, 4, p. 576-588 13 p.

Biosynthesis of Macrolactam BE-14106 Involves Two Distinct PKS Systems and Amino Acid Processing Enzymes for Generation of the Aminoacyl Starter Unit
Jorgensen, H., Degnes, K. F., Sletta, H., Fjaervik, E., Dikiy, A., Herfindal, L., Bruheim, P., Klinkenberg, G., Bredholt, H., Nygard, G., Doskeland, S. O., Ellingsen, T. E. & Zotchev, S. B., 30 Oct 2009, In: Chemistry & Biology. 16, 10, p. 1109-1121 13 p.

Candicidin Biosynthesis Gene Cluster Is Widely Distributed among Streptomyces spp. Isolated from the Sediments and the Neuston Layer of the Trondheim Fjord, Norway
Jorgensen, H., Fjaervik, E., Hakvag, S., Bruheim, P., Bredholt, H., Klinkenberg, G., Ellingsen, T. E. & Zotchev, S. B., 15 May 2009, In: Applied and Environmental Microbiology. 75, 10, p. 3296-3303 8 p.

Chemical Modification and Biological Evaluation of New Semisynthetic Derivatives of 28,29-Didehydronystatin A(1) (S44HP), a Genetically Engineered Antifungal Polyene Macrolide Antibiotic
Preobrazhenskaya, M. N., Olsufyeva, E. N., Solovieva, S. E., Tevyashova, A. N., Reznikova, M. I., Luzikov, Y. N., Terekhova, L. P., Trenin, A. S., Galatenko, O. A., Treshalin, I. D., Mirchink, E. P., Bukhman, V. M., Sletta, H. & Zotchev, S. B., 8 Jan 2009, In: Journal of Medicinal Chemistry. 52, 1, p. 189-196 8 p.

Genetic Analysis of Nystatin and Amphotericin Biosynthesis
Zotchev, S. & Caffrey, P., 2009, *Complex enzymes in microbial natural product biosynthesis: Part B. Polyketides, aminocoumarins, and carbohydrates.* Hopwood, D. A. (ed.). Amsterdam, Boston: Elsevier Academic Press, p. 243-258 16 p. (Methods in Enzymology, Vol. 459).

Characterization of Streptomyces spp. Isolated from the Sea Surface Microlayer in the Trondheim Fjord, Norway
Hakvag, S., Fjaervik, E., Josefsen, K. D., Ian, E., Ellingsen, T. E. & Zotchev, S. B., Dec 2008, In: Marine Drugs. 6, 4, p. 620-635 16 p.

Improved Antifungal Polyene Macrolides via Engineering of the Nystatin Biosynthetic Genes in Streptomyces noursei
Brautaset, T., Sletta, H., Nedal, A., Borgos, S. E. F., Degnes, K. F., Bakke, I., Volokhan, O., Sekurova, O. N., Treshalin, I. D., Mirchink, E. P., Dikiy, A., Ellingsen, T. E. & Zotchev, S. B., 24 Nov 2008, In: Chemistry & Biology. 15, 11, p. 1198-1206 9 p.

Biosynthesis of natural products applied to drug discovery
Zotchev, S. B., May 2008, In: Current Topics in Medicinal Chemistry. 8, 8, p. 616-617 2 p.

Biosynthetic engineering of polyene macrolides towards generation of improved antifungal and antiparasitic agents
Caffrey, P., Aparicio, J. F., Malpartida, F. & Zotchev, S. B., May 2008, In: Current Topics in Medicinal Chemistry. 8, 8, p. 639-653 15 p.

Actinomycetes from Sediments in the trondheim fjord, Norway: Diversity and biological activity
Bredholt, H., Fjaervik, E., Johnsen, G. & Zotchev, S. B., Mar 2008, In: Marine Drugs. 6, 1, p. 12-24 13 p.

Computer-aided design of polyketides with the required properties
Sergeyko, A. P., Stepanchikova, A. V., Sobolev, B. N., Zotchev, S. B., Lagunin, A. A., Filimonov, D. A. & Poroikov, V. V., Mar 2008, In: Biochemistry (Moscow) Supplement Series B: Biomedical Chemistry. 2, 1, p. 55-62 8 p.

Antibiotics: Biosynthesis
Zotchev, S. B., 1 Jan 2008, *Wiley Encyclopedia of Chemical Biology.* Wiley, p. 1-9 9 p.

Analysis of the mycosamine biosynthesis and attachment genes in the nystatin Biosynthetic gene cluster of Streptomyces noursei ATCC 11455

Nedal, A., Sletta, H., Brautaset, T., Borgos, S. E. F., Sekurova, O. N., Ellingsen, T. E. & Zotchev, S. B., Nov 2007, In: Applied and Environmental Microbiology. 73, 22, p. 7400-7407 8 p.

Rare actinomycete bacteria from the shallow water sediments of the Trondheim fjord, Norway: isolation, diversity and biological activity
Bredholdt, H., Galatenko, O. A., Engelhardt, K., Fjaervik, E., Terekhova, L. P. & Zotchev, S. B., Nov 2007, In: Environmental Microbiology. 9, 11, p. 2756-2764 9 p.

Bacterial metabolism of long-chain n-alkanes
Wentzel, A., Ellingsen, T. E., Kotlar, H.-K., Zotchev, S. B. & Throne-Holst, M., Oct 2007, In: Applied Microbiology and Biotechnology. 76, 6, p. 1209-1221 13 p.

Identification of novel genes involved in long-chain n-alkane degradation by Acinetobacter sp strain DSM 17874
Throne-Holst, M., Wentzel, A., Ellingsen, T. E., Kotlar, H.-K. & Zotchev, S. B., May 2007, In: Applied and Environmental Microbiology. 73, 10, p. 3327-3332 6 p.

Computer-aided design of polyketides with the required properties
Sergeyko, A. P., Stepanchikova, A. V., Sobolev, B. N., Zotchev, S. B., Lagunin, A. A., Filimonov, D. A. & Poroikov, V. V., 2007, In: Biomeditsinskaya Khimiya. 53, 5, p. 522-531 10 p.

Wax control by biocatalytic degradation in high-paraffinic crude oils
Kotlar, H. K., Wentzel, A., Throne-Holst, M., Zotchev, S. & Ellingensen, T., 2007, *SPE International Symposium on Oilfield Chemistry Proceedings.* p. 533-539 7 p.

Wax control by biocatalytic degradation in high-paraffmic crude oils
Kotlar, H. K., Wentzel, A., Throne-Hoist, M., Zotchev, S. & Ellingensen, T., 2007, *Proceedings - SPE International Symposium on Oilfield Chemistry.* p. 533-539 7 p.

Utilization of n-alkanes by a newly isolated strain of Acinetobacter venetianus: the role of two AlkB-type alkane hydroxylases
Throne-Holst, M., Markussen, S., Winnberg, A., Ellingsen, T. E., Kotlar, H.-K. & Zotchev, S. B., Sept 2006, In: Applied Microbiology and Biotechnology. 72, 2, p. 353-360 8 p.

Probing the structure-function relationship of polyene macrolides: Engineered biosynthesis of soluble nystatin analogues
Borgos, S., Tsan, P., Sletta, H., Ellingsen, T., Lancelin, J. & Zotchev, S., 20 Apr 2006, In: Journal of Medicinal Chemistry. 49, 8, p. 2431-2439 9 p.

Characterization of the P450 monooxygenase NysL, responsible for C-10 hydroxylation during biosynthesis of the polyene macrolide antibiotic nystatin in Streptomyces noursei
Volokhan, O., Sletta, H., Ellingsen, T. & Zotchev, S., Apr 2006, In: Applied and Environmental Microbiology. 72, 4, p. 2514-2519 6 p.

Effect of glucose limitation and specific mutations in the module 5 enoyl reductase domains in the nystatin and amphotericin polyketide synthases on polyene macrolide biosynthesis
Borgos, S., Sletta, H., Fjaervik, E., Brautaset, T., Ellingsen, T., Gulliksen, O. & Zotchev, S., Apr 2006, In: Archives of Microbiology. 185, 3, p. 165-171 7 p.

Rational design of macrolides by virtual screening of combinatorial libraries generated through in silico manipulation of polyketide synthases
Zotchev, S., Stepanchikova, A., Sergeyko, A., Sobolev, B., Filimonov, D. & Poroikov, V., 23 Mar 2006, In: Journal of Medicinal Chemistry. 49, 6, p. 2077-2087 11 p.

Nystatin biosynthesis and transport: nysH and nysG genes encoding a putative ABC transporter system in Streptomyces noursei ATCC 11455 are required for efficient conversion of 10-deoxynystatin to nystatin
Sletta, H., Borgos, S., Bruheim, P., Sekurova, O., Grasdalen, H., Aune, R., Ellingsen, T. & Zotchev, S., Nov 2005, In: Antimicrobial Agents and Chemotherapy. 49, 11, p. 4576-4583 8 p.

An unexpected role for the putative 4 '-phosphopantetheinyl transferase-encoding gene nysF in the regulation of nystatin biosynthesis in Streptomyces noursei ATCC 11455
Volokhan, O., Sletta, H., Sekurova, O., Ellingsen, T. & Zotchev, S., 1 Aug 2005, In: FEMS Microbiology Letters. 249, 1, p. 57-64 8 p.

Biosynthesis of the polyene macrolide antibiotic nystatin in Streptomyces noursei
Fjaervik, E. & Zotchev, S., Jun 2005, In: Applied Microbiology and Biotechnology. 67, 4, p. 436-443 8 p.

Comparative analysis of in vitro antifungal activity and in vivo acute toxicity of the nystatin analogue S44HP produced via genetic manipulation
Treshchalin, I. D., Sletta, H., Borgos, S. E. F., Pereverzeva, E. R., Voeikova, T. A., Ellingsen, T. E. & Zotchev, S. B., 2005 , In: Antibiotiki i khimioterapii˘a˘. 50, 7, p. 18-22 5 p.

Сравнительный анализ противогрибковой активности in vitro и острой токсичности in vivo аналога нистатина S44HP, полученного методом генной инженерии
Treshchalin, I. D., Sletta, H., Borgos, S. E., Pereverzeva, E. P., Voeĭkova, T. A., Ellingsen, T. E. & Zotchev, S. B., 2005, In: Antibiotiki i khimioterapii˘a˘. 50, 7, p. 18-22 5 p.

Chemical diversity of polyene macrolides produced by Streptomyces noursei ATCC 11455 and recombinant strain ERD44 with genetically altered polyketide synthase NysC
Bruheim, P., Borgos, S., Tsan, P., Sletta, H., Ellingsen, T., Lancelin, J. & Zotchev, S., Nov 2004, In: Antimicrobial Agents and Chemotherapy. 48, 11, p. 4120-4129 10 p.

Biosynthesis of deoxyaminosugars in antibiotic-producing bacteria
Nedal, A. & Zotchev, S., Mar 2004, In: Applied Microbiology and Biotechnology. 64, 1, p. 7-15 9 p.

In vivo analysis of the regulatory genes in the nystatin biosynthetic gene cluster of Streptomyces noursei ATCC 11455 reveals their differential control over antibiotic biosynthesis
Sekurova, O., Brautaset, T., Sletta, H., Borgos, S., Jakobsen, O., Ellingsen, T., Strom, A., Valla, S. & Zotchev, S., Mar 2004, In: Journal of Bacteriology. 186, 5, p. 1345-1354 10 p.

Polyene antibiotic biosynthesis gene clusters
Aparicio, J., Caffrey, P., Gil, J. & Zotchev, S., May 2003, In: Applied Microbiology and Biotechnology. 61, 3, p. 179-188 10 p.

Site-specific mutagenesis and domain substitutions in the loading module of the nystatin polyketide synthase, and their effects on nystatin biosynthesis in Streptomyces noursei
Brautaset, T., Borgos, S., Sletta, H., Ellingsen, T. & Zotchev, S., 25 Apr 2003, In: Journal of Biological Chemistry. 278, 17, p. 14913-14919 7 p.

Bioconversion of aromatics in light gas oil in a continuous bioreactor system.
Kotlar, H., Grande, K., Rasmussen, K., Ramstad, M., Markussen, S., Winnberg, A., Zotchev, S. & Gimmestad, M., Mar 2003, In: American Chemical Society. Abstracts of Papers (at the National Meeting). 225, p. U851-U851 1 p.

Bioconversion of aromatics in light gas oil (LGO) in a continuous bioreactor system.
Kotlar, H., Rasmussen, K., Markussen, S., Winnberg, A., Zotchev, S. & Gimmestad, M., Mar 2003, In: American Chemical Society. Abstracts of Papers (at the National Meeting). 225, p. U425-U425 1 p.

Polyene macrolide antibiotics and their applications in human therapy
Zotchev, S., Feb 2003, In: Current Medicinal Chemistry. 10, 3, p. 211-223 13 p.

Polyne macrolide antibiotics and their applications in human therapy
Zotchev, S. B., 2003, In: Current Medicinal Chemistry. 10, 3, p. 211-223 13 p.

Hexaene derivatives of nystatin produced as a result of an induced rearrangement within the nysC polyketide synthase gene in S. noursei ATCC 11455
Brautaset, T., Bruheim, P., Sletta, H., Hagen, L., Ellingsen, T., Strom, A., Valla, S. & Zotchev, S., Mar 2002, In: Chemistry & Biology. 9, 3, p. 367-373 7 p., PII S1074-5521(02)00108-4.

P53 C-terminal interaction with DNA ends and gaps has opposing effect on specific DNA binding by the core
Zotchev, S. B., Protopopova, M. & Selivanova, G., 15 Oct 2000, In: Nucleic Acids Research. 28, 20, p. 4005-4012 8 p.

Biosynthesis of the polyene antifungal antibiotic nystatin in Streptomyces noursei ATCC 11455: Analysis of the gene cluster and deduction of the biosynthetic pathway
Brautaset, T., Sekurova, O. N., Sletta, H., Ellingsen, T. E., Strøm, A. R., Valla, S. & Zotchev, S. B., 1 Jun 2000, In: Chemistry and Biology. 7, 6, p. 395-403 9 p.

Identification of a gene cluster for antibacterial polyketide-derived antibiotic biosynthesis in the nystatin producer Streptomyces noursei ATCC 11455
Zotchev, S., Haugan, K., Sekurova, O., Sletta, H., Ellingsen, T. E. & Valla, S., Mar 2000, In: Microbiology. 146, 3, p. 611-619 9 p.

Molecular cloning and analysis of a pleiotropic regulatory gene locus from the nystatin producer Streptomyces noursei ATCC11455
Sekurova, O., Sletta, H., Ellingsen, T. E., Valla, S. & Zotchev, S., 15 Aug 1999, In: FEMS Microbiology Letters. 177, 2, p. 297-304 8 p.

Cloning and heterologous expression of the genes encoding nonspecific electron transport components for a cytochrome P450 system of Saccharopolyspora erythraea involved in erythromycin production
Zotchev, S. B. & Hutchinson, C. R., 14 Apr 1995, In: Gene. 156, 1, p. 101-106 6 p.

Identification of a methyl-specific restriction system mediated by a conjugative element from Streptomyces bambergiensis
Zotchev, S. B., Schrempf, H. & Hutchinson, C. R., 1995, In: Journal of Bacteriology. 177, 16, p. 4809-4812 4 p.

The linear Streptomyces plasmid pBL1: analyses of transfer functions
Zotchev, S. B. & Schrempf, H., Feb 1994, In: Molecular and general genetics : MGG. 242, 4, p. 374-382 9 p.

Characterization of a linear extrachromosomal DNA element (pBL1) isolated after interspecific mating between Streptomyces bambergiensis and S. lividans
Zotchev, S. B., Soldatova, L. I., Orekhov, A. V. & Schrempf, H., 1992, In: Research in Microbiology. 143, 9, p. 839-845 7 p.

Genetic studies of Streptomyces bambergiensis fertility properties: Intra- and interspecific crosses
Zotchev, S. B., Rozenfeld, S. M., Zhdanov, V. G. & Orekhov, A. V., 1990, In: Genetika. 26, 10, p. 1760-1769 10 p.

Obnaruzhenie gigantskikh plazmid v shtammakh Streptomyces bambergiensis.
Zotchev, S. B., Beritashvili, D. R., Rozanfel'd, S. M., Zhdanov, V. G. & Orekhov, A. V., 1990, In: Doklady Akademii nauk SSSR. 313, 1, p. 203-206 4 p.

Influence of pIJ350 plasmid on genetic instability of antibiotic production property in Streptomyces bambergiensis
Zotchev, S. B., Orekhov, A. V., Rozenfeld, S. M. & Zhdanov, V. G., 1989, In: Antibiotiki i khimioterapii¯a¯. 34, 3, p. 180-186 7 p.

Transformatsiia protoplastov Streptomyces bambergiensis S712 plazmidnoĭ DNK
Zotchev, S. B., Rozenfel'd, S. M. & Zhdanov, V. G., Mar 1988, In: Antibiotiki i khimioterapii¯a¯. 33, 3, p. 200-3 4 p.

Activities

Actinomycete bacteria in the discovery of novel natural products
Zotchev, S. (Invited speaker)
17 Mar 2025

Conventional and modern methods for the discovery of novel bacterial natural products
Zotchev, S. (Invited speaker)
27 Feb 2025

From extreme environments to bioactive discoveries: Unveiling the potential of Antarctic bacteria
Bezdicek Kralova, S. (Speaker), Flieder, M. (Contributor), Spacek, P. (Contributor), Gafriller, J. (Contributor), Grienke, U. (Contributor), Sekurova, O. (Contributor), Rattei, T. (Contributor), Zehl, M. (Contributor), Zotchev, S. (Contributor) & Loy, A. (Contributor)
Oct 2024

Harnessing Actinomycete Bacteria for Drug Discovery: from Bioprospecting to Synthetic Biology
Zotchev, S. (Invited speaker)
7 Mar 2024

Deletions of conserved extracytoplasmic sigma factors in Streptomyces have a major impact on secondary metabolism
Sekurova, O. (Selected presenter), Zehl, M. (Contributor), Predl, M. (Contributor), Hunyadi, P. (Contributor), Rattei, T. (Contributor) & Zotchev, S. (Contributor)
2024

Ethanol shock, sigma factors and secondary metabolism: the Streptomyces venezuelae story
Zotchev, S. (Invited speaker)
2024

Exploration and Engineering of a 'Supercluster' for Meroterpenoid and Phenaziterpene Biosynthesis in Streptomyces sp. 4.7
Schneider, O. (Selected presenter), Zehl, M. (Contributor), Cheng, J.-F. (Contributor) & Zotchev, S. (Contributor)
2024

Genome mining-based discovery of new glycosylated terpenoids from Micromonospora sp. isolated from Leontopodium nivale subsp. alpinum rhizosphere
Guerrero Garzón, J. F. (Selected presenter), Bajric, U. (Contributor), Zehl, M. (Contributor), Kirkegaard, R. H. (Contributor) & Zotchev, S. (Contributor)
2024

Engineering actinomycete biology for the discovery of new natural products
Zotchev, S. (Invited speaker)
2 Dec 2023

Streptomyces spp. from the rhizosphere of Leontopodium nivale subsp. alpinum – uncovering potential for the biosynthesis of secondary metabolites
Vignolle, A. (Contributor), Zehl, M. (Contributor), Pjevac, P. (Contributor) & Zotchev, S. (Contributor)
2 Jul 2023

Metabolic Engineering and Synthetic Biology for Drug Discovery
Zotchev, S. (Invited speaker)
8 May 2023

Bioprospecting, biosynthetic engineering and synthetic biology towards drug discovery from bacteria
Zotchev, S. (Invited speaker)
19 Sept 2022

Heterologous expression of terpene synthases from the endophytic fungus Helotiales sp. BL73 in Streptomyces spp.
Malfent, F. (Selected presenter), Oberhofer, M. (Contributor), Zehl, M. (Contributor), Reznicek, G. (Contributor), Rückert, C. (Contributor), Busche, T. (Contributor), Wibberg, D. (Contributor) & Zotchev, S. (Contributor)
19 Jun 2022 → 23 Jun 2022

Bioprospecting of plant-associated bacteria and fungi for novel secondary metabolites
Zotchev, S. (Invited speaker)
6 Dec 2019

Unravelling antibiotically active natural products of fungal endophytes from Leontopodium nivale subsp. alpinum
Oberhofer, M. (Speaker), Isikoglu, H. (Contributor), Haager, C. (Contributor), Haubenwallner, N. (Contributor), Wackerlig, J. (Contributor), Urban, E. (Contributor), Zehl, M. (Contributor), Wawrosch, C. (Contributor) & Zotchev, S. (Contributor)
18 Sept 2019

Harnessing Actinomycete Bacteria for Drug Discovery: from Bioprospecting to Synthetic Biology
Zotchev, S. (Invited speaker)
12 Sept 2019

Construction of a "mutator" device via manipulation of the DNA replication machinery components of Streptomyces lividans TK24
Sekurova, O. (Selected presenter), Sun, Y.-Q. (Contributor), Stich, A. (Contributor), Busche, T. (Contributor), Rückert, C. (Contributor), Kalinowski, J. (Contributor) & Zotchev, S. (Contributor)
11 Sept 2019

Bioactive Amycolatopsis sp. from the Mongolian steppe: identification of secondary metabolites and genome mining yielding novel lasso peptides
Guerrero Garzón, J. F. (Selected presenter), Zehl, M. (Contributor), Urban, E. (Contributor), Cao, Y. R. (Contributor), Jiang, Y. (Contributor), Jiang, C. (Contributor), Rückert, C. (Speaker), Busche, T. (Speaker), Kalinowski, J. (Contributor) & Zotchev, S. (Contributor)
8 Sept 2019 → 11 Sept 2019

Discovery of geninthiocin B from new lichen-associated Streptomyces sp.
Schneider, O. (Selected presenter), Simic, N. (Contributor), Aachmann, F. L. (Contributor), Rückert, C. (Contributor), Kristiansen, K. A. (Contributor), Kalinowski, J. (Contributor), Jiang, Y. (Contributor), Wang, L. (Contributor), Jiang, C. (Contributor), Lale, R. (Contributor) & Zotchev, S. (Contributor)
8 Sept 2019 → 11 Sept 2019

Synthetic biology and metabolic engineering toward the discovery of novel bioactive secondary metabolites from actinomycete bacteria
Zotchev, S. (Invited speaker)
17 Sept 2018 → 20 Sept 2018

Harnessing Bacteria for Drug Discovery: from Bioprospecting to Synthetic Biology
Zotchev, S. (Invited speaker)
2018

Harnessing Bacteria for Drug Discovery: from Bioprospecting to Synthetic Biology
Zotchev, S. (Invited speaker)
18 Dec 2017

Harnessing Bacteria for Drug Discovery: from Bioprospecting to Synthetic Biology
Zotchev, S. (Invited speaker)
10 Nov 2017

Activation of Chloramphenicol Biosynthesis in Streptomyces venezuelae ATCC 10712 by Ethanol Shock: Insights from the Promoter Fusion Studies
Sekurova, O. (Selected presenter), Zhang, J. (Contributor), Kristiansen, K. A. (Contributor) & Zotchev, S. (Contributor)
23 May 2017 → 27 May 2017

Bioactive Amycolatopsis sp. from the Mongolian steppe: identification of secondary metabolites, genome sequencing and genome-based bioprospecting
Guerrero Garzón, J. F. (Selected presenter), Zehl, M. (Contributor), Urban, E. (Contributor), Cao, Y. R. (Contributor), Jiang, Y. (Contributor), Jiang, C. (Contributor), Rückert, C. (Contributor), Busche, T. (Contributor), Kalinowski, J. (Contributor) & Zotchev, S. (Contributor)
23 May 2017 → 27 May 2017

Rare Actinomycete bacteria in the tissues of Leontopodium nivale subsp. alpinum (Edelweiss) and its rhizosphere
Oberhofer, M. (Selected presenter), Leutgeb, M. (Contributor), Rattei, T. (Contributor) & Zotchev, S. (Contributor)
23 May 2017 → 27 May 2017

Activation of chloramphenicol biosynthesis in Streptomyces venezuelae ATCC 10712 by ethanol shock: insights from the promoter fusion studies
Sekurova, O. (Speaker), Zhang, J. (Contributor), Kristiansen, K. A. (Contributor) & Zotchev, S. (Contributor)
30 Sept 2016

Harnessing Actinomycete Bacteria for Drug Discovery: from Bioprospecting to Synthetic Biology
Zotchev, S. (Invited speaker)
29 Sept 2016

Harnessing Bacteria for Drug Discovery: from Bioprospecting to Synthetic Biology
Zotchev, S. (Invited speaker)
13 Jun 2016

Harnessing Bacteria for Drug Discovery: from Bioprospecting to Synthetic Biology
Zotchev, S. (Invited speaker)
30 May 2016

Projects

Anti-Infectives Drug Discovery
Rollinger, J. M. (Project Lead), Dailey, L. A. (Co-Lead), Orts, J. (Co-Lead), Böttcher, T. (Co-Lead), Schmidt, M. (Co-Lead), Rademacher, C. J. H. (Co-Lead), Schützenmeister, N. (Co-Lead), Zotchev, S. (Co-Lead), Kirchmair, J. (Co-Lead) & Ortmayr, K. (Co-Lead)
1/07/25 → 31/01/30

Deciphering the biosynthesis of bioactive meroterpenoids
Zotchev, S. (Project Lead)
1/11/23 → 31/10/27

New bioactive natural products via forced evolution
Zotchev, S. (Project Lead)
1/11/22 → 31/10/26

Novel bacterial metabolites via synthetic biology
Zotchev, S. (Project Lead)
1/11/19 → 31/10/23

STREPSYNTH
Zotchev, S. (Project Lead)
1/09/15 → 30/11/18

Stress-induced antibiotic production in bacteria
Zotchev, S. (Project Lead)
1/04/18 → 30/09/21