DECHEMA
Biotechnologie

PROGRAMME

6 – 9 September 2015
Goethe University Frankfurt – Campus Westend
Frankfurt am Main/Germany

2nd European Conference on Natural Products

www.dechema.de/ECNP2015

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INVITATION

The second European Conference on Natural Products will again bring together more than 300 international experts in secondary metabolite research.

The programme – with a special emphasis on networking opportunities, the posters exhibition, and the interaction of industrial and academic research – spans a broad range of topics:

- Biosyntheses and Synthetic Biology
- Chemical Communication (volatile natural products)
- Methods (from bioinformatics to screening)
- Natural Products as Tools
- Organic Syntheses
- Structural Biology

We look forward to welcoming you in Frankfurt!

On behalf of the Scientific Committee,

Helge B. Bode
R. Müller

SUPPORTERS

LOEWE /
Integrative Fungal Research (IFR)

University of Frankfurt

Please note that ECNP 2015 will precede BIOFLAVOUR 2015 (Frankfurt, 9 -11 September 2015), the International Conference on Flavours and Fragrances Biotechnology.

www.bioflavour-conference.com

SCIENTIFIC COMMITTEE

Chairs:

Prof. Dr. Helge B. Bode	University of Frankfurt/D
Prof. Dr. Rolf Müller	Helmholtz-Institute for Pharmaceutical Research Saarland, Saarland University, Saarbrücken/D

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Dr. Friedrich Bischoff	Boehringer Ingelheim Animal Health GmbH, Ingelheim/D
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Prof. Dr. Gerhard Bringmann	University of Würzburg/D
Prof. Dr. Mark Brönstrup	Helmholtz-Centre for Infection Research, Braunschweig/D
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Prof. Dr. Elke Dittmann	University of Potsdam/D
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Prof. Dr. Stefan Schulz	Technical University of Braunschweig/D
Prof. Dr. Marc Stadler	Helmholtz-Centre for Infection Research, Braunschweig/D
Prof. Dr. Eckhard Thines	University of Mainz/D
Prof. Dr. Wolfgang Wohlleben	University of Tuebingen/D

KEYNOTE LECTURES

Monday, 7 September 2015

Natural products discovery from Actinomycetes in the genomic era
Richard Baltz, CognoGen Biotechnology Consulting, Indianapolis, IN/USA

Protein interactions in acetate metabolic pathways
Michael Burkart, University of California San Diego, La Jolla, CA/USA

Tuesday, 8 September 2015

Problems, progress and Holy-Grails in natural product sciences
David H. Sherman, University of Michigan, Ann Arbor, MI/USA

Upping the ante' for natural product synthesis: from traditional to bioactivity-guided retrosyntheses
Daniel Romo, Baylor University, Waco, TX/USA

Wednesday, 9 September 2015

Using genomics approaches to discover terpenoid pathway enzymes in non-model systems
Joerg Bohlmann, University of British Columbia, Vancouver/CDN

Sunday, 6 September 2015

17:30 – 19:00 **Registration and Welcome Reception**

Monday, 7 September 2015

Lecture Hall HZ 2

9:00 **OPENING AND WELCOME**
H.B. Bode[1]; R. Müller[2], [1]Goethe University Frankfurt, Frankfurt am Main/D; [2]Helmholtz Institute for Pharmaceutical Research Saarland (HIPS), Saarland University, Saarbrücken/D

Chair: R. Müller, Helmholtz-Institut für Pharmazeutische Forschung Saarland, Saarbrücken/D

9:10 **KEYNOTE LECTURE**
Natural products discovery from Actinomycetes in the genomic era
R. Baltz, CognoGen Biotechnology Consulting, Indianapolis, IN/USA

BIOSYNTHESES & SYNTHETIC BIOLOGY

Chair: J. Piel, ETH Zurich/CH

09:55 **Chemical probes for the capture and functionalisation of polyketide intermediates: biosynthetic insights and novel opportunities**
M. Tosin, University of Warwick, Coventry/UK

10:25 **Engineering FAS for directed polyketide synthesis**
M. Grininger[1]; J. Gajewski[1]; F. Buelens[2]; S. Serdjukov[3]; N. Cortina[1]; H. Grubmüller[2]
[1] Goethe University Frankfurt, Frankfurt am Main/D; [2] Max-Planck-Institute for Biophysical Chemistry, Göttingen/D; [3] Max-Planck-Institute of Biochemistry, Martinsried/D

10:55 Coffee Break

11:25 **Mechanism of ergothioneine biosynthesis**
F. Seebeck, University of Basel, Basel/CH

11:55 **Novel (bio-)synthetic strategies to polycyclic natural products**
T. Gulder, TU München, Garching/D

12:05 **Biosynthetic pathways from predatory bacteria: their products and biological relevance**
M. Nett, Leibniz Institute for Natural Product Research and Infection Biology, Jena/D

12:15 **The biosynthesis of albicidins**
D. Petras[1]; B. Hempel[1]; D. Kerwart[1]; A. Mainz[1]; R. Süssmuth[1]; S. Cociancich[2]; M. Royer[2]
[1] TU Berlin, Berlin/D; [2] Cirad, Montpellier/F

Monday, 7 September 2015

Lecture Hall HZ 2

12:25 **Structure-function relationships of the DNA gyrase inhibitor simocyclinone: SimC7 is essential for antibiotic activity**
M. Schäfer[1]; T. Le[1]; S. Hearnshaw[1]; A. Maxwell[1]; G. Challis[2]; B. Wilkinson[1]; M. Buttner[1]
[1] John Innes Centre, Norwich/UK; [2] University of Warwick, Coventry/UK

12:35 Lunch Break & Poster Exhibition

BIOSYNTHESES & SYNTHETIC BIOLOGY

Chair: H.B. Bode, Goethe University Frankfurt, Frankfurt am Main/D

14:00 **Peptide antibiotics from bacterial and fungal pathogens**
R. Suessmuth, TU Berlin, Berlin/D

14:30 **Hapalindole alkaloid biosynthesis: a treasure trove of novel enzymatic transformations**
X. Liu, University of Pittsburgh, Pittsburgh, PA/USA

15:00 **A novel enzyme capping N-terminus of various peptides with amidino-PheGly derivatives**
T. Dairi, Hokkaido University, Sapporo/J

15:30 Coffee Break

16:00 **Reprogramming nonribosomal peptide synthetases from *Xenorhabdus* and *Photorhabdus***
F. Fleischhacker[1]; K. Bozhüyük[1]; H.B. Bode[1], [1] Goethe University Frankfurt, Frankfurt am Main/D

16:10 **Corallopyronin A – two in one sweep**
T. Schäberle[1]; G. Zocher[2]; F. Lohr[1]; M. Mir Mohseni[1]; T. Stehle[2]; G. König[3], [1] Rheinische Friedrich-Wilhelms-Universität Bonn, Bonn/D; [2] Eberhard Karls Universität Tübingen, Tübingen/D; [3] Universität Bonn, Bonn/D

16:20 **The quest for the production and biosynthesis of thapsigargin**
T. Andersen[1]; C. López[1]; K. Martinez[1]; H. Simonsen[1], [1] University of Copenhagen, Frederiksberg/DK

16:30 **Metabolic engineering of microorganisms for the synthesis of phenylpropanoid-derived aromatic products**
P. van Summeren-Wesenhagen[1]; N. Kallscheuer[1]; M. Vogt[1]; J. Marienhagen[1],
[1] Forschungszentrum Jülich, Jülich/D

16:40 **KEYNOTE LECTURE**
Protein interactions in acetate metabolic pathways
M. Burkart, University of California San Diego, La Jolla, CA/USA

17:25 End of 1st day

19:00 – 23:00 **Conference Dinner at „Sachsenhäuser Warte“, Frankfurt-Sachsenhausen**

Tuesday, 8 September 2015

Lecture Hall HZ 2

Chair: E. Dittmann, Universität Potsdam, Potsdam-Golm/D

09:00 **KEYNOTE LECTURE**
Problems, progress and Holy-Grails in natural product sciences
D.H. Sherman, University of Michigan, Ann Arbor, MI/US

NATURAL PRODUCTS AS TOOLS

Chair: E. Dittmann, Universität Potsdam, Potsdam-Golm/D

09:45 **Structure-activity relationship studies on muraymycin nucleoside-peptide antibiotics**
C. Ducho, Universität des Saarlandes, Saarbrücken/D

10:15 **Cyclomarin a kills mycobacteria and malaria parasites using distinct modes of action**
E. Schmitt, Novartis, Basel/CH

10:45 **In vivo Raman imaging of coronatine as a plant virulence factor**
M. Ueda, Tohoku University, Sendai/J

10:55 Coffee Break

11:25 **Prenyltransferase genes in fungal genomes, their role in the biosynthesis of natural products and potential usage for synthetic biology**
S. Li, Philipps-Universität Marburg, Marburg/D

11:55 **Antibacterial disciformycins from myxobacteria as novel RNA polymerase inhibitors**
J. Herrmann[1]; O. Kalinina[2]; F. Surup[3]; R. Müller[1], [1] Helmholtz Institut für Pharmazeutische Forschung Saarland, Saarbrücken/D; [2] Max Planck Institute for Informatics, Saarbrücken/D; [3] Helmholtz-Zentrum für Infektionsforschung GmbH, Braunschweig/D

12:05 **New strategies to by-pass the plant-based bioinsecticide production**
P. Spieth[1]; R. Lohse[1]; H. Bednarz[2]; H. Kleeberg[3]; K. Niehaus[2]; A. Patel[1], [1] Bielefeld University of Applied Sciences, Bielefeld/D; [2] Bielefeld University, Bielefeld/D; [3] Trifolio-M GmbH, Lahnau/D

12:15 **V-APase inhibition by archazolid A influences cholesterol metabolism of cancer cells**
K. Steiner[1]; K. von Schwarzenberg[1]; A. Vollmar[1], [1] Ludwig-Maximilians-Universität München, München/D

12:25 Lunch Break & Poster Exhibition

Tuesday, 8 September 2015

Lecture Hall HZ 2

ORGANIC SYNTHESES

Chair: S. Schulz, TU Braunschweig, Braunschweig/D

14:00 **α-Aminocarbanions, radicals and other tools for the synthesis of heterocyclic natural products**
M. Geffe[1]; G. Lahm[1]; A. Stoye[1]; J. Tauber[1]; T. Opatz[1]; [1] Johannes Gutenberg-University Mainz, Mainz/D

14:30 **Total synthesis of mycolactones and structure-function studies**
K. Altmann[1]; G. Pluschke[2]; T. Junghanss[3]; F. Pletscher[4]; J. Dangy[2]; M. Ruf[2]; N. Scherr[2]; R. Bieri[2]; P. Gersbach[1]; [1] Eidgenössische Technische Hochschule Zürich (ETHZ), Zürich/CH; [2] Schweizerische Tropen- und Public-Health-Institut (SwissTPH), Basel/CH; [3] Ruprecht-Karls-Universität und UniversitätsKlinikums Heidelberg, Heidelberg/D; [4] Universität und Universitätsspital Basel, Basel/CH

15:00 **Straightforward protocols for the synthesis of myxobacterial natural products**
U. Kazmaier, Universität des Saarlandes, Saarbrücken/D

15:30 Coffee Break

16:00 ***In vitro* studies of the post-PKS pathway in jerangolid biosynthesis**
F. Lindner[1]; F. Hahn[1]; [1] Leibniz Universität Hannover, Hannover/D

16:10 **Design and synthesis of novel macrolide-based antibiotics**
D. Möller[1]; N. Pryk[1]; A. Bashan[2]; A. Yonath[2]; F. Schulz[1]; [1] Ruhr Universität Bochum, Bochum/D; [2] Weizmann Institute of Science, Rehovot/IL

16:20 **Synthesis of potent antiinflammatory fungal macrolactones**
J. Tauber[1]; K. Rudolph[2]; M. Rohr[2]; G. Erkel[2]; T. Opatz[1]; [1] Johannes Gutenberg-University Mainz, Mainz/D; [2] TU Kaiserslautern, Kaiserslautern/D;

16:30 **Total synthesis of the indolo-6,7-quinone alkaloid sanguinolentaquinone and the pyrroloquinoline alkaloids mycenaflavin A and mycenaflavin B**
J. Backenköhler[1]; P. Spiteller[1]; [1] Universität Bremen, Bremen/D

16:40 **KEYNOTE LECTURE**
Upping the ante' for natural product synthesis: from traditional to bioactivity-guided retrosyntheses
D. Romo, Baylor University, Waco, TX/USA

17:25 **Poster Discussion**

19:00 End of the 2nd day

Wednesday, 9 September 2015

Lecture Hall HZ 2

METHODS: FROM BIOINFORMATICS TO SCREENING

Chair: P. Hammann, Sanofi-Aventis Deutschland GmbH, Frankfurt/D

09:30 **Tools for the genomics driven discovery and engineering of natural products**
K. Blin[1]; Y. Tong[1]; E. Musiol-Kroll[1]; H. Kim[1]; H. Lunde Robertsen[1]; X. Jiang[1]; P. Charusanti[1]; M. Medema[2]; S. Lee[1]; T. Weber[1]; [1] Technical University of Denmark, Hørsholm/DK; [2] Wageningen University, Wageningen/NL

10:00 **Accessing previously uncultured bacteria with the Diffusion Sandwich System, a tool for the discovery of new natural products**
O. Genilloud[1]; G. Bills[2]; F. Reyes[3]; F. Vicente[3]; M. de la Cruz[3]; N. de Pedro[3]; B. Cautain[3]; J. Martín[3]; J. Pascual[3]; [1] Fundación MEDINDA, Granada/E; [2] The University of Texas Health Science Center, Houston, TX/USA; [3] Fundación MEDINDA, Armilla, Granada/E

10:30 **Reactivity-guided isolation of biologically-active natural products**
C. Hughes[1]; D. Hahn[2]; D. Reimer[2]; G. Castro[2]; [1] University of California, La Jolla, CA/USA; [2] University of California San Diego, La Jolla, CA/USA

11:00 **Novel secondary metabolites from *Salinispora* through mass spectrometry-guided genome mining approaches – new strategies towards more rational and high-throughput natural product discovery**
M. Crüsemann[1]; E. O'Neill[1]; N. Ziemert[1]; J. Li[1]; A. de Oliveira[1]; K. Duncan[1]; N. Bandeira[1]; P. Dorrestein[1]; P. Jensen[1]; B. Moore[1]; [1] University of California San Diego, La Jolla, CA/USA

11:10 **Activity-based profiling of a physiologic aglycone library detects natural substrates of plant glycosyltransferases**
W. Schwab[1]; F. Huang[2]; F. Bönisch[2]; [1] TU München, Freising/D; [2] TU München, München/D

11:20 **Secondary metabolites from *Xylariaceae***
F. Surup[1]; E. Kuhnert[1]; M. Stadler[1]; [1] Helmholtz-Zentrum für Infektionsforschung GmbH, Braunschweig/D

11:30 **Investigation of extraction conditions for paclitaxel in hazelnut hard shell**
H. Ugras, Düzce University, Düzce/TR

11:40 Lunch Break & Poster Exhibition

Chair: J. Schrader, DECHEMA-Forschungsinstitut, Frankfurt/D

13:00 **KEYNOTE LECTURE**
Using genomics approaches to discover terpenoid pathway enzymes in non-model systems
J. Bohlmann, University of British Columbia, Vancouver/CDN

Wednesday, 9 September 2015

Lecture Hall HZ 2

CHEMICAL COMMUNICATION (VOLATILE NATURAL PRODUCTS)

Chair: J. Schrader, DECHEMA-Forschungsinstitut, Frankfurt/D

13:45 **Got mint? Navigating the complexities of essential oil biosynthesis**
B. Lange[1]; A. Ahkami[1]; S. Johnson[1]; N. Srividya[1]; [1] Washington State University, Pullman, WA/USA

14:15 **Bacterial volatiles – new compounds and functions**
S. Schulz[1]; U. Groenhagen[1]; L. Ziesche[1]; H. Bruns[1]; A. von Rymon-Lipinski[1]; M. Maczka[1]; S. Ravella[1]; S. Kern[1]; [1] TU Braunschweig, Braunschweig/D

14:45 **Engineering of *Streptomyces venezuelae* for heterologous production of terpenoids**
R. Phelan[1]; O. Sekurova[2]; J. Keasling[1]; S. Zotchev[2,3]; [1] University of California, Berkeley, CA/USA; [2] Norwegian University of Science and Technology, Trondheim/N; [3] University of Vienna, Vienna/A

15:15 Coffee Break

15:45 **Characterization of novel communication systems from entomopathogenic bacteria**
D. Kresovic[1]; N. Tobias[2]; S. Brameyer[3]; R. Heermann[3]; H.B. Bode[2]; [1] Universität Frankfurt, Offenbach am Main/D; [2] Goethe University Frankfurt, Frankfurt am Main/D; [3] Universität München, München/D

15:55 **Clostrubins, novel polyphenolic polyketide antibiotics from soil-derived and plant-pathogenic clostridium species**
K. Ishida[1]; G. Shabuer[1]; S. Pidot[1]; U. Knüpfer[1]; C. Hertweck[1]; [1] Leibniz Institute for Natural Product Research and Infection Biology – Hans Knöll Institute (HKI), Jena/D

16:05 **Production of short fatty acid in *S. cerevisiae* by rational engineering**
J. Gajewski[1]; R. Pavlovic[1]; M. Fischer[1]; E. Boles[1]; M. Grininger[1]; [1] Goethe University Frankfurt, Frankfurt am Main/D

16:15 **Correlation between nudicaulin biosynthesis and volatile composition in Papaver nudicaule flowers**
A. Warskulat[1]; J. Martinez-Harms[1]; B. Dudek[1]; B. Schneider[1]; [1] Max-Planck-Institute for Chemical Ecology, Jena/D

16:25 **CLOSING REMARKS**
H.B. Bode[2], R. Müller[1]; [1]Helmholtz Institute for Pharmaceutical Research Saarland (HIPS), Saarland University, Saarbrücken/D; [2]Goethe University Frankfurt, Frankfurt am Main/D

16:30 **End of the conference**

(Programme subject to change)

P 01 **_Aspergillus niger_: a versatile and efficient expression host for secondary metabolite synthesis**
S. Boecker[1,2], F. Wanka[1], L. Richter[2], T. Kurt[1], Ö. Vural[1], R. Süßmuth[2], V. Meyer[1], [1]TU Berlin, Institut für Biotechnologie, FG Angewandte und Molekulare Mikrobiologie, Berlin/D
[2]TU Berlin, Institut für Chemie, FG Biologische Chemie, Berlin/D

P 02 **Development of a database of chemical components of African traditional medicine: Focus on Northern Africa**
F. Ntie-Kang[1]; P. Judson[2]; W. Sippl[1]; S. Günther[4]; L. Meva'a Mbaze[5]; [1] Martin-Luther University Halle-Wittenberg, Halle/D; [2] CBIC/BR; [4] University of Freiburg, Freiburg/D; [5] University of Douala, Douala/RFC

P 03 **Investigation of extraction conditions for baccatin III in hazelnut green leafy**
H. Ugras[1], [1] Düzce University, Düzce/TR

P 04 **Synthesis and biological activity studies of ozonated hazelnut oil**
S. Ugras[1], [1] Düzce University, Düzce/TR

P 05 **Investigation of extraction conditions for paclitaxel in hazelnut tree leaf**
H. Ugras[1], [1] Düzce University, Düzce/TR

P 06 **Structure-function relationships of the DNA gyrase inhibitor simocyclinone: SimC7 is essential for antibiotic activity**
M. Schäfer[1]; T. Le[1]; S. Hearnshaw[1]; A. Maxwell[1]; G. Challis[2]; B. Wilkinson[1]; M. Buttner[1]; [1] John Innes Centre, Norwich/UK; [2] University of Warwick, Coventry/UK

P 07 **Investigating aglycone formation during glycopeptide antibiotic biosynthesis**
M. Peschke[1]; K. Haslinger[1]; C. Brieke[1]; M. Cryle[1]; [1] Max Planck Institute for Medical Research, Heidelberg/D

P 08 **A chem-biosynthetic structure-activity relationship of a polyketide targeting the KRAS pathway**
A. Ismail-Ali[1], [1] Ruhr Universität Bochum, Bochum/D

P 09 **Activation of natural product gene clusters of _Aspergillus nidulans_ at low temperature stress**
B. Hanf[1]; D. Mattern[1]; T. Krüger[1]; O. Kniemeyer[1]; A. Brakhage[1]; [1] Leibniz Institute for Natural Product Research and Infection Biology – Hans-Knöll-Institute, Jena/D

P 10 **Genome mining and discovery of an orphan natural product gene cluster in the human-pathogenic fungus _Aspergillus fumigatus_**
D. Mattern[1]; J. Weber[1]; S. Novohradská[1]; H. Schoeler[1]; K. Kraibooj[1]; F. Hillmann[1]; M. Figge[1]; V. Valiante[1]; A. Brakhage[1]; [1] Leibniz Institute for Natural Product Research and Infection Biology – Hans-Knöll-Institute, Jena/D

P 11 **Biochemical diversification of insecticidal rhabdopeptides in entomopathogenic bacteria**
X. Cai[1]; H.B. Bode[1]; [1] Goethe University Frankfurt, Frankfurt am Main/D

P 12 **cancelled**

P 13 **cancelled**

P 14 **Cytotoxic effects of extracts from Allium species against cancer cells**
E. Jivishov[1]; J. Hänze[1]; R. Hofmann[1]; M. Keusgen[1]; [1] Philipps-Universität Marburg, Marburg/D

POSTERS

P 15 **Yellow pyrroloquinoline alkaloids from _Mycena haematopus_**
J. Lohmann[1]; P. Spiteller[1]; S. Wagner[1]; A. Pulte[1]; [1] Universität Bremen, Bremen/D

P 16 **Exploring novel peptide ligase orthologs in actinobacteria**
Y. Ogasawara[1]; J. Kawata[1]; M. Noike[1]; K. Furihata[2]; T. Dairi[1]; [1] Hokkaido University, Sapporo/J; [2] University of Tokyo, Tokyo/J

P 17 **cancelled**

P 18 **Optimizing xylose metabolism for heterologous terpene production in _E. coli_ systems**
K. Kemper[1]; M. Fuchs[1]; T. Brück[2]; [1] TU München, Garching/D; [2] TU München, München/D

P 19 **Evolution of _E. coli_ for taxoid-production**
M. Hirte[1]; M. Fuchs[1]; T. Brück[2]; [1] TU München, Garching/D; [2] TU München, München/D

P 20 **A carbohydrate fraction, AIP1, from _Artemisia iwayomogi_ reduces the action potential duration by activation of hERG channels in rabbit ventricular myocytes**
Y. Son[1]; W. Park[2]; [1] National Institute of Biological Resources, Incheon/ROK; [2] Kangwon National University School of Medicine, Chuncheon/ROK

P 21 **The direct inhibition of voltage-dependent K+ channels by curcumin in rabbit coronary arterial smooth muscle cells**
Y. Son[1]; W. Park[2]; [1] National Institute of Biological Resources, Incheon/ROK; [2] Kangwon National University School of Medicine, Chuncheon/ROK

P 22 **The inhibitory effect of isoflavone, genistein on voltage-dependent K+ channels in rabbit coronary arterial smooth muscle cells**
Y. Son[1]; W. Park[2]; [1] National Institute of Biological Resources, Incheon/ ROK; [2] Kangwon National University School of Medicine, Chuncheon/ ROK

P 23 **cancelled**

P 24 **Elucidation of specific interaction between the model organism _Aspergillus nidulans_ and _Streptomycetes_**
T. Netzker[1]; V. Schroeckh[1]; K. Scherlach[1]; C. Hertweck[1]; A. Brakhage[1]; [1] Leibniz Institute for Natural Product Research and Infection Biology – Hans-Knöll-Institute, Jena/D

P 25 **Discovery, structure elucidation and biological characterization of nannocystin A, a macrocyclic myxobacterial metabolite with potent antiproliferative properties**
M. Brönstrup[1]; L. Debussche[2]; G. Penarier[2]; A. Bauer[3]; C. Klemke-Jahn[3]; D. Schummer[4]; M. Caspers[3]; H. Matter[3]; W. Heyse[3]; H. Kogler[5]; H. Hoffmann[3]; [1] Helmholtz-Zentrum für Infektionsforschung GmbH, Braunschweig/D; [2] Sanofi R&D, Vitry sur Seine/F; [3] Sanofi R&D, Frankfurt am Main/D; [4] TH Mittelhessen, Gießen/D; [5] Universität Bremen, Bremen/D

P 26 **_Cryptosporioptides_: a class of novel bioactive polyketides produced by an endophytic fungus Cryptosporiopsis sp.**
M. Saleem[1]; M. Tousif[1]; N. Riaz[1]; H. Gross[3]; G. Pescitelli[4]; B. Schulz[5]; [1] The Islamia University of Bahawalpur, Bahawalpur/PK;[3] Universität Tübingen, Tübingen/D; [4] Università di Pisa, Pisa/I; [5] TU Braunschweig, Braunschweig/D

P 27 **Investigation of lasso peptide isopeptidases**
J. Hegemann[1]; C. Fage[1]; M. Zimmermann[1]; S. Zhu[1]; M. Marahiel[1]; [1] Philipps-Universität Marburg, Marburg/D

P 28 **Edonamides, the first secondary metabolites from the recently described myxobacterium *Aggregicoccus edonensis***
S. Karwehl[1]; R. Jansen[1]; K. Mohr[1]; S. Sood[2]; S. Bernecker[1]; M. Stadler[1]; [1] Helmholtz-Zentrum für Infektionsforschung GmbH, Braunschweig/D; [2] MRC National Institute of Medical Research, London/UK

P 29 **cancelled**

P 30 **Plasticity of the malleobactin pathway and its impact on siderophore action in human pathogenic bacteria**
J. Franke[1]; K. Ishida[1]; C. Hertweck[1]; [1] Leibniz Institute for Natural Product Research and Infection Biology – Hans Knöll Institute, Jena/D

P 31 **MS-based elucidation of class III lanthipeptide curvopeptin biosynthesis unravels its nonlinear processing**
N. Jungmann[1]; B. Krawczyk[1]; M. Tietzmann[1]; P. Ensle[1]; R. Süssmuth[1]; [1] TU Berlin, Berlin/D

P 32 **Histone acetyltransferases are involved in the regulation of secondary metabolites of *Aspergillus fumigatus***
J. Weber[1]; D. Mattern[1]; C. König[1]; V. Schroeckh[1]; V. Valiante[1]; A. Brakhage[1]; [1] Leibniz Institute for Natural Product Research and Infection Biology – Hans-Knöll-Institute, Jena/D

P 33 **Heterologous expression of disciformycin precursors in the mxyobacterium *Myxococcus xanthus***
K. Viehrig[1]; D. Auerbach[1]; R. Müller[1]; [1] Helmholtz Institute for Pharmaceutical Research Saarland (HIPS), Saarbrücken/D

P 34 **Oleanolic carboxamides – selective anticancer agents**
L. Heller[1]; J. Wiemann[1]; R. Csuk[1]; [1] Martin-Luther-Universität Halle-Wittenberg, Halle/D

P 35 **Honokiol derivatives as RXRalpha modulators**
S. Latkolik[1]; N. Fakhrudin[2]; L. Rycek[3]; A. Ladurner[1]; C. Malainer[1]; E. Heiss[1]; S. Schwaiger[4]; H. Stuppner[4]; M. Mihovilovic[3]; W. Schuehly[5]; A. Atanasov[1]; V. Dirsch[1]; [1] Universität Wien, Wien/A; [2] Universitas Gadjah Mada, Yogyakarta/RI; [3] TU Wien, Wien/A; [4] Universität Innsbruck, Innsbruck/A; [5] Karl-Franzens-University Graz, Graz/A

P 36 **The inhibitory effects and molecular mechanism of dieckol isolated from marine brown alga on COX-2 and iNOS in microglial cells**
Y. Son[1]; J. Lee[1]; S. Lee[1]; J. Yeo[1]; W. Park[2]; I. Choi[3]; [1] National Institute of Biological Resources, Incheon/ROK; [2] Kangwon National University School of Medicine, Chuncheon/ROK; [3] Inje University, College of Medicine, Busan/ROK

P 37 **Anti-inflammatory activity of caffeic acid phenethyl ester (CAPE) derived from Rhodiola sacra attenuates the effects of lipopolysaccharide-induced inflammatory responses in mice**
Y. Son[1]; J. Lee[1]; S. Lee[1]; J. Yeo[1]; W. Park[2]; I. Choi[3]; [1] National Institute of Biological Resources, Incheon/ROK; [2] Kangwon National University School of Medicine, Chuncheon/ROK; [3] Inje University, College of Medicine, Busan/ROK

P 38 **Identification of chemical structure and free radical scavenging activity of active compound isolated from a brown alga, Ishige okamurae**
Y. Son[1]; J. Lee[1]; S. Lee[1]; J. Yeo[1]; W. Park[2]; I. Choi[3]; [1] National Institute of Biological Resources, Incheon/ROK; [2] Kangwon National University School of Medicine, Chuncheon/ROK; [3] Inje University, College of Medicine, Busan/ROK

P 39 **Total synthesis of Arylomycin-type antibiotics**
H. Hong[1], F. Schaefers[1], T.A.M. Gulder[1]; [1] Technische Universität München, Garching/D

P 40 **Investigations of the unusual methylation-double bond migration in module 4 of the ambruticin polyketide synthase**
G. Berkhan[1]; C. Holec[1]; F. Hahn[1]; [1] Leibniz Universität Hannover, Hannover/D

P 41 **Construction of a novel tetracycline lead-structures with potent antibacterial activity using synthetic biology approach**
T. Lukežič[1]; U. Lešnik[2]; A. Podgoršek[3]; J. Horvat[3]; T. Polak[2]; M. Šala[4]; B. Jenko[3]; K. Harmrolfs[1]; A. Ocampo-Sosa[5]; L. Martínez-Martínez[6]; P. Herron[7]; Š. Fujs[3]; G. Kosec[3]; I. Hunter[7]; R. Müller[1]; H. Petkovi´c[2]; [1] Helmholtz-Institute for Pharmaceutical Research Saarland (HIPS), Saarbrücken/D; [2] University of Ljubljana, Ljubljana/SL; [3] Acies Bio d.o.o., Ljubljana/SL; [4] National Institute of Chemistry, Ljubljana/SL; [5] Hospital Universario Marques de Valdecilla-IDIVAL, Santander/E; [6] School of Medicine, University of Cantabria, Santander/S; [7] Strathclyde Institute of Pharmacy and Biomedical Sciences, University of Strathclyde, Glasgow/UK

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P 43 **An efficient CRISPR toolkit for actinomycetes**
Y. Tong[1]; T. Weber[1]; S. Lee[2]; [1] Technical University of Denmark, Hørsholm/DK; [2] KAIST - Korea Advanced Institute of Science and Technology, Daejeon/ROK

P 44 **Biosynthesis of fumaric acid amides in *Aspergillus fumigatus***
D. Kalb[1]; T. Heinekamp[2]; G. Lackner[1]; A. Brakhage[2]; D. Hoffmeister[2]; [1] Friedrich Schiller Universität Jena, Jena/D; [2] Leibniz Institute for Natural Product Research and Infection Biology – Hans-Knöll-Institute, Jena/D

P 45 **antiSMASH 3.0**
K. Blin[1]; H. Kim[1]; M. Medema[2]; T. Weber[1]; [1] Technical University of Denmark, Hørsholm/DK; [2] Wageningen University, Wageningen/NL

P 46 **Exploitation of global microbial biodiversity for the discovery of novel cosmeceuticals using LC-HRMS based metabolomics**
C. Almeida[1]; V. González-Menéndez[1]; I. González[1]; J. Perez del Palacio[1]; F. Reyes[1]; N. Lemonakis[2]; N. Tsafantakis[2]; E. Gikas[2]; N. Fokialakis[2]; O. Genilloud[3]; [1] Fundación MEDINA, Armilla, Granada/E; [2] University of Athens, Athens/GR; [3] Fundación MEDINA, Granada/E

P 47 **Strategies towards the synthesis of the strained, heteroatom-rich natural product HB-372**
S. Kohlhepp[1]; J. Wiese[2]; J. Imhoff[2]; T. Gulder[1]; [1] TU München, Garching/D; [2] IFM Geomar, Kiel/D

P 48 **Enantioselective total syntheses of morphinan-alkaloids from deprotonated a-aminonitriles**
M. Geffe[1]; H. Schäfer[2]; T. Opatz[1]; [1] Johannes Gutenberg-Universität Mainz, Mainz/D; [2] Westfälische Wilhelms-Universität Münster, Münster/D

P 49 **Griselimycins: Streptomyces-derived leads with potent antituberculosis activity that target the sliding clamp**
A. Kling[1]; [1] Helmholtz Institute for Pharmaceutical Research Saarland (HIPS), Saarbrücken/D

P 50 **Authenticity approach for red fruits and derived extracts**
M. Stürtz[1]; H. Herbst[1]; M. Roloff[1]; U. Schäfer[1]; D. Stuhlmann[1]; J. Ley[1]; [1] Symrise AG, Holzminden/D

P 51 **Chemical probes for investigating aglycon maturation in the biosynthesis of glycopeptide antibiotics**
C. Brieke[1]; M. Peschke[1]; K. Haslinger[1]; V. Kratzig[1]; M. Cryle[1]; [1] Max Planck Institute for Medical Research, Heidelberg/D

P 52 **Epipyrones from the marine-derived fungus link inhibit the proteases cathepsin K and S**
P. Hufendiek[1]; S. Kehraus[1]; M. Gütschow[1]; G. König[1]; [1] Universität Bonn, Bonn/D

P 53 **Chemical investigations of Cnidaria-associated microbes**
H. Guo[1]; M. Rischer[1]; T. Krüger[1]; C. Beemelmanns[1]; [1] Leibniz Institute for Natural Product Research and Infection Biology e.V. - Hans-Knöll-Institute, Jena/D

P 54 **Reactivity of electrophilic marine natural products: fishing for the pharmacophore for mode-of-action studies**
D. Reimer[1]; D. Hahn[1]; C. Hughes[1]; [1] University of California San Diego, La Jolla, CA/USA

P 55 **Three new oxo-cembranoids from an Okinawan soft coral, *Sinularia sp.***
P. Roy[1]; R. Ashimine[2]; M. Roy[2]; H. Miyazato[3]; J. Taira[3]; K. Ueda[1]; [1] University of the Ryukyus, Okinawa/J; [2] Okinawa Institute of Science and Technology, Okinawa/J; [3] Okinawa National College of Technology, Okinawa/J

P 56 **Engineering precursor supply for pamamycin biosynthesis in *Streptomyces albus***
N. Manderscheid[1]; Y. Rebets[1]; M. Myronovskyi[1]; E. Brötz[1]; J. Schmid[2]; K. Mauch[3]; A. Luzhetskyy[1]; [1] Helmholtz Institute for Pharmaceutical Research Saarland (HIPS), Saarbrücken/D; [2] Insilico Biotechnology AG, Stuttgart/D

P 57 **Transcriptome analysis of an Australian desert plant**
O. Kracht[1]; F. Berrué[2]; A. Müller[1]; J. Kelly[3]; M. Piotrowski[1]; R. Kerr[4]; D. Wibberg[5]; B. Haltli[1]; M. Lanteigne[4]; J. Kalinowski[5]; T. Brück[6]; R. Kourist[1]; [1] Ruhr Universität Bochum, Bochum/D; [2] University of Prince Edward Island, Charlottetown/CDN; [3] Nautilus Biosciences Canada, Charlottetown/ CDN;[5] Universität Bielefeld, Bielefeld/D; [6] TU München, München/D

P 58 **Function and biosynthesis of aryl polyene pigments, one of the most widespread class of bacterial natural products**
T. Schöner[1]; S. Gassel[1]; A. Osawa[2]; N. Tobias[1]; Y. Okuno[2]; Y. Sakakibara[2]; K. Shindo[2]; G. Sandmann[1]; H.B. Bode[1]; [1] Goethe University Frankfurt, Frankfurt am Main/D; [2] Japan Women's University, Tokyo/J

P 59 **Induction of secondary metabolite biosynthesis in marine Streptomyces with chemical elicitors**
D. Oves-Costales[1]; J. Tormo[1]; I. González[1]; O. Genilloud[2]; [1] Fundación MEDINA, Armilla, Granada/E; [2] Fundación MEDINA, Granada/E

P 60 **Natural-product-derived inhibitors of *P. aeruginosa quorum* sensing**
C. Lu[1]; C. Maurer[1]; B. Kirsch[1]; M. Empting[1]; R. Hartmann[1]; [1] Helmholtz Institute for Pharmaceutical Research Saarland (HIPS), Saarbrücken/D

P 61 **Identification of the humidimycin biosynthetic pathway in the draft whole genome sequence of the producer *Streptomyces humidus* F-100.629**
M. Sánchez-Hidalgo[1]; J. Pascual[1]; O. Genilloud[2]; [1] Fundación MEDINA, Armilla, Granada/E; [2] Fundación MEDINA, Granada/E

P 62 **Myxobacterial compound chondramide in a therapeutic approach towards novel combination treatment of actin binding agents and doxorubicin in cancer therapy**
C. Moser[1]; F. Förster[1]; E. Wagner[1]; R. Müller[2]; A. Vollmar[1]; [1] Ludwig-Maximilians Universität München, München/D; [2] Helmholtz Institute for Pharmaceutical Research Saarland (HIPS), Saarbrücken/D

P 63 **DEM30355/B: isolation from a novel amycolatopsis**
S. Morton[1]; B. Kepplinger[1]; L. Ceccaroni[1]; C. Wills[1]; N. Allenby[1]; N. Zenkin[1]; M. Hall[1]; [1] Newcastle University, Newcastle-upon-Tyne/UK

P 64 **V-ATPase regulates epithelial-mesenchymal transition in breast cancer cells**
H. Merk[1]; R. Müller[2]; A. Vollmar[3]; J. Liebl[1]; [1] Universität München, München/D; Helmholtz Institute for Pharmaceutical Research Saarland (HIPS), Saarbrücken/D; [3] Ludwig-Maximilians-Universität München, München/D

P 65 **Overexpression and activity assay of FoxGI-III of foxicin biosynthesis**
D. Deubel[1]; A. Greule[1]; A. Bechthold[1]; [1] Universität Freiburg, Freiburg/D

P 66 **Foxicin – an unusual ortho-quinone of *Streptomyces* diastatochromogenes Tü6028**
A. Greule[1]; A. Bechthold[1]; S. Zhang[1]; [1] Universität Freiburg, Freiburg/D

P 67 **Enhanced biosynthesis the hyperoside during quercetin biotransformation by *Crataegus monogyna* cell suspension culture**
J. Dumireih[1]; M. Dmirieh[2]; M. Wink[2]; [1] Universität Heidelberg, Eppelheim/D; [2] Universität Heidelberg, Heidelberg/D

P 68 **Induced defense in predator-prey interactions**
M. Klapper[1]; S. Götze[1]; M. Roth[1]; P. Stallforth[1]; [1] Leibniz Institute for Natural Product Research and Infection Biology – Hans-Knöll-Institute, Jena/D

P 69 **Design and synthesis of novel macrolide-based antibiotics**
D. Möller[1]; N. Pryk[1]; A. Bashan[2]; A. Yonath[2]; F. Schulz[1]; [1] Ruhr Universität Bochum, Bochum/D; [2] Weizmann Institute of Science, Rehovot/IL

P 70 **Shedding light on polyketide synthases: intracellular fluorescence labelling of the erythromycin assembly line**
D. Martinez Fagundo[1]; S. Kushnir[1]; F. Schulz[1]; [1] Ruhr Universität Bochum, Bochum/D

P 71 **Identification of natural products from *Xenorhabdus* and *Photorhabdus* based on mass spectrometry and genome mining**
H. Wolff[1]; N. Tobias[1]; H.B. Bode[1]; [1] Goethe University Frankfurt, Frankfurt am Main/D

P 72 **Characterization of the non-ribosomal peptide synthetase producing the glycopeptide antibiotic teicoplanin**
T. Kittilä[1]; M. Cryle[1]; [1] Max Planck Institute for Medical Research, Heidelberg/D

P 73 **Discovery of small molecule inhibitors of multicellular development in social amoeba**
R. Barnett[1]; P. Stallforth[1]; [1] Leibniz Institute for Natural Product Research and Infection Biology – Hans-Knöll-Institute, Jena/D

P 74 **Design and assembly of a non-canonical metabolic pathway: the HOB cycle**
P. Marlière[1]; M. Bouzon[2]; J. Patrouix[2]; R. Mutzel[3]; [1] Heurisko Gesellschaft für Biologische Technologien mbH, Leipzig/D; [2] Genoscope, Evry/F; [3] Freie Universität Berlin, Berlin/D

P 75 **High throughput screening of microbial biodiversity for the discovery of novel cosmeuceutical agents**
N. Fokialakis[1]; K. Georgousaki[1]; N. de Pedro[2]; A. Chinchilla[3]; N. Aliagiannis[1]; F. Vicente[2]; M. de Castro[3]; S. Fotinos[4]; J. Muñoz Montaño[3]; O. Genilloud[5]; [1] University of Athens, Athens/GR; [2] Fundación MEDINA, Armilla, Granada/E; [3] PROTEOS Biotech, Albacete/E; [4] Lavipharm SA, Paiania Attica/GR; [5] Fundación MEDINA, Granada/E

P 76 **Rational drug design tools for the discovery of novel microbial natural products with applications in cosmetics**
G. Lambrinidis[1]; D. Vidal[1]; N. Fokialakis[2]; E. Mikros[2]; J. Mestres[1]; [1] Chemotargets, Barcelona/E; [2] University of Athens, Athens/GR

P 77 **Impressive myxobacterial diversity in unusual habitats like moor, fen and the Wadden Sea**
W. Landwehr[1]; T. Zindler[1]; K. Mohr[1]; J. Wink[1]; [1] Helmholtz Zentrum für Infektionsforschung GmbH, Braunschweig/D

P 78 **Assigning natural bacterial metabolites to their producers in groundwater**
N. Ueberschaar[1]; T. Baumeister[1]; L. Straub[1]; G. Pohnert[1]; [1] Friedrich Schiller Universität Jena, Jena/D

P 79 **Mechanistic crosslinking studies in carrier protein-based biosynthetic pathways**
P. Tufar[1]; G. Hur[1]; M. Wuo[1]; J. Beld[1]; W. Kim[1]; C. Vickery[1]; M. Jaremko[1]; K. Finzel[1]; J. La Clair[1]; M. Burkart[1]; [1] University of California, San Diego, La Jolla, CA/USA

P 80 **Understanding chemotrophy of bacteria in the earths critical zone with metabolomic tools and stable isotope labelling**
N. Ueberschaar[1]; C. Lazar[1]; V. Schwab[1]; K. Küsel[1]; G. Pohnert[1]; [1] Friedrich Schiller Universität Jena, Jena/D

P 81 **Isolation and identification of volatile compounds in shed skin of Clelia clelia snake from Costa Rica**
M. Alvarado Rojas[1]; A. Gómez[1]; G. Lamoureux[1]; J. Araya[1]; M. Herrera Vega[1]; [1] Universidad de Costa Rica, San José/CR

P 82 **Interplay between the terminal NRPS-module and Cytochrome P450 enzymes during teicoplanin biosynthesis**
M. Peschke[1]; K. Haslinger[1]; C. Brieke[1]; E. Maximowitsch[1]; M. Cryle[1]; [1] Max Planck Institute for Medical Research, Heidelberg/D

P 83 **Human organotypic cell culture models maximise the translational value of in vitro results**
M. Schmolz[1]; [1] HOT Screen GmbH, Reutlingen/D

P 84 **Identification of new bioactive secondary metabolites from the phytopathogenic fungus *Hymenoscyphus fraxineus***
S. Halecker[1]; F. Surup[1]; E. Kuhnert[1]; K. Mohr[1]; B. Schulz[2]; M. Stadler[1]; [1] Helmholtz-Zentrum für Infektionsforschung GmbH, Braunschweig/D [2] TU Braunschweig, Braunschweig/D

P 85 **Antidiabetic effect of methanolic leaves extract and isolated constituents from Saraca asoca**
S. Kumar[1]; [1] Kurukshetra University, Kurukshetra/IND

P 86 **Atypical AND gate for the spatial and temporal control of gene expression in *Actinobacteria***
L. Horbal; A. Luzhetskyy; Helmholtz Institute for Pharmaceutical Research Saarland (HIPS), Saarbrücken/D

P 87 **Synthesis of (–)-altenuene-d_6 as internal standard for isotope dilution mass spectrometry**
J. Gebauer; I.J. Reimúndez; ASCA GmbH, Berlin/D

P 88 **Esca: a grapevine trunk disease - identification of biocontrol agents**
J. Fischer[1]; A. Bernal-Martínez[1]; E. Thines[2]; [1] IBWF - Institut für Biotechnologie und Wirkstoff-Forschung gGmbH, Kaiserslautern/D; [2] Johannes-Gutenberg Universität, Mainz/D

P 89 **Secondary metabolites of the fungus *Stemphylium globuliferum* and their biological activity**
J. Schrör; P. Hufendiek; S. Kehraus; M. Gütschow; G. König; Universität Bonn, Bonn/D

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P 90 **Production of new kirromycin derivatives by exploiting the features of the discrete acyltransferase KirCII**
E. Musiol-Kroll[1]; T. Härtner[2]; T. Schafhauser[2]; F. Zubeil[2]; S. Grond[2]; G. Williams[3]; W. Wohlleben[2]; S. Lee[1]; T. Weber[1], [1] Technical University of Denmark, Hørsholm/DK; [2] Universität Tübingen, Tübingen/DE; [3] North Carolina State University, Raleigh/US

P 91 **Lemon grass (*Cymbopogon citratus* (DC.)) essential oil as a potent anti-inflammatory and antifungal drug**
B. Mohamed Nadjib, Faculté des Sciences de la Nature et de la Vie, Université Blida 1, Blida, Algeria, Blida/DZ

P 92 **Inhibition of microbial biofilms by coriander (*Coriandrum sativum*) essential oil encapsulated with sodium alginate**
M. Mohammadi Bazarani[1]; J. Rohloff[2], [1] Iranian Research Organization for Science and Technology (IROST), Tehran/IR; [2] Department of Biology, Norwegian University of Science and Technology, Trondheim/NO

P 93 **SeleKomM – Selective Compartiment Membrane**
R. Bosch, University of Hohenheim, Stuttgart/DE

P 94 ***In vitro* characterization of a two-component aminoacyl-carrier protein monooxygenase AcdB that acts in concert with FMN-oxidoreductase**
V. Simunovic[1]; A. Truman[2]; I. Gruic Sovulj[1], [1] University of Zagreb, Zagreb/HR; [2] John Innes Centre, Noriwich/GB

P 95 **Technology of the garlic paste**
K. Kintsurashvili; R. Melqadze, Georgian Technical University, Tbilisi/GE

P 96 **Some physical and chemical characteristics of the Georgian garlic**
K. Kintsurashvili; R. Melqadze, Georgian Technical University, Tbilisi/GE

P 97 **Heterologous expression of a cyslabdane-like cluster discovered by genome mining in a *Streptomyces* isolated from Mexican soil**
S. Guzman[1]; S. Sánchez[2]; H. Ikeda[3]; P. Vinuesa[1]; R. Rodríguez[1]; M. Macías[1], [1] Universidad Nacional Autónoma de México (UNAM), Mexico City/MX; [2] Universidad Nacional Autónoma de México (UNAM), Mexico Cuty/MX; [3] Kitasato Institute for Life Sciences, Sagamihara/JP

P 98 **New fungal secondary metabolites from fruiting bodies of *Mycena* species of the section Calodontes**
D. Schmidt[1]; A. Pulte[1]; S. Wagner[2]; P. Spiteller[1], [1] Universität Bremen, Bremen/DE; [2] Technische Universität München, München/DE

P 99 **Characterization of biosynthetic genes from *Hypericum* species in *Nicotiana benthamiana***
E. Biedermann[1]; T. Fiesel[1]; M. Gaid[1]; D. Kaufholdt[2]; R. Hänsch[2]; L. Beerhues[1]; U. Wittstock[1], [1] TU Braunschweig, Institute of Pharmaceutical Biology, Braunschweig/DE; [2] Institute of Plant Biology, Braunschweig/DE

P 100 **Biosynthetic code for divergolide assembly in a bacterial mangrove endophyte**
H. Peng; Z. Xu; M. Baunach; L. Ding; J. Franke; C. Hertweck, Leibniz Institute for Natural Product Research and Infection Biology – Hans Knöll Institute –, Jena/DE

P 101 **Membranes from NanoDiscs – applications and future perspectives**
K. Moß; R. Bosch; R. Hausmann, Universität Hohenheim, Stuttgart/DE

P 102 **Selective biocatalytic gamma-hydroxylation of carboxylic acids via gamma-butyrobetaine hydroxylase**
S. Fromme; W. Hüttel, Albert-Ludwigs-University Freiburg, Freiburg i. Br./DE

P 103 **Insight into bacterial mushroom diseases by genome mining and imaging mass spectrometry**
K. Dornblut; K. Scherlach; G. Lackner; T. Bretschneider; S. Pidot; C. Hertweck, Leibniz Institute for Natural Product Research and Infection Biology –Hans-Knöll-Institute, Jena/DE

P 104 **Proline hydroxlase catalysis - products beyond the standard**
J. Mattay, Universität Freiburg, Freiburg/DE

P 105 **Diversification paths in bacterial indolosesquiterpene biosynthesis**
M. Baunach; L. Ding; Z. Xu; M. Roth; C. Hertweck, Leibniz Institute for Natural Product Research and Infection Biology (HKI), Jena/DE

P 106 **Plant-like sesquiterpenes produced by bacterial endophytes of Mangrove trees**
L. Ding[1]; K. Dornblut[1]; G. Peschel[1]; H. Goerls[2]; W. Lin[3]; A. Maier[4]; H. Fiebig[4]; C. Hertweck[1], [1] Leibniz Institute for Natural Product Research and Infection Biology – Hans Knöll Institute (HKI), Jena/DE; [2] Friedrich Schiller University Jena, Jena/DE; [3] Peking University, Peking/DE; [4] Oncotest GmbH, Freiburg/DE

P 107 **Colibactin biosynthesis and biological activity depend on the rare aminomalonyl polyketide precursor**
A. Brachmann[1]; C. Garcie[2]; V. Wu[1]; R. Ueoka[1]; P. Martin[2]; E. Oswald[2]; J. Piel[1], [1] ETH Zürich, Zürich/CH; [2] Université de Toulouse, Toulouse/FR

P 108 **Volatile organic compounds from *Satureja subspicata* Vis. honey: Abundance of methyl syringate as chemical marker**
I. Jerkovic[1]; Z. Marijanovic[2]; M. Kranjac[1], [1] Faculty of Chemistry and Technology, University of Split, Split/HR; [2] Polytechnics "Marko Marulić" in Knin, Knin/HR

P 109 **Reconstruction of biosynthetic pathways on bioactive molecules in the host *Aspergillus nidulans***
W. Yin, Institute of Microbiology, Chinese Academy of Sciences, Beijing/CN

P 110 **Indications for a precursor peptide-binding motif during the biosynthesis of proteusins**
S. Fuchs; B. Morinaka; J. Piel, ETH Zürich, Zürich/CH

P 111 **Usefulness of plant secondary metabolites to answer key question in molecular ecology**
M. Falahati Anbaran[1]; J. Rohloff[2], [1] University of Tehran, Tehran/IR; [2] Department of Biology, Norwegian University of Science and Technology, Trondheim/NO

P 112 **Two polyketide synthases are responsible for 4-hydroxy-5-methylcoumarin biosynthesis in *Gerbera hybrida***
J. Kontturi; M. Pietiäinen; T. Teeri, University of Helsinki, Helsinki/FI

P 113 **Total synthesis of cyclomarins A, C and D**
P. Barbie; U. Kazmaier, Universität des Saarlandes, Saarbrücken/DE

P 114 **Unpredicted diversity of secondary metabolites from the fruiting bodies of the fungal genus *Hypoxylon* and its allies (Ascomycota)**
E. Kuhnert; F. Surup; S. Heitkämper; V. Wiebach; M. Stadler, Helmholtz-Zentrum für Infektionsforschung (HZI), Braunschweig/DE

P 115 **One fold – three products: exploring the architectures of chorismatases' active sites**
M. Grüninger; F. Hubrich; J. Andexer, Albert-Ludwigs-Universität Freiburg, Freiburg/DE

P 116 **Signature of secondary metabolism in the genome of the medicinal plant *Salvia officinalis***
A. Denton; A. Vogel; A. Bolger; M. Schmidt; B. Usadel, RWTH Aachen University, Aachen/DE

(Programme subject to change)

EXHIBITORS

Bruker Daltonic GmbH
Bremen/D

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Worms/D

SOCIAL PROGRAMME

Sunday, 6 September 2015 — **17:30 – 19:00**

Welcome Reception

The conference will start with a welcome reception for all participants on Sunday, 6 September 2015 at 17:30 at the Goethe University Frankfurt, Campus Westend. Drinks and snacks will be served by invitation of the organisers.

Monday, 7 September 2015 — **19:00**

Conference Dinner

The conference dinner on Monday, 7 September 2015, 19:00 will be served at the Sachsenhäuser Warte, a traditional regional restaurant, situated in a significant historical building, one of the five ancient watchtowers of Frankfurt.

Cost per person: 59 € incl. 19% VAT


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Accommodation has been reserved for conference participants at a special rate. Reservations should be directly made before **30 July 2015**.

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(Registration is neccessary, price: 5.90 € incl. VAT)

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Please register online at www.dechema.de/ECNP2015.

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Please note that registrations received after **17 August 2015** may not appear in the list of participants.

Confirmation of registration and invoice will be sent after receipt of the registration.

REGISTRATION FEES*)

	Members[1)]	Others
Delegate from Industry	650 €	665 €
Delegate from Academia	390 €	405 €
Postgraduate Student[2)]	250 €	265 €
Student[2)]	180 €	195 €
Conference Dinner[3)]	59 €	59 €
Ticket for Public Transport (incl. 7% VAT)	5.90 €	5.90 €

*) No VAT requested according to § 4.22 UStG, registration fee may include catering services with VAT
1) Personal DECHEMA-, VDI-GVC-members, EFC/EFCE passport holders
2) Proof of status required
3) incl. 19% VAT

The registration fees include the conference ticket, a book of abstracts, the list of participants and catering during the breaks. All documents will be handed out on-site.

CANCELLATION AND REFUNDS

30 € administrative costs will be charged for cancellations of registrations by **17 August 2015**. Thereafter 80% of the registration fee will be charged. Only written cancellations will be accepted. In case of no-show the conference fees won't be refunded and fees not yet paid still have to be paid.

If the event is cancelled by DECHEMA the registration fees for the conference will be refunded. Further claims for compensation are excluded.

The DECHEMA general terms and conditions apply for the conference.

Please find all information at **www.dechema.de/ECNP2015**, the conference website will be updated frequently.

Integrative Fungal Research

IPF – a focal point of the **LOEWE Research Excellence Initiative** of the State of Hesse

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