



Dr Hajo Kries

[Biosynthetic Design of Natural Products · Head](#) +49 3641 532 1735
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Curriculum vitae

Professional Career

2023	Substitute Professor W3 Organic Chemistry I, University of Bayreuth
since 2016	Junior Group Leader, Leibniz Institute for Natural Product Research and Infection Biology (Hans- Knöll-Institute), Jena
2014-2016	Postdoc, John Innes Centre, Norwich (UK), with Prof. Sarah E. O'Connor
2009-2014	PhD "Tailor-made biocatalysts by enzyme

2007-2009	design, redesign, and directed evolution" at ETH Zurich with Prof. Donald Hilvert
2006-2007	MSc in Chemistry, ETH Zurich
2003-2006	BSc in Biochemistry, University of Geneva
2002	Studies of Biochemistry, University of Jena
	Abitur at the Gymnasium Heide-Ost

Awards · Appointments · Scientific Activities

2021	Max Buchner Fellowship, DECHEMA
2020	Medac Research Prize
2019	FCI material cost allowances
2017-2019	Fellowship of the Daimler and Benz Foundation
2015-2016	Marie Skłodowska-Curie postdoctoral fellowship (H2020), project 658155
2015	Friedrich-Weygang-Preis, awarded by the Max-Bergmann-Kreis
2015	ETH Medal for the PhD thesis
2014-2015	Early Postdoc.Mobility fellowship of the Swiss National Science Foundation (SNSF)
2011-2014	PhD Fellowship of the Stipendienfonds der Schweizerischen Chemischen Industrie (SSCI)
2010-2012	PhD Fellowship of the German Academic Scholarship Foundation
2008-2009	Oskar Jeger Fellowship for master studies (ETH Zurich)
2008	Novartis Master Fellowship
2007-2009	DAAD grant for foreign studies
2005-2009	Fellowship of the German Academic Scholarship Foundation

Publications

Little RF, Trottmann F, Hashizume H, Preissler M, Unger S, Sawa R, Kries H, Pidot S, Igarashi M, Hertweck C (2024) Analysis of the valgamycin biosynthetic pathway reveals a general

mechanism for cyclopropanol formation across diverse natural product scaffolds. *ACS Chem Biol* 19(3), 660-668.

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Peng H, Schmiederer J, Chen X, Panagiotou G, Kries H[#] (2024) Controlling substrate- and stereospecificity of condensation domains in nonribosomal peptide synthetases. *ACS Chem Bio* 19(3), 599-606.

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Kries H, Trottman F, Hertweck C (2023) Novel biocatalysts from specialized metabolism. *Angew Chem Int Ed Engl* 63(4), e202309284. (Review)

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Müll M, Pourmasoumi F, Wehrhan L, Nosovska O, Stephan P, Zeihe H, Vilotijevic I, Keller BG,

Kries H (2023) Biosynthetic incorporation of fluorinated amino acids into the nonribosomal peptide gramicidin S. *RSC Chem Biol* 4(9), 692-697.

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Pourmasoumi F, * Hengoju S, * Beck K, Stephan P, Klopffleisch L, Hoernke M, Rosenbaum MA, Kries H (2023) Analysing megasynthetase mutants at high throughput using droplet microfluidics. *Chembiochem* 24(24), e202300680.

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Stephan P, Langley C, Winkler D, Basquin J, Caputi L, O'Connor SE, Kries H (2023) Directed evolution of piperazic acid incorporation by a nonribosomal peptide synthetase. *Angew Chem Int Ed Engl* 62(35), e202304843.

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Zhang K, Kries H (2023) Biomimetic engineering of nonribosomal peptide synthesis. *Biochem Soc Trans* 51(4), 1521-1532. (Review)

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Pourmasoumi F, * De S, * Peng H, Trottmann F, Hertweck C, Kries H (2022) Proof-reading thioesterase boosts activity of engineered nonribosomal peptide synthetase. *ACS Chem Biol* 17(9), 2382-2388.

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Raguž L, Peng CC, Rutaganira FUN, Krüger T, Stanišić A, Jautzus T, Kries H, Kniemeyer O, Brakhage AA, King N, Beemelmans C (2022) Total synthesis and functional evaluation of IORs, sulfonolipid-based inhibitors of cell differentiation in *Salpingoeca rosetta*. *Angew Chem Int Ed* 61(41), e202209105.

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Stanišić A, Svensson CM, Ettelt U, Kries H[#] (2022) Defining a nonribosomal specificity code for design. *bioRxiv* [Preprint]

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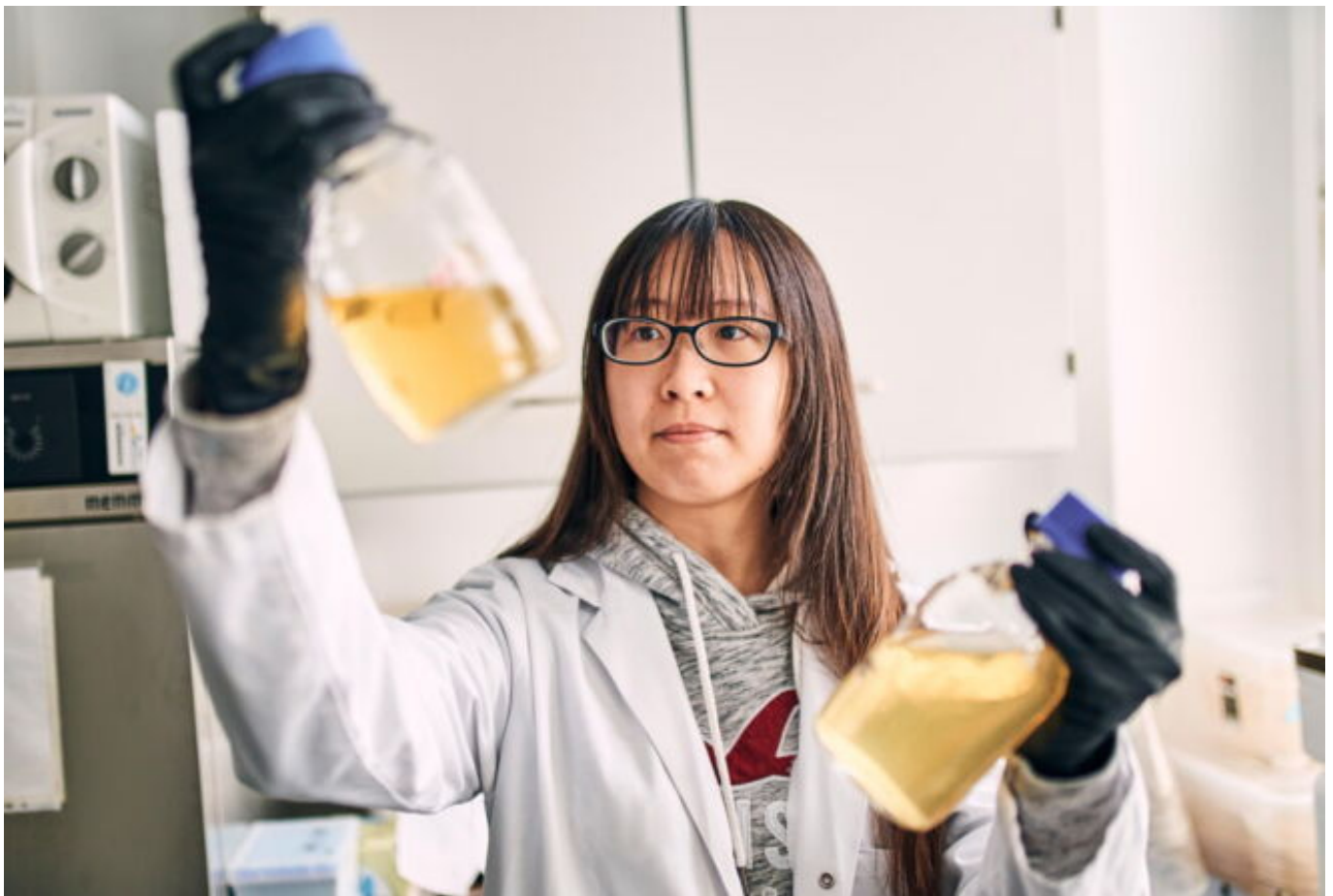
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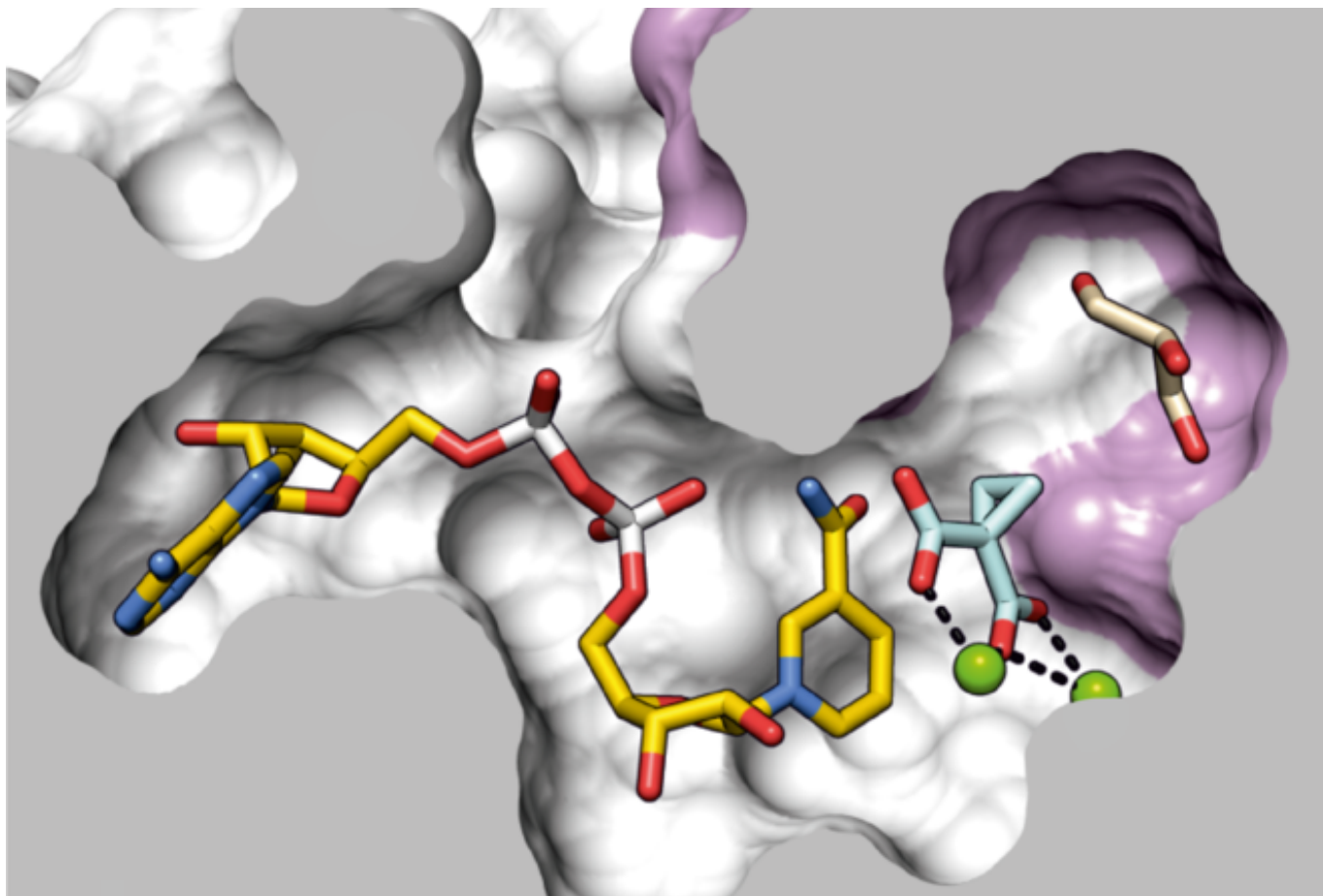
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