

Heine, Andreas, Prof. Dr.

Date of Birth 15.10.1963 in Bünde

Institute of Pharmaceutical Chemistry
Philipps-University Marburg
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Position Associate Professor

1) Academic Education

1986-1987 Reciprocal student at the University of California at Berkeley, Berkeley, CA, USA
1983-1990 Chemistry major, Georg-August University Göttingen

2) Advanced Professional Degrees

1993 Final Doctoral Examination in Chemistry
1990-1993 Doctoral thesis, Department of Inorganic Chemistry, Georg-August University Göttingen

3) Positions Held

since 2013 Associate Professor at the Institute of Pharmaceutical Chemistry, Philipps-University Marburg
2002-2013 Head of X-ray crystallography in the research group of Prof. G. Klebe, Institute of Pharmaceutical Chemistry, Philipps-University Marburg
1999-2002 Assistant Professor in the Department of Molecular Biology, The Scripps Research Institute, La Jolla, CA, USA
1993-1999 Research Associate in the laboratory of Prof. I.A. Wilson D. Phil., Department of Molecular Biology, The Scripps Research Institute, La Jolla, CA, USA
1991-1993 Scientific research associate and teaching assistant at the Department of Inorganic Chemistry, Georg-August University Göttingen
1989-1991 Scientific research and teaching assistant at the Department of Inorganic Chemistry, Georg-August University Göttingen

4) Other Activities

Honors and Awards

1993 Richard-Zsigmondy Award for doctoral dissertation
1986-1987 University of California at Berkeley recipient of an „Education Abroad Program“ fellowship

5) Publications - 10 most important out of 130, H-index: 39 (Google Scholar, December 2017)

- 1) Schiebel J, Gaspari R, Sandner A, Ngo K, Gerber HD, Cavalli A, Ostermann A, **Heine A**, Klebe G (2017) Charges Shift Protonation: Neutron Diffraction Reveals that Aniline and 2-Aminopyridine Become Protonated Upon Binding to Trypsin. **Angew. Chem. Int. Ed. Engl.** 56: 4887-4890.
- 2) Schiebel J, Krimmer SG, Röwer K, Knörlein A, Wang X, Park AY, Stieler M, Ehrmann FR, Fu K, Radeva N, Krug M, Huschmann FU, Glöckner S, Weiss MS, Mueller U, Klebe G, **Heine A** (2016) High-Throughput Crystallography: Reliable and Efficient Identification of Fragment Hits. **Structure** 24: 1398-1409.
- 3) Radeva N, Schiebel J, Wang X, Krimmer SG, Fu K, Stieler M, Ehrmann FR, Metz A, Rickmeyer T, Betz M, Winquist J, Park AY, Huschmann FU, Weiss MS, Mueller U, **Heine A**, Klebe G (2016) Active Site

Mapping of an Aspartic Protease by Multiple Fragment Crystal Structures: Versatile Warheads to Address a Catalytic Dyad. **J. Med. Chem.** 59: 9743-9759.

- 4) Schiebel J, Radeva N, Krimmer SG, Wang X, Stieler M, Ehrmann FR, Fu K, Metz A, Huschmann FU, Weiss MS, Mueller U, **Heine A**, Klebe G (2016) Six Biophysical Screening Methods Miss a Large Proportion of Crystallographically Discovered Fragment Hits: A Case Study. **ACS Chem. Biol.** 11: 1693-1701.
- 5) Debler EW, Kaufmann GF, Meijler MM, **Heine A**, Mee JM, Pljevaljcic G, Di Bilio AJ, Schultz PG, Millar DP, Janda KD, Wilson IA, Gray HB, Lerner RA (2008) Deeply inverted electron-hole recombination in a luminescent antibody-stilbene complex. **Science** 319: 1232-1235.
- 6) **Heine A**, DeSantis G, Luz JG, Mitchell M, Wong C-H, Wilson IA (2001) Observation of Covalent Intermediates in an Enzyme Mechanism at Atomic Resolution. **Science** 294: 369-374.
- 7) **Heine A**, Stura EA, Yli-Kauhaluoma JT, Gao C, Deng Q, Beno BR, Houk KN, Janda KD, Wilson IA (1998) An Antibody exo Diels-Alderase-Inhibitor Complex at 1.95 Å Resolution. **Science** 279: 1934-1940.
- 8) Barbas III CF, **Heine A**, Zhong G, Hoffmann T, Gramatikova S, Björnstedt R, List B, Anderson J, Stura EA, Wilson IA, Lerner RA (1997) Immune Versus Natural Selection: Antibody Aldolases with Enzymic Rates But Broader Scope. **Science** 278: 2085-2092.
- 9) **Heine A**, Stalke D (1994) Synthesis and Structure of the Disilagermirane $R_2Ge(SiR_2)_2$ and the Solvent-Separated Ion Pair $[Li(12-crown-4)_2][GeR_3]$; $R = SiMe_3$. **Angew. Chem. Int. Ed. Engl.** 33: 113-115.
- 10) **Heine A**, Stalke D (1992) Structures of Two Highly Reactive Intermediates upon $LiAlH_4$ Reduction in the Solid State and in Solution: $[(Me_3Si)_2NAlH_3Li \cdot 2Et_2O]_2$ and $[(Me_3Si)_2N]_2AlH_2Li \cdot 2Et_2O$. **Angew. Chem., Int. Ed. Engl.** 31: 854-855.