

Curriculum Vitae

Name Michael Groessl

Date of Birth July 25, 1980

Education

2012 Habilitation in Analytical Chemistry at the University of Vienna. *“Mass spectrometry in biomedical research and metallodrug development”*

2008 PhD in Chemistry, University of Vienna. *“Interaction of Novel Metal-based Anticancer Compounds with Biomolecules”*

2004 Master in Chemistry, University of Vienna.

Training/Functions

2017 Head of Steroid Analysis, University Hospital Bern, Switzerland

2013-2016 Head of Applications and Product Manager, Tofwerk AG (Thun, Switzerland).

2012-2013 Research Associate and Lecturer, University of Vienna, Austria.

2011-2012 Research Associate, Max-Planck-Institute for Molecular Cell Biology and Genetics (MPI-CBG, Germany).

2009-2011 Erwin Schrödinger Postdoctoral Fellow at the Swiss Federal Institute of Technology Lausanne (EPFL).

2005-2008 Scientific Assistant and Lecturer at the University of Vienna, Austria.

Academic Degrees

2012 Habilitation in Analytical Chemistry at the University of Vienna

2008 PhD in Chemistry, University of Vienna

2004 Master in Chemistry, University of Vienna.

Awards and Funding

Erwin Schrödinger Postdoctoral Fellowship (2009; Austria)

Bioanalysis Young Investigator Award, finalist (2012)

Talent Promotion Award for Young Scientists (2008; Austria)

BA-CA Award for Innovative Teaching Methods (2008; Austria)

COST-Scholarship (2008; European Union)

Publications

Link to my **bibliography**:

<http://scholar.google.ch/citations?user=G3QEFFQAAAAJ&hl=de>

2017

Kiesilä A, Kivijärvi L, Beyeh NK, Moilanen JO, Groessl M, Rothe T, Götz S, Topić F, Rissanen K, Lützen A, Kalenius E. *Simultaneous endo and exo Complex Formation of Pyridine[4]arene Dimers with Neutral and Anionic Guests*. *Angew Chem Int Ed Engl*. 2017;56(36):10942-10946.

Groessl M, Nagy K. *Benefits of ion mobility for analysing monochloropropane-diol esters*. *Food Addit Contam Part A Chem Anal Control Expo Risk Assess*. 2017;34(7):1131-1139.

Zhang X, Lambe AT, Upshur MA, Brooks WA, Gray Bé A, Thomson RJ, Geiger FM, Surratt JD, Zhang Z, Gold A, Graf S, Cubison MJ, Groessl M, Jayne JT, Worsnop DR, Canagaratna MR. *Highly Oxygenated Multifunctional Compounds in α -Pinene Secondary Organic Aerosol*. *Environ Sci Technol*. 2017;51(11):5932-5940.

Sullivan MP, Groessl M, Meier SM, Kingston RL, Goldstone DC, Hartinger CG. *The metalation of hen egg white lysozyme impacts protein stability as shown by ion mobility mass spectrometry, differential scanning calorimetry, and X-ray crystallography*. *Chem Commun (Camb)*. 2017 11;53(30):4246-4249.

Kreutz, D., Bileck, A., Plessl, K., Wolrab, D., Groessl, M., Keppler, B.K., Meier, S.M., Gerner, Ch. *Response Profiling Using Shotgun Proteomics Enables Establishing Global Metallodrug Mechanisms of Action*. *Chemistry*. 2017;23(8):1881-1890.

2016

Zhang, X., Krechmer, J.E., Groessl, M., Xu, W., Graf, S., Cubison, M., Jayne, J.T., Jimenez, J.L., Worsnop, D.R., Canagaratna, M.A. *A Novel framework for molecular characterization of atmospherically relevant organic compounds based on collision cross section and mass-to-charge ratio*. *Atmos. Chem. Phys.*, 2016, 16, 12945-12959.

Krechmer, J.E., Groessl, M., Zhang, X., Junninen, H., Massoli, P., Lambe, A.T., Kimmel, J.R., Cubison, M.J., Graf, S., et al. *Ion mobility spectrometry–mass spectrometry (IMS–MS) for on- and offline analysis of atmospheric gas and aerosol species*. *Atmos. Meas. Tech.*, 2016, 9, 3245-3262.

2015

Groessler, M., Graf, S., Knochenmuss, R. *High resolution ion mobility-mass spectrometry for separation and identification of isomeric lipids*. *Analyst*, 2015, 140, 6904–6911.

Jurcek, O., Bonakdarzadeh, P., Kalenius, E., Linnanto, J.M., Groessler, M., Knochenmuss, R., Ihalainen, J.A., Rissanen, K. *Superchiral Pd3L6 Coordination Complex and Its Reversible Structural Conversion into Pd3L3Cl6 Metallocycles*. *Angew. Chem. Int. Ed.* 2015, 51, 15462-15467.

Bonakdarzadeh, P., Topić, F., Kalenius, E., Bhowmik, S., Sato, S., Groessler, M., Knochenmuss, R., Rissanen, K. *DOSY NMR, X-ray Structural and Ion-Mobility Mass Spectrometric Studies on Electron-Deficient and Electron-Rich M6L4 Coordination Cages*. *Inorg Chem.* 2015, 54, 6055-6061.

2014

Adhireksan, Z., Davey, G.E., Campomanes, P., Groessler, M., Clavel, C.M., Yu, H., Nazarov, A.A., Yeo, C.H., Ang, W.H., Dröge, P., Rothlisberger, U., Dyson, P.J., Davey C.A. *Ligand substitutions between ruthenium-cymene compounds can control protein versus DNA targeting and anticancer activity*. *Nat Commun.* 2014, 3462.

Groessler, M., Azzollini, A., Eugster, P., Plet, B., Wolfender, J.L., Knochenmuss, R. *Comparison of UHPLC-ESI-MS and Hadamard transform atmospheric pressure ion mobility-ESI-MS for rapid profiling of isomeric flavonoids*. *Chimia* 2014, 68, 135-139.

Groessler, M., Slany, A., Bileck, A., Gloessmann, K., Kreutz, D., Jaeger, W., Pfeiler, G., Gerner, C. *Proteome profiling of breast cancer biopsies reveals a wound healing signature of cancer-associated fibroblasts*. *J Proteome Res.* 2014, 13, 4773–4782

2013

Hartinger, C.G., Groessler, M., Meier, S.M., Casini, A., Dyson, P.J. *Application of Mass Spectrometric Techniques to Delineate the Modes-of-Action of Anticancer Metallodrugs*. *Chem Soc Rev* 2013, 42, 6186-6199.

Keihan Falsafi, S., Rossner, S., Ghafari, M., Groessler, M., Morawski, M., Gerner, C., Lubec, G. *Changes of several brain receptor complexes in the cerebral cortex of patients with Alzheimer disease: probable new potential pharmaceutical targets*. *Amino Acids* 2013.

Groessler, M., Hartinger, C.G. *Anticancer Metallodrug Research Analytically Painting the "-omics" Picture – Current Developments and Future Trends*. *Anal Bioanal Chem* 2013, 405, 1791-1808.

Nazarov, A.A., Baquié, M., Nowak-Sliwinska, P., Zava, O., van Beijnum, J.R., Groessler, M., Chisholm, D.M., Ahmadi, Z., McIndoe, S.J., Griffioen, A.W., van den Bergh, H., Dyson, P.J. *Synthesis and characterization of a new class of anti-angiogenic agent based on ruthenium clusters*. *Sci. Rep.* 2013, 3, 1485.