



BOKU - University of Natural Resources
and Applied Life Sciences

Appendix

Report 2007

Department for Chemistry

**analytical / bio
chemistry
organic / wood**

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Doctoral Theses

Division of Analytical Chemistry

Falta Thomas

Entwicklung von Speziierungsmethoden (LC-ICP-MS) für Verfahren zur Elimination prioritärer Metalle aus Abwässern

Doctoral thesis since 2007

Supervisor: Hann Stephan/Gunda Köllensperger

Lisa Fischer

Entwicklung von Multielement- und Speziierungsmethoden (GC-ICP-MS) für Verfahren zur Elimination prioritärer Metalle aus Abwässern

Doctoral thesis since 2007

Supervisor: Hann Stephan/Gunda Köllensperger

Galler Patrick

Precise Sr Isotope Ratio Measurements by Multiple Collector-Inductively Coupled Plasma Mass Spectrometry

Doctoral thesis since 2006

Supervisor: Prohaska Thomas

Jaitz Leonhard

Entwicklung von LC-MS Methoden im Rahmen des BOKU-Netzwerks für Schad- und Naturstoffanalytik

Doctoral thesis since 2006

Supervisor: Hann Stephan/Gunda Köllensperger

Popp Maximilian

Bestimmung von Glyphosate und AMPA sowie Schwebstoff gebundenen Metallen in Oberflächenwässern

Doctoral thesis 2007

Supervisor: Köllensperger Gunda/Stephan Hann

Swoboda Siegfried

Characterization an authentication studies by isotopic and elemental pattern

Doctoral thesis since 2005

Supervisor: Prohaska Thomas

Standler Alexander

Platinum speciation in the environment

Doctoral thesis 2007

Supervisor: Hann Stephan

Division of Biochemistry / Glycobiology

Jin Chunsheng

The allergenicity of plant and insect N-glycan in mammals

Doctoral thesis 2007

Supervisor: Altmann Friedrich

Gutternigg Martin

Hexosaminidase from *Caenorhabditis elegans*, man and mouse

Doctoral thesis 2007

Supervisor: Wilson Iain B. H.

Hykollari Alba

Glycosylation in *Dictyostelium discoideum*

Doctoral thesis since 2007

Supervisor: Wilson Iain B. H.

Pabst Martin

Analysis of oligosaccharides by LC-MS

Doctoral thesis since 2004

Supervisor: Altmann Friedrich

Paschinger Katharina

Glycosylation in *Caenorhabditis elegans*

Doctoral thesis since 2002

Supervisor: Wilson Iain B. H.

Singh Bondili Jayakumar

The plant N-glycosylation pathway

Doctoral thesis 2007

Supervisor: Altmann Friedrich

Stadlmann Johannes

Glycomodification of recombinant glycoproteins

Doctoral thesis since 2004

Supervisor: Altmann Friedrich

Division of Biochemistry / Metalloprotein Research Group

Banerjee Srijib

Dynamics of structure and function of metalloproteins

Doctoral thesis since 2005

Supervisor: Obinger Christian, Furtmüller Paul G.

Bernroither Margit

Respiration in cyanobacteria: the role of cytochrome c_6 , cytochrome c_M and plastocyanin

Doctoral thesis since 2005

Supervisor: Obinger Christian, Furtmüller Paul G.

Margreiter Gerd

Monitoring of inclusion body formation by FT-IR spectroscopy

Doctoral thesis since 2006

Supervisor: Obinger Christian, Bayer Karl

Schwanninger Manfred

Picea abies (L.) Karst. Lignin determination in spruce wood with wet-lab-chemical and infrared spectroscopic methods using multivariate data analysis.

Doctoral thesis 2007

Supervisor: Paul Kosma

Stampler Johanna

Recombinant human Lactooxidase

Doctoral thesis since 2007

Supervisor: Furtmüller Paul G., Obinger Christian

Vlasits Jutta

Structure-function relationships of catalase-peroxidase

Doctoral thesis since 2006

Supervisor: Obinger Christian, Furtmüller Paul G.,

Division of Organic Chemistry

Abad Romero Beatriz

Synthesis of regioselectively sulfated xylooligomers

Doctoral thesis 2007

Supervisor: Kosma Paul

Blaukopf Markus

Synthese von Aminoarabinose-LPS-Epitopen

Doctoral thesis since 2007

Supervisor: Kosma Paul

del Ruiz-Ruiz Maria Carmen

Synthesis of glycyrrhetic acid glycosides

Doctoral thesis since 2004

Supervisor: Kosma Paul

Kocsis Laura

Influence of harvest time on yield and profile of carbohydrates in different varieties of Jerusalem artichoke (*Helianthus tuberosus* L.) for the utilisation in functional food

Doctoral thesis 2007

Supervisor: Praznik Werner

Bernhard Müller

Synthese von Neoglycoconjugaten der Aminoarabinose

Doctoral thesis since 2007

Supervisor: Kosma Paul

Sixta Georg

Synthesis and modification of the chlamydial Kdo epitope

Doctoral thesis since 2005

Supervisor: Kosma Paul

Stanetty Christian

Neue glycosylierte Triterpene

Doctoral thesis since 2006

Supervisor: Kosma Paul

Wimmer Kurt

Synthesis of 2-4 linked Kdo analogs

Doctoral thesis since 2005

Supervisor: Kosma Paul

Chair of Wood, Pulp and Fibre Chemistry

Böhmendorfer Stefan

Spiropolymerization of tocopherol derivatives

Doctoral thesis since 2006

Supervisor: Rosenau Thomas

Haimer Emmerich

Supercritical CO₂ in processing of lignocellulosics

Doctoral thesis since 2006

Supervisor: Martin Wendland (Dept. f. Materialwiss.), Liebner Falk, Rosenau Thomas

Henniges Ute

Bestimmung des Schädigungsgrades cellulosischer Materialien

Doctoral thesis since 2005

Supervisor: Potthast Antje

Kloser Elisabeth

Synthesis of novel tocopherol derivatives

Doctoral thesis since 2005

Supervisor: Rosenau Thomas

Krainz Karin

Residual chromophores in bleached pulps

Doctoral thesis since 2006

Supervisor: Rosenau Thomas, Antje Potthast

Opietnik Martina

Synthesis of heterocyclic receptor agonists

Doctoral thesis since 2006

Supervisor: Rosenau Thomas

Patel Anjan

Oxidation chemistry of non-alpha tocopherols

Doctoral thesis 2007

Supervisor: Rosenau Thomas

Patel Ilabahan

Chemical and enzymatic modification of cellulose

Doctoral thesis since 2006

Supervisor: Potthast Antje, Rosenau Thomas

Tot Ivana

Fluorescence labelling of hexenuronic acid residues in cellulose

Doctoral thesis since 2005

Supervisor: Potthast Antje

Yuko Yoneda
Cellodextrins: synthesis and direct dissolution mechanism
Doctoral thesis 2007
Supervisor: Rosenau Thomas

Diploma Theses

Division of Analytical Chemistry

Böck Katharina
Multidimensional separation schemes for ICP-MS analysis of metal-protein interaction
Diploma thesis since 2006
Supervisor: Köllensperger Gunda, Hann Stephan

Brunner Marion
Determination of geographical origin of agricultural products via isotopic and elemental analyses by inductively coupled plasma mass spectrometry (ICP-MS) on the example of *Asparagus officinalis*
Diploma thesis 2007
Supervisor: Prohaska Thomas

Falta Thomas
Analysis of toxic metals and assessment of their bioaccessibility from urban particulate matter by ICP-MS
Diploma thesis 2007
Supervisor: Hann Stephan, Stingeder Gerhard (joint with Andreas Limbeck, TU-Vienna)

Feuerstein Juliet
Determination of ^{90}Sr in soil samples using inductively coupled plasma mass spectrometry equipped with dynamic reaction cell (ICP-DRC-MS)
Diploma thesis 2007
Supervisor: Prohaska Thomas

Huemer Christiane
Migration studies of humans by isotopic fingerprints using (LA)-(MC)-ICP-MS
Diploma thesis since 2006
Supervisor: Prohaska Thomas

Kappel Stefanie
Radionuclide fingerprinting of hot particles by LA-MC-ICP-MS
Diploma theses: since October 2007
Supervisor: Thomas Prohaska

König Karin

Radioactive tracing in environmental samples by ICP-MS

Diploma theses: since January 2007

Supervisor: Thomas Prohaska

Van Dorpe Sylvie

Elemental and isotopic mapping for food authenticity'

Diploma thesis 2007

Supervisor: Prohaska Thomas

Witzmann Bernhard

Penetrationsverhalten und Eindringtiefe von Quecksilber aus Amalgamfüllungen in das benachbarte Gewebe

Diploma thesis 2007

Supervisor: Prohaska Thomas

Division of Biochemistry / Glycobiology

Kretschmer-Lubich Dorothea

Hexosaminidases of *Caenorhabditis*

Diploma thesis since 2006

Supervisor: Wilson Iain B. H.

Schiller Birgit

Fucosylation in *Dictyostelium discoideum*

Diploma thesis 2007

Supervisor: Wilson Iain B. H.

Sobczak Lukas

Fucosyltransferasen in *Caenorhabditis elegans*

Diploma thesis 2007

Supervisor: Wilson Iain B. H.

Stemmer Ute

Fucosylation in *Caenorhabditis elegans*

Diploma thesis 2007

Supervisor: Wilson Iain B. H.

Stowasser Karin

Fucosyltransferasen in Schnecken

Diploma thesis since 2006

Supervisor: Staudacher Erika, Gutternigg Martin

Rudolf Judith

N-Glycosylierungsmuster von Gastropoden

Diploma thesis 2007

Supervisor: Staudacher Erika, Gutternigg Martin

Wohlschlager Therese

Exploring the role of sialic acids in *Aspergillus fumigatus* conidia binding to extracellular matrix proteins

Diploma thesis 2007

Supervisor: Altmann Friedrich

Division of Biochemistry / Metalloprotein Research Group

Auer Markus

Substitution of tyrosines in catalase-peroxidase for probing the electronic structure of reaction intermediates

Diploma thesis 2007

Supervisor: Obinger Christian

Feichtinger Markus

Recombinant Cytochrome c6 from *Synechocystis* PCC 6803: Production and its role in respiratory electron transport

Diploma thesis 2007

Supervisor: Obinger Christian

Ganster Bernadette

Glykosylation in recombinant myeloperoxidase

Diploma thesis since 2006

Supervisor: Obinger Christian, Furtmüller Paul G.

Gusenbauer Doris

Elektronentransportkomponenten der Atmungskette in *Nostoc* PCC 7120

Diploma thesis since 2006

Supervisor: Obinger Christian

Lucini Chantal

Cu_a domain of terminal cytochrom c oxidase in *Nostoc* PCC7120

Diploma thesis since 2007

Supervisor: Obinger Christian

Schachinger Judith

Copper A from *Nostoc* PCC 7120

Diploma thesis 2007

Supervisor: Obinger Christian

Tangl Daniela
Cyanobakterielles Cytochrom c_M
Diploma thesis 2007
Supervisor: Obinger Christian

Division of Organic Chemistry

Güzbek Hacer
Synthese von Heptose 7-Phosphat
Diploma thesis 2007
Supervisor: Kosma Paul

Szczepanik Marcin
Kohlenhydratzusammensetzung in Topinamburknollen und Artichoken
Diploma thesis since 2006
Supervisor: Praznik Werner

Chair of Wood, Pulp and Fibre Chemistry

Ebner Gerald
Fluorescence labeling of hexenuronic acids in cellulosics
Diploma thesis since 2007
Supervisor: Rosenau Thomas

Ragab Tamer
Ammoxidation of lignin model compounds
Diploma thesis since 2007
Supervisor: Liebner Falk, Rosenau Thomas

Scientific Projects

Division of Analytical Chemistry

BOKU-Network for Analysis of Pollutants and Natural Materials - follow-up projects

Start: 01 06 2006

End: 31 12 2016

Financing: contract research

Novel methods for sampling and analysis of root exudates

Start: 01 11 2007

End: 30 09 2010

Financing: FWF, Austrian Science Fund

Austrian-Hungarian Doctoral Network for food authentication

Start: 01 03 2007

End: 28 02 2009

Financing: Bundesministerium für Bildung, Wissenschaft und Kultur, Austria

Vienna Isotope Research and Survey (VIRIS)

Start: 01 03 2005

End: 31 02 2011

Financing: FWF, Austrian Science Fund (START Project)

Elimination of priority metals from communal waste water

Start: 01 10 2006

End: 31 12 2009

Financing: BM Kommunalkredit Austria AG Wien Austria

Analysis of metals in the aquatic phase and in suspended matter of surface water by inductively coupled plasma mass spectrometry (ICP-MS)

Start: 30 08 2005

End: 30 09 2007

Financing: BM für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft Wien, Austria

Division of Biochemistry / Glycobiology**Recombinant pharmaceuticals from plants for human health**

Start: 01 02 2004

End: 31 12 2009

Financing: European Commission, Brussels, European Union

Modulation of the N-glycosylation pathway in plants for the production of pharmaceutically relevant glycoproteins

Start: 01 02 2004

End: 31 01 2008

Financing: WWTF

Glycosylation of *Caenorhabditis elegans* II

Start: 01 10 2005

End: 30 09 2007

Financing: FWF, Austrian Science Fund

Glycogenomics of *Dictyostelium discoideum*

Start: 01 04 2007

End: 31 03 2010

Financing: FWF, Austrian Science Fund

Arabinosylated allergens in weed pollen

Start: 01 08 2006
End: 31 07 2009
Financing: FWF, Austrian Science Fund

Re-engineering Glycosylation in Insect cells

Start: 01 11 2006
End: 31 11 2009
Financing: FWF, Austrian Science Fund

Fucosylation and defucosylation in *Arabidopsis thaliana*

Start: 01 09 2007
End: 31 08 2010
Financing: FWF, Austrian Science Fund

Division of Biochemistry / Metalloprotein Research Group**Proteinreinigung und Strukturanalysen**

Start: 01 08 1998
End: 31 12 2012
Financing: Planta Natural Products Vertriebs GmbH, Vienna Austria

Structure-function relationships in catalase-peroxidases

Start: 01 01 2006
End: 31 12 2008
Financing: FWF, Austrian Science Fund

Spectroscopic techniques for bioprocess optimization

Start: 01 11 2005
End: 31 10 2008
Financing: FWF, Austrian Science Fund

Respiration in cyanobacteria: the role of cytochrome c_b , cytochrome c_M and plastocyanin

Start: 01 02 2005
End: 31 01 2008
Financing: FWF, Austrian Science Fund

Division of Organic Chemistry

Synthesis and immunochemistry of lipopolysaccharide epitopes containing 4-Amino-4-deoxy-L-arabinose

Start: 01 03 2007
End: 28 02 2010
Financing: FWF, Austrian Science Fund

Antiviral Spot of Excellence (ASPEX)

Start: 01 03 2006
End: 28 02 2009
Financing: ZIT

EU Network of Excellence "The European Polysaccharide Network"

Start: 01 05 2005
End: 30 09 2009
Financing: European Commission Brussels European Union

Molecular characterization of carbohydrate-specific antibodies against Chlamydiae

Start: 01 08 2004
End: 31 07 2008
Financing: FWF, Austrian Science Fund

Competence Centre WOOD Kplus (Wood COMET)

Start: 01 01 2004
End: 31 12 2007
Financing: FFG, Provincial governments, companies

Chair of Wood, Pulp and Fibre Chemistry

Chemistry of ortho-quinone methides

Start: 01 01 2005
End: 31 12 2007
Financing: FWF, Austrian Science Fund

Synthesis of heterocyclic receptor agonists

Start: 01 10 2006
End: 30 09 2009
Financing: CDG

Cellulose damage in historical papers

Start: 01 03 2006
End: 28 02 2009
Financing: FWF, Austrian Science Fund

Spiro-polymerization: polytocopherols as antioxidants

Start: 01 11 2006
End: 31 10 2009
Financing: FWF, Austrian Science Fund

Cellodextrins – structure and dissolution

Start: 01 04 2005
End: 31 03 2008
Financing: FWF, Austrian Science Fund

Entwicklung eines zerstörungsfreien Untersuchungsverfahrens zur Bestimmung des Schädigungsgrades von Cellulose

Start: 01 03 2006
End: 28 02 2008
Financing: PAL

Reaction mechanisms in Organosolv-Pulping

Start: 01 04 2005
End: 31 03 2008
Financing: Wood K plus - Kompetenzzentrum Holz GmbH Linz Austria

Residual chromophores in bleached pulps

Start: 01 10 2006
End: 30 09 2009
Financing: Österreichische Forschungsförderungsgesellschaft mbH Wien Austria
FFG

EU Network of Excellence "The European Polysaccharide Network"

Start: 01 05 2005
End: 30 09 2009
Financing: European Commission Brussels European Union

For more details about Scientific Projects, refer to the [research information service](#)

Publications

Division of Analytical Chemistry

Original articles and reviews in refereed journals

Boulyga, S.F., Klötzli, U., Stingeder, G., Prohaska, T. (2007): Optimization and application of ICP-MS with dynamic reaction cell for precise determination of ⁴⁴Ca/⁴⁰Ca isotope ratios. ANAL CHEM, 79, 7753-7760; ISSN 0003-2700

Boulyga, S.F. (2007): Review on ICP Mass Spectrometry Handbook by Simon M. Nelms (ed.). ANAL BIOANAL CHEM, 387, 731-732; ISSN 1618-2642

Boulyga, S.F., Heilmann, J., Prohaska, T., Heumann, K.G. (2007): Development of an accurate, sensitive and robust isotope dilution laser ablation ICP-MS method for simultaneous multi-element analysis (chlorine, sulfur and heavy metals) in coal samples. ANAL BIOANAL CHEM, 389, 697-706; ISSN 1618-2642

Falta, T., Limbeck, A., Stingeder, G., Hann, S. (2007): Determination of Palladium in Human Urine Samples via Flow-Injection Coupled With ICP-MS. ATOM SPECTROSC, 28, 81-89; ISSN 0195-5373

Köllensperger, G., Daubert, S., Erdmann, R., Hann, S., Rottensteiner, H.P. (2007): Investigation of recombinant RING-finger peroxins by SEC-ICP-MS / LC-ESI-TOFMS. CHEM BIOL, 388, 1209-1214; ISSN 1074-5521

**Lenz, K., Koellensperger, G., Hann, S., Weissenbacher, N., Mahnik, S.N., M. Fürhacker, M. (2007): Fate of cancerostatic platinum compounds in biological wastewater treatment of hospital effluents. CHEMOSPHERE, 69, 1765-1774; ISSN 0045-6535

**Lenz, K., Mahnik, S., Weissenbacher, N., Mader, R., Krenn, P., Hann, S., Köllensperger, G., Uhl, M., Knasmüller, S., Ferk, F., Bursch, W., Fürhacker, M. (2007): Monitoring, removal and risk assessment of cytostatic drugs in hospital wastewater. WATER SCI TECHNOL, 56, 141-149; ISSN 0273-1223

Galler, P., Limbeck, A., Boulyga, S.F., Stingeder, G., Hirata, T., Prohaska, T. (2007): Development of an On-Line Flow Injection Sr/ Matrix Separation Method for Accurate, High-Throughput Determination of Sr Isotope Ratios by Multiple Collector-Inductively Coupled Plasma-Mass Spectrometry. ANAL CHEM, 79(13), 5023-5029; ISSN 0003-2700

Popp, M., Sulyok, M., Rosenberg, E. (2007): Chromatographic characterisation of a novel type of monolithic methylsilsequioxane-based HPLC cloumn. J SEP SCI, 30, 2888-2899; ISSN 1615-9306

Stadlbauer, C., Reiter, C., Patzak, B., Stingeder, G., Prohaska, T. (2007): History of individuals of the 18th/19th centuries stored in bones, teeth and hair analyzed by LA-ICP-MS - a step in attempts to confirm the authenticity of Mozart's skull. ANAL BIOANAL CHEM, 388, 593-602; ISSN 1618-2642

Stadlbauer, C., Reiter, C., Patzak, B., Stingeder, G., Prohaska T. (2007): History of individuals of the 18th/19th centuries stored in bones, teeth and hair analyzed by LA-ICP-MS - a step in attempts to confirm the authenticity of Mozart's skull. ANAL BIOANAL CHEM, 388, 593-602; ISSN 1618-2642

Standler, A., Koellensperger, G., Buchberger, W., Stingeder, G., Hann, S. (2007): Determination of chloroplatinates by capillary electrophoresis coupled to inductively coupled plasma mass spectrometry. ELECTROPHORESIS, 28, 3492-3499; ISSN 0173-0835

Conference & workshop proceedings, abstracts

Boulyga, S., Heilmann, J., Heumann, K. G., Prohaska, T. (2007): Isotope Dilution Laser Ablation ICP-MS for Direct and Accurate Analyses of Chlorine, Sulfur and Trace Metals in Coal Samples. In: Book of abstracts, 2007 European Winter Conference on Plasma Spectrochemistry, 18 - 23 February 2007, Palazzo dei Congressi, Taormina, I

Boulyga, S., König, K., Kappel, S., Prohaska, T. (2007): Performance of LA-ICP-MS for actinide isotope analysis in particles. TMPA Meeting IAEA, 2007, Seibersdorf, Austria

Boulyga, S., Prohaska, T. (2007): Uranium Isotope Ratios Determined by MC-ICP-MS and the Assessment of Total Combined Uncertainty Budgets. In: Book of abstracts, 2007 European Winter Conference on Plasma Spectrochemistry, 18 - 23 February 2007, Palazzo dei Congressi, Taormina, I

Boulyga, S., Prohaska, T. (2007): Direct Isotope Analysis of Uranium and Plutonium in Radioactive Particles Using LA-MC-ICP-MS. In: Book of abstracts, 2007 European Winter Conference on Plasma Spectrochemistry, 18 - 23 February 2007, Palazzo dei Congressi, Taormina, I

Boulyga, S., Swoboda, S., Brunner, M., Horacek, M., Bandura, D., Klötzli, U., Stingeder, G., Prohaska, T. (2007): Precise Determination of $^{44}\text{Ca}/^{40}\text{Ca}$ Isotope Ratios by Using ICP-MS with Dynamic Reaction Cell and its Potential for Food Authenticity Studies. In: Book of abstracts, 2007 European Winter Conference on Plasma Spectrochemistry, 18 - 23 February 2007, Palazzo dei Congressi, Taormina, I

Boulyga, S.F., Klötzli, U., Prohaska, T. (2007): Uranium isotope ratios determined by MC-ICP-MS and the assessment of total combined uncertainty budgets. In: Book of abstracts, Goldschmidt, August 19 – 24, Cologne

Boulyga, S.F., Prohaska, T. (2007): Direct Isotope Analysis of Actinides and Particular Fission Fragments in Particles Using LA-MC-ICP-MS. In: Book of abstracts, 53rd International Conference on Analytical Sciences and Spectroscopy, 24 - 27 June 2007, Peterborough

Böck, K., Hann, S., Stingeder, G., Köllensperger, G. (2007): Native separation work-flow for metalloprotein analysis. PUMPAYA 2007: 3rd BOKU-Corvinus University - Workshop on Spectroscopy, July 5 - 7, 2007, Nagymaros, Hungary

Brunner, M., Swoboda, S., Galler, P., Boulyga, S., Horacek, M., Prohaska, T. (2007): Determination of geographical origin of agricultural products via isotopic and elemental analyses by inductively coupled plasma

mass spectrometry (ICP-MS) on the example of *Asparagus officinalis*. 3rd PUMPAYA Meeting 2007: BOKU-Corvinus University - Workshop on Spectroscopy, July 5 - 7, 2007, Nagymaros, Hungary

Falta, T., Limbeck, A., Hann, S. (2007): Bioaccessibility of selected trace metals in urban PM2.5 and PM10 samples. CANAS 07 - Colloquium Analytische Atomspektroskopie, 18 - 21 März 2007, Konstanz [Poster]

Fischer, L., Popp, M., Köllensperger, G., Hann, S. (2007): Elimination of priority metals and metal containing compounds from water by ionic liquids. PUMPAYA 2007: 3rd BOKU-Corvinus University - Workshop on Spectroscopy, July 5 - 7, 2007, Nagymaros, Hungary

Galler, P., Limbeck, A., Boulyga, S., Stingeder, G., Prohaska, T. (2007): Development of an In-Line FI Sr/Matrix Separation Method for Accurate Determination of $^{87}\text{Sr}/^{86}\text{Sr}$ Isotope Ratios. In: Book of abstracts, 2007 European Winter Conference on Plasma Spectrochemistry, 18 - 23 February 2007, Palazzo dei Congressi, Taormina, I

Galler, P., Limbeck, A., Boulyga, S.F., Stingeder, G., Hirata, T., Prohaska, T. (2007): Recent developments in precise Sr isotope analysis by MC-ICP-MS for geology, archaeometry and forensic studies - the challenges of liquid and solid sample introduction. In: Book of abstracts, 3rd Congress of Russian Society for Mass Spectrometry, 03-07 September 2007, Moscow, R

Galler, P., Prohaska, T. (2007): (LA-)ICP-MS für die Spurensuche an "historischen Artefakten". Perkin Elmer Seminar, June 2007, Vienna, Austria

Galler, P., Prohaska, T., Teschler-Nicola, M. (2007): Evidence of significant Sr isotope heterogeneity in Upper Paleolithic human teeth from the Mladec caves. AAPA, March 28 - 31, 2007, Cleveland, Ohio, USA

Galler, P., Teschler-Nicola, M., Prohaska, T. (2007): Zerstörungsfreie Isotopen- und Elementaranalyse anthropologischer Fundstücke mittels LA-(MC)-ICP-MS (Laserablations Massenspektrometrie mit induktiv gekoppelter Plasma-Ionenquelle). Internationales ÖGUF Symposium, October 24 - 27, 2007, Naturhistorisches Museum - Wien, Austria

Galler, P., (2007): Entwicklung einer on-line Fliessinjektions (FI) Sr/Matrix Trennmethode zur Interferenzbestimmung von $^{87}\text{Sr}/^{86}\text{Sr}$ Isotopenverhältnissen mittels multiple collector – Inductively Coupled Plasma – MASS SPECTROMETRY (MC-ICP-MS). 3. ASAC JunganalytikerInnen Forum, 01.06 - 02.06.2007, Linz

Hann, S., Böck, K., Köllensperger, G. (2007): Native separation schemes for the assessment of metal protein interaction by elemental and molecular mass spectrometry. , Journal of Biological Inorganic Chemistry, 12 (Suppl 1), S99-S117

Hann, S., Köllensperger, G. (2007): Moderne Trennmethode mit massenspektrometrischer Detektion zur Analyse von metallhaltigen Zytostatika . Agilent World Tour 2007, 23. April 2007, Wien

Hann, S., Köllensperger, G. (2007): Moderne Trennmethoden mit massenspektrometrischer Detektion zur Analyse von metallhaltigen Zytostatika . Agilent World Tour 2007, 25. April 2007, Linz

Hann, S., Köllensperger, G. (2007): Moderne Trennmethoden mit massenspektrometrischer Detektion zur Analyse von metallhaltigen Zytostatika . Agilent World Tour 2007, 26. April 2007, Innsbruck

Hann, S., Köllensperger, G. (2007): Moderne Trennmethoden mit massenspektrometrischer Detektion zur Analyse von metallhaltigen Zytostatika. Agilent World Tour 2007, 24. April 2007, Graz

Hann, S., Köllensperger, G., Standler, A., Buchberger, W., Stingeder, G. (2007): Complementary Speciation of Oxaliplatin in Human Urine. 2007 European Winter Conference on Plasma Spectrochemistry, 18 - 23 February 2007, Palazzo dei Congressi, Taormina, I [Poster]

Heumann, K.G., Boulyga, S.F., Heilmann, J. (2007): Isotope dilution laser ablation ICP-MS for direct and accurate determination of trace elements in powdered coal samples. In: Book of abstracts, 55th ASMS Conference on Mass Spectrometry, June 3 - 7, Indianapolis

Jaitz, L., Köllensperger, G., Stingeder, G., Hann, S. (2007): Development of LC-MS methods for the analysis of juvenile hormones in insects. PUMPAYA 2007: 3rd BOKU-Corvinus University - Workshop on Spectroscopy, July 5 - 7, 2007, Nagymaros, Hungary

Köllensperger, G., Hann, S. (2007): Two-Dimensional Separation Schemes for the Assessment of Metal Protein Interaction by ICP-MS. 2007 European Winter Conference on Plasma Spectrochemistry, 18 - 23 February 2007, Palazzo dei Congressi, Taormina, I [Poster]

*Lenz, K., Köllensperger, G., Weissenbacher, N., Mahnik, S., Fürhacker, M., Hann, S. (2007): Fate of cancerostatic platinum compounds in biological wastewater treatment of hospital effluents. , Journal of Biological Inorganic Chemistry, 12 (Suppl 1), S204-S204

Popp, M., Fischer, L., Köllensperger, G., Stingeder, G., Kogelnig, D., Galanski, M., Krachler, R., Keppler, B., Hann, S. (2007): Determination and Elimination of organotin compounds from surface and communal waters. , Journal of Biological Inorganic Chemistry, 12 (Suppl 1), S203-S206

Popp, M., Köllensperger, G., Stingeder, G., Hann, S. (2007): Novel Approach for Determination of Trace Metals in Suspended Solids of Surface Water by ICP-SFMS. 2007 European Winter Conference on Plasma Spectrochemistry, 18 - 23 February 2007, Palazzo dei Congressi, Taormina, I [Poster]

Prohaska, T., Boulyga, S., Galler, P., Swoboda, S., Stingeder, G. (2007): Isotopic Fingerprints - A Unique Piece of Information (?). In: Book of abstracts, 2007 European Winter Conference on Plasma Spectrochemistry, 18 - 23 February 2007, Palazzo dei Congressi, Taormina, I

Prohaska, T. (2007): Vertical integration of higher education institutions in the life sciences - cooperation between universities and fachhochschulen. ICA Week of Conferences, August 29 - September 01, 2007, Freiburg, Germany

Prohaska, T. (2007): Proof of provenance by isotopic and elemental fingerprinting. FACSS Meeting, October 14 - 19, 2007, Memphis, Tennessee, USA

Prohaska, T. (2007): Gesetz der Zyklichkeit und Evolution. SEIVO Workshop "Bewusstsein Leben", November 23 - 25, 2008, Vienna, Austria

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(*) Joined publication within the Department

(**) Joined publication with other Departments at BOKU

For more details about publications, refer to the [research information service](#)

Research Activities Abroad

Jutta Vlasits, 2 month, Department of Chemistry, University of Modena and Reggio Emilia, via Campi 183, 41100 Modena, Italy

Maximilian Popp, 3 month, Faculty of Chemistry, Department of Physical and Analytical Chemistry, University of Oviedo, Oviedo, Spain

External Teaching Activities

Martin Gutternigg

is responsible for the biochemistry practical for the evening course in Bioengineering offered by the Fachhochschule Favoriten

Christina Haberhauer-Troyer

is lecturer of the FH-degree program "Bioengineering" at the FH Campus Wien

Antje Potthast

is lecturer of the FH-degree program "Biotechnical Processes" in Tulln, Austria which is organized by the University of Applied Sciences at Wiener Neustadt (Fachhochschule Wiener Neustadt).

"Technologie der Zellulose", since 2005, 2 h, WS

Thomas Prohaska

is lecturer of the FH-degree program "Biotechnical Processes" in Tulln, Austria which is organized by the University of Applied Sciences at Wiener Neustadt (Fachhochschule Wiener Neustadt).

"General and Inorganic Chemistry"

Manfred Schwanninger

is lecturer of the FH-degree program "Bioengineering" at the FH Campus Wien

Gerhard Stingeder

is lecturer of the FH-degree program "Biotechnical Processes" in Tulln, Austria which is organized by the University of Applied Sciences at Wiener Neustadt (Fachhochschule Wiener Neustadt).

"General and Inorganic Chemistry"

Petra Viehauser

is lecturer of the FH-degree program "Bioengineering" at the FH Campus Wien

Awards

Iain Wilson

Novartispreis 2007

Thomas Rosenau

Hayashi Jisuke International Cellulose Award 2007

Stephan Hann

Klaus Fischer Innovationspreis 2007

External Lectures and Seminar Talks

13. 02.	Gunda Köllensperger, hearing, candidate lecture, Johannes Gutenberg University, Mainz
01. 03.	Paul Kosma, TU-Graz, SFB Biokatalyse
16. 03.	Ute Henniges, Austrian National Library, Vienna
26.03.-27.03.	Antje Potthast, PAL-Meeting C.-Mellon Foundation, Leipzig
02.04.-04.04.	Yuko Yoneda, Ivana Tot, Karin Krainz, EPNOE PhD meeting, Jena
16.05.	Gunda Köllensperger, hearing, candidate lecture, Paris-Lodron University, Salzburg
22.05.	Gunda Köllensperger, GÖCH lecture series, Linz
19.06.	Thomas Rosenau, EPNOE Meeting at VTT, Helsinki, Finland
12.06.	Gunda Köllensperger, Adlershofer Kolloquium, Berlin
25.06.	Antje Potthast, Zellcheming, Wiesbaden
26.06.-27.06.	Antje Potthast, DFG-Kolloquium "Savinyi-Kollektion", Marburg
04.07.	Antje Potthast, EPNOE final meeting Round robin tests GPC, Golm
05.09.-07.09	Ute Henniges, Conservation Conference, Bern
06.09.-07.09	Thomas Rosenau, "Chance nachwachsender Rohstoffe", Ried
17.09.-20.09.	Ute Henniges, Antje Potthast, IADA Conference, Wien
08.11.-09.11.	Paul Kosma, EPNOE Meeting at Iasi, Romania
22.11.-23.11.	Antje Potthast, Ute Henniges, COST E41 Meeting, Bled
27.11.-28.11.	Antje Potthast, PTS Meeting, Dresden
06.12.	Gunda Köllensperger, ASAC lecture series, Wien
10.12.	Antje Potthast, GdCH-Seminar, Braunschweig

Press Reports

Paul Kosma, Arnold Stütz: *Netzwerk für Kohlenhydrate und Glykokonjugate*, Transkript 2007 (13) 88-89.

Paul Kosma, *Verräterischen Zuckermolekülen auf der Spur*, DiePresse 17. Okt. 2007

Invited Speakers

Lena Bjerregaard, M.Sc., Ethnological Museum Berlin, Germany "World of Inca-The Leymebamba Textiles"

Hans-Peter Fink, Fraunhofer-Institut für Angewandte Polymerforschung, Golm, Germany „Cellulose – unerschöpfliches Biopolymer mit neuen Perspektiven“

Irma Schabussova, Med. Univ. Wien: "Parasite sugars: Sweet manipulation"

Harry Schachter, Hospital for Sick Children, Toronto, Canada "Bringing Coal to Newcastle: The Role of N-glycans in Worm and Fly Development,"

Roland Schauer, Biochemisches Institut, Universität Kiel, Germany „Sialic Acids: Regulators of Molecular and Cellular Interactions

Hans-Ulrich Süss, Degussa, Hanau, Germany, Stand der Technik bei der Zellstoffbleiche

Erhard Oeser, University of Vienna, Austria, „Kollektives Bewußtsein“

Visiting scientists

Anne-Laurance Dupont (March 2007)

STSM COST E41, Centre de Recherche sur la Conservation des Collections, Paris

Makiko Enoki (May 2008)

Tokyo University of Marine Science and Technology, Japan

Myung-Joon Jeong (Sept/Oct 2007)

Dongguk University, Seoul and National Research Institute for Cultural Heritage, South Korea

Kåre Kristiansen (Feb 2007)

NTNU, Trondheim, Norway

Toshiyuki Takano (March – Oct 2008)

Kyoto University, Japan

Scientific Events

Gunda Köllensperger was a member of the Scientific Committee of the 4th International conference on trace element speciation in biomedical, nutritional and environmental sciences, May 2008, Munich

Gunda Köllensperger was a member of the Scientific Committee of the The 3rd International Sector Field Inductively Coupled Plasma Mass Spectrometry Conference, September 2008, New Brunswick

Christian Obinger was a member of the Scientific Committee of the 5th International Meeting on Human Peroxidases, New Zealand

Thomas Rosenau was Co-organizer and member of the Scientific Committee of the 2nd International Cellulose Conference 2007 (ICC2007), Tokyo, Japan, October 22-25, 2007

Antje Potthast was Co-organizer of the COST E54 Meeting “Characterization of fine structure and properties of papermaking fibers using new technologies”, Feb 14-15, 2007, Vienna

Thomas Rosenau was Co-organizer of the Japanese-European Workshop "Cellulose and Functional Polysaccharides", Kyoto, Japan, October 29-31, 2007

Other External Activities of the Members of the Department

Gunda Köllensperger became member of the advisory board of the Journal of Analytical Atomic Spectroscopy, Royal Society of Chemistry

Falk Liebner organized the first "Chemical Christmas Lecture" (11.12.) at BOKU.

Antje Potthast became member of the editorial board of the journals "Restaurator" (2008).

Thomas Rosenau was elected Editor-in-Chief of the „Green Sciences“ Book series, Walter de Gruyter, Berlin.

Thomas Rosenau became member of the editorial board of the journals "Cellulose" and "The Open Macromolecules Journal".

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Impressum

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