



Publikationen 2007

**des
Instituts für Medizinische Physik und Biophysik
Universitätsklinikum Münster
Westfälische Wilhelms-Universität Münster**

| Zeitschriftenartikel, Buchbeiträge, Bücher | Fachge biet(e)* |
|---|--------------------|
| <p>Arkhipov A., Hüve J., Kahms M., Peters R., Schulten K. Continuous Fluorescence Microphotolysis and Correlation Spectroscopy Using 4Pi Microscopy. Biophys. J. 93 (2007) 4006-4017.</p> | BP, PH |
| <p>Bauwens A., Bielaszewska M., Karch H., Schweppe C.H., Reichelt R., Kemper B., Langehanenberg P., von Baly G., Peter-Katalinić J., Müthing J. Investigation of Shiga-toxin 1 induced cellular damage. Int. J. Med. Microbiol. 297 (2007) 57-58.</p> | BP, ESI, LM, KM |
| <p>Bindila L., Steiner K., Schaffer C., Messner P., Mormann M., Peter-Katalinic J. Sequencing of O-glycopeptides derived from an S-layer glycoprotein of Geobacillus stearothermophilus NRS 2004/3a containing up to 51 monosaccharide residues at a single glycosylation site by Fourier transform ion cyclotron resonance infrared multiphoton dissociation mass spectrometry. Anal. Chem. 79 (2007) 3271-3279.</p> | FT-ICR, BC, ESI |
| <p>Bradatsch B., Katahira J., Kowalinski E., Bange G., Yao W., Sekimoto T., Baumgärtel V., Boese G., Bassler J., Wild K., Peters R., Yoneda Y., Sinning I., Hurt E. Arx1 Functions as an Unorthodox Nuclear Export Receptor for the 60S Preribosomal Subunit. Mol. Cell 27 (2007) 767-779</p> | BP, BC |
| <p>Cindric M., Cepo T., Galic N., Bukvic-Krajacic M., Tomczyk N., Vissers J.P.C., Bindila L., Peter-Katalinic J. Structural characterization of PEGylated rHuG-CSF and location of PEG attachment sites. J. Pharmaceut. Biomed. 44 (2007) 388-395.</p> | KM, ESI, LM |
| <p>Cramer R.C., Dreisewerd K. Principles and Instrumentation of UV-MALDI in M. Gross (Ed.): Encyclopedia of Mass Spectrometry, Vol. 6, Elsevier, 2007, ISBN: 0080438016.</p> | LM |

- Dashtiev M., Waefler E., Roehling U., Gorshkov M., Hillenkamp F., Zenobi R. LM
 Positive and negative analyte ion yield in matrix-assisted laser desorption/ionization
 Int. J. Mass Spectrom. 268 (2007) 122–130.
- Dreisewerd K., Draude F., Kruppe S., Rohlfing A., Berkenkamp S., Pohlentz, G. LM, KM
 Molecular Analysis of Native Tissue and Whole Oils by Infrared Laser Mass Spectrometry
 Anal. Chem. 79 (2007) 4514 - 4520.
- Dreisewerd K., Lemaire R., Pohlentz G., Salzet M., Wisztorski M., Berkenkamp S., Fournier I. BC, KM, LM
 Molecular Profiling of Native and Matrix-Coated Tissue Slices from Rat Brain by Infrared and Ultraviolet Laser Desorption/Ionization Orthogonal Time-of-Flight Mass Spectrometry.
 Anal. Chem. 79 (2007) 2462-2471.
- González G., González C.S., Stracke W., Reichelt R., Garcia L. EM, AFM
 New zeolite topologies based on intergrowths of FAU/EMT systems.
 Microporous and Mesoporous Materials 101 (2007) 30-42.
- Grote M., Krzyzanek V., Reichelt R. EM, KM, AL
 Bundles of hexagonally arranged tubules in timothy grass pollen: Detection of a novel pollen component using anhydrous fixation and image analysis techniques in transmission electron microscopy.
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 J. Proteome Res. 6 (2007) 4269-4289.
- Henning S., Peter-Katalinić J., Pohlentz G. ESI, PR, BC
 Structure elucidation of glycoproteins by direct nanoESI MS and MS/MS analysis of proteolytic glycopeptides
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- Hillenkamp F., Peter-Katalinić J., (Eds.) LM
MALDI MS: A Practical Guide to Instrumentation, Methods
and Applications
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- Hillenkamp F., Karas, M. LM
The MALDI Process and Method,
in: MALDI MS: A Practical Guide to Instrumentation, Methods
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P.N., Sabirova J.S., Ferrer M., Timmis K.N., Steinbuchel A. NBT
Analysis of storage lipid accumulation in *Alcanivorax*
: Evidence for alternative triacylglycerol
biosynthesis routes in bacteria.
J. Bacteriol. 189 (2007) 918-928.
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versus age-matched WKY.
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Desorption Ionization Ion Trap Mass Spectrometry.
Anal. Chem. 79 (2007), 5484 - 5488.
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Steinbüchel A., Reichelt R. NBT
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transmission electron microscopy.
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 Identification and localization of cyanophycin in bacteria cells via imaging of the nitrogen distribution using energy-filtering transmission electron microscopy
 Biomacromolecules 8 (2007) 2675-2683.
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- Mormann M., Kuck D. FT-ICR
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 J. Mass Spectrom. 42 (2007) 263-265.
- Mormann M., Zamfir A.D., Seidler D.G., Kresse H., Peter-Katalinić J. FT-ICR, KM, ESI
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 Single-molecule Fluorescence Analysis of Cellular Nanomachinery Components.
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- Seidler D.G., Peter-Katalinić J., Zamfir A.D., ESI, BC
 Galactosaminoglycan function and oligosaccharide structure determination
 THESCIANTIFICWORLDJOURNAL 7 (2007) 233-241.
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 Chi L., Reichelt R., Nembach E.
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 Steinbüchel A. NBT
 Heat-shock protein HspA mimics the function of phasins sensu stricto in recombinant strains of Escherichia coli accumulating polythioesters or polyhydroxyalkanoates.
 Microbiology 153 (2007) 366-374.
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 J. Gen. Virol. 88 (2007) 196-206.

Vukelić Ž., Kalanj-Bognar S., Froesch M., Bindila L., Radic B., Allen M., Peter-Katalinić J., Zamfir A.D. ESI, FT-ICR, BC

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Glycobiology 17 (2007) 504-515.

Wada Y., ... ,Peter-Katalinić J., Pohlentz G.,..., Taniguchi N. PR, ESI, BC, KM

Comparison of the methods for profiling glycoprotein glycans - HUPO Human Disease Glycomics/Proteome Initiative multi-institutional study.

Glycobiology 17 (2007) 10.

Wada Y., ... ,Peter-Katalinić J., Pohlentz G.,..., Taniguchi N. PR, ESI, BC, KM

Comparison of the methods for profiling glycoprotein glycans - HUPO Human Disease Glycomics/Proteome Initiative multi-institutional study.

Glycobiology 17 (2007) 411-422.

Diplom- und Doktorarbeiten

Diplomarbeiten

Bredendiek N.

„Charakterisierung des nukleären RNA-Exports *in vitro* mittels optischer Einzeltransporter-Analyse“

Diplomarbeit im Studiengang Biologie (Betreuung: G. Böse)

Quiskamp N.

"In vitro Fluoreszenzanalyse des nukleären RNA-Exports"

Diplomarbeit im Studiengang Biologie (Betreuung: G. Böse)

Sanetra N.

„Kernimport-Messungen mit konfokaler- und Einzelmolekül-Fluoreszenzmikroskopie“

Diplomarbeit im Studiengang Physik (Betreuung: J. Hüve, M. Kahms)

Dissertationen

Auswärtige Dissertationen abgeschlossen in 2007

Fachsemester

Kaufmann, H.

„Untersuchungen zum Einsatz der Focussed Ion Beam (FIB) Technik an beschichteten Implantaten.“

Fachsemester im Studiengang Biomedizinische Technik der FH Münster-Steinfurt

(Betreuung: Prof. Dr. R. Reichelt / Prof. Dr. U. Stöber (FH Münster-Steinfurt))

| Vorträge (V) und Poster (P) mit Abstracts | Fachgebiet(e)* |
|--|----------------|
| <p>Bindila L., Steiner K., Schäffer C., Messner P., Mormann M., Peter-Katalinić J. ESI/FTICR IRMPD MS/MS for structural identification of O-glycopeptides derived from an S-layer glycoprotein of <i>Geobacillus stearothermophilus</i> NRS 2004/3a containing up to 51 monosaccharide residues. 40. Diskussionstagung der Deutschen Gesellschaft für Massenspektrometrie, 11.03.-14.03. 2007, Bremen (V).</p> | FT-ICR, BC |
| <p>Baumgärtel V., Peters R. Optical Single Transporter Recording - Kinetic Analysis of Nuclear Export. Begutachtung SFB 431; 10.09.-11.09.2007; Universität Osnabrück (P).</p> | BP, BC |
| <p>Baumgärtel V., Quiskamp N., Peters R. Kinetic Analysis of Nuclear Export Processes. Frontiers Annual Meeting 2007; 23.10-25.10.2007; Leuven/Belgien (P)</p> | BP, BC |
| <p>Distler U., Souady J., Hülsewig M., Dreisewerd K., Berkenkamp S., Peter-Katalinić J., Müthing J. HPTLC immunodetection coupled with IR-MALDI-o-TOF mass spectrometry for the high sensitivity structural detection and characterization of glycosphingolipids. 40. Diskussionstagung der Deutschen Gesellschaft für Massenspektrometrie, 11.03.-14.03. 2007, Bremen (P).</p> | KM, LM, BC |
| <p>Draude F., Kruppe S., Rohlfing A., Dreisewerd K. Spatially-resolved molecular analysis of native tissue and profiling of whole oils by infrared laser mass spectrometry 9th International Conference on Laser Ablation (COLA 2007), 24.09.-28.09.2007, Teneriffa, Spain (P).</p> | LM |
| <p>Dreisewerd K. Molecular Analysis of Native Tissue, Food Products and Whole Oils by Direct Infrared Laser Mass Spectrometry 3rd International Symposium on Recent Advances in Food Analysis, 07.11.-09.11.2007, Prag, Czech Republic (V).</p> | LM |

- Dreisewerd K., Lemaire R., Draude F., Kruppe S., Wisztorski M., Salzet M., Fournier I., Berkenkamp S, Pohlentz G. LM
 Spatially-resolved molecular analysis of native tissue and profiling of whole oils by infrared laser mass spectrometry
 40. Diskussionstagung der Deutschen Gesellschaft für Massenspektrometrie, 11.03.-14.03. 2007, Bremen (V).
- Farr J.C., Rout M.P., Peters R. BP, BC
 An In vitro system to measure transport through the Nuclear Pore Complex in *Saccharomyces cerevisiae*
 Begutachtung SFB 431; 10.09-11.09.2007; Universität Osnabrück (P).
- Grote M., Krzyzanek V., Reichelt R. AL, EM, KM, ZB
 Image processing of hexagonally arranged tubules in ultrathin sections of grass pollen reveals a novel cytoplasmic pollen constituent.
 3rd International Congress on Nanobiotechnology, 13.-15.06.2007, Münster. (P)
- Hülsewig M., Dreisewerd K., Berkenkamp S., Peter-Katalinić J., Müthing J. KM, LM
 IR-MALDI-o-TOF coupled with automated multiple development high-performance thin-layer chromatography affords characterization of long-chained CD15 glycosphingolipids.
 40. Diskussionstagung der Deutschen Gesellschaft für Massenspektrometrie, 11.03.-14.03. 2007, Bremen (P).
- Krzyzanek V., Reichelt R. BP, EM, NBT
 Mass determination with a high-resolution scanning electron microscope: a new development for nanoanalytics
 3rd International Congress on Nanobiotechnology, 13.-15.06.2007, Münster. (P)
- Krzyzanek V., Reichelt R., Grote M. AL, EM, KM, ZB
 Detection of a novel cytoplasmic component in timothy grass pollen using anhydrous fixation and image processing techniques in TEM.
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- Krzyzanek V., Reichelt R. BP, EM, NBT
 Quantitative high-resolution scanning electron microscopy in the transmission mode: a new nanoanalytical tool.
 8th Multinational Congress on Microscopy, 17.-21.06.2007, Prague, Czech Republic. (V)
- Krzyzanek V., Reichelt R. BP, EM
 High-resolution scanning electron microscope for mass determination: progress in the development of a new nanoanalytical tool.
 Microscopy Conference MC 2007, 02.-07.09.2007, Saarbrücken. (P)
- Krzyzanek V., Reichelt R. BP, EM, NBT
 Mass determination with a high-resolution scanning electron microscope: progress in the development of a new nanoanalytical tool.
 Symposium "Current Topics in Medical Technology", 30.11.2007, Münster. (P)
- Krzyzanek V., Reichelt R. BP, EM, NBT
 Mass determination with a high-resolution scanning electron microscope: a new development for nanoanalytics
 European BioPerspectives, 30.05.-01.06.2007, Köln. (P)
- López-Cabaña Z., González Moraga G., Keller U., Reichelt R. AFM, EM, PH
 Template-based approaches to the preparation of layered zinc sulfide.
 IX Interamerican Conference on Electron Microscopy, 23.-29.09.2007, Cusco, Peru. (P)
- Rohlfing A, Bindila L., Vakhrushev S.Y., Peter-Katalinić J., Dreisewerd K., Mormann M. LM, PR, FT-ICR
 Infrared Matrix-Assisted Laser Desorption/Ionization Fourier-Transform Ion Cyclotron Resonance Mass Spectrometry with a Glycerol Matrix for Applications in Proteomics, Glycoproteomics and Glycomics.
 40. Diskussionstagung der Deutschen Gesellschaft für Massenspektrometrie, 11.03.-14.03. 2007, Bremen (V).

- Rohlfing A., Leisner A., Röhling U., Hillenkamp F., Dreisewerd K. LM
Investigation of the desorption process in UV-MALDI with a liquid matrix
9th International Conference on Laser Ablation (COLA 2007), 24.09.-28.09.2007, Teneriffa, Spain (P).
- Rohlfing A., Müthing J., Pohlentz G., Distler U., Peter-Katalinić J., Berkenkamp S., Dreisewerd K. LM, KM
Highly accurate IR-MALDI-MS analysis of HPTLC-separated phospholipid mixtures directly from the plate.
40. Diskussionstagung der Deutschen Gesellschaft für Massenspektrometrie, 11.03.-14.03. 2007, Bremen (P).
- Sanetra N., Hüve J., Kahms M., Peters R. BP, LSM
Import measurements of single molecules through the nuclear pore complex with fluorescence microscopy.
Nanobio Europe, 13.06.-15.06.2007, Münster (P).
- Schweppe C.H., Bielaszewska M., Friedrich A.W., Karch H., Peter-Katalinić J., Müthing J. KM, ESI
Structural characterization of high- and low affinity receptors of Shiga toxin 1 in fetal calf serum by nanoESI-Q-TOF mass spectrometry and high-performance thin-layer chromatography immunostaining.
40. Diskussionstagung der Deutschen Gesellschaft für Massenspektrometrie, 11.03.-14.03.2007, Bremen (P).
- Schweppe C.H., Bielaszewska M., Karch H., Müthing J. KM, ESI, LM
Analysis of receptors for EHEC cytolethal distending toxin on human endothelial cells.
DFG Meeting, 25.-27.02.2007, Oberbärenburg (V).
- Schweppe C.H., Bielaszewska M., Karch H., Peter-Katalinić J., Müthing J. KM, ESI, LM
Massenspektrometrische Charakterisierung von Shiga Toxin 1-Rezeptoren aus Endothelzellen.
EHEC Workshop, 9.-11.05. 2007, Wildbad Kreuth (V).
- Schweppe C.H., Bielaszewska M., Karch H., Peter-Katalinić J., Müthing J. KM, ESI
Characterization of Shiga toxin 1 receptors by mass spectrometry.
DGHM Tagung, 30.09-04.10.2007, Göttingen (P).

- Soltwisch J., Berkenkamp S., Dreisewerd K. LM
 Effect of background gas type and pressure on the stability of laser generated ions in a elevated pressure MALDI ion source
 9th International Conference on Laser Ablation (COLA 2007), 24.09.-28.09.2007, Teneriffa, Spain (P).
- Souady S., Peter-Katalinić J., Müthing J. ESI, KM
 Structural characterization of glycosphingolipids containing hydroxylated fatty acids by nanoESI-Q-TOF mass spectrometry.
 40. Diskussionstagung der Deutschen Gesellschaft für Massenspektrometrie, 11.03.-14.03. 2007, Bremen (P).
- Vakhrushev S.Y., Hughes C.; Langridge J.; Campuzano I.; Vissers H.; McKenna T.; Peter-Katalinić J. KM, LM, ESI
 Rapid automated identification of urine glycoconjugates by ion mobility separation MS and MS/MS and computer assignment.
 55th Annual ASMS Conference on Mass Spectrometry, 03.06. – 07.06.2007, Indianapolis, IN, USA (P).
- Vakhrushev S.Y., Langridge J.; Hughes C.; Campuzano I.; Vissers H.; McKenna T.; Peter-Katalinić J. KM, LM, ESI
 Ion mobility coupled with TOF MS for the automated assignment of glycoconjugates in the urine of patients with inherited disorders.
 55th Annual ASMS Conference on Mass Spectrometry, 03.06. – 07.06.2007, Indianapolis, IN, USA (P).
- Vakhrushev S.Y., Mormann, M., Rohlfing A., Dreisewerd K., Peter-Katalinić J. KM, LM, FT-ICR
 Structural characterisation of glycoconjugates in the urine of patients with inherited disorders by infrared MALDI FT-ICR MS and MS/MS.
 8th European FTMS conference, 28.08.-01.09.2007, Moscow, Russia (P).
- Vakhrushev S.Y., Snel M., Langridge J., Peter-Katalinić J. KM, LM, ESI
 MALDI Q-Tof MS and MS/MS for structural identification of glycoforms in urine.
 40. Diskussionstagung der Deutschen Gesellschaft für Massenspektrometrie, 11.03.-14.03. 2007, Bremen (P).

Wesselmann R., Peters R., Hüve J. BP, LSM, ZM
Topography of single nuclear pore complexes analyzed by
4Pi fluorescence microscopy.
Begutachtung SFB 431; 10.09.-11.09.2007; Universität
Osnabrück (P).

Wesselmann R., Peters R., Hüve J. BP, LSM, ZM
Topography of single nuclear pore complexes analyzed by
4Pi fluorescence microscopy.
Nanobio Europe, 13.06.-15.06.2007, Münster (P).

Zarei M., Müthing J., Rohlfing A., Dreisewerd K., Souady J., LM
Berkenkamp S., Peter-Katalinić J.
Influence of the laser wavelength, matrices and analyte
derivatization on sialylation analysis of gangliosides by matrix
assisted laser desorption ionization time of flight mass
spectrometry.
40. Diskussionstagung der Deutschen Gesellschaft für
Massenspektrometrie, 11.03.-14.03. 2007, Bremen (P).

Zeck A.; Pohlentz G.; Schlothauer T.; Seeber S.; Peter- KM, LM, ESI
Katalinić J.; Regula J.T.
Characterization of the Fc γ RIIIa carbohydrate structure
using LC-nanoESI-MS/MS with parallel MS triggered fraction
collection and subsequent analysis of glycopeptide fractions.
55th Annual ASMS Conference on Mass Spectrometry,
03.06. – 07.06.2007, Indianapolis, IN, USA (P).

Eingeladene Vorträge

Fachgebiet(e)*

Baumgärtel V.

Fluorescence technique for the kinetic analysis of membrane transport processes

Frontiers Annual Meeting 2007; 23.10 - 25.10.2007;

Leuven/Belgien.

BP, BC

Dreisewerd K.

Lasermassenspektrometrie mit Infrarotlasern: Direkte molekulare Analyse von Gewebeproben und von HPTLC-Platten.

Institutskolloquium des Instituts für Medizinische Physik und Biophysik der Universität Leipzig, 30.11.2007, Leipzig.

Dreisewerd K.

IR-MALDI-Imaging.

19th ASMS Sanibel Conference - Imaging Mass Spectrometry, 19.01-22.01.2007, Sanibel Island, Florida, USA.

LM

LM

Hillenkamp F.

Analysis of Nucleic Acids by Matrix Assisted Laser Desorption/Ionization Mass Spectrometry

Seminar, Beckmann Laser Institute, University of California, 31.05.2007, Irvine, USA.

LM

Hillenkamp, F.

LC_MALDI_MS: Infrared lasers and o-TOF analyzers, interesting alternatives to standard instrumentation.

EMBO practical course on shotgun proteomics, 23.07.-26.07.2007, York, England.

LM

Hillenkamp F.

Matrix-Assisted Laser Desorption/Ionization Mass Spectrometry: Basic Principles and Recent Developments

1st Advanced Research Workshop on Applications of Mass Spectrometry in Life Safety, 23.09.-27.09.2007, Herculane, Romania.

LM

Hillenkamp F.

Applications of MALDI MS in Genomics.

1st Advanced Research Workshop on Applications of Mass Spectrometry in Life Safety, 23.09.-27.09.2007, Herculane, Romania.

LM

- Hillenkamp, F. LM
 Identification of Microorganisms by Matrix-Assisted Laser Desorption/Ionization Mass Spectrometry (MALDI-MS).
 Graduate Research School "Molecular Interactions of Pathogens with Biotic and Abiotic Surfaces", 24.10.2007, University of Münster, Münster.
- Hillenkamp F. LM
 Matrix Assisted Laser Desorption/Ionization Mass Spectrometry (MALDI-MS) of Nucleic Acids.
 5th London Biological Mass Spectrometry Discussion Group Meeting, 13.12.2007, London, UK.
- Hillenkamp F. LM
 Recent Developments in Matrix Assisted Laser Desorption/Ionization Mass Spectrometry (MALDI-MS) of Nucleic Acids.
 Plenary lecture, Singapore International Chemical Conference 5 (SICC-5) and 7th Asia-Pacific International Symposium on Microscale Separation and Analysis (APCE 2007), 17.12-19.12.2007, Singapore.
- Hüve, J. BP, BC
 4Pi Mikroskopie.
 Symposium Nanoanalytik: Herausforderung in der Zellbiologie, 13.11.2007, Münster.
- Kahms M., Peters R., Hüve J., Wesselmann R., Baumgärtel V., Sanetra N., Bredendiek N., Quiskamp N. BP, BC
 Structure and function of a biological nanopore.
 Frontiers Meeting: SRA2 Nanopores 02.04.-03.04.2007, Münster.
- Mormann, M. LM, ESI
 Structural elucidation of gaseous ions by use of activation processes-the basics
 2nd Summer Course on Mass Spectrometry in Biotechnology and Medicine, Center for Advanced Academic Studies, 07.07.-14.07.2007, Dubrovnik, Croatia.

| | |
|---|------------------------|
| Mormann, M. Fragmentation processes of gaseous peptide ions consequences for biomedical proteomics 2 nd Summer Course on Mass Spectrometry in Biotechnology and Medicine, Center for Advanced Academic Studies, 07.07.-14.07.2007, Dubrovnik, Croatia. | ESI, LM |
| Peter-Katalinić J. Mass Spectrometry in Glycoproteomics Proteomics & Pathology. 2 nd Congress of the Spanish Proteomics Society, 10.02.-14.02.2007, Valencia, Spain. | KM, LM, ESI, BP, BC |
| Peter-Katalinić J. HGPI pilot study for <i>N</i> -linked glycan analysis. 2 nd Congress of the Spanish Proteomics Society, 10.02.-14.02.2007, Valencia, Spain. | KM, LM, ESI, BP, BC |
| Peter-Katalinić J. Revealing Molecular Structure of Biopolymers by Mass Spectrometry: Applications to Nanobioanalytics and Nanomedicine. Pilani Int. Conference on Emerging Mechanical Technology Macro to Nano 2007, 17.02.-19.02.2007, Pilani, India | KM, LM, ESI, BP, BC |
| Peter-Katalinić J. Requirements for glycoproteomics and glycomics analysis by mass spectrometry: microfluidics, accurate mass determination and software. 2007 Pittsburgh Conference on Analytical Chemistry, 25.02.-01.03.2007, Chicago, Ill., USA. | KM, LM, ESI, BP, BC |
| Peter-Katalinić J. Dissecting complex carbohydrate structure by FT-ICR MS. 2007 Tagung der FT-ICR MS Fachgruppe der DGMS, Universität Konstanz, 13.04.2007, Konstanz. | KM, LM, ESI, BP, BC |
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| <p>Pohlentz G., Mormann M., Peter-Katalinić J. Glycosylation of IgA1 Preparations. HGPI Meeting, 07.09.2007, Lübeck</p> | <p>KM, LM, ESI, BP, BC</p> |
| <p>Reichelt R. Soft materials studied by atomic force and high-resolution scanning electron microscopy. Facultad de Ciencias Biologicas, Universidad Nacional Mayor de San Marcos, 17.09.2007, Lima, Peru.</p> | <p>AFM, BP, EM, NBT</p> |

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| Reichelt R. Atomic force (AFM) and high-resolution scanning electron microscopy (HRSEM): a complementary powerful couple. IX Interamerican Conference on Electron Microscopy, 23.- 29.09.2007, Cusco, Peru. | AFM, BP, EM, NBT, PH |
| Reichelt R. Nanowissenschaften: Wissenschaft im Unsichtbaren ? Elbe-Gymnasium, 06.10.2007, Boizenburg. | AFM, BP, EM, NBT |
| Wesselmann R., Hüve J., Peters R. Topography of single nuclear pore complexes analysed by 4Pi microscopy. Seminar talk, M.E. Mueller Institute for Structural Biology Biozentrum - University of Basel, 14.08. - 15.08.07, Basel, Schweiz. | BP, BC |

Drittmittelprojekte, Personalstellen und Sachmittel und andere Aktivitäten 2007

Dreisewerd K.
DFG-Projekt
DC-IR-MALDI-MS, DFG: DR 416/5-1.

Dreisewerd K.
Host for Short-Term Fellowship der Human Frontier Science Program (HFSP)
Organisation für einen mehrwöchigen Forschungsaufenthalt von Dr. Joanne
Yew, Dep. of Neurobiology, Harvard Medical School, Boston, MA.
Analysis of *Drosophila melanogaster* cuticular compounds
using mass spectrometry.

Dreisewerd K.
Lecturer, 2nd Summer Course on Mass Spectrometry in Biotechnology and
Medicine Center for Advanced Academic Studies, 07.07.-14.07.2007,
Dubrovnik, Croatia.

Müthing J.
Deutsche Krebshilfe (Mildred Scheel Stiftung) 106742 (Kooperationspartner:
Prof. Dr. Peter-Katalinić (IMPB), PD Dr. J. Haier (Klinik und Poliklinik f.
Allgemeine Chirurgie, UK Münster), Prof. Dr. N. Senninger (Klinik und Poliklinik
f. Allgemeine Chirurgie, UK Münster).

Peter-Katalinić J.
SFB 492: Extrazelluläre Matrix: Biogenese, Assemblierung und Zelluläre
Wechselwirkungen (2000-2008).
„Quadrupol Flugzeit und Fourier-Transform Ion Zyklotron Resonanz
Massenspektrometrie von Glykosaminoglykanen und anderen
Glykokonjugaten“, Projekt Z2: 2006-2008.

Peters R.
National Institute of Health (USA), Grant number 1 R01 GM071329-01: “Virtual
gating machines for protein purification”. Volume: 240,000 €, 2004-2008.

Peters R.
Deutsche Forschungsgemeinschaft, SFB 431, subproject P21: “In vitro-Analyse
des nukleären mRNA-Exports”. Volume: 247,800 €, 2005-2007.

Peters, R.

Deutsche Forschungsgemeinschaft, Grant number PE 138/19-1,2, "Exploring the cellular nanomachinery by 4Pi microscopy", Volume 1,000,000 €, 2005-2007.

Reichelt R.

DFG-Projekt NE 123/34-3 (E. Nembach, Inst. für Materialphysik, WWU und Reichelt): "Anwendungen des Rasterkraftmikroskops in der Materialphysik".

Reichelt R.

DRL / BMBF-Projekt Internat. Zusammenarbeit in Bildung und Forschung mit Mexiko, Projekt MEX06/020: "Oberflächencharakterisierung von Keramiken und nichtmetallischen Materialien mittels hochauflösender Rasterelektronen- und Atomkraftmikroskopie", 2006-2008.

Andere Aktivitäten

Müthing

Croatian Medical Journal, Scientific Board.

Neurologia Croatica, Scientific Board.

Peter-Katalinić

Vorstandsmitglied der Deutschen Gesellschaft für Massenspektrometrie (DGMS).

Journal of Proteome Research, Editorial Board

Journal of the American Society for Mass Spectrometry, Editorial Board

Gastherausgeberin: „Proteomics Special Issue Glycomics“

Projektkoordination: EU-Projekt: SRPT1-Nano2Life WP7.

Reichelt

Acta Microscopica, Editorial Board

Mitveranstalter der interdisziplinären Vortragsreihe “Current Topics in Medical Technology” am 30.11.2007 an der WWU, Münster

Chairman of the Session B III “Instrumentation”, *IX Interamerican Conference on Electron Microscopy*, 25. Sept. 2007, Cusco, Peru.

Lecturer of the 2-days course on “Atomic Force Microscopy (AFM)”, 28.-29.11.2007, Tecnológico de Monterrey, Mexiko.

Diverse Projekte mit kleinen und mittleren Firmen / Industrie

Peters

Peters, R.

Visiting Scientist, The Rockefeller University, New York, NY, USA (1.2.2006-31.8.2007)

Abkürzungsverzeichnis

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| AFM | Atomkraftmikroskopie |
| AL | Elektronenmikroskopische Untersuchungen zur Allergologie |
| BC | Biochemie |
| BP | Biophysik |
| BT | Biotechnologie |
| EM | Elektronenmikroskopie |
| ESI | Elektrospray Massenspektrometrie |
| FT-ICR | Fourier Transform Ion Cyclotron Resonance |
| KM | Klinisch-medizinische Fragestellung |
| LM | Laser-Massenspektrometrie |
| LSM | Laser-Scanning-Mikroskopie |
| MA | Elektronenstrahl-Mikrosondenanalytik |
| NBT | Nanobiotechnologie |
| PH | Physik |
| PR | Proteomics |
| PC | Physiologische Chemie |
| SSM | Scanning-Sensormikroskopie |
| TM | Tumormedizin |
| ZM | Zellbiologie |