



Jasna Peter-Katalinić received her PhD in organic chemistry at the University of Zürich, Switzerland, where her mentor was Professor Hans Schmid. After the postdoctoral training at the Texas A+M University in USA she was associated with the Medical School of University of Bonn in Germany, where she started the structural glycobiology work by mass spectrometry in 1981. In 1996 she joined the Medical School Faculty of the Westfalian Wilhelms University in Münster. Her group “Biomedical Analysis” is actively involved in all aspects of mass spectrometry-based glycomics and proteomics, for which the recent focus is toward development and application of new methods using microfluidic devices and chips for hyphenation of sample preparation and manipulation for mass spectrometry. The projects involve discovery of carbohydrate biomarkers in tumor, inflammatory and metabolic human diseases. She is a recipient of the “Life Science Prize” of the German Society for Mass Spectrometry. Most representative publications (10 out of 279) are:

- 1) H.Egge, M.Kordowicz, J. Peter-Katalinić and P. Hanfland: Immunochemistry of I/i-active oligo- and polyglycosyl-ceramides from rabbit erythrocyte membranes. *J.Biol.Chem.* **260** (1985) 4927-4935.
- 2) H.Egge, J.Peter-Katalinić: Fast atom bombardment mass spectrometry for structural elucidation of glycoconjugates. *Mass Spectrom.Rev.* **6** (1987) 331-393.
- 3) J.Peter-Katalinić and H.Egge : Desorption Mass Spectrometry of Glycosphingolipids. *Meth. Enzymol.* **193** (1990) 713-733.
- 4) J.Peter-Katalinić: Analysis of Glycoconjugates by Fast Atom Bombardment Mass Spectrometry and Related MS Techniques. *Mass Spectrom.Rev.* **13** (1994) 77-98.
- 5) I. Gruić-Sovulj, H.-C. Lüdemann, F. Hillenkamp, I. Weygand-Đurašević, Z. Kućan, J. Peter-Katalinić: Detection of Noncovalent tRNA-Aminoacyl-tRNA Synthetase Complexes by Matrix-assisted Laser Desorption/Ionization Mass Spectrometry, *J. Biol. Chem.* **272** (1997) 32084-32091.
- 6) Ž. Vukelić, W. Metelmann, J. Müthing, M. Kos and J. Peter-Katalinić: Anencephaly: structural characterization of gangliosides in defined brain regions, *Biol. Chem.* **382** (2001) 259-274.
- 7) A. Zamfir, S. Vakhrushev, A. Sterling, H.-J. Niebel, M. Allen, J. Peter-Katalinić: Fully automated chip-based mass spectrometry for complex carbohydrate system analysis, *Anal. Chem.* **76** (2004) 2046-2054.
- 8) J. Peter-Katalinić: O-glycosylation of proteins, *Methods Enzymology* **405** (2005) 139-171.
- 9) L. Bindila, K. Steiner, M. Mormann, C. Schäffer, P. Messner, J. Peter-Katalinić: Sequencing of O-glycopeptides derived from S-layer glycoproteins containing very large carbohydrate chains by Fourier transform ion cyclotron resonance infrared multiphoton dissociation mass spectrometry, *Anal. Chem.* **79** (2007) 3271-3279.
- 10) L. Bindila, J. Peter- Katalinić: Chip-mass spectrometry for glycomic studies, *Mass Spectrom. Rev.* (2008), in press.