

## BIOGRAPHICAL SKETCH

NAME <b>Albert J. R. Heck</b>	POSITION TITLE Prof. dr.		
CURRENT AFFILIATION Utrecht University and Netherlands Proteomics Centre			
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY

1983-1986 Undergraduate chemistry study at the Vrije Universiteit in Amsterdam  
 1987 Teaching assistant in Physics at the University of Roma in Lesotho, Africa.  
 1988-1989 Continuation of undergraduate chemistry study at the Universiteit van Amsterdam.  
 Year of graduation: 1989, Exam subjects: Physical Chemistry (optically detected magnetic resonance) and Theoretical Chemistry.  
 1989-1993 Graduate research at the Universiteit van Amsterdam, research-supervisor Prof. Dr. N. M. M. Nibbering at the Institute of Mass spectrometry, PhD in 1993.

### positions held

1993 Visiting Scientist at the Hahn-Meitner Institute Berlin GmbH.  
 1993-1995 Visiting scientist at Stanford in the group of Prof. R.N. Zare, Department of Chemistry, Stanford University, Stanford, USA and at Sandia National Laboratory, in the group of Dr. D.W. Chandler.  
 1996-1998 Lecturer in Physical Chemistry and Mass Spectrometry in the Chemistry Department at the University of Warwick (UK).  
 1998-present Professor in Biomolecular Mass Spectrometry and Proteomics at Utrecht University (The Netherlands)  
 2003-present Scientific Director of the Netherlands Proteomics Centre  
 2006-present Scientific Director of the Bijvoet Institute for Biomolecular Research  
 2010 Visiting professor at the ETH Zurich (6 months)  
 2011-present Coordinator of the European Large Scale Proteomics Infrastructure program PRIME-XS

### **List of five recent publications by the candidate:**

1. Selective isolation at the femtomole level of phosphopeptides from proteolytic digests using 2D-nanoLC-ESI-MS/MS and titanium oxide pre-columns M. W. H. Pinkse, P. M. Uitto, M. J. Hilhorst, B. Ooms and A. J. R. Heck *Anal. Chem* 76 (2004) 3935-3943.
2. Native mass spectrometry: a bridge between interactomics and structural biology A. J. R. Heck *Nature Methods* 5 (2008) 927-933.
3. Straightforward ladder sequencing of peptides using a Lys-N metalloendopeptidase N. Taouatas, M. M. Drugan, A. J. R. Heck, S. Mohammed *Nature Methods* 5 (2008) 405-407
4. In depth qualitative and quantitative profiling of tyrosine phosphorylation using a combination of phosphopeptide immuno-affinity purification and stable isotope dimethyl labeling. P.J. Boersema, L.Y. Foong, V.M. Ding, S. Lemeer, B. van Breukelen, R. Philp, J. Boekhorst, B. Snel B, J. den Hertog, A.B. Choo, A.J.R. Heck. *Mol Cell Proteomics* 9 (2010) 84-99.
5. Interrogating viral capsid assembly with ion mobility mass spectrometry C. Uetrecht, I.M. Barbu, G.K. Shoemaker, E. van Duijn, A.J.R. Heck. *Nature Chemistry* 3 (2011) 126-132.

Please indicate in 200 words or less the reason(s) why you would be a suitable candidate for the HUPO Council elections.

Since 1998 Albert Heck (1964) is full professor at Utrecht University at the Science Faculty in the Netherlands. His major interest is in protein mass spectrometry. The general theme of the research in his group is to develop and implement innovative mass spectrometric methods for the more efficient and detailed characterization of proteins and other biomolecules in relation to their biological function. The emphasis is on the structural characterization of proteins and post-translational modifications as well as on the investigation of protein complexes and protein interactions. Major biological current research themes entail stem cells, cAMP signaling, chaperones, and viral assembly.

Albert Heck is scientific director of the Netherlands Proteomics Centre (since 2003) and the Bijvoet Institute for Biomolecular Research (since 2006). He is member of the council of the Human Proteome Organization (HUPO) and chairman of the HUPO Conference in Amsterdam in 2008. In 2001 he was recipient of the Golden Medal of the Dutch Royal Chemical Society. In 2004 he received an honoree Utrecht University "ABC"-professorship. He has currently published more than 350 papers in internationally reviewed journals. He is a great supporter of HUPO and has served on the Publication Committee and the Meetings Committee.