

## GDCh- und Chemisches Kolloquium

Der GDCh-Ortsverband Oldenburg und das Institut für Reine und Angewandte Chemie der Carl von Ossietzky Universität Oldenburg laden zu einem Vortrag

**von** Prof. Dr. Hubert Girault, École Polytechnique Fédérale de Lausanne

**zum Thema** Electrospray microchips for proteomic applications

herzlich ein.

**Termin:** **Donnerstag, den 16.11.2006 17 Uhr c.t.**  
Großer Hörsaal im Neubau der Naturwissenschaften,  
Carl-von-Ossietzky-Straße 9-11

**Einladender** Prof. Dr. Gunther Wittstock

Soft ionisation methods have played a major role in the development of mass spectrometry for proteomic applications. In our laboratory, we have concentrated our effort on the electrochemical aspects of electrospray ionisation. In particular, we have developed polymer microchips in which the high-voltage electrode could be inserted. The gist of our work has been to use the electrode reaction to electrogenerate on-line reactants that can be used to tag specific reactive groups. As an example, the tagging of cysteine by quinine will be presented. Together with our work on OffGel prefractionation of proteins and peptides, our long term strategy of combining electrochemistry and mass spectrometry will be discussed. Some recent results on the use of soluble copper anodes to tag and digest peptides in the gas phase will then be presented. Finally, we shall conclude with our latest work in collaboration with DiagnoSwiss on electrochemical immuno-assay.

GDCh-Ortsverband Oldenburg  
Der Vorsitzende

Institut für Reine und Angewandte Chemie  
Der Direktor



GESELLSCHAFT DEUTSCHER CHEMIKER E. V.  
**Ortsverband Oldenburg**