

Working Group I: Gas Phase Instrumentation

Session I - Experimental techniques I **Thursday 14.00 – 15.30**

14.00 Introduction

Th. Möller / M. Meyer

14.10 Experiments on Nano-Particles

E. Rühl

14.30 X-ray Femtochemistry on small molecular systems

T. Laarmann

14.50 Studies on Clusters

T. Ditmire

15.10 X-Ray Fluorescence

D. Rolles

Session II - Experimental techniques II

16.00 Time-resolved Pump-Probe experiments

J. Costello

16.20 Non-linear Processes in the X-ray regime

J. Marangos

16.40 Molecular Alignment and Orientation

H. Stapelfeldt

17.00 Velocity Map Imaging

M. Vrakking

17:20 Coltrims

R. Moshhammer

Summary :

Gasphase Instrumentation

Purpose of the working group meeting

- open beam port for special instruments
- define **one** endstation / instrument
- energy range 250 eV- 2500 eV
 - important K-edges: C, N, O, Ne, S, Ar?
- requirements X-ray beam
 - repetition rate as high as possible
 - variable polarization

Issues

Requirements

- focusing optics sub micron focus
- detectors: high resolution tof, VMI, COLTRIMS, 2D-photon pixel detector
- lasers (pulse energy, pulse length fs, ps)
 - pump probe, alignment
- vacuum requirements $<10^{-9}$ mbar,
- diagnostics (x-rays), diagnostics (lasers)...

Definition of an instrument

Discussion/workig groups

- targets/sample: gas jets, electrospray...
- laser
- detectors/chamber

Next steps:

User XFEL meeting in Januar