## Preliminary Programme of the High-Field Nanoscience Workshop

## Thursday, 27 May 2010:

9<sup>00</sup> Workshop opening.

A word of introduction by The Dean of Faculty of Physics and Astronomy Professor Robert Olkiewicz

9<sup>10</sup>-11<sup>10</sup> Session 1 (Chair: G. Schmitz)

9<sup>10</sup> Norbert Kruse Field Emission and Atom-Probe Studies in Catalysis Research

10<sup>00</sup> Invited tandem lecture by Yuri Suchorski and Günther Rupprechter: *Effects of high field versus high pressure on catalytic surfaces* 

 $10^{00}$  **Yuri Suchorski** High field effects on adsorption, surface oxidation and reaction  $10^{30}$  **Günther Rupprechter** High gas pressure effects on adsorption, surface oxidation and reaction

11<sup>10</sup>-11<sup>30</sup> Coffe Break

## 11<sup>30</sup> - 12<sup>50</sup> Session 2 (Chair: Y. Suchorski)

11<sup>30</sup> **Peter Hommelhoff** Understanding laser-driven electron emission from field emitters: energyresolved measurements

12<sup>20</sup> Andrzej Szczepkowicz Surface science on field emission tips in Wrocław - past and present

## 13<sup>00</sup> -14<sup>30</sup> Lunch

14<sup>30</sup>-16<sup>10</sup> Session 3 (Chair: G. Antczak)

14<sup>30</sup> Janusz Bęben The analysis of fluctuations in nanoscale diffusion

 $15^{20}$  Aleksander Krupski Growth of Pb on Mo(110) studied by scanning tunnelling microscopy. Comparison with the growth of Au, Ag and Sn on Mo(110)

16<sup>10</sup> -16<sup>30</sup> Coffe Break

16<sup>30</sup>-18<sup>10</sup> Session 4 (Chair: N. Kruse)

16<sup>30</sup> Guido Schmitz Research on ,top of the tip': Interfaces in nanostructured matter

17<sup>20</sup> Adam Kiejna Au nanostructures on defected rutile TiO2(110)

17<sup>45</sup> Robert Kucharczyk Adsorption of thin films of titanium on tungsten (111) surface

18<sup>10</sup> Poster Session (including competition for the best Students' Presentation)

**19<sup>00</sup> Workshop Dinner** 

Friday, 28 May 2010:

9<sup>00</sup>-10<sup>40</sup> Session 5 (Chair G. Rupprechter)

9<sup>00</sup> Markus Heyde NC-AFM in the Surface Science Approach to Model Catalysis

9<sup>50</sup> Marek Nowicki Properties of MgO thin films on Ag(001) revealed by low temperature scanning tunneling microscopy and spectroscopy

10<sup>15</sup> Jacek Brona Ultrathin Cu layers on clean and oxidized Ru(10-10) surface

10<sup>40</sup>-11<sup>00</sup> Coffe Break

11<sup>00</sup> -13<sup>05</sup> Session 6 (Chair P. Hommelhoff)

11<sup>00</sup> Richard Forbes Progress in reconstructing the basic theory of field electron emission

11<sup>50</sup> Andreas Fischer Influence of tip curvature on field electron emission characteristics

12<sup>15</sup> Tomasz Grzebyk Field-emission electron source for vacuum MEMS

12<sup>40</sup> Bartłomiej Cichy Field-emission electron source with carbon nanotubes

13<sup>05</sup> -14<sup>30</sup> Lunch

14<sup>30</sup>-17<sup>15</sup> Professor Ryszard Błaszczyszyn Special Session (chair R. Markowski) Venue: Collegium Marianum Music Hall

14<sup>30</sup> Preface by Antoni Ciszewski

14<sup>45</sup> Grażyna Antczak Surface Diffusion - An Atomistic Picture

15<sup>45</sup> - 16<sup>30</sup> concerto ('La Primavera' quartett)

16<sup>30</sup> announcement of the Winner of the competition for the Best Students' presentation

**16**<sup>45</sup> **official closing of The High-Field Nanoscience Workshop** by The Workshop Chairman Professor Antoni Ciszewski