



# Functional Interfaces in Physics and Chemistry

## Block course on

## Fundamentals of molecules, clusters, solids and their interfaces

When? 8 morning lectures in March/April 2016.  
Where? Humboldt-Universität Berlin, Science Campus Adlershof.  
Important: please see room numbers below for each individual day.

This basic course provides an introduction into the fundamentals of molecules, clusters, solids and their interfaces.

	Mon, 21 March Newtonstr. 14, Lehrgebäude 0'05	Tue, 22 March Newtonstr. 14, Lehrgebäude 0'05	Wed, 23 March Newtonstr. 14, Lehrgebäude 0'05	Thu, 24 March Newtonstr. 14, Lehrgebäude 0'05
9:00-10:30h	Thomas Risse (FU): <i>Vibrational modes of molecules, solids and surfaces: fundamentals and measurement</i>	Joachim Sauer (HU): <i>Electronic structure of solids</i>	Karsten Horn (FHI): <i>Electronic band structure of solids: an experimentalist's view</i>	Reinhard Schomäcker (TU): <i>Principles of heterogeneous catalysis (1)</i>
11:00-12:30h		Joachim Sauer (HU): <i>Molecule-surface interactions (oxide-water)</i>	Martin Wolf (FHI): <i>Surface states of metals</i>	Martin Weinelt (FU): <i>Fundamentals of semiconductors and their surfaces</i>

	Wed, 30 March Newtonstr. 14, Lehrgebäude 0'05	Thu, 31 March Newtonstr. 15, Lehrgebäude 1'201	Fri, 1 Apr Newtonstr. 15, Lehrgebäude 1'201	Wed, 20 Apr Newtonstr. 15, Room: see below
9:00-10:30h	Sergey Levchenko (FHI): <i>Introduction to density-functional theory</i>	André Fielicke (TU): <i>Basics of metal clusters</i>	Wolfgang Christen (HU): Scientific toolbox <i>Statistics of measurement series: averaging, statistical and systematic errors</i>	Norbert Koch (HU): <i>Introduction to interfaces between (in)organic solids: electronic properties</i> in Lehrgebäude 1'201
11:00-12:30h		Reinhard Schomäcker (TU): <i>Principles of heterogeneous catalysis (2)</i>		Norbert Koch (HU): <i>continued</i> in Lehrgebäude 1'202

