

Friday June 13

11:00 – 12:30	Check In & Registration
12:30 – 14:15	Lunch
14:15-14:30	Welcoming and opening of the conference (Odile Eisenstein and Benedetta Mennucci)
Session I	Materials, surfaces & magnetism Chair: David Balcells
14:30-15:10	PL1 <u>A. Selloni</u> : Photocatalysis on metal oxides: insights from quantum simulations
15:10-15:40	IN1 <u>R. Broer</u> : Analysis of the spin crossover mechanism in Fe(II) complexes
15:40-16:10	IN2 <u>L.V. Moskaleva</u> : Silver residues as a possible key to catalytic activity of nanoporous gold: a computational study
16:10-16:40	coffee-break
16:40-17:10	IN3 <u>M.L. Bocquet</u> : Complex metal–organic interaction probed by first principles simulations
17:10-17:40	IN4 <u>H. Fliegl</u> : What are magnetically induced currents good for?
17:40-18:10	IN5 <u>T. Jacob</u> : Modeling electrochemical systems
18:10-18:25	O1 <u>T.R. Walsh</u> : Investigating Peptide-Materials Adsorption Selectivity using Advanced Molecular Simulation
18:25-18:40	O2 <u>J.B. Rommel</u> : Embedding Methods: Improvements, Extensions, and Chemisorption of Methane on Ni(100)
19:00-20:30	Dinner
20:30-22:30	Poster session #1

Saturday June 14

Session II		Excited states & energy/electron transfers	Chair: Kenneth Ruud
9:00-9:40	PL2	<u>S. Hammes-Schiffer</u> : Proton-Coupled Electron Transfer in Catalysis and Energy Conversion	
9:40-10:10	IN6	<u>F. Negri</u> : Structure-property relationships from modeling electronic, optical, charge & energy transport properties of core-extended organic semiconductor	
10:10-10:40	IN7	<u>L. Guidoni</u> : Electrons and protons on the way to photosynthetic water splitting	
10:40-11:10		coffee-break	
11:10-11:40	IN8	<u>C.P. Hsu</u> : Electronic Coupling for Singlet Fission and Triplet-Triplet Annihilation	
11:40-12:10	IN9	<u>A. Olaya-Castro</u> : Quantum-scale vibrations and excitation energy distribution	
12:10-12:25	O3	<u>A. Laurent</u> : Multiscale Modeling of a New Promising Class of Fluorescent Protein	
12:25-12:40	O4	<u>M. Malis</u> : Unraveling Radiationless Relaxation Pathways of Electronically Excited Biological Chromophores: From Peptides in Gas Phase to Retinal in Solution	
12:40-14:30		Lunch	
Session III		Reactivity	Chair: Karinne Miqueu
14:30-15:10	PL3	<u>M. R. A. Blomberg</u> : Quantum chemical studies of metalloenzymes – some examples from bioenergetics	
15:10-15:40	IN10	<u>N. Lopez</u> : Understanding industrial reactions by theoretical methods	
15:40-16:10	IN11	<u>S. C. L. Kamerlin</u> : Probing Evolution in the Alkaline Phosphatase Superfamily	
16:10-16:40		coffee-break	
16:40-17:10	IN12	<u>H. Gerard</u> : Solvation, aggregation, chelation and co.: Theoretical challenges to modelling Li ⁺ containing organometallics	
17:10-17:40	IN13	<u>K.H. Hopmann</u> : The Full Reaction Mechanism of Nitrile Hydratase: a Cyclic Intermediate and an Unexpected Disulfide Switch	
17:40-18:10	IN14	<u>J. Harvey</u> : Ab initio determination of catalysis kinetics: Successes and challenges	
18:10-18:25	O5	<u>A. Martin-Somer</u> : Post-transition state dynamics in gas phase chemical reactivity: bifurcations and rotational activation.	
18:25-18:40	O6	<u>A. Eizaguirre</u> : Simulation of Collision Induced Dissociation Experiments of Carbohydrates	
19:00-20:30		Dinner	
20:30-22:30		Poster session #2	

Sunday June 15

Session IV		Biology & condensed phase	Chair: Michele Cascela
9:00-9:40	PL4	<u>U. Rothlisberger</u> : QM/MM Simulations in Ground and Excited States	
9:40-10:10	IN15	<u>M. J. Ramos</u> : Quantum mechanical studies on enzymatic reaction mechanisms	
10:10-10:40	IN16	<u>M. Sulpizi</u> : Water interfaces: structure and vibrational spectroscopy from DFT-based molecular dynamics simulations	
10:40-11:10		coffee-break	
11:10-11:40	IN17	<u>L. Frediani</u> : Pushing the limits of continuum solvation in space and time	
11:40-11:55	O7	<u>B. Stewart</u> : Computational Studies of Conjugated Polymer Aggregates with Surfactants in Solvent Environments	
11:55-12:10	O8	<u>D. Major</u> : Electrostatically guided dynamics-The root of fidelity in promiscuous terpene synthase?	
12:10-12:25	O9	<u>S. G. Aalbergsjø</u> : Radiation induced damage in biomolecules. An ab initio molecular dynamics study on crystalline α -L-rhamnose	
12:25-12:40	O10	<u>K. Roos</u> : Predicting the effect of electronic variations on ligand-target binding affinity by density functional methods	
12:40-14:30		Lunch	
Session V		Electronic structure methods	Chair: Trygve Helgaker
14:30-15:10	PL5	<u>C. Corminbeuf</u> : A Walk Through Electronic Structure Challenges in the Land of Thiophene	
15:10-15:40	IN18	<u>P. Gori-Giorgi</u> : Strong correlation in Kohn-Sham Density Functional Theory	
15:40-16:10	IN19	<u>S. Coriani</u> : Old and new spectroscopies in “strong” magnetic fields: MCD, NSCD, and MCHD	
16:10-16:40		coffee-break	
16:40-17:10	IN20	<u>T. Saue</u> : Simulating L3 XANES spectra of actinide compounds	
17:10-17:40	IN21	<u>M. Pecul</u> : Circularly polarized phosphorescence of selected diketones and enones.	
17:40-17:55	O11	<u>H. Bahman</u> : Efficient semi-numerical implementation of local hybrid density functionals	
17:55-18:10	O12	<u>M. Andrejic</u> : Application of Local Coupled-Cluster Methods to Enzymatic Reactivity	
20:00		Conference Banquet	Chair: Odile Eisenstein
21:30-22:30		After dinner talk by <u>P. Walton</u> : Equality in Academia. Now, Sometime or Never?	

Monday June 16

Session VI

Dynamics

Chair: Thomas B. Pedersen

9:00-9:40	PL6	<u>N. Makri</u> : Quantum-Classical Path Integral: A Rigorous Methodology for Condensed-Phase Dynamics
9:40-10:10	IN22	<u>A. Boutin</u> : To breathe or not to breathe: the behavior of flexible MOFs upon gas adsorption or external stimuli
10:10-10:40	IN23	<u>M. P. de Lara-Catells</u> : Towards the Helium-mediated Soft-Landing of Embedded Nano-particles on Surfaces: Insights from Ab-initio Simulations
10:40-11:10		coffee-break
11:10-11:40	IN24	<u>S. Bonella</u> : Quantum effects via (almost) classical trajectories: How far can we go?
11:40-12:10	IN25	<u>M. Barbatti</u> : Photoinduced processes in nucleic acids
12:10-12:30		Closing remarks (Odile Eisenstein and Benedetta Mennucci)
12:30-14:30		Lunch
14:30		Departure