

Particle Technology Seminar FS10

Fridays 14-17h; ML F40

- Feb 25 **Thu** "The effect of MG and Ca addition to Fe/Zn oxides made by flame spray pyrolysis for nutritional applications"
ML E13 @2.15pm *Jesper Knijnenburg, PTL, ETHZ*
- March 5 "Numerical Simulation of Turbulent Combustion on Petascale Platforms: Application to Non- Premixed Hydrogen Autoignition"
Stefan Kerkemeier, IET, ETHZ
"Flame synthesis of nanophosphors for fluorescent bio-imaging probes"
Melanie Schneider, BSc ETHZ
- March 11 **Thu** "In situ carbon-coated LiFePO₄ nanoparticles for Li- ion batteries"
HG F33.3 @3.15pm *Oliver Waser, PTL, ETHZ*
- March 12 "Developing sulphur tolerant NO_x storage-reduction catalysts"
Leonardo Meiler, BSc ETHZ
"Flame synthesis of dye sensitized solar cells"
Anna Wallerand, BSc ETHZ
- March 19 "Functional magnetic actuators for biomedical applications"
Giovanni Mattucci, BSc ETHZ
"Multi-layer direct deposition with recurring annealing for battery electrodes"
Daniel Marxer, BSc ETHZ
"Drag of spherical and agglomerated particles in different Knudsen regimes"
Jules Petit, BSc ETHZ
- March 26 "Investigation of Fluid and Thermodynamics in a Flame Spray Pyrolysis Aerosol Reactor"
Thomas Plattner, BSc ETHZ
"Structure of flame-made Ti-doped SiO₂ and catalytic behavior in H₂O₂ decomposition"
Guangda Tang, BSc ETHZ
"Large scale production of Fe-based nanoparticles for food fortification"
Sylvie Anthonioz, MSc ETHZ
- April 1 **Thu** "Design of gas phase coating of nanoparticles"
ML E13 @ 1pm *Beat Büsser, PTL, ETHZ*
„The effect of flame spray configuration on synthesis of inhomogeneous nanoparticles“
Thomas Rudin, PTL, ETHZ
- April 9 „Silica-coated Ag nanoparticles by FSP"
Georgios Sotiriou, PTL, ETHZ
- April 16 "The effect of flame spray configuration on synthesis of inhomogeneous nanoparticles"
Thomas Rudin, PTL, ETHZ

May 7	“Vulcanization of natural rubber with functionalized copper nanoparticles for dielectric elastomers” <i>Zabdiel Dominguez Trinidad, ETHZ</i>
May 12 Wed ML E13 @ 1pm	“Flame synthesis of nanophosphors for fluorescent bio-imaging probes” <i>Melanie Schneider, Bachelor Thesis Presentation, ETHZ</i> „Functional magnetic actuators for biomedical applications” <i>Giovanni Mattucci, Bachelor Thesis Presentation, ETHZ</i>
May 20 Thu LFW E11 @ 2pm	“Direct Deposition and In-Situ Annealing of LiMn ₂ O ₄ for Batteries” <i>Daniel Marxer Bachelor Thesis Presentation, ETHZ</i> “Developing sulfur tolerant NO _x storage-reduction catalysts” <i>Leonardo Meiler, Bachelor Thesis Presentation, ETHZ</i> “Structure of flame-made Ti-doped SiO ₂ and catalytic behavior in H ₂ O ₂ decomposition” <i>Guangda Tang, Bachelor Thesis Presentation, ETHZ</i>
May 27 Thu LFW E11 @1pm	“Large scale production of Fe-based nanoparticles for food fortification” <i>Sylvie Anthonioz, Bachelor Thesis Presentation, ETHZ</i> “The effect of particle size on turbophoresis” <i>Sebastian Conrady, Bachelor Thesis Presentation, ETHZ</i> “Investigation of Fluid and Thermodynamics in a Flame Spray Pyrolysis Aerosol Reactor” <i>Thomas Plattner, Bachelor Thesis Presentation, ETHZ</i>
June 2 Wed LFW E11 @1pm	“Drag of spherical and agglomerated particles in different Knudsen regimes” <i>Jules Petit, Bachelor Thesis Presentation, ETHZ</i> “Flame synthesis of dye sensitized solar cells” <i>Anna Wallerand, Bachelor Thesis Presentation, ETHZ</i>
June 11 ML F34 @1pm	“Hybrid silica-coated plasmonic-magnetic nanoparticles” <i>Georgios Sotiriou, PTL, ETHZ</i>
June 18 ML E13 @1pm	“Chemical availability of thiol surface groups by in-situ ATR-IR and UV-Vis spectroscopy” <i>Jesper Knijnenburg, PTL, ETHZ</i> „H ₂ O adsorption properties on SnO ₂ -TiO ₂ gas sensors by DFT calculations“ <i>Konstanze Hahn, PTL, ETHZ</i>
July 2 ML E13 @2pm	“Portable gas sensor for breath analysis” <i>Samuel Gass, Planning presentation of Bachelor Thesis, ETHZ</i>
July 8 Thu ML E13 @1pm	“The effect of particle size on turbophoresis” <i>Sebastian Conrady, Presentation Bachelor Thesis, ETHZ</i>
July 15 Thu CLA J1 @1pm	“Experiences in academic research and industrial engineering projects” <i>Vera Tschedanoff</i>
July 30 ML E13 @1pm	“Cost efficient scale-up of FePO ₄ synthesis by flame spray pyrolysis” <i>Stefanie Zeilinger, Planning Presentation of Semester Project, ETHZ</i> “Improving the tracking and erosion performance of silicone rubber by adding different Alumina-Trihydrate (ATH) fillers” <i>Samuel Ansorge, PTL, ETHZ</i> “Aggregate neck growth & coalescence by multiparticle sintering” <i>Max Eggersdorfer, PTL, ETHZ</i>
August 6 ML E13 @1pm	“Portable gas sensor for breath analysis” <i>Samuel Gass, Bachelor Thesis Presentation, ETHZ</i> “Synthesis of titania nanoparticles by laser oven method” <i>Masayuki Tsuji, Kanazawa University, Japan</i>

- August 20 "Flame Spray Synthesis of Bi₂O₃ Nanoparticles From Low Enthalpy Precursors"
ML E13 @1pm *Thomas Rudin, PTL; ETHZ*
- "From biochemistry to catalysis: MD simulations of macromolecules at classical and DFT level of theory"
Dr. Gianluca Santarossa, PTL, ETHZ
- August 27 "Multi-particle sintering of fractal-like aggregates"
ML H37.1 @1pm *Max Eggersdorfer, PTL, ETHZ*
- September 3 "Optically functionalized periodic mesoporous organosilica" - ABSTRACT
CLA J1 @10am *Dr. Takao Tani, Materials Design Group, Toyota CR&DL, Nagoya, Japan*
- "Scale Up of FePO₄ synthesis by Flame Spray Pyrolysis"
Stephanie Zeilinger, PTL, ETHZ