

# Sunday, August 4, 2019

17:00 Welcome Reception at Sheridan Roof (231 W Colorado Ave)

# Monday, August 5, 2019

**Technical Sessions and Breakfast at Palm Theater 721 West Colorado Ave**

7:30 Breakfast at the Palm Theater

Session 0: Opening Remarks (Jennifer Andrew and Thompson Mefford)

8:00 Introduction to Meeting

Session 1: MagMED/Hyperthermia (Chair: Thompson Mefford)

8:15 **Gutiérrez** Spain **Alternative approaches for the use of hyperthermia in cancer treatment**

9:05 Mues Germany Immobilization Effects of magnetic nanoparticle inside hybrid implants on hyperthermia and magnetic resonance

9:30 Pasek-Allen USA PEG-Coated Iron Oxide Nanoparticles for Nanowarming

9:55 Samstag USA Glycan-functionalized Iron-oxide Nanoparticles for Tracking of Pathogen-host Interactions and Selective Binding

10:20 Milbrandt USA Magnetic hydrogel used for the treatment of bacterial biofilms

10:45 Coffee Break

11:10 Zhao USA Alternating magnetic field induced targeted liposomal doxorubicin release for improved thermo-chemotherapy

11:35 Panel Discussion with Speakers from Session 1

12:00 Lunch on site

Session 2: Imaging and Sensing (Chair: Lucía Gutiérrez)

14:00 **Dutz** Germany **Measurement phantoms for the evaluation of the spatial and temporal resolution of magnetic particle i**

14:50 Knopke USA Functionalized Magnetic Nanoparticle Reporter Probe for Longitudinal Biosensing

15:15 Amirshaghghi USA Chlorin e6-Coated superparamagnetic iron oxide (SPION) nanoclusters as a theranostic agent for dual-mode im

15:40 Break (Poster presenters please hang your poster)

16:05 **Rinaldi** USA **Magnetic Particle Imaging: From simulations to particle synthesis and applications**

16:55 Moore USA A comparison of bulk cell magnetometry by SQUID-MPMS and single cell magnetometry by CTV

17:20 Castillo-Torres USA Magnetic isolation of spin-vortex microdiscs for E. coli detection in water samples

17:45 Panel Discussion with Session 2 presenters

18:00 Poster Session

19:30 Dinner in town with friends new and old

# Tuesday, August 6, 2019

7:30	Breakfast at the Palm Theater		
	Session 3: Career Panel - Patrick Godwill, Karen Livesey, and Sam Oberdick (Chair: Mas Crawford)		
8:00	Career Panel at the Palm Theater		
	Session 4: Delivery and Synthesis (Chair: Jennifer Andrew)		
9:00	Jasanoff	USA	<b>Magnetic nanoparticles for imaging biological processes in the brain</b>
9:50	Uhl	USA	Magnetolectric Fiber- Hydrogel Composites for the Stimulation of Neuronal Proliferation and Differentiation
10:15	Chalmers	USA	The separation of red blood cells based solely on intrinsic magnetization: clinical and commercial implications
10:40	Coffee Break		
11:05	Ghobrial	USA	Using Heparin-Coated Magnetic Nanoparticles to Treat Neointimal Hyperplasia
11:30	Jafari	USA	Biomagnetic carriers for nasal delivery; deliver heat and drug to the brain
11:55	Azie	USA	Magnetically triggered release of active TGF- $\beta$ from spin vortex microdiscs
12:20	Panel Discussion with Session 4 presenters		
12:45	Lunch on your own		
	Enjoy Telluride		
18:00	Picnic and Annoucement of Poster Winners (Tent behind building)		

# Wednesday, August 7, 2019

7:30	Breakfast at the Palm Theater		
	Session 5: Theory and Characterization (Chair: Carlos Rinaldi)		
8:30	Livesey	USA	<b>Magnetization relaxation time in nanoparticle systems: the influence of applied fields and interactions</b>
9:20	FitzGerald	USA	Calculating effective magnetocrystalline anisotropy from ZFC/FC measurements on cobalt ferrite/nickel ferrite co
9:45	Goldfarb	USA	Superparamagnetism, the Curie-Weiss Law, and Demagnetizing Factors
10:10	Pan	USA	Faster, more accurate modeling of magnetic particles through deep learning algorithms
10:35	Coffee Break		
11:00	Oberdick	USA	<b>Dynamic characterization of magnetic nanoparticle nucleation and growth within biocompatible hydro</b>
11:50	Panel Discussion with Session 5 presenters		
12:15	Lunch on site		
	Session 6: Synthesis (Chair: Sam Oberdick)		
13:30	Yan	USA	Synthesis and characterization of cobalt ferrite/nickel ferrit core/gradient-shell nanoparticles
13:55	Zabow	USA	Micro-patterning high-moment magnetic particles over biological surfaces
14:20	Faust	USA	Exploiting ferrous dopants for stronger, antibacterial hydrogels in 3D printed biografts
14:45	Zahn	Germany	Magnetic PLGA microspheres for imaging, therapy, and remote controlled drug release
15:10	Panel Discussion with Session 6 presenters		
15:35	Session 7: Conference Closing (Chairs: Jennifer Andrew and Thompson Mefford)		

# Poster Session: Monday, August 5, 2019

18:00 Poster Session

<u>Poster #</u>	<u>Presenter</u>	<u>Country</u>	<u>Title</u>
1	Baki	Germany	Continuous synthesis of magnetic nanoparticles for biomedical applications
1	Chalmers	USA	The intrinsic magnetic susceptibility of some normal human blood constituents and the potential to separate these
2	Dutz	Germany	Influence of synthesis parameters on the structural and magnetic properties of magnetic multicore nanoparticles
3	Ghobrial	USA	Using RAGE-Coated cobalt ferrite nanoparticles to diagnose diabetes
4	Sandler	USA	Device and Delivery for MagMED Treatment in in-vivo studies
5	Sannidhi	USA	Multiparameter Paramagnetic Particle Characterization by Dark-Field Imaging and Bright-Field Absorbance
6	Sarkar	India	Exploring Bare and surface functionalised Iron-oxide Nanoparticles with exciting attributes towards biological applications
7	Walsh	USA	Indirect magnetic force microscopy of superparamagnetic nanoparticles
8	Zahn	Germany	Development of a setup for magnetic nanoparticle targeting to the eye