12th International Conference on Ceramic Processing Science (ICCPS-12)

August 4-7, 2013 | Portland, Oregon

Abstracts due February 6, 2013

ICCPS-12 marks the 27th anniversary of the ceramic processing science series. Started in Boston in 1986, the conference has evolved from a focus on particle-based processes to now include thin film processes, precursor approaches and all facets of the science underlying the basic themes of control and tailoring of ceramic-based materials with specific microstructure-property goals. Since 1986 the discipline of ceramic processing has made significant progress in colloid and surface chemistry, powder synthesis, precursor-derived systems and sintering. However, much needs to be done to advance the scientific underpinnings of these processes, as well as the emergent areas of nanotechnology and its associated challenges, particle assembly, patterning, additive manufacturing, rapid sintering, and densification of complex shapes and multimaterial combinations.

Publication: We plan to publish 20-30 papers that are at the forefront of the ceramic processing field, including the plenary and invited talks, as a special topical issue of the *Journal of the American Ceramic Society*.

ICCPS-12 will be comprised of plenary sessions in the morning and afternoon, as well as concurrent sessions with both invited and contributed presentations. A poster session is also planned.

Abstracts are solicited in the following areas:

- Particle shape control and assembly
- Colloid dispersion and surface modification
- Rheology of concentrated suspensions
- Microfluidic techniques
- Patterning, templates and self assembly
- Wet and dry shaping methods, including additive manufacturing
- Solution and precursor thin film processes
- Reaction-based processes
- Biomimetic and bioinspired techniques
- Computational tools applied to processing
- Novel characterization and imaging tools
- Densification (nanoscale, multimaterial, complex shapes, novel approaches)
- Mesoscale, microscale and hierarchical manufacturing and design of microstructure
- Processes and processing designed to advance specific energy, electronic, optical and structural applications

Abstract Submission Instructions

Visit **www.ceramics.org/iccps12** to review the session topics and select the "Submit Abstract" hyperlink to be directed to the Abstract Central website.

If you have questions, please contact Marilyn Stoltz at **mstoltz@ceramics.org** or +1 614-794-5868.

Tentative Schedule of Events

Sunday, August 4

Registration	3:00 p.m. – 6:00 p.m.

Monday, August 5

Registration	7:00 a.m. – 7:00 p.m.
Welcome	8:30 a.m. – 8:40 a.m.
Plenary Talk	8:40 a.m. – 9:20 a.m.
Break	9:20 a.m. – 9:40 a.m.
Concurrent Sessions	9:40 a.m. – Noon
Lunch	Noon – 1:00 p.m.
Plenary Talk	1:00 p.m. – 1:40 p.m.
Concurrent Sessions	1:40 p.m. – 4:40 p.m.
Welcome Reception and Poster Session 1	5:00 p.m. – 7:30 p.m.

Tuesday, August 6

Registration	7:30 a.m. – 6:00 p.m.
Plenary Talk	8:20 a.m. – 9:00 a.m.
Break	9:00 a.m. – 9:20 a.m.
Concurrent Sessions	9:20 a.m. – Noon
Lunch on own	Noon – 1:20 p.m.
Plenary Talk	1:20 p.m. – 2:00 p.m.
Poster Session 2	2:00 p.m. – 4:30 p.m.
Banquet	6:30 p.m. – 9:00 p.m.

Wednesday, August 7

Registration	7:30 a.m. – 5:00 p.m.
Plenary Talk	8:20 a.m. – 9:00 a.m.
Break	9:20 a.m. – 9:40 a.m.
Concurrent Sessions	9:40 a.m. – Noon
Lunch on own	Noon – 1:20 p.m.
Plenary Talk	1:20 p.m. – 2:00 p.m.
Concurrent Sessions	2:00 p.m. – 4:20 p.m.

To reserve your room, visit **www.ceramics.org/iccps12**. Make your reservation by **June 23, 2013** to ensure the discounted rate.

Hilton Portland & Executive Towers
921 SW Sixth Ave. | Portland, OR 97204 | 503-226-1611

Rate: $169

Cut off Date: June 26, 2013

Portland is known as the City of Roses and is one of the top tourist destinations in the USA.

Chairs and Co-chairs

Gary L. Messing, Co-Chair
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www.ceramics.org/iccps12

The American Ceramic Society
www.ceramics.org

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