

INDUSTRY MEMBER MEETING

4-5 October 2004



The Nittany Lion Inn State College, PA

- Teleconferencing
- Venture Capitalists for Materials
- Preview Computer Modeling Center
- Research Updates



Center for Innovative Sintered Products

Program Highlights

Special Guest Speaker



Purnesh Seegopaul

Dr. Purnesh Seegopaul has worked with advanced materials over the last 25 years and is currently involved in business development, technology assessment, and venture capital investment, serving as Vice President of Technology and Business Development at

Umicore USA Inc. and Strategic Advisor on business and technology at Pangaea Ventures Ltd. His current areas of interest include nanostructured materials, coatings, advanced process technologies, alternative energy, hard materials, optoelectronics, and compound semiconductors. He is actively involved in growing many start-up companies.

How do venture capitalists look at materials?

- What excites the venture capitalist?
- Investment criteria and key challenges / opportunities in materials
- Shared benefits for all participants, including a window on innovation advantage to strategic partners
- Venture capital model and business trends

Featured Presentation

John Johnson

Dr. John Johnson is a Senior Research Associate at the Center for Innovative Sintered Products. He received his PhD from Penn State in 1994. His research focus is P/M processing of thermal management materials, biocompatible materials, and unique structures such as controlled porosi



unique structures such as controlled porosity, bi-materials, composites, and functionally graded materials.

Biomedical materials & markets opportunities

- Materials, applications, and current uses
- Technical and material growth prospects
- Key actors, emerging opportunities
- Forums for vendors
- Good manufacturing practices for medical and dental applications

Video Conferencing Demo

Lou Campbell will give a overview of some of the available video conferencing packages, and how CISP intends to use this technology for education and communication.

- Current state of teleconferencing software
- Web authoring tools
- Evaluating available packages
- Vision for on-line training
- Live and off-site capabilities

To demonstrate the current state and usefulness of teleconferencing software, Debby Blaine will be giving her presentation from the new CISP Computational Modeling Center, instead of in person.

Showcasing the Computer Modeling Center

Experience the new CISP Computational Modeling Center, supporting various CAE tools used for simulating and modeling PM processes, with a virtual live demonstration of the simulation capabilities in areas such as injection-molding, compaction, sintering, and furnace control. Examples of procedures from experimental characterization of models to prediction of properties will be showcased.

Future in Modeling & Simulation

- Unveiling the Computational Modeling Center
- CAE tools for simulating & modeling PM processes
- Discover how CAE tools can increase productivity and quality
- Future of computational tools in PM

Debby Blaine

Dr. Debby Blaine is a Research Associate at the Center for Innovative Sintered Products. She received her PhD from Penn State in May 2004. Her research focus is on modeling sintering behavior, and investigating the micro- and macroscopic



influences on sintering of various materials, such as 17-4PH stainless steel, nickel, and W-Ni-Fe, so that these can be combined in sinter models.



G





CISP Industry Member Meeting 4-5 October 2004

		_			
	-	0.00	- V	n /	A
74 - 0	I alt if a 1	A Y A Y A	-		1741
	4444	ber	77	. A.	

	. 200
1:00	Registration – light lunch
1:30	Welcome and status report – Sharon Elder
1:50	Multi-axial in situ monitoring of dimensional changes using a laser
	dilatometer – Ryan Koseski
2:10	Sintering to full density – Ravi Bollina
2:30	Pressing to full density – fundamental limitations and capabilities of
	high-density P/M – Guneet Sethi
2:50	Video conferencing technologies – Lou Campbell
3:00	Break
3:30	Future modeling and simulation – Debby Blaine
3:50	Potential of carbon-nano tube/metal-matrix-composites – Ivi Smid
4:10	Industry capabilities sessions
5:30	Social/poster session
6:30	Dinner

How do venture capitalists look at materials – Purnesh Seegopaul

5 October 2004

Closing – plan for tomorrow

7:30

8:15

	. 200 .
7:30	Continental breakfast
8:00	Welcome – Rand German
8:10	Global benchmarks in sintered materials – who is the competition? - Rand German
8:30	Press and sinter processing realities with nanoscale powders – Rand German
8:40	Press and sinter processing opportunities for titanium in automotive applications – Don Heaney
8:55	Crack detection in green compacts – Eric Hauck
9:15	Polymer systems for die compaction of gas atomized powders - Kumar Enneti
9:30	Electrophoretic deposition for coating applications – Neal Myers
9:45	The burner rig: rocket launcher – Tom Jesberger
10:00	Break/poster session/meet the students
10:30	Financial update – Judy King
10:35	Biomedical materials and market opportunities – John Johnson
11:15	Industry panel – Educational needs for industry applications
12:30	Lunch
1:45	Industry Council meeting
3:00	Meeting adjourned

Registration Form

Register me for the CISP Industry Member Meeting, 4-5 October 2004, Nittany Lion Inn, 200 W. Park Ave., State College, PA.

Name			
Company			
Address			
City	State/Province	Country	
 Telephone	Fax	 E-mail	

4-5 October 2004

I will attend: ☐ Both Days ☐ 4 October 2004 **□** 5 October 2004 Fax or mail completed registration form by 20 September 2004 to:

Sharon L. Elder **Executive Director**

Center for Innovative Sintered Products Penn State University, 147 Research West

University Park, PA 16802

Fax: 814-863-8211

Phone: 814-865-1914 (inquires)

E-mail: CISP@psu.edu



ACCOMMODATIONS: There are a limited number of overnight rooms available for this meeting on a first-come, first-served basis for Monday, 4 October 2004. These rates are based on single/double occupancy and are subject to a room tax. Please make individual reservations at the hotel of your choice before 4 September, 2004. Reservations received after that date will be accepted only if space is available.

Nittany Lion Inn

200 West Park Ave. Phone: 800-233-7505 E-mail: pshs@pshs.psu.edu \$99.00 single or \$109.00 double

Penn Stater Conference Center

Penn State Research Park Phone: 800-233-7505 E-mail: pshs@pshs.psu.edu \$99.00 single or \$109.00 double

Atherton Hotel

125 S. Atherton St. Phone: 800-832-0132 E-mail: atherton@statecollege.com \$70.00 Single or \$80.00 double

(When registering use the reservation code CS0226 for the Nitty Lion Inn all others CISP)

For additional information on the meeting, hotel accommodations and detailed maps visit our web site: www.cisp.psu.edu

Map & Directions



Center for Innovative Sintered Products

147 Research West, University Park, PA 16802-6809

Office: 814-865-2121 Fax: 814-863-8211 E-mail: CISP@psu.edu www.cisp.psu.edu

