

Volume 45 Issue 2

Editor: Carl Czajkowski

MEETING NOTICE: Wednesday, November 12, 2003

TOPIC: What the Next Twenty Years Will Mean to the Thermal Spray Industry

SPEAKER: *Dr. Sanjay Sampath, Stony Brook University.*

LOCATION: Stony Brook Manhattan Facility

Social hour ... 6:00 pm, Dinner ... 7:00 pm, Meeting ... 8:00 pm. Members ... \$22; Guests ... \$25; ASM 25 years ... \$20; Students ... \$12

Reservations requested: Carl Czajkowski (631/344-4420)

Joint meeting with the Metro NY-NJ Chapter

DIRECTIONS

The SBU facility is located at 401 Park Ave. South (28th St.), 2nd Floor (use Park Ave. entrance) .

Buses: #34 (34th St. Crosstown); #23 (23rd St. Crosstown); M1, M2, M3, M4, M101, M102, M103 (North-South). **Trains:** #6 (Lexington Local) @ Park Ave S. & 28th St.; N, R (Broadway Local) @ Broadway & 28th St.; #1, #9 (Broadway 7th Ave. Local) @7th Ave. & 28th St.; B, D, Q (6th Ave. Express) @ Broadway & 34th St.; F (6th Ave. Local) @ Broadway & 34th; #2, #3 (Broadway 7th Ave. Express) @ 7th Ave. & 34th St.; A (8th Ave. Express) @ 8th Ave & 34th St.; C, E (8th Ave. Local) @ 8th Ave. & 34th St.; LIRR @ Pennsylvania Station (1 Penn Plaza) **Car:** use Midtown Tunnel; exit to 34th St. and start looking for a place to park! (There's a garage at 398 Park S but not much else on Park; maybe Lexington Ave. is a better bet)



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. THE TOPIC

Since its evolution in the early part of the 20th Century, thermal spray has enjoyed unprecedented growth. This is largely attributed to the versatility and flexibility afforded by the thermal spray process. Over the last 4 decades thermal spray has found numerous applications in the gas turbine, pulp and paper, automotive, and biomedical implants industries. These applications have largely been related to the use of protective coatings. The thermal spray industry is now in transition. The "low hanging fruits" in terms of applications have been picked. The technology maturity has led to "commoditizing" with limited margins. Coupled with the extraordinary complexity of this materials processing technique, the growth has stymied somewhat.

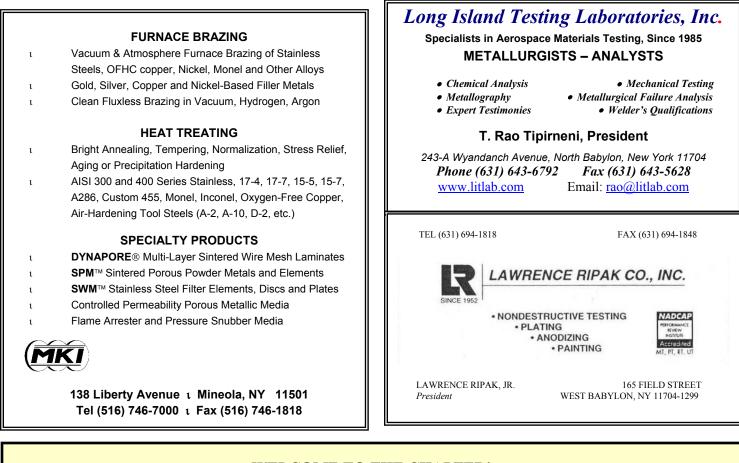
One asks the question "what does the future hold for thermal spray in the new millennium?". Two areas of opportunities exist, both of which will require substantial scientific understanding of the process. The first is prime reliant coatings, which will enable and expand applications of protective coatings under extended design constraints. The other involves functional surfaces, where the sprayed material performs a function rather than acts as a barrier. The speaker will explore some of these advanced concepts.

OUR SPEAKER

Dr. Sanjay Sampath, is *Professor*, State University of New York at Stony Brook. He is also the director of the Center for Thermal Spray Research, one of the National Science Foundation's 29 Materials Research Science and Engineering Centers. In this capacity he directs an integrated, interdisciplinary effort comprising of twelve faculty from three universities and various national laboratory participants. The program extends science and technology linkages through partnerships with industry and international institutions. The Center has major educational outreach programs for students at various levels, high school to undergraduates. More information about Center can be found at <u>www.sunysb.edu/cstr</u>. Dr. Sampath has directed research efforts on various federal and industrially funded programs. He is PI on the DARPA Mesoscopic Integrated Conformal Electronics. He also has developed the Consortium for Thermal Spray Technology and industrial research consortium funded by 10 companies at SUNY-Stony Brook.

Dr. Sampath received his Ph.D. degree from Stony Brook in Materials Science in 1989. After graduating, he spent four years at Sylvania principally involved in research, development, and processing of refractory metal compounds, refractory intermetallics, and composites. Upon joining the faculty at Stony Brook in 1993, Dr.Sampath has over 150 publications to his credit, 12 patents and several best paper awards. He was recently awarded the SUNY Chancellors Award for excellence in scholarship and creative activities in its inaugural year.

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WELCOME TO THE CHAPTER!

We'd like to take this opportunity to welcome into the Chapter, and to invite them to dine free at a regular meeting of their choice:

Carl Adams, Sulzer Metco Anand Amar, Con Edison Joseph Furio, BGA

Artur Jagielski Jr., Astoria Christpher Jensen, SBU

The "free dinner" invitation is open to all new members so, if you have yet to take us up on this offer, it's never too late. Perhaps you haven't seen your name mentioned specifically in this box - it could have been in an issue that you didn't receive or that we need a new Membership person. Whatever, don't be shy - come along to a meeting, introduce yourself, meet with other Chapter members, and start networking.

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