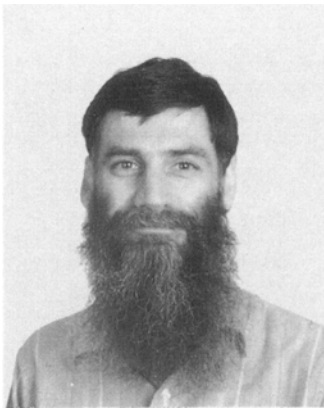


Commentary

Conferences and Meetings - Who's Holding the Gun?



More about the title of this commentary later on - but first some background.

Twenty years ago it was reasonably straight forward for a scientist or engineer to decide THE meeting to attend if their interests lay in thermal spray - it was the International Metal Spraying Conference that was held every 3 or 4 years. The last International Metal Spraying Conference, the 7th, was convened in 1973 in London. This conference then underwent a name change so that the series of ITSC's (International Thermal Spray Conferences) kicked off in 1976 as the 8th ITSC in Miami. Of course, a parallel series of meetings, the International Symposium on Plasma Chemistry (ISPC), also have an extended history of fundamental science which is related to thermal sprayers.

Other conferences evolved in the 1970's, such as the International Conference on Metallurgical Coatings (ICMC), organized by the Vacuum Metallurgy Division of The American Vacuum Society (AVS). These meetings were co-sponsored by what was then known as The American Society for Metals; the forerunner of ASM International. The National Thermal Spray Conferences (NTSC's) evolved in 1981, initially under the umbrella of the American Welding Society but since 1984 under the sponsorship of ASM International. And in parallel there are "international/national" meetings in Germany (sponsored by the DVS) and Switzerland (sponsored

by Plasma Technik) every 3 or so years. Then, there are seminars (for instance, the Gorham meetings), conference sessions (for instance, at Materials Week, the National Association for Corrosion Engineers meetings, and the Cocoa Beach American Ceramic Society meeting), industrial meetings (for example, The International Thermal Spraying Association convention) and workshops (at the National Institute for Standards and Technology and Brookhaven National Laboratory).

The list of meetings that could be attended in areas that address thermal spray is quite large - conservatively 3 or 4 meetings per year rather than the once per 3 years are several decades ago. Of course this plethora of conventions is good news not only for the professional societies that rely on the income to provide member services and benefits; for also, more importantly, the industry and microcosm of thermal spray. Thermal spray has clearly emerged as an enabling technology for the manufacturing sector, for the transportation industry, and infrastructure, chemical processing, biomedical and many other applied engineering fields.

So, the aspect of "conferences and meetings" has been addressed but "who's holding the gun?" refers to a fundamental boundary condition which relates publishing, presenting, travel budgets and new information; i.e., it is difficult for personnel to attend every meeting; yet generate new data. Thus, scientists and engineers must differentiate and prioritize (as well as justify to their upper management) the meetings that they attend. It is clear that the NTSC's have developed a niche market in North America by being held every year. Likewise other conferences will be attractive due to their locality and convenience or by being held in conjunction with related subjects; for example, by being part of a ceramics, biomedical or coatings meeting.

So the point of this commentary is not to lament the choices that need to be made each year concerning "What meeting to attend?" since no such opportunities existed in the not so recent past, but to consider the wide range of available conferences as an indicator of the burgeoning field of thermal spray.

To add to this choice of meetings this commentary announces a "NASA/NIST/DOE THERMAL BARRIER COATINGS WORKSHOP" to be held March 28-29, 1995 in Cleveland, Ohio.

Thermal Barrier Coatings (TBC) have been the target of intense interest as one of few viable near term means to fill the gap between current metallic and future ceramic components. The objectives of the two day workshop are to assess the state of TBC knowledge, the goals for TBC performance for current and next generation engines and also to identify critical gaps in the knowledge that must be addressed to reach desired TBC performance levels. To achieve these objectives, the following topics will be addressed for the application areas of aircraft turbines, land and marine based turbines and diesel engines:

- Rationale for TBC use, a design perspective
- Current NASA/NIST/DOE Program Areas
- Engine Experience and Failure Modes for current TBC applications
- Current and alternate processing
- TBC Properties: Thermal, Physical and Mechanical properties of all constituents of the TBC
- Modeling: Life Prediction, Mechanical and Thermal Modeling
- Characterization and Standards:

including NDE and possible test standards for TBC's • TBC Effects on Component Durability: Creep, Oxidation, Fatigue. The workshop will include discussion periods for each session.

A detailed agenda and registration form will be mailed at a later date. The tentative registration fee for the workshop is approximately \$80. Since it is inevitable that interested people have been missed on the mailing list, please pass this information along to others that may be interested.

The 1995 Thermal Barrier Coatings Workshop Organizing Committee consists of Bill Brindley, John Goedjen (both of NASA Lewis Research Center), Sandy Dapkunas (NIST) and Woo Lee (Oak Ridge National Laboratory). For more information contact: Bill Brindley (NASA-Lewis MS 24-1, Cleveland, OH 44135, phone: (216) 433-3274, fax: (216) 433-5544). John Goedjen (phone: (216) 433-3161, fax: (216) 433-5544).

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