

26th Oil Shale Symposium Welcoming Remarks, Oct. 16th, 2006

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Welcome to the 26th Colorado School of Mines Oil Shale Symposium.

That number – 26th – signifies two things:

- 1) CSM's commitment to the development of unconventional hydrocarbon resources – we began these symposia in 1964 and resume today after a 14-year hiatus.
- 2) The far-sightedness of the then-director of petroleum refining here on campus, Prof. Jim Gary. Jim went on to become VP of Academic Affairs, then emeritus, and then – today – he is with us here as the Honorary Chair of the 26th Symposium. Judging by the numbers – more than 270 registrants with representation from all across the US and 18 foreign countries – this revived symposium has the makings of being one of the best ever.

I also want to thank the Colorado Energy Research Institute (Dag Nummedal, dir.) for having taken the initiative to revive the Oil Shale Symposium. We owe very special thanks to Jerry Boak (also with CERI) who is serving as overall meeting co-chair as well as the members of the program advisory board, who include many senior executives with energy companies, the State Geologists of CO, UT, WY and NM, and several senior members of the CSM staff – who played key roles in the oil shale seminars in the 80s. The Office of Special Programs and Continuing Education (Gary Bachman, dir) provided invaluable assistance with registration, facilities layout and logistics arrangements and it has all moved very smoothly. The other co-chair also deserves our special thanks; he is Tony Dammer, the director of the Office of Naval Petroleum and Oil Shale Reserves at

the US Department of Energy. Tony will arrive on the scene here early tomorrow morning.

Not the least, I want to thank our sponsors who enabled us to cover travel for some students and researchers from abroad, and other special activities. All sponsors are listed on the program and posters - and I want to formally recognize them:

- The American Chemical Society
- The Colorado School of Mines
- The Colorado Energy Research Institute
- EGL Resources
- The Environmental Protection Agency
- ExxonMobil Corporation
- Lawrence Livermore National Laboratory
- The Naval Petroleum and Oil Shale Reserve
- Shell Oil Company
- The University of Utah
- The Viru Keemia Grupp shale oil and chemicals company, of Estonia

We expect all of these entities to play leading roles in the development of this new industry; we appreciate their engagement with us, and we hope to see them here at future oil shale conferences as well. Let us give the representatives of our sponsors a big hand!

The Colorado School of Mines is eager to help in R&D related to the development of oil shale resources around the world. It is a technology challenge and an environmental challenge. Yet, there is such a direct link between energy consumption and standard of living, that our commitment to help provide affordable energy both for the developed world, and to help lift the developing world out of poverty, requires development of unconventional resources such as these. Concurrently, we are keenly aware of the emissions issue surrounding

the development of an energy resource that requires using large amounts of other forms of energy for its production. We hope that all nations who consider developing their oil shale resources commit at the outset to do so under the constraints of no emissions – no CO₂, SO_x or NO_x. Perhaps that requires subsurface (in-situ) processing – as planned for the Colorado oil shale – and perhaps other new technologies can achieve zero emissions as well.

The technical program at this meeting covers in-depth analysis of a range of new technology options, an open evaluation and discussion of water and other environmental issues, and a serious look at the magnitude of the oil shale resource around the world. Some of you will also be able to visit past and planned oil shale development sites in western Colorado and eastern Utah. I hope the visits will be educational and pleasant (but it probably will snow in the Colorado mountains before this week is over!), and that your visit here to Golden this week will be just one of many occasions for us to work together to help develop a global oil shale industry that helps ease growing fuel demands in a responsible and clean manner.