

DIAL — YOUR PARTNER FOR RESEARCH

CAPABILITY STATEMENT

SEPTEMBER 2000

The Diagnostic Instrumentation and Analysis Laboratory (DIAL) at Mississippi State University is a multidisciplinary group of scientists and engineers focused on measurement and testing. DIAL's mission is to enhance process effectiveness and product competitiveness through the application of advanced characterization and control tools. Since its beginning in 1979, DIAL has been a leader in monitoring, testing, and control. DIAL is currently focused on solving energy, environmental, infrastructure and industrial problems.

As you start your research career, you should consider DIAL as a potential partner. Because DIAL has a broad customer base and a wide international network of collaborators, we can help you get a better picture of what funding agencies really need, and thus enhance the likelihood of funding for your pro-



posals. By including any of DIAL's test beds, its diverse instrumentation, or its widely experienced personnel in your proposals you can significantly enhance the value you can provide the funding agency. Over two dozen MSU faculty have partnered with DIAL on projects in the last three years — we hope you will too.

CUSTOMERS & COLLABORATORS

DIAL has a broad group of customers which means we can help you understand what these funding agencies really need. They span the range from the US government (DOE, TVA, NASA, Corps of Engineers) to small companies (Domes International, C. L. Dews); from industrial giants (Dow, Kerr-McGee,

Ishikawajima-Harima Heavy Industries) to state government (MDOT); and from the national laboratories (ORNL, ANL, SRTC, INEEL) to foreign research organizations such as the Russian Research Institute for Chemical Technology.

In addition to its customer base, DIAL can call upon its network of collaborators for assistance. This includes GeoCenters (DIAL's partner on a support contract for the Naval Research Laboratory), E-OIR (support contractor for the Army Research Lab), Battelle-Pacific Northwest National Laboratory, Lawrence Livermore National Laboratory, and Sandia National Laboratory in the US. DIAL is also collaborating with the six leading nuclear institutes and nuclear materials production sites in Russia on development and demonstration of innovative technologies for nuclear waste management, and with the



Japanese Science and Technology Agency on a unique gasifier concept for low-BTU fuels.

CAPABILITIES

Quite simply, most funding agencies want solutions to their problems. This means problem-driven R&D, with solutions demonstrated at the right scale, using as close a simulation as possible. DIAL can help with each of these. DIAL's staff has over 500 years of applications R&D in science and engineering. DIAL staff members have been involved in some of the largest R&D projects in history - most notably the nation's first and the free world's largest facility to immobilize radioactive waste. DIAL's measurement capabilities - extending beyond the state-of-the-art in optical and acoustic trace techniques - have been designed to be used in the rugged conditions in the real world, whether this means high temperatures, exposed venues, or other challenging environments. DIAL's test beds for combustion testing and for groundwater monitoring provide the opportunity to test solutions with all the exactness expected in a laboratory setting but at an industrial scale. DIAL's instrumentation and testing facilities are a unique combination ideally suited for providing performance data for new

technologies. If it would be better to conduct testing at the customer's location, we can take our instrumentation and test personnel wherever they're needed.



COLLABORATION WITH DIAL

DIAL can be an invaluable partner as you begin your research career here at MSU. DIAL's motto is "fast, flexible, and focused." You'll find us fast to respond, flexible in assisting you, and focused on helping you get your research program off to a good start.

If you are interested in exploring our possibilities, please contact DIAL's Director, John Plodinec, by telephone at 662-325-2105, by FAX at 662-325-8465, or via e-mail, plodinec@dial.msstate.edu.

