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Abstract

The Ceramic Technology [for Advanced Heat Engines] Project was begun in 1983 to meet the ceramic materials needs of the companion DOE automotive engine program, the Advanced Gas Turbine (AGT) project, and the Heavy Duty Transport (low-heat-rejection, heavy-duty diesel) project. The goal is to develop an industry technology base for reliable and cost effective ceramics for applications in advanced automotive gas turbine and diesel engines. Research areas were identified following extensive input from industry and academia. The majority of research is done by industry (60%); work is also done at colleges and universities, in-house, and at other national laboratories and government agencies.

At the inception of the program, reliability of ceramic components was the key issue. The reliability issues have largely been met and, at the present time, cost is the driving issue, especially in light of the highly cost-sensitive automotive market. To that end, the emphasis of the program has now been shifted toward developing cost-effective ceramic components for high-performance engines in the near-term.

This bibliography is a compilation of publications done in conjunction with the Ceramic Technology Project since its beginning. Citations were obtained from reports done by participants in the project. We have tried to limit citations to those which are published and can be fairly easily located. The end date of 1992 was selected because several of the latest citations were published in 1992. We realize that this list is by no means complete and would greatly appreciate additions and corrections.

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