

## GALAXY ADVANCED ENGINEERING, INC. P.O. BOX 614 BURLINGAME, CALIFORNIA 94011 Tel: (650) 740-3244

Fax: (650) 347-4234 E-mail: bahmanz@aol.com

## MOM/PC

## **Massive Offgassing Model Code for PC**

MOM/PC code is a general thermo-chemical solver code used to compute the surface conditions of ablating materials under low pressure and high heat flux rates. It employs a rigorous thermo-chemical treatment of solid-vapor equilibrium. This code is intended to model the chemical and physical processes occurring when a solid rapidly ablates into a low-pressure environment due to intense, localized heating from a laser beam. The ablating vapor may contain a number of individual gas-phase species coupled to a surface composed of a number of distinct surface species.

In MOM/PC code arbitrary solid materials may be considered, provided the elemental composition is known and suitable thermodynamic data is available. Materials, which "char" or decompose in-depth also may be treated unlike many previous models, which treat only materials where all reactions occur directly at the material surface. In addition, environmental conditions (such as pressures) are not limited allowing nearly any external conditions to be treated. Hence, the MOM code is able to treat a wide variety of materials under a large number of external environments.

We at Galaxy Advanced Engineering, Inc. (GAE) have taken the steps to produce the PC version, i.e. MOM/PC. Currently the program is operating on IBM/PC or 10% compatibles under PC/DOS of MS/Windows95/98/2000/XP/ME or NT operating system. To order this code, please contact us at (650) 740-3244.