HARPER INTERNATIONAL

POSITION DESCRIPTION

The Position Description is the tool used by Harper International to communicate and clarify the essential job functions, establish the basis for performance expectations, and identify training needs for each position.

Part I - Reporting Structure

Date of last revision: September 2012 **Job Title:** Process Technology Engineer **Completed By:** HR **Department:** Technology **Status:** Exempt

Part II – Position Objective

To serve as a member of Harper's knowledge team, dedicated to driving innovation throughout the organization.

Part III – Job Responsibilities

- 1. Conceive, plan, design and conduct scale up tests for processing of advanced materials.
- 2. Prepare R&D Project Proposals, providing estimates of schedule and budget requirements as well as estimates of value to be obtained
- 3. Set up test plans, day to day experimentation, to include safety review/adherence.
- 4. Prepare decision support packages to allow Gatekeepers to assess progress and make project support decisions.
- 5. Document methodologies and results for Knowledge Library.
- 6. Provide Definitions of Technology as the technical basis for new designs and projects.
- 7. Provide assistance in resolving design, processing, manufacturing issues.
- 8. Provide support to operations improvement initiatives, as requested.
- 9. Interface effectively with Engineering group to obtain insights regarding alternative analysis, commercialization issues, data requirements and etc.
- 10. Collect data to support design needs (even if it is not required to prove the technology works).
- 11. Keep abreast of commercially available technology
- 12. Conduct verification and reliability testing on subsystems and components.
- 13. Conduct failure analysis of components to identify root cause.
- 14. Lead and provide guidance in the development of product and materials specifications for prototypes and verification testing protocols. Coordinate verification testing activities.
- 15. Actively participate in the investigation of technological advancements or new technologies and provide conceptual or practical applications for these technologies within the business units

IV – Knowledge, Skills, Education

- 1. M.S. Degree in material science or related field; PhD preferred
- 2. Broad multi-engineering discipline background (electrical, process, materials, mechanical) ideal.
- 3. Must have OEM equipment design experience preferably in an R&D/ product development setting.
- 4. Understanding of high temperature processes desirable
- 5. Must possess high degree of technical depth and creativity
- 6. Solid understanding of the practical application of engineering fundamentals (from a "1st principals" perspective)

- 7. Strong "hands on" bias" with mechanical inclination.
- 8. Experience in running industrial lab experiments, to include handling of hazardous materials, safety compliance, etc...
- 9. Must possess the following "soft" skills"
 - Comfort & ability to deal with ambiguity
 - Commercial savvy
 - Good judgment

V - Physical Demands

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is regularly required to walk. The employee is frequently required to sit, use hands, reach with hands and arms, talk and hear. The employee is occasionally required to stand, stoop, kneel, crouch or crawl.

Harper International is an Equal Opportunity / Affirmative Action Employer. M/F/D/V