## **Risk Assessment Form (3)**

Must be completed before experimentation.

Student's Name(s)

Jalaj Mehta and Lauren Stiefel

Title of Project

Enhancing the Flame Retardancy of Biodegradable Poly(vinyl alcohol) Hydrogels with Resorcinol Bis(diphenyl phosphate) Coated

To be completed by the Student Researcher(s) in collaboration with Designated Supervisor/Qualified Scientist: (All questions must be answered; additional page(s) may be attached.)

- 1. List all hazardous chemicals, activities, or devices that will be used; identify microorganisms exempt from pre-approval (see Potentially Hazardous Biological Agent rules).
  - a) Fourier Transform Infrared Spectroscopy
  - b) Thermal Gravametirc Analysis c) High-Speed Centrifuge

  - d) Bernzomatic Blowtorch
    e) Resorcinol bis(diphenyl phosphate)
  - f) Poly(vinyl alcohol)
- 2. Identify and assess the risks involved in this project.
  - a) Contact burns are likely and may range from trivial to severe but most likely will affect only the user.
  - b) Ignition is much less likely but may result in widespread injury to others.
  - c) Possible injury to digits if machiney is used improperly(centrifuge and TGA)
  - d) Direct skin exposure to chemicals(PVA and RDP) may be dterimental to health
- Describe the safety precautions and procedures that will be used to reduce the risks.
  - a) Appropriate gloves, safety glasses and lab coat must be worn when handling heating equipment.
  - b) all users will be trained on machine sbefore handling
  - c) Appropriate PPE will always be worn while working with chemicals to ensure safety
  - d) Machines will be handled with care and caution
- 4. Describe the disposal procedures that will be used (when applicable).

chemicals will be disposed of in labeled vented containers and removed by EH&S

List the source(s) of safety information.

Ashville Lubricants, XG Sciences, Stony Brook University

To be completed and signed by the Desi I agree with the risk assessment and safety preca Plan/Project Summary and will provide direct su	autions and procedures des		
miriam rafailovich Designated Supervisor's Printed Name	Signature		6/30/2019  Date of Review (mm/dd/yy)
Professor Stony Brook University Position & Institution		516 458 9011 Phone or email con	tact information
PhD Nuclear Physics, director of laboratory  Experience/Training as relates to the studen	nt's area of research		