Responsibility: The intern will work on preparing and characterizing polymer solutions that mimic the rheology of antibody formulations. Most of the work will involve careful preparation of polymer solutions, and the characterization of their rheology on a rotational rheometer and on a micro-capillary rheometer. A minor component of the work may also involve measurement of the molar mass, molar mass distribution and molecular size of the polymer in solution by appropriate light scattering and/or size-exclusion chromatography techniques. At the end of the internship, the intern will deliver a presentation, which will summarize the key results/accomplishments of the project (calibrated against the project objectives) and provide detailed scientific/technical analysis of major experiments conducted.

Description:
Primarily focused on laboratory activities; responsibilities include (but may not be limited to):

- Measurement of polymer solution rheology by means of rotational and micro-capillary rheometry
- Measurement of molar mass and molecular size by appropriate light scattering an/or size exclusion chromatography techniques
- Maintenance of a detailed laboratory notebook with research procedures, observations, and conclusions
- Reading relevant scientific literature and reconciling his/her experimental data with published data for consistency/correctness
- Troubleshooting experiments and instruments as/when necessary

Requirements: Undergraduates at the end of their sophomore or junior year pursuing physical science (Physics/Chemistry) and/or engineering (Chemical Engineering/Materials Science and Engineering) degrees will be considered. Graduate students enrolled in M.S./Ph.D. programs in these disciplines will also be considered. Prior coursework in introductory Fluid Mechanics/Rheology and/or Polymer Physics/Physical Chemistry is a plus, but not necessary for this position.

Application process: Interested candidates must apply on the MedImmune careers web page (job requisition number 02381): http://www.medimmune.com/careers/

About the Organization:
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