April 5th, 2016

3614 Irwin Avenue

Bronx, NY 10463

To Whom It May Concern,

My Name is Ivan Perez, and I am applying for the position of Senior College Laboratory Technician (Job ID: 14626) in the department of Chemistry and Biochemistry at the City College of New York (CCNY), as advertised on the CCNY website. I have attached my résumé for your review.

I was recently at Élan working as a Synthetic Organic Chemist for Dr. Fred Schreiber in the R&D department. Prior to that position, I was a Research Associate for Dr. James Belmont in Performance R&D department at Cabot Corporation. My industrial roles have been highly interdisciplinary, integrating materials, analytical and synthetic organic chemistries.

At Cabot, my research focused on the cost effective synthesis optimization of hydrogen bonding and ion-pairing treating agents similar to those discussed in patent WO 2013/130099A1 (largely triazole disulfides) and treating carbon black for tire tread and rolling resistance applications. Most recently, I worked on the pilot scale synthesis of naturally derived precursors used to prepare naturally derived aromatics at Élan. My undergraduate career focused on the synthesis of biotin and perfluorooctylethyl tagged ligands affecting the α2δ1 subunit for prion protein scrapie isoform (PrPSc) proliferation inhibition, with the intent of isolating relevant proteins using a pull-down assay.

While I am grateful for my experience in industrial research settings, I wish to transition towards a supervisory position where I can collaborate with administrators as well as scientists of all levels. I believe that I am uniquely qualified for this unique position because of my previous experience at Cabot and Boston University. Meeting goals and objectives thrived on consistent communication with internal and external analytical and rubber testing departments, all of which had varying focuses of chemical understanding. I played a significant role in relaying information promptly and concisely to my supervising manager.

I am interested in a career at CCNY because I wish to continue to contribute to the academic community while making use of my professional and laboratory skills. I can offer a sharp quantitative mind, competent organization, and cordial interpersonal communication. These skills can serve to allow me to develop, implement and disseminate laboratory policy and safety regulation.

I believe that my scientific background and technical aptitude have prepared me well for this position. Please contact me at 347-4545-8049 or Perez.Ivan.E@gmail.com to further discuss this opportunity.

Sincerely,

Ivan E. Perez

**Ivan E. Perez**

3614 Irwin Avenue Bronx, NY 10463

347-445-8049 Perez.Ivan.E@gmail.com

**Summary of Qualifications**

* Scientist with over two years of industrial organic synthesis, materials and medicinal chemistry experience seeking new challenges in laboratory management position.
* Improved a 3-step one-pot synthesis of novel small molecule treating agent from 36% to 85%, contributing to a cost effective treatment of carbon black (CB) for rolling resistance and tread wear tire applications.
* Collaborated with multiple groups for analysis of optimization of treated CB performance in synthetic based rubber (SBR).

**Professional Experience**

**Research and Development (Élan Chemical Company)***—Synthetic Organic Chemist* **December 2015—March 2016**

Chemist assisting Director of R&D in development of viable production processes for naturally derived aromatics.

* Synthesized naturally derived precursors for application in pilot scale synthesis of natural aromatics.
* Evaluated tanker material quality by using internal standard methods in GC/MS.
* Developed purification methods of crude precursors in syntheses of natural aromatics.

**Performance R&D (Cabot Corporation)** –*Research Associate* **June 2014—October 2015**

Chemist responsible for research in CB surface modification for tire rolling resistance and tread wear in rubber tires.

* Optimized syntheses of novel treating agents potentially leading to cost effective CB treatment methods.
* Conducted a myriad of target syntheses, CB treatment, and associated analytical sample preparations.
* Collaborated with internal and external analytical and testing departments to secure relevant data for managers.
* Designated and maintained safety parameters for novel experiments and equipment as LabRAT’s and LeRAT’s.
* Upheld safety standards and contributed to the safety dialogue with the Safety Health & Environment dept. (SH&E).

**Beeler Research Group (Boston University Chemistry Department)**—*Research Assistant* **September 2012—May 2014**

Undergraduate research applying organic synthesis to explore the medicinal chemistry of a PrPSc proliferation inhibitor.

* Sole technician responsible for synthesis of target molecule and related analogues.
* Collaborated with internal biochemists and Harris group at BUMC towards design of pull-down analogues.
* Regularly presented research updates formally at group meetings and informally to P.I. at subgroup.

**Education**

B.A. in Chemistry with ACS certification, Boston University **September 2010—May 2014**

*Graduate Coursework:* (CH644) Medicinal Chemistry, (CH741) NMR Spectroscopy, (CH641) Organic Reaction Mechanisms, (CH631) Inorganic Coordination Chemistry, (CH643) Synthetic Methods of Organic Chemistry.

**Technical Skills**

**Operating Systems:** Microsoft Windows, Linux(Ubuntu), Mac OSX

**Office Tools:** Microsoft Office Suite

**Scientific Software:** iLabber, Scilligence and ArtusLabs electronic lab notebooks(ELN), ACD/Labs spectroscopy suite, MestreNova, Schrödinger Jaguar and Maestro, Spartan, Gaussian, Cambridgesoft ChemBiooffice Suite(Chemdraw), ChemAxon cheminformatics suite, Waters MassLynx, Origin Lab, Pfeiffer Vacuum proprietary MS software, SciFinder.

**Laboratory:**

* Four years of experience designing and executing organic synthesis experiments in support of product leads in materials chemistry, drug discovery and asymmetric methodology development.
* Engineering experience with design and maintenance of 10-22L reactors, lab scale tube furnace with attached GC-MS.
* Set parameters and compiled safety documentation of 10L reactor, general organic syntheses, and CB treatment.
* Experience carrying out lab scale to sub kilogram scale reactions and purifications.
* Experience with advanced analytical techniques including NMR (Heteronuclear, 2D experiments), IR, UV/vis, LCMS/UPLC, GCMS, CD, DSC, TGA.
* Experience with Swagelok and Unistrut assembly and modification.
* Well versed in a broad range of reaction mechanisms, and practical laboratory procedures.
* Demonstrated aptitude for practical, synthesis improvement, and analytical skills.
* Knowledge of GMP, GLP and FDA regulations.

**Awards**

1. Undergraduate Research Opportunity Program Faculty Matching Grant **January 2013**

2. Undergraduate Research Opportunity Program Student Research Award **May 2013**

**Presentations**

1. Initial Probing into Mechanism of Action of PrPSc Proliferation Inhibitor. Perez, I.; Herres, J.; Harris, D.; Beeler. A.

Undergraduate Research Symposium, Boston University, Boston, MA October 17, 2012.

**References**

1. Joshua Wimble—Former Colleague in Performance R&D, *Senior Research Associate* at Cabot Corporation

(Josh.wimble@cabotcorp.com, 978-670-6143)

2. Aaron B. Beeler—Undergraduate P.I., *Assistant Professor of Chemistry* at Boston University

(Beelera@bu.edu, 617-358-3487)

3. Fred Schreiber—Supervising Manager, *Director of Research and Development* at Elan Chemical Company

(FSchreiber@elan-chemical.com, 973-344-8014 Ext.114)