# MUGDHA RAVINDRA KASAREKAR

Graduate student in the Department of Materials Design and Innovation University at Buffalo, NY - 14260 mugdhara@buffalo.edu

#### **EDUCATION**

Aug 2017 – current

Master of Engineering Sciences (Materials Design and Innovation)

GPA: 4.0

University at Buffalo, State University of New York

**Research Project:** Quantitative Structure Property Relationships of

Polymeric Materials (ongoing)

• Introduction to Materials Design and Informatics

• Multivariate Statistics and Material Informatics

Thermodynamics and Molecular Structure

Quantitative Structure Property Relationships

2007 - 2011

Master of Engineering in Chemical Engineering with Business

First Class Hons. **Management** (*IChemE Accredited*)

University of Birmingham, United Kingdom

**Design Project:** Design of Rotary Dryer for Kaolin Processing **Research Project:** Investigating strategies for the purification of drug

substances re-crystallised from ionic liquids

#### **WORK EXPERIENCE**

Apr 2015 – Dec 2016 Process Engineer

GlaxoSmithKline, Worthing, UK

- Technical support for Sterile Products
- SME (Subject Matter Expert) for airflow pattern studies
- SME for Wireless data transfer and storage system
- SME for Particle Monitoring Systems/ISO classification
- Expertise in Plant Modifications and Change Controls
- Expertise in Root Cause Analysis studies and process improvements
- Expertise in Plant Shutdown and Start-up co-ordination

### Dec 2011 – Mar 2015 Associate Process Engineer

Merck Sharp & Dohme, Cramlington, UK

- Technical Support for Solid Dosage Formulations
- Lead Large Process Validations and Equipment Qualifications
- Supported regulatory audits (FDA and MHRA)
- Expertise in Statistical analysis (using Minitab) for process monitoring, continuous process improvement for a Quality by Design product

## **AWARDS & SCHOLARSHIPS**

2007

2015	Lean Six Sigma Green Belt Certified
2011	Department of Chemical Engineering Garner Prize, U. of Birmingham
2011	Col. of Engg. and Phy. Sciences Cert. of Achievement, U. of Birmingham
2010	BP Internship scholarship, U. of Birmingham
2007 - 2011	U. of Birmingham Excellence Scholarship

Bronze II Award in British Physics Olympiad

**SKILLS** AutoCAD, Aspen, Minitab, MATLAB, R, Python

**LANGUAGES** English, Hindi and Marathi

**AFFILIATION** Associate Member of the Institution of Chemical Engineers