 **Rohit Aakash 110110042**

**Metallurgical Engineering and Materials Science UG Second Year**

**Indian institute of Technology, Bombay Male**

**Specialization: Metallurgical Engineering and DOB: 13/01/1992**

**Materials Science**

**Examination University Institute Year CPI/%**

Graduation IIT Bombay IIT Bombay 2012 6.78

Intermediate/+2 CBSE Adwaita Mission High School, Banka 2010 77.2%

Matriculation ICSE Saint Joseph’s School, Bhagalpur 2008 96.0%

**SCHOLASTIC ACHIEVEMENTS**

* Qualified IIT Joint Entrance Examination 2011 and secured a 99.98 percentile among 0.48 million candidates appearing for the exam.
* Recipient of IIT Bombay Heritage Scholarship.
* Secured 96% in ICSE 10th boards with 100% marks in Computer Applications.
* Awarded Merit Certificate for distinctive performance in first nationwide Biotechnology Olympiad conducted by EduHeal Foundation (Aug 2006) and certificate of successful participation in 4th National Cyber Olympiad (Aug 2004) and 9th National Science Olympiad (Nov 2006)

**KEY ACADEMIC PROJECTS**

**Ceramic Tape casting using Doctor Blade** *[Jan’13 – Apr’11]*

*Course: Experimental Techniques in Materials Science* *Prof. P. Bhargava*

* Preparation of ceramic tape slurry using Titanium Oxide, Lithium Carbonate, Zirconia and Alumina as key ingredients
* Characterised and differentiated Green and Sintered Ceramic Tape using SEM with EDS, XRD, TGA, and molecular weight determination using dynamic light scattering
* Analysed the mechanical strength of both the tapes by analysing the level of ceramic loading, particle size distribution and chemical reaction between particle surface and organic binder

**Reversibly Switching Surfaces** *[April’12]*

*Course: Materials and Technology*  *Prof. Ajay Singh Panwar*

* Designed a working model of surfaces which show anomalous behaviour in their wettability in response to external stimulus.
* Prepared a presentation for the same which was appreciated by the professors

**Determination of Bravais lattice through a program in C++**  *[Oct’11 - Nov’11]*

*Course: Computer Programming and Utilisation*  *Prof. M.P. Gururajan*

* Programmed a code in C++ capable of identifying the Bravais lattice of a given cubic crystal based on the Intensity vs. 2θ data obtained from the X-Ray Diffraction Crystallography.
* Generated a plot of the Intensity vs. 2θ for the same using GNUPlot.

**POSITIONS OF RESPONSIBILITY**

**System Administrator, Hostel 13, IIT Bombay** *[Apr’13 – Present]*

* Installed 7 new systems in the computer room ensuring 10 running PCs in computer room using hostel funds judiciously
* Updated and maintained the hostel website on [www.h13iitb.wordpress.com](http://www.h13iitb.wordpress.com) and gymkhana.com/~hostel13/

**Web Secretary, MEMS, IIT Bombay** *[July’12 – Present]*

* Designed a completely new website department to be hosted on [www.met.iitb.ac.in](http://www.met.iitb.ac.in) based on PHP with online forms for various department activities with the assistance of the department system administrator.
* Assisted in management of www.met.iitb.ac.in, visited globally by MEMS research scholars for latest research projects and information and containing the database of all students and professors of MEMS, IIT Bombay

**COURSES UNDERTAKEN**

**Core Courses**

Materials and Technology, Transport Phenomena, Mechanics of Materials, Structure of Materials, Colloidal & Interfacial Science, Metallography & Structural Characterisation Lab, Kinetics of Processes, Thermodynamics of Materials, Experimental Techniques in Materials Science

**Additional Courses**

Economics, Data Analysis and Interpretation, Computer Programing and Utilization, Introduction to Electrical & Electronic Circuits, Theory of Machines and Machine Design

**TECHNICAL SKILLS**

Operating Systems: Windows, Linux and Mac

Programming Languages: C, C++, Java

Web Development: HTML, CSS, JavaScript, PHP and Adobe Dreamweaver

Software Skills: Microsoft Office, Adobe Photoshop

**EXTRA-CIRRICULAR ACTIVITIES**

**Social Service**

* Worked as an active member of the National Service Scheme (NSS), Events Department, IIT Bombay.
* Participated in Cloth Collection Campaign conducted twice in a year gathering an overall collection of 1500 kilograms of clothes from all over the institute.
* Designed toys from scrap objects for poor children

**Cultural events**

* Actively involved in **PAF** (Performing Arts Festival)-2013 & 2012 mainly in the development of whole set of drama.
* Worked as an Organizer, Mood Indigo, Asia’s largest college cultural festival with a footfall of over 80,000 students and over 800 colleges from all across India.