

आई डी सी - अभिकल्प विद्यालय, भारतीय प्रौद्योगिकी संस्थान मुंबई, पवई, मुंबई - ४०० ०७६, भारत

Indian Institute of Technology Bombay, Powai, Mumbai 400 076, Maharashtra, India Tel : +91 22 2576 7801, 7802, 7803 Fax : +91 22 2576 3480 Email : office.idc@iitb.ac.in URL : www.idc.iitb.ac.in

Confidential Letter of Recommendation

It was a pleasure interacting and working with Rishikesh Sonawane. During his role at the Indian Institute of Technology Bombay (IITB) Industrial Design Center (IDC) as a Project Associate (boat design), he carried out a variety of tasks in the field of sustainable boat design, boat schematics & layout, keeping in mind the clients and their needs. His eye for perfection and multifaceted skillsets ensured a high-quality output, setting an example amongst his colleagues. He worked on multiple projects and executed complex tasks throughout his 8 months at IIT, such as sustainable bamboo rafts, design & schematics for 6 & 8-bedroom houseboats. Rishikesh showed exceptional prototyping skills that involved the construction of a bamboo raft scaled model using real cane & making of a 12-foot-long scaled boat hull.

Rishikesh has superior spatial awareness and 3D visualization, enabling him to make pertinent decisions and create feasible designs, reflected in his extraordinary freehand sketching skills. He is technically sound, with a deep understanding of materials and construction; he always found a balance between design and engineering. He is a quick learner, does not hesitate to ask questions, and is always eager to improve. A great team player, he is ready to help his colleagues and sets a motivating environment in the workplace. His maturity is seen during problem-solving and client interactions. His suggested design approaches and changes were always backed by impressive and relevant logic/research. He always met deadlines, delivered on time, and exceeded expectations. He is a diligent and punctual young man with a strong zest for learning.

Rishikesh constantly interacted with several designers and faculty from other fields, sharing work and networking throughout his time here. He allocated extra time to bring the electric micro mobile vehicle project that he had built during his college education to the IIT campus, showing it to freshmen and masters students who took up transportation design. He enthusiastically displayed and explained his project to fellow IIT students, and he disassembled his EV scooter to explain its design thinking and construction better. With such an impressive performance review, I personally recommended him to the client for any future they might have.

I wish him the best in his future endeavors and can personally vouch for his talents. His aim to learn more will keep growing by taking this step of pursuing higher education. I recommend Rishikesh for his graduate education at your reputed university. I assure you that he will surely exceed all expectations and set the bar high.

Unni Mohan M Assistant Professor IDC School of Design Indian Institute of Technology Bombay unnimohanm@iitb.ac.in

सहायक प्राध्यापक / Assistant Professor आई डी सी अभिकल्प विद्यालय, IDC School of Design, भा. प्रौ. सं. पवई, मुंबई – ४०० ०७६. IIT Powai, Mumbai - ४०००७६.



Novita LOR.docx



Novita Healthcare Letter Head

Confidential Letter of Recommendation

Me and my team here at Novita very much enjoyed working with Rishikesh in the development of our nutraceutical dispenser. It was amusing to see such caliber in someone so young, Rishi knew his way in and around the crux of designing for medical devices. He showed a deep understanding in fields of biocompatibility and barrier properties while developing our product. Pharma products have their own chain of complexities making design for medical products tricky, Rishi enthusiastically took up this challenge and delivered high quality outputs meeting all our expectations. It was great to see him find a perfect balance between design and user ergonomics. During this development process he professionally handled direct communication with our engineering and marketing team, always respecting & reflecting their opinions in his outcomes. He was responsive all throughout the project, helping with last minute design changes. Through his design perspective, we learnt a lot about consumer mentality regarding products and how usability would help us elevate out product experience. His design suggestions were always backed by strong research, user insights, and technical feasibility, ensuring that the proposed solutions were innovative yet practical for manufacturing and market demands.

Overall it was amazing working with Rishikesh and we are grateful for his valuable contribution in this project of ours. His outputs did not just meet our requirements but were innovative and stood apart compared to various market segments. I feel his contribution would really help us stand out in the market. We shall constantly recommend him for any industry product development roles we come across; his professionalism and knowledge base would surely be beneficial for us and any other employer in the future. His ambition for pursuing higher education would only enhance his skillsets and make him a sensation in the field of design and innovation. I would like to recommend Rishikesh to pursue masters at your prestigious university, he would surely set an example for bright minds like him. I wish him the best for his future endeavours.

Pranav Bankda/ pranav@novitagro Director - Novita novitahealthcare.in





Regd Office: LL-19 Gagan Arcade, Krishna Vatika Marg, Goregaon (E), MUMBAI - 400063 INDIA 🕿 +91 22 4979 6981 Corp. Office & Warehouse : 37, Mangal Compound, Pipliya Kumar, Dewas Naka, Indore (M.P.) 452010 🖀 +91 731 4007432/33/34 CIN: U74110MH2018PTC310335
www.novita.co.in support@novitagroup.in

TOXIFREE

MasterPlast

MASTERPLAST INDIA PRIVATE LIMITED Plot No. 1, Khasra 447-448, Badiyakeema, Nemawar Road, Opposite Barfani Convent School, Indore (452 016), MP, India | CIN: U25200MH2006PTC165366

www.masterplast.in | info@masterplast.in Tel: +91 731 491 9377

17th Dec, 2024

Letter of Recommendation – Rishikesh Sonawane

We engaged Rishikesh earlier this year for help with designing a nutraceutical dispenser for the Indian market. Our brief requested a design that would be easy to use, novel, and experiential / fun to use – all at the same time.

Over the following months Rishikesh developed more than 20 sophisticated iterations that fully addressed the brief given to him. Notably, virtually all of the iterations used distinct and unique mechanisms for dispensing the pills, which I imagine must have required extensive time and application of mind, akin to undertaking 20 individual projects.

In developing these designs, Rishikesh showcased a strong understanding of engineering design such as moulding constraints, tolerances and fitment, and material properties, as well as practical considerations such as overall cost and ease of manufacturing. His emphasis on balancing costs and product complications eventually led us to a dispenser design that was practical and cost-effective to manufacture but still retained the essence of our brief, which was to have an experiential / intriguing dispensing mechanism.

Rishikesh responded to all our feedback with alacrity, combining his own research and user validation to redevelop iterations. In one case, when we mentioned that we had rejected a previous iteration because it required two-handed use, Rishikesh followed up with an ingenious adaption of the same design-concept incorporating a one-handed use. While this was not the final design selected by us, we appreciated his approach of leaving no stone unturned in pursuit of the perfect design, something me and my team had not seen before.

Further to this, Rishikesh took full responsibility for designing and testing the prototype, starting with handmade physical 3D mockups and moving onto 3D prints using SLA and SLS technologies. His knowledge of prototyping methods – and the advantages and disadvantages of each method – were exceptionally useful to us given the nature of the product. For example, which technology to use for achieving a transparent casing for the pills while preserving the structural integrity of the dispenser. All prototypes were able to perfectly showcase the functionality and design of the underlying concepts, and met the mark in fitment and tolerances.

A crucial contribution made by Rishikesh to the project was designing for adaptability. The size and shape of our nutraceutical pill was undefined at the start of the project, which complicated certain design decisions. Rishikesh solved this concern by incorporating design features such as a funnel and chamber to isolate each pill before dispensing, allowing us to achieve a flexible and versatile design that can work for a wider range of products in the future, all while maintaining the same look, feel, & experience of our preferred design. Out of all the concepts that were developed by Rishikesh, two stood out as exceptional and – in my opinion – unlike anything on the market. We are currently pursuing patents for both these designs.

It was a pleasure collaborating and interacting with a talented designer such as Rishikesh, and I would like to provide my wholehearted recommendation for him to pursue higher studies at your university. Please feel free to contact me for any further information that I can provide in support of his candidature.

Yours faithfully,

yuan

Ujwal Soni CEO - Masterplast India Private Limited +91 98930 23456 | info@masterplast.in



COLLEGE LETTERHEAD CONFIDENTIAL LETTER OF RECOMMENDATION

It is students like Mr. Rishikesh Sonawane who make teaching such an enriching experience. As the Associate Dean and faculty of Design Business and Technology, I guided him in his pre-thesis project in the 7th semester. During this period, I noticed his dynamism and interactivity in class, which has led him to develop a superior understanding of his subjects especially design techniques. Rishikesh has consistently been amongst the top scorers of his batch. Having observed his progress for more than three years, I am happy to state that he is an intelligent and talented student focused on his goals and committed to his responsibilities. He is an ardent learner; during my association with him, the most prominent qualities I observed were his diligence, willingness to learn, and obedience. He was very punctual with completion of assignments which had innovative answers, which underline his proficiency in concepts. He does not hesitate to ask questions and ensures that he clarifies all his doubts. I have found him to be a hardworking and dedicated student.

Rishikesh comes across as an intelligent student with clear ideas, one who spares no effort to overcome, even the most challenging tasks. He always attempted to find novel approaches to problems, never conforming to existing or pre-laid norms. He has a stronghold over manufacturing tools and techniques, which he can effortlessly channel through his product designing abilities. Using these skillsets, he was able to design and construct a fully operational electric transit vehicle from scratch, which was physically tested in the field. Rishikesh is skilled at using advanced power tools and machines that enabled him to execute such a complex project efficiently, in less time. He also possesses deep knowledge in alternative subjects that gives him an edge over other students and enables him to finish such complex tasks. He developed his interest in using various research techniques to identify consumer groups and map data using charts and diagrams. He made an accurate business model canvas to identify categories such as key partners, value addition, cost structures, and revenue streams. His ability to ask the right questions and conduct his research and studies outside of the classroom helped enrich class discussions and reflected his research potential.

Rishikesh has attended various seminars and workshops. Besides the coursework, he presented and showcased his pre-thesis project at the Bangalore Design Week 2022 conference. He displayed immense working efficiency, exceptional analytical capabilities, and impressive technical writing and presentation skills, establishing himself as a promising young specialist, capable of performing independent research and development. His intelligence, sincerity, and pleasing personality will make him an asset to the graduate program at your university. I recommend him to your graduate school and for any financial assistance you can offer. I am confident he will continue to be a promising and competitive student. I wish him all the success in his future endeavors. I strongly endorse his candidature for graduate studies in Industrial Design.

Riti Sonalcher 08/02/2028

Mrs. Ritu Sonalika (B.Arch., M.Des.) ritu.sonalika@srishti.ac.in Associate Dean – Design Business and Technology



Srishti Institute of Art, Design & Technology



COLLEGE LETTERHEAD CONFIDENTIAL LETTER OF RECOMMENDATION

It gives me immense pleasure to recommend Mr. Rishikesh Sonawane for graduate study and research at your esteemed university. As a professor in this college, I have come across many hardworking students. I am happy to state that Rishikesh is one of the best students I have had the pleasure to interact with. I taught him "Ideation Mechanics, Design Characteristics & Design for Manufacturing" in his first, second and third year. He had consistently performed well in my subjects and had been one of my favorite students from his batch.

Rishikesh has a natural disposition for inquiry, which makes him ask questions and learn more quickly than others. He is sincere, and he engages fully in understanding the subject. His diligence and hardworking habit enabled him to complete his academic obligations on time. His logical approach to complex concepts and the clarity of thought helped him achieve his targets efficiently. A mature student that he is, he will find his way through the rigors of the academic and professional world, and his adroitness will be his dependable ally in his journey to success. A true designer can think differently and put innovative ideas into existence. Rishikesh stood tall among those students who had the innate ability to do so. His particular areas of strength have been identifying problem areas, analyzing consumer demands and designing to cater to their specific needs. He also developed his skills in sketching natural products and highlighting signifiers and affordances. He can build accurate working prototypes and mockups to present his work. He has an excellent grasp of workshop skillsets that include the use of power tools and electricals. He has shown capabilities of working with a variety of materials such as metal, wood, plastics, glass, and cement. He has an exceptional flair for innovation and always strives and learns something new. His strong grip of the core concepts and ability to communicate well through various mediums such as 3D modelling/on-paper sketching convinced me that he has the propensity to become a good and effective teaching assistant.

His engagement with co-curricular activities includes presentation of a term paper on micro-mobility along with his final year pre-thesis project. His paper was very informative, showing his strong understanding of the subject matter, and displayed his superior ability to conduct research and put his thoughts across in a lucid report, which he presented with great panache.

I am happy to know that he wishes to pursue further studies in Industrial Design. This course will further nurture his technical abilities. It will help his exposure to international styles. Based on his overall abilities, I strongly recommend him as a student at your prestigious university.

07.02.2023

Mr. Sukumaran S. (B.E., M.Des.) sukumaran.s@srishti.ac.in Industrial Design Faculty



Srishti Institute of Art, Design & Technology



CONFIDENTIAL LETTER OF RECOMMENDATION

It gives me immense pleasure to write a recommendation for an energetic and bright student like Rishikesh Sonawane. I have had the opportunity to assess his work in my capacity as a Director-Research & Development at A.O. Smith India, as his supervisor for his third-year summer internship. I coached him in Product Manufacturing, Design & Engineering, and Consumer Market Analysis during his tenure. I found him immensely passionate about his studies during my association with him. I can vouch for his academic excellence and competence.

Under my guidance, he was assigned to work on "Designing new products for A.O. Smith India." The aim of the project was to develop new designs for water heaters and water purifiers, in accordance with market trends and competitors. He has also redesigned a few existing products for upgraded technologies and to serve alternate markets. He presented the latest designs with high-quality models and has rendered to the company board. The project was efficiently developed using industry-leading software such as Solidworks, Fusion 360 & Rhino 7 for modelling designs and Key Shot, Adobe Dimensions for creating realistic renders and use case scenarios. He also used Adobe Illustrator and Photoshop for a few products' sticker designs and Shapr 3D for rapid modelling. Rishikesh's project work gave him a chance to gain experience in conducting product research and provided an opportunity to work on frontline improvements using advanced tools and be part of the industry's thrust for excellence. He has designed instructed product lines after conducting market and competitor research and presented multiple designs. His selected designs were modelled using industry-grade 3D software and were handed over to the engineering team for development. He prototyped designs using industrial prototyping methods for review. What stood out distinctly during the project was his propensity to work hard with undeterred focus towards meeting his goals.

He showed excellent mathematical acumen & analytical skills during the project. As a diligent designer, Rishikesh interacted with me extensively during the project and took it upon himself to prepare the presentations, which were interestingly informative, lucid, and comprehensive. I am impressed not only by the hard work he put into acquiring and researching the data but also by his imaginative and ingenious coupling of diverse methods to allow their applications in a variety of remarkable ways.

I very strongly recommend Mr. Rishikesh Sonawane for Graduate Studies at your university and suggest his candidacy as a good contender for financial assistance in the form of a Research or Teaching assistantship. I am confident he will surpass your expectations and be your institution's pride.

102/202

Neeraj Gupta (M.Sc., M.Tech., Ph.D.) neerajg@aosmith.com Director – Research & Development A.O. Smith India A.O. Smith India Water Products Pvt. Ltd. # 300, Phase -II, KIADB Industrial Area, Harohalli, Kanakapura (TQ), Ramanagar - 562 112. Karnataka, INDIA. Phone : +91 80 2801 1200 Fax : +91 80 2801 1205 Website : www.aosmithindia.com CIN : U31909KA2006PTC040282



TO WHOMSOEVER, IT MAY CONCERN

This is to certify that **Mr. Rishikesh Sonawane** a B. Des. (Product Design) student of *Srishti Institute of Art, Design & Technology*, Bengaluru has completed his Summer Internship with **A.O. Smith India Water Product Private Limited**, his project period was from 25th May 2022 to 29th July 2022. He completed his internship in our Engineering Department under the guidance of Dr. Neeraj Gupta (Director R&D – WH & WT), Mr. Rajesh Bhakta (Head WH- Product Engineering) & Mr. Dhanish Dharman (Head WT- Product Engineering).

His internship Duration with A.O. Smith was for 9 weeks.

During his stint in A.O. Smith, he worked on the following projects:

Project 1: Designing of A.O. Smith's new 3-liter Instant water heater as per the briefing given by the WH team. He was guided by Dr. Neeraj Gupta (Director) and Mr. Rajesh Bhakta (WH-HOD) in this project. The design was presented and approved by the engineering & marketing team before being finalized.

Project 2: Designing of A.O. Smith's new VAS-10L and HAS-RH-10L water heater. The design was modelled and was handed over to the engineering team for final changes as per the guidance and briefing given by Dr. Neeraj Gupta (Director) & Basavraj Sankhgond (Assistant Manager-Design). The design was presented and approved by the engineering & marketing team before being finalized.

Project 3: Redesigning of A.O. Smith's 6L SHS storage water heater as per the guidance and briefing given by Mr. Rajesh Bhakta (WH-HOD) & Chandra Mahesh (Assistant Manager-Design). The design was shortlisted as a future prospect for the current design.

Project 4: Designing of A.O. Smith's new compact UV+ SAPC water purifier. Providing a new product design and alternate redesigns for the faucet as per guidance and briefing given by Dr. Neeraj Gupta (Director) & Dhanish Dharman (HOD-WT). The designed was modelled and handed over to the engineering department for development.

Along with the above projects, he was involved in ideating for several water heater and water purifier categories. He was also Involved in providing service cover sticker designs for A.O. Smith's VAS water heaters.

A.O. Smith India Water Products Pvt. Ltd. # 300, Phase -II, KIADB Industrial Area, Harohalli, Kanakapura (TQ), Ramanagar - 562 112. Karnataka, INDA Phone : +91 80 2801 1200 Fax : +91 80 2801 1205 Website : www.aosmithindia.com CIN : U31909KA2006PTC040282



Feedback from the project guides:

Dr. Neeraj Gupta (Director R&D - WH & WT):

Mr. Rishikesh showed quality involvement in our ongoing projects and contributed to the design of several A. O. Smith water heaters & water purifiers. His outcomes were consistent and fit the product guidelines that we provided him with. He was able to coordinate with the engineering team to produce relevant outcomes that have the potential to be considered for our future product portfolio.

Mr. Dhanish Dharman (Senior Manager Engineering-WT):

We got very little time to work with Mr. Rishikesh Sonawane but in this short period, he showed his creativity and his passion for work. During his tenure with AO Smith India, he created some good concepts for our products considering market trends and competitor benchmarks. We wish him all the best in his future endeavors. It was nice working with him.

Mr. Rajesh Bhakta (Head of Department-WH):

Mr. Rishikesh did full justice to the Design Brief given to him during his internship. He was very quick to grasp the A. O. Smith brand values and consistently gave the Water Heater team the deliverables they aspired for. His skill in providing the edge in form and finish over completion is commendable. Given an opportunity, we would be happy to engage with Rishikesh anytime.

Date: 29th July 2022 Place of work: A.O. Smith India Water Products Pvt. Ltd, KIADB Industrial Area, Harohalli, Ramanagara, Karnatakar 562112.



A.O. Smith India Water Products Pvt. Ltd. # 300, Phase -II, KIADB Industrial Area, Harohalli, Kanakapura (TQ), Ramanagar - 562 112. Karnataka, INDIA. Phone : +91 80 2801 1200 Fax : +91 80 2801 1205 Website : www.aosmithindia.com CIN : U31909KA2006PTC040282