**WASABI Innovations –** **Simple. Symbiotic. Sustainable.**

**Manifesto-**

Wasabi is an innovation management and consulting company developing projects in subjects of dire socio-environmental demand. Examples being sustainable energy materials and technologies, quality of air and water resources, health, and security.

Our mission is to contribute to social harmony through projects that are extensions of natural ecosystems - borrowing principles that have worked sustainably for millions of years.

WI projects are interdisciplinary, intersectoral, and international. They are designed to empower existing and emerging infrastructures. We consolidate our core ideas with support from academic partners and we collaborate with industry for development from prototype to scalable pilots. In the process we bridge academic research with the industry, across their social interfaces.

WASABI is an acronym for Water and Surface-Active Bio-mimesis. Each link in our value chain is forged by the *WI Principle*- Simple. Symbiotic. Sustainable.

Materials: We noted a foundational weakness in incumbent structural and functional materials. They do not or rarely constitute living matter. So, we decided to work with materials that are either constituents of living matter or are bio-mimetic. The primary materials we work with are thus water, and natural or nature identical molecules and nanomaterials. The secondary set of materials are bio-mimetic macromolecules and nanoparticles. While water forms the base for our designs, other materials are surface active - they either assemble at water-gas interface or they assemble as micelles or colloids in the liquid phase.

Building Blocks: We work with soap films and composite droplets. Both are simply profound in their character.

We use a soap film as a stretched semipermeable nano-composite membrane, made of a proton conducting aqueous phase sandwiched by self-assembled monolayer of surfactant molecules. Droplets that we use are generally micron and submicron size composites incorporating both structure and function within a single spherical form.

Architectures: Our primary architectural principle is self-assembly. We work with soap bubbles, soap foams, and aerosols as structural architecture hosting functional materials and gases.

Assembled Devices: Our engineering devices prioritise gravity and natural convection as motive potentials. All devices and processes are subjected to LCA (life cycle assessment) and are optimised for minimizing losses and environmental footprint.

Business Model: We are a social enterprise for-profit organization focussed on deriving our enjoyment from our creative pursuit. Our foundational principles are protected by company bylaws. WI team is limited by a maximum 11 employees forming a close-knit family of co-workers.

WI aims to become a holding company spinning off start ups through its innovative projects and managing industry academic coordination for continuous R&D. The company innovation portfolio is envisioned to be driven by grants while revenue is expected through consultancy, IP licensing, and through investment in spinoffs.