This proposal is based on architectural research in the field of performative design. The research aspires to unite computational design and its manufacturing technique into a continuous process of natural morphogenesis. The following program offers a lattice-type wall, a parametric irregular solid network, which can be reified with the attached technology of closed gelatin casting.

The technology is based on thermodynamic interaction between nichrome wires heated with direct current of electricity and meltable materials, such as ice, wax or cured gelatin solution. In a wider perspective it has two scales of application: the first is focused on production of joints for nodes of irregular space frame structures; the second is full-size manufacturing of solid irregular networks. A series of tests on the fabrication process have been run on the scale of a joint element and have proven its feasibility. This gelatin molds are compatible with Epoxy resin and materials based on mineral bindings. A 3’x3’ sample of the final proposal can be produced as an adequate section of the solid network. As a material for the sample, sculpting plaster is considered.
VASILY SITNIKOV has successfully graduated from Staedelschule Architecture Class, with a specialization in Architecture and Performative Design. In his Master thesis the intention was to discover an organic way of implementation of algorithmic design into architectural realm with high emphasis on innovative fabrication methods. In the summer of 2013 the research was awarded the Gunter Bock Prize, and one year later was nominated for the AIV Master Thesis Prize. Since completion of the graduate program Vasily has been working in collaboration with Professor Mirco Becker, exploring the research direction with wider scope of architectural applications. In parallel to this academic activities Vasily is cooperating with a research center of High Performative Concrete SISTROM Ltd, where he has been working as a technologist since 2011.