# Search for magma-analog material in the kitchen

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The essential characteristics of magma in flowing state comes from ,1)viscosity increase by the increase of the crystal fraction under cooling,2)viscosity increase by the reduction of H2O concentration and 3)volume increase and viscosity change associated with the progress of vesiculation. Since these phenomena are associated with the phase changes and sensitive to change of the environments, complicated behavior is expected. Thus simplified and conceptual experiments are necessary to get clear insights on these. Here we report our results on the exploration in the kitchen for the analog material simulating for the complicated magmatic behavior. Starting materials are soymilk,bittern and starch. They are mixed with proper portion and heated up in a microwave. Homogeneous small pieces of tofu are solidified under heating as well as vesiculation steadly advances forming small sized homogeneous bubbles. This state is an ideal form of the analog material for the complex magma.