**Geochemistry and Petrology Group – First response plan in the event of a volcanic eruption**

***Primary tasks***

**Task 1.** Samples of fluids, tephra and rock collected in the field, brought to Reykjavík, handed over to IES personnel

**Task 2.** Fluid samples → care of aqueous geochemistry group

**Task 3.** Tephra samples

**a)** Determine whole-rock chemical composition – rock classification

**b)** Determine chemical composition of glass and minerals - petrography

**c)** Grain shape analysis

**d)** Adsorbed fluoride content, pH → care of aqueous geochemistry group

**e)** Grain size distribution → care of physical volcanology group

**Task 4.** Rock samples

**a)** Determine whole-rock chemical composition – rock classification

**b)** Determine chemical composition of glass and minerals - petrography

***Secondary tasks***

**Task 5.** Inclusion study

**a)** Petrographic study

**b)** Determine volatile content of glass inclusions

**c)** Determine chemical composition of inclusions