



**Figure 5.** Univariant curves around the invariant point biotite-sillimanite-garnet-cordierite-orthopyroxene in the composition space  $\text{Al}_2\text{O}_3$  -  $\text{FeO}$  -  $\text{MgO}$  -  $\text{SiO}_2$  -  $\text{KAlSi}_3\text{O}_8$  -  $\text{H}_2\text{O}$  with  $\text{Al}_2\text{O}_3$ ,  $\text{FeO}$ , and  $\text{MgO}$  as  $j$ -components and  $\text{SiO}_2$ ,  $\text{KAlSi}_3\text{O}_8$ , and  $\text{H}_2\text{O}$  as  $k$ -components.