

## APPENDIX 1A

### EMP analyses of K-feldspar from the biotite-muscovite granites of the Strzelin Massif

	Gromnik												
	1	2	3	4	5	6	7	8	9	10	11	12	13
SiO <sub>2</sub>	64.15	64.61	64.96	64.45	64.41	64.81	64.74	64.52	64.84	65.29	64.95	63.68	64.25
Al <sub>2</sub> O <sub>3</sub>	18.71	18.57	18.29	18.4	18.57	18.47	18.41	18.58	18.36	18.36	18.35	18.82	18.64
CaO	0	0	0.03	0	0	0.03	0	0	0	0.02	0	0.03	0
MnO	–	–	–	–	–	–	–	–	–	–	–	–	–
FeO	0	0	0.07	0	0	0.03	0.04	0.10	0.16	0	0.10	0.01	0.11
SrO	–	–	–	–	–	–	–	–	–	–	–	–	–
BaO	0.21	0.17	0.17	0.20	0.37	0.08	0.08	0.10	0.33	0.04	0.04	1.37	1.29
Na <sub>2</sub> O	0.47	0.39	0.22	0.45	0.50	0.96	0.6	0.86	0.42	1.09	1.11	1.00	1.26
K <sub>2</sub> O	16.21	16.13	16.51	15.79	15.92	15.31	16.20	15.46	15.81	15.17	15.44	14.61	14.65
Sum	99.75	99.87	100.25	99.29	99.77	99.69	100.07	99.62	99.92	99.97	99.99	99.52	100.2
based on 8 O													
Si	2.979	2.992	3.001	2.997	2.988	2.996	2.994	2.989	3.000	3.005	2.997	2.971	2.978
Al	1.024	1.013	0.996	1.009	1.016	1.006	1.003	1.014	1.001	0.996	0.998	1.035	1.018
Fe <sup>+2</sup>	0	0	0.003	0	0	0.001	0.002	0.004	0.006	0	0.004	0	0.004
Mn	–	–	–	–	–	–	–	–	–	–	–	–	–
Ca	0	0	0.001	0	0	0.002	0	0	0	0.001	0	0.002	0
Sr	–	–	–	–	–	–	–	–	–	–	–	–	–
Ba	0.004	0.003	0.003	0.004	0.007	0.001	0.001	0.002	0.006	0.001	0.001	0.025	0.023
Na	0.042	0.035	0.020	0.040	0.045	0.086	0.053	0.077	0.037	0.097	0.099	0.090	0.113
K	0.960	0.953	0.973	0.937	0.942	0.903	0.956	0.914	0.933	0.891	0.909	0.869	0.866
Sum	5.009	4.995	4.997	4.987	4.997	4.995	5.009	4.999	4.984	4.991	5.008	4.992	5.003
or	95.5	96.2	97.6	95.5	94.8	91	94.6	92.1	95.6	90	90.1	88.2	86.4
ab	4.2	3.5	2	4.1	4.5	8.7	5.3	7.8	3.8	9.8	9.8	9.1	11.3
an	0	0	0.1	0	0	0.2	0	0	0	0.1	0	0.2	0
cls	0.4	0.3	0.3	0.4	0.7	0.1	0.1	0.2	0.6	0.1	0.1	2.5	2.3

## APPENDIX 1B

	Gębczyce															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
SiO <sub>2</sub>	64.35	64.80	64.53	64.88	64.75	64.44	63.8	64.43	64.22	63.89	64.34	64.32	64.40	64.61	64.69	64.33
Al <sub>2</sub> O <sub>3</sub>	18.34	18.28	18.17	18.17	18.15	18.10	18.25	18.14	18.08	18.27	18.04	18.00	18.05	18.23	18.05	18.12
CaO	0	0	0	0	0	0.01	0.10	0.04	0.03	0	0.03	0	0	0	0	0
MnO	0	0	0.01	0	0	0	0.03	0	0	0.02	0	0	0	0.03	0	0
FeO	0.01	0	0	0.02	0.03	0.02	0.01	0	0	0.05	0	0	0	0.03	0	0.01
SrO	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
BaO	0.26	0.15	0.12	0.16	0.26	0.35	0.65	0.40	0.30	0.29	0.11	0.21	0.18	0.25	0.12	0.11
Na <sub>2</sub> O	0.52	1.04	0.57	0.94	0.73	0.56	0.67	0.95	0.71	0.59	0.88	0.76	0.83	1.09	0.42	0.28
K <sub>2</sub> O	16.04	15.26	16.06	15.24	15.64	15.56	15.29	15.28	15.75	15.76	15.59	15.74	15.39	15.15	16.17	16.46
Sum	99.52	99.53	99.46	99.41	99.56	99.04	98.8	99.24	99.09	98.87	98.99	99.03	98.85	99.39	99.45	99.31

Si	2.994	3.001	3.001	3.007	3.005	3.006	2.991	3.000	3.000	2.991	3.002	3.004	3.006	3.000	3.008	3.001
Al	1.006	0.998	0.996	0.993	0.993	0.995	1.008	0.996	0.995	1.008	0.992	0.991	0.993	0.998	0.989	0.996
Fe <sup>+2</sup>	0	0	0	0.001	0.001	0.001	0	0	0	0.002	0	0	0	0.001	0	0
Mn	0	0	0	0	0	0	0.001	0	0	0.001	0	0	0	0.001	0	0
Ca	0	0	0	0	0	0	0.005	0.002	0.001	0	0.001	0	0	0	0	0
Sr	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Ba	0.005	0.003	0.002	0.003	0.005	0.006	0.012	0.007	0.005	0.005	0.002	0.004	0.03	0.005	0.002	0.002
Na	0.047	0.093	0.051	0.084	0.066	0.050	0.061	0.086	0.064	0.053	0.08	0.069	0.075	0.098	0.038	0.026
K	0.952	0.902	0.953	0.901	0.926	0.926	0.915	0.908	0.938	0.941	0.928	0.937	0.916	0.897	0.959	0.980
Sum	5.004	4.997	5.003	4.989	4.996	4.984	4.993	4.999	5.003	5.001	5.005	5.005	4.993	5.000	4.996	5.005

or	94.9	90.4	94.7	91.2	92.9	94.2	92.2	90.5	93	94.1	91.7	92.8	92.1	89.7	96	97.3
ab	4.7	9.3	5.1	8.5	6.6	5.1	6.1	8.6	6.3	5.3	7.9	6.8	7.5	9.8	3.8	2.5
an	0	0	0	0	0	0	0.5	0.2	0.1	0	0.1	0	0	0	0	0
cls	0.5	0.3	0.2	0.3	0.5	0.6	1.2	0.7	0.5	0.5	0.2	0.4	0.3	0.5	0.2	0.2

## APPENDIX 1C

	Górka												
	1	2	3	4	5	6	7	8	9	10	11	12	13
SiO <sub>2</sub>	63.94	63.93	64.61	64.48	64.62	64.48	64.78	64.99	64.33	65.27	64.79	64.21	64.73
Al <sub>2</sub> O <sub>3</sub>	18.44	18.57	18.54	18.75	18.58	18.27	18.3	18.02	18.56	18.37	18.20	18.70	18.73
CaO	0.04	0.01	0	0.03	0.12	0.03	0.01	0	0.02	0	0	0.06	0.02
MnO	0.02	0	0.02	0	0	0.01	0	0.01	0	0	0.07	0.05	0
FeO	0	0.02	0.02	0.03	0	0.01	0.09	0	0	0.06	0	0.06	0
SrO	–	–	–	–	–	–	–	–	–	–	–	–	–
BaO	0.86	0.49	0.07	1.35	0.16	0.12	0.1	0.06	0.79	0.33	0.13	0.55	0.43
Na <sub>2</sub> O	0.62	0.75	0.64	1.61	0.98	0.77	0.94	1.1	1.23	0.34	0.96	0.43	1.07
K <sub>2</sub> O	15.09	15.13	15.55	13.74	15.42	15.26	14.84	14.59	14.19	15.56	14.62	14.92	14.17
Sum	0	98.9	99.45	99.99	99.88	98.95	99.06	98.77	99.12	99.93	98.77	98.98	99.15

Si	2.989	2.986	2.995	2.981	2.987	3.002	3.006	3.019	2.992	3.011	3.012	2.990	2.996
Al	1.016	1.022	1.013	1.022	1.012	1.002	1.001	0.987	1.017	0.998	0.997	1.026	1.022
Fe <sup>+2</sup>	0	0.001	0.001	0.001	0	0	0.003	0	0	0.002	0	0.002	0
Mn	0.001	0	0.001	0	0	0	0	0	0	0	0.003	0.002	0
Ca	0.002	0	0	0.002	0.006	0.002	0	0	0.001	0	0	0.003	0.001
Sr	–	–	–	–	–	–	–	–	–	–	–	–	–
Ba	0.016	0.009	0.001	0.024	0.003	0.002	0.002	0.001	0.014	0.006	0.002	0.010	0.008
Na	0.056	0.068	0.058	0.144	0.088	0.07	0.085	0.099	0.110	0.030	0.086	0.039	0.096
K	0.900	0.901	0.919	0.811	0.909	0.906	0.878	0.864	0.842	0.915	0.867	0.886	0.837
Sum	4.980	4.987	4.988	4.985	5.005	4.984	4.975	4.970	4.976	4.962	4.967	4.958	4.96

or	92.4	92.1	93.9	82.6	90.3	92.5	91	89.7	87	96.2	90.7	94.4	88.8
ab	5.8	6.9	5.9	14.7	8.8	7.1	8.8	10.2	11.4	3.2	9	4.2	10.2
an	0.2	0	0	0.2	0.6	0.2	0	0	0.1	0	0	0.3	0.1
cls	1.6	0.9	0.1	2.5	0.3	0.2	0.2	0.1	1.5	0.6	0.2	1.1	0.8

### APPENDIX 1D

	Gęsiniec								
	1	2	3	4	5	6	7	8	9
SiO <sub>2</sub>	64.69	65.08	64.57	64.94	64.42	65.12	64.37	64.48	64.47
Al <sub>2</sub> O <sub>3</sub>	18.28	18.70	18.72	18.55	18.17	18.56	18.60	18.58	18.71
CaO	0	0	0.04	0	0	0	0.02	0	0.02
MnO	0	0.01	0	0	0.05	0	0	0.06	0
FeO	0	0.03	0.01	0	0	0	0.04	0.02	0.05
SrO	–	–	–	–	–	–	–	–	–
BaO	0.11	0.09	0.52	0.11	0.11	0.22	0	0.33	0.30
Na <sub>2</sub> O	0.57	1.24	1.41	0.96	0.63	0.93	0.89	1.08	1.29
K <sub>2</sub> O	15.68	14.70	14.43	15.27	15.60	14.96	15.00	14.88	14.75
Sum	99.33	99.85	99.7	99.83	98.98	99.79	98.92	99.43	99.59

Si	3.004	2.995	2.985	2.996	3.003	3.001	2.992	2.990	2.984
Al	1.000	1.014	1.020	1.009	0.998	1.008	1.019	1.015	1.021
Fe <sup>+2</sup>	0	0.001	0	0	0	0	0.002	0.001	0.002
Mn	0	0	0	0	0.002	0	0	0.002	0
Ca	0	0	0.002	0	0	0	0.001	0	0.001
Sr	–	–	–	–	–	–	–	–	–
Ba	0.002	0.002	0.009	0.002	0.002	0.004	0	0.006	0.005
Na	0.052	0.11	0.126	0.086	0.057	0.083	0.080	0.097	0.116
K	0.929	0.863	0.851	0.899	0.928	0.880	0.890	0.880	0.871
Sum	4.987	4.985	4.993	4.992	4.990	4.976	4.983	4.991	4.999

or	94.5	88.5	86.1	91.1	94	91	91.6	89.6	87.7
ab	5.3	11.3	12.8	8.7	5.8	8.6	8.3	9.8	11.7
an	0	0	0.2	0	0	0	0.1	0	0.1
cls	0.2	0.2	1	0.2	0.2	0.4	0	0.6	0.5

### APPENDIX 1E

	Strzelin I Quarry															
	1	2	3	4	5	6	7	8	9	11	12	13	14	15	16	
SiO <sub>2</sub>	64.47	64.56	64.13	63.75	63.31	64.34	64.45	63.01	64.40	63.14	63.92	64.04	64.15	63.33	64.30	
Al <sub>2</sub> O <sub>3</sub>	18.46	18.17	18.31	18.03	17.27	18.26	18.41	18.05	18.29	18.44	18.51	18.49	18.74	19.16	18.63	
CaO	0.03	0	0.05	0	0	0.05	0	0	0	0	0	0.02	0	0.03	0	
MnO	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
FeO	0.07	0	0.04	0.52	0.48	0.02	0.12	0	0	0	0	0	0	0.01	0	
SrO	0.01	0	0.01	0	0	0.02	0	0.01	0.09	–	–	–	–	–	–	
BaO	0.03	0.13	0.13	0.69	0.11	0.08	0	0.13	0.05	0	0.01	0.19	0	1.18	0.08	
Na <sub>2</sub> O	1.38	1.28	1.16	0.12	0.06	0.62	0.71	0.29	0.99	0.20	0.72	0.88	1.21	1.23	1.04	
K <sub>2</sub> O	14.79	14.75	15.00	15.58	15.94	15.95	16.05	16.09	15.34	16.20	15.49	15.32	14.55	14.49	15.30	
Sum	99.24	98.89	98.83	98.69	97.17	99.34	99.74	97.58	99.16	97.98	98.65	98.93	98.64	99.44	99.35	

Si	2.991	3.004	2.992	2.998	3.018	2.995	2.990	2.991	2.996	2.982	2.988	2.987	2.986	2.955	2.985
Al	1.009	0.997	1.007	0.999	0.970	1.002	1.006	1.010	1.003	1.026	1.020	1.017	1.028	1.054	1.019
Fe <sup>+2</sup>	0.003	0	0.001	0.020	0.019	0.001	0.004	0	0	0	0	0	0	0	0
Mn	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Ca	0.001	0	0.002	0	0	0.002	0	0	0	0	0	0.001	0	0.001	0
Sr	0	0	0	0	0	0.001	0	0	0.003	–	–	–	–	–	–
Ba	0.001	0.002	0.002	0.013	0.002	0.001	0	0.002	0.001	0	0	0.003	0	0.022	0.001
Na	0.124	0.115	0.105	0.011	0.006	0.056	0.063	0.027	0.089	0.018	0.065	0.08	0.109	0.111	0.094
K	0.875	0.875	0.893	0.935	0.969	0.947	0.950	0.974	0.911	0.976	0.924	0.912	0.864	0.862	0.906
Sum	5.004	4.993	5.002	4.976	4.984	5.005	5.013	5.004	5.003	5.002	4.997	5.000	4.987	5.005	5.005

or	87.5	88.1	89.1	97.6	99.2	94	93.7	97.1	91	98.2	93.4	91.6	88.8	86.5	90.5
ab	12.4	11.6	10.4	1.1	0.6	5.6	6.3	2.7	8.9	1.8	6.6	8	11.2	11.2	9.3
an	0.1	0	0.2	0	0	0.2	0	0	0	0	0	0.1	0	0.2	0
cls	0.1	0.2	0.2	1.3	0.2	0.1	0	0.2	0.1	0	0	0.3	0	2.2	0.1