More *basic lithotypes* ranging in composition from leucogabbro to melatonalite, also occur, as fine-grained hectometer-sized bodies, dark microganular inclusions and mafic dikes: they are characterized by the assemblage plagioclase + clinopyroxene + amphibole +/— olivina +/— biotite +/— quartz.

The whole igneous suite is crosscut by a swarm of *felsic dykes* including granitic porphyries, microgranite, leucogranite, aplite and pegmatite.

Field, petrological, modal and geochemical data suggest the Sila granitoids, as a whole belong to a calcalkaline magmatic suite, which derives, by a fractionation process, from a parental magma of high-alumina basaltic composition. The most primitive members of the suite are mafic dykes, dark microgranular inclusion and fine-grained bodies. The more fractionated members are represented by the subordinate igneous units and felsic dykes.

The process responsable for the fractionation of the Sila granitoid series must have taken place under relatively different physical and chemical conditions, especially as regard to the H_2O activity. This is shown by the presence of three calcalkaline magmatic trends, defined by different K content.

* Istituto di Scienze della Terra, Papardo - 98010 Sant'Agata, Messina (Italy). ** Dipartimento di Scienze della Terra, Università «La Sapienza», 00100 Roma (Italy). *** Dipartimento di Scienze della Terra - via Valperga Caluso, 7 - 10125 Torino (Italy). **** Dipartimento di Scienze della Terra - Largo San Marcellino, 10 - 83138 Napoli (Italy). ***** U.S. Geological Survey - Reston - 22092 Virginia (U.S.A.).

MESSINA A.*, RUSSO S.*, STAGNO F.*, CALANDRA M.* - *Contribution to the knowdledge of late Hercynian peralumious granitoids of the Calabrian-Peloritan Arc (Southern Italy): Monte Cacciagrande, granite - Stilo Unit*

The Stilo Unit basement (Calabrian-Peloritan Arc is composed mainly of late-Hercyniac composite plutons. The paper describes the results of the studies on the Monte Cacciagrande granitoid stock, southernmost Serre, near the tectonic contact against the underlying Aspromonte Unit.

The monzogranitic to granodioritic Monte Cacciagrande stock is characterized by the occurrence of K-feldspar megacrysts. Its calc-alkaline peraluminous character is shown by the presence of muscovite and minor sillimanite, andalusite and cordierite. The chemical composition indicates that it is a single body with an internal fractionation. This granitoid was affected by a deformative — though not pervasive — event which causes cataclastic to flaser structures.

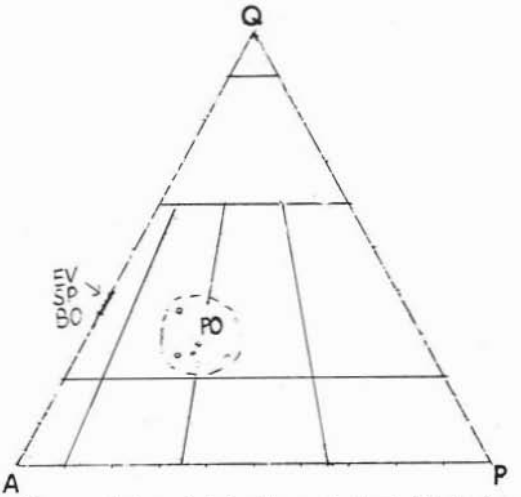
Compared with the other intrusive of Stilo Unit, the Monte Cacciagrande granite is crearly different from the nearby peraluminous Cittanova granite, but it shows a common origin with the two bi ± ms, bi ± amph granite to granodiorite stocks from the Serre. The felsic and peraluminous character higher than that one of the two stocks of the Serre, suggests for the Monte Cacciagrande granite a more advanced stage of magmatic evolution.

The deformative event is most likely related to the Oligocene emplacement of the Stilo and Aspromonte Units during the Alpine orogeny.

* Istituto di Scienze della Terra - Papardo - 98010 Sant'Agata, Messina (Italy).

MIGHELI A.* - *Petrographical and petrochemical features of some permian granites of the complex of M. Cinto area (north-western part of Corsica)*

Several granitic samples from the ring complex of M. Cinto area (nort-western part of Corsica) were analysed.



These rocks intruded the Hercynian batholith during Permian and are related to a thick layered series of acid volcanites, mostly of ignimbritic type.

According to analytical results, it is possibile to distinguish two different granites: the first one (Bonifato, Spasimata and Evisa) is of peralkaline type, with a low CaO content (except for samples carrying fluorite), while the second one (Massif of Popolasca) is characterized by a major CaO and Al_2O_3 content, as shown in the following table:

	Peralkaline granites			Popolasca granites
	BO (average an. on 6 samples)	SP (average an. on 10 samples)	EV (average an. on 3 samples)	PO (average an. on 6 samples)
SiO_2	75.69	77.19	77.19	70.68
TiO_2	0.15	0.13	0.08	0.41
Al_2O_3	12.53	11.62	11.79	14.32
Fe_2O_3	0.98	1.11	0.55	0.98
FeO	1.04	1.24	0.56	2.22
MnO	0.03	0.02	0.02	0.06
MgO	0.05	0.43	0.05	0.37
CaO	0.37	0.04	0.18	1.52
Na_2O	3.74	3.31	4.29	4.47
K_2O	4.67	3.94	4.61	3.91
P_2O_5	0.01	—	0.01	0.10
F_2	0.17	—	—	—
H_2O	0.57	0.97	0.67	0.96

The chemical differences are due to distinct mineral contents, in particular the feldspar type.

Microprobe analyses are in progress to determine chemical composition of the most significative minerals.

The Streckeisen modal diagram clearly displays the mineralogy of the granitic samples.

* Dipartimento di Scienze della Terra, Università «La Sapienza», Roma (Italy).

ONDARROA C.*, PESQUERA A.*, GIL P.P.* - *Mineralogy and geochemical features of the pegmatites from the Massif of Ursuya (Western Pyrenees, France)*

The Massif of Ursuya comprises two large lithological assemblages (1) a lower gneissic complex, where aluminous rocks of the granulite facies occur; (2) a heterogeneous complex above the former, composed of gneisses and Cambro-Ordovician micaschists with sillimanite. The pegmatites are associated mainly to the latter complex. The presence of small size (< 500 m) leucogranitic bodies should also be noted SW of the Massif.

The pegmatites occur mainly as lenticular bodies, conforming to the fabric of the host rocks, with a medium-to-coarse-grain granitic overall texture, where graphic local textures are observed. Fracture-filling pegmatites also appear but to a lesser extent.

The mineral assemblage observed in the samples is quartz + K-feldspar + oligoclase ± biotite ± muscovite ± Fe-Ti oxides ± tourmaline ± apatite ± sillimanite ± garnet. The K-feldspar presents a variable structural state, from orthoclase to maximum microcline, and perthitic texture (film, vein and patch perthites mainly) and it often displays a cross-hatched texture or grid twinning, typical of microcline.

The Or bulk percentage from the samples homogeneized at 1050°C determined by X-ray diffraction methods (WRIGHT, 1968) ranges between 79% Or and 91% Or, and the compositional Or contents of the K-rich phase calculated from the cell volumen (KROLL & RIBBE, 1983), varies between 89% Or and 100% Or. The oligoclase cystals shows sometimes a patchy-zoning, And myrmekitic intergrowth close to K-felspar.

The tourmaline is a fine or coarse sized accessory mineral, with a zoning appearing optically as brown-yellowish inner zones and greenish outer zones. The sillimanite and garnet appear occasionally, and the proportion of sillimanite increases towards the host rocks.

X-ray fluorescence analysis of pegmatite representative samples, reveals relatively low contents of Li (< 200 ppm), Rb (< 600 ppm), Sr (< 400 ppm), Sn (< 20 ppm), Pb (< 150 ppm), Zn (< 30 ppm), W (< 20 ppm), Y (< 20 ppm), and the concentrations of other elements such as Nb, Ta, Be, La, Y, Ce are below the detection limit. The distribution of trace elements in muscovite samples is within the variation ranges reported for barren and muscovite-bearing pegmatites (CERNY & BURT, 1984): K/Rb = 60-300, Li (200-500 ppm), Ba (100-1500 ppm), Ti (800-3500 ppm), V (10-100 ppm), Sc (< 20 ppm), Ni (< 10 ppm), Cr (10-50 ppm), Sn (< 20 ppm), Ga (70-150 ppm), Zn (30-120 ppm), and other elements such as Be, Pb, Sr and Zr are usually below the detection limit.

The field observations, and the mineralogy and geochemical data suggest that the pegmatite bodies from the Massif of Ursuya correspond to the ceramic and mica-bearing pegmatite types according to the classification by RUDENKO et al. (1975), or to the III and IV types according to GINSBURG et al. (1979). Consequently, its origin wuold be related to deep crustal levels, where a metamorphism in the anphibolite facies and in the granulite facies occurs, accompanied by a partial melting phenomenon. This is supported by the studies carried out by VIELZEUF (1984) on the gneisses of this Massif, which estimated an approximate P-T condition of 5.5 Kb and 750°C.

REFERENCES

CERNY P., BURT D.M.. (1984) - In «*Micas*», Miner. Soc. Amer. 13, 257-297.

GINSBURG A.I., TIMOFEYEV I.N., FELDMAN L.G. (1979) - Nedra Moscow, 296 pp.

KROLL H., RIBBE P.H. (1983) - In «*Feldspar Mineralogy*» *(2nd ed., P.H. Ribbe ed.).* Miner. Soc. Amer., Rev. Mineral. 2, 57-99.

RUDENKO S., ROMANOV V.A., MORAKHOVSKYI V.N., TARASOV E.B., GALKIN G.A., DOROKHIN V.K. (1975) - In «*Muscovite pegmatites of the URSS*», Nauka Leningrad, 174-182.

VIELZEUF D. (1984) - Ann. Scient. de l'Universite de Clermont-Ferrand II, These Doct.

WRIGHT T.L. (1968) - Amer. Mineral. 53, 88-104.

* Dpto. Mineralogia, Universidad del Pais Vasco - Apdo. 644 - 48071 Bilbao (España).

ORLANDI P.*, VEZZALINI G.** - *Calcioancylite from Baveno (Novara, Italy)*

Calcioancylite, found in a pegmatitic cavity at the Montecatini quarry (Baveno), shows a prismatic bipyramidal habit; crystals (1 mm long), trasparent, pale pink coloured, show a vitreous lustre.

The identification was carried out through X-ray powder diffraction.

The single crystal indicated systematic absences compatible with the space group Pmcn assumed by DAL NEGRO et al., 1975.

A density hygher than 4.02 was indicated by heavy liquid method (Clerici solution). All the chemical data are collected in the following crystallochemical formula given on the basis of RE + Ca = 4.

$Nd_{0.90}Ce_{0.64}Sm_{0.33}Gd_{0.27}Y_{0.26}Pr_{0.15}La_{0.14}Dy_{0.07}Tm_{0.03}Ca_{1.20}(CO_3)_{3.98}(OH)_{2.81}.1.2H_2O$ ore more compactly $RE_{2.8}Ca_{1.2}(CO_3)_4(OH)_{2.8}.1.2H_2O$.

The relations between calcioancylite and «weibyeite (ARTINI, 1915) are discussed.

* Dipartimento di Scienze della Terra, Università di Pisa (Italy.
** Istituto di Mineralogia, Università di Modena.