

ANALIZA MODALA a ROCILOR SEDIMENTARE

Definitii - principii

- Prin analiza modala evaluam participarea cantitativa a componentilor in roca (pe care o exprimam in % pentru fiecare component in parte.
- In functie de scopul urmarit si de forma de reprezentare aleasa (histograma, diagrama binara, diagrama ternara, tetraedru..) se apeleaza la recalcularea componentilor alesi pentru a fi reprezentati, tot in % fata de 100%

Exemplu :

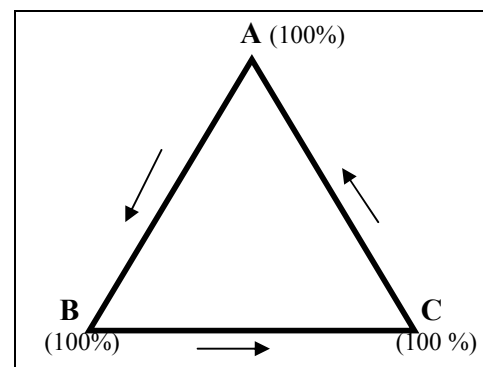
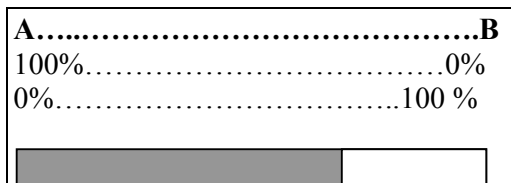
Particule = 70 %	Liant = 30 %
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Claste = 60% Alocheme = 30% Bioclaste = 10%	Cuart (Q) = 75 % Feldspati (F) = 10 % Litice (L) = 15%
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- Evaluarea procentelor de participare se face cu masa de integrare , la microscop , sau cu ajutorul comparatoarelor vizuale (vezi plansa) (depinde de scara la care se lucreaza si de informatiile care se cer.).

Rezultatele integrarii se proiecteaza, pentru fiecare situatie in parte, in diagrame binare sau diagrame ternare, de tipul:



Aplicatie

Examen microscopic

1. Integrati trei sectiuni efectuate in roci eterogene (1,2,3) ,formate din liant si particule si notati procentele de participare in tabel. Proiectati datele in diagrame binare sau ternare – dupa caz – si incercati sa dati un diagnostic. Consultati Modulul 16.

Relatia Particule : Liant	%			Criteriul genetic	%			Criteriul mineralogic	%		
	1	2	3		1	2	3		1	2	3
Particule				Tipuri de particule				Siliciclaste			
				Claste (grano+litocla ste)				Cuart – Q			
				Bioclaste				Feldspati – F			
				Alocheme				Fragmente litice - L			
				Total:	100 %			Total:	100%		
Liant				Matrice:							
				Ciment:							
Total :	100 %			Total:	100 %						

Table 1 - Leordina Nappe

	Section/ Sample		Section/ Sample		Section/ Sample		Section/ Sample		Section/ Sample		Section/ Sample		Section/ Sample		Section/ Sample	
	1/59		1/61		1/63a		2/137		2/138		2/139a		3/112		3/136	
	Formation		Formation		Formation		Formation		Formation		Formation		Formation		Formation	
	Voroniciu Sst.		Voroniciu Sst.		Rozavlea Fm.		Voroniciu Sst.		Voroniciu Sst.		Rozavlea Fm.		Voroniciu Sst.		Rozavlea Fm.	
	N°grains	%	N°grains	%	N°grains	%	N°grains	%	N°grains	%	N°grains	%	N°grains	%	N°grains	%
Qm	102	51.0	85	42.5	75	37.5	106	53.0	88	44.0	55	27.5	68	34.0	74	37.0
F	51	25.5	65	32.5	63	31.5	50	25.0	52	26.0	67	33.5	65	32.5	48	24.0
Lt	47	23.5	50	25.0	62	31.0	44	22.0	60	30.0	78	39.0	67	33.5	78	39.0
Tot	200	100.0	200	100.0	200	100.0	200	100.0	200	100.0	200	100.0	200	100.0	200	100.0
Lm	110	55.0	101	50.5	102	51.0	126	63.0	125	62.5	90	45.0	121	60.5	116	58.0
Lv	23	11.5	23	11.5	20	10.0	24	12.0	18	9.0	21	10.5	36	18.0	15	7.5
Ls	67	33.5	76	38.0	78	39.0	50	25.0	57	28.5	89	44.5	43	21.5	69	34.5
Tot	200	100.0	200	100.0	200	100.0	200	100.0	200	100.0	200	100.0	200	100.0	200	100.0

Table 2 - Petrova Nappe

	Section/ Sample		Section/ Sample		Section/ Sample		Section/ Sample		Section/ Sample		Section/ Sample		Section/ Sample		Section/ Sample	
	2/141		4/113		5/38a		5/38c		5/40		5/42		5/45		5/49	
	Formation		Formation		Formation		Formation		Formation		Formation		Formation		Formation	
	Petrova Fm.		Petrova Fm.		Stramtura Sst.		Stramtura Sst.		Stramtura Sst.		Stramtura Sst.		Stramtura Sst.		Petrova Fm.	
	N°grains	%	N°grains	%	N°grains	%	N°grains	%	N°grains	%	N°grains	%	N°grains	%	N°grains	%
Qm	82	41.0	96	48.0	92	46.0	85	42.5	89	44.5	96	48.0	80	40.0	83	41.5
F	36	18.0	34	17.0	40	20.0	73	36.5	69	34.5	60	30.0	68	34.0	66	33.0
Lt	82	41.0	70	35.0	68	34.0	42	21.0	42	21.0	44	22.0	52	26.0	51	25.5
Tot	200	100.0	200	100.0	200	100.0	200	100.0	200	100.0	200	100.0	200	100.0	200	100.0
Lm	143	71.5	136	68.0	130	65.0	125	62.5	128	64.0	124	62.0	132	66.0	128	64.0
Lv	16	8.0	14	7.0	16	8.0	18	9.0	22	11.0	28	14.0	24	12.0	20	10.0
Ls	41	20.5	50	25.0	54	27.0	57	28.5	50	25.0	48	24.0	44	22.0	52	26.0
Tot	200	100.0	200	100.0	200	100.0	200	100.0	200	100.0	200	100.0	200	100.0	200	100.0

	Section/ Sample		Section/ Sample		Section/ Sample		Section/ Sample	
	6/149		6/147		6/145		6/143	
	Formation		Formation		Formation		Formation	
	Stramtura Sst.		Stramtura Sst.		Stramtura Sst.		Stramtura Sst.	
	N°grains	%	N°grains	%	N°grains	%	N°grains	%
Qm	72	36.0	89	44.5	95	47.5	84	42.0
F	29	14.5	64	32.0	66	33.0	37	18.5
Lt	99	49.5	47	23.5	39	19.5	79	39.5
Tot	200	100.0	200	100.0	200	100.0	200	100.0
Lm	90	45.0	103	51.5	109	54.5	98	49.0
Lv	39	19.5	22	11.0	28	14.0	32	16.0
Ls	71	35.5	75	37.5	63	31.5	70	35.0
Tot	200	100.0	200	100.0	200	100.0	200	100.0