

# Textura e composição de sedimentos finos

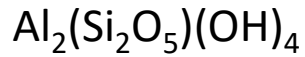
GSA0252-Sedimentologia

# Composição vs. Granulação

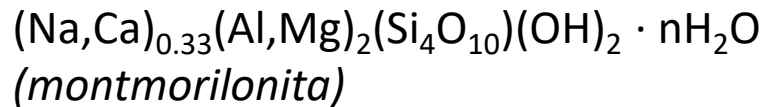
mm	phi	Name	
256	-8	Boulders	
128	-7		
64	-6	Cobbles	
32	-5		<b>Gravel Conglomerate</b>
16	-4		
8	-3	Pebbles	
4	-2		
		Granules	
2	-1		
		Very coarse sand	
1	0		
		Coarse sand	<b>Sand Sandstone</b>
0.5	1		
		Medium sand	
0.25	2		
		Fine sand	
0.125	3		
		Very fine sand	
0.063	4		
		Coarse silt	<b>Mud Mudrock</b>
0.031	5		
		Medium silt	
0.0156	6		
		Fine silt	
0.0078	7		
		Very fine silt	
0.0039	8		
		Clay	

# Composição vs. Granulação

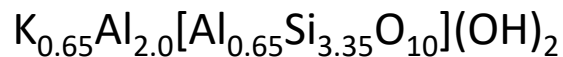
*Caulinita*



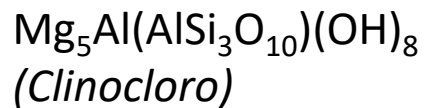
*Esmectita*



*Ilita*



*Clorita*



mm	phi	Name	
256	-8	Boulders	Gravel Conglomerate
128	-7		
64	-6	Cobbles	
32	-5		
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8	-3	Pebbles	Sand Sandstone
4	-2	Granules	
2	-1	Very coarse sand	
1	0	Coarse sand	
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0.25	2	Fine sand	
0.125	3	Very fine sand	
0.063	4	Coarse silt	Mud Mudrock
0.031	5	Medium silt	
0.0156	6	Fine silt	
0.0078	7	Very fine silt	
0.0039	8	Clay	

Fragmentos líticos

Quartzo e feldspato

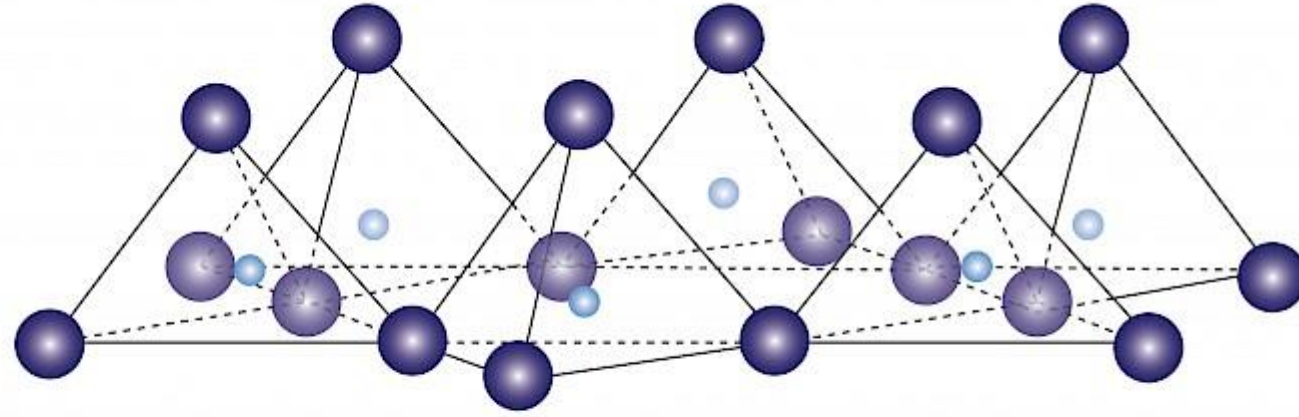
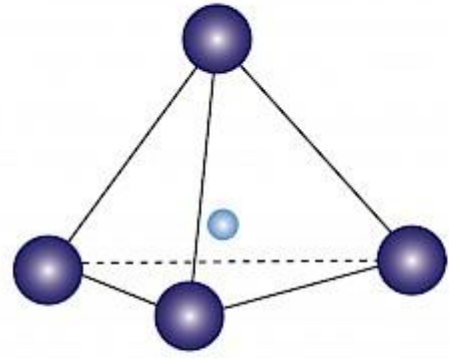
Argilominerais

*'Bolas misteriosas' tomam praia no litoral de SP e intrigam moradores: 'Impressionante' (G1)*

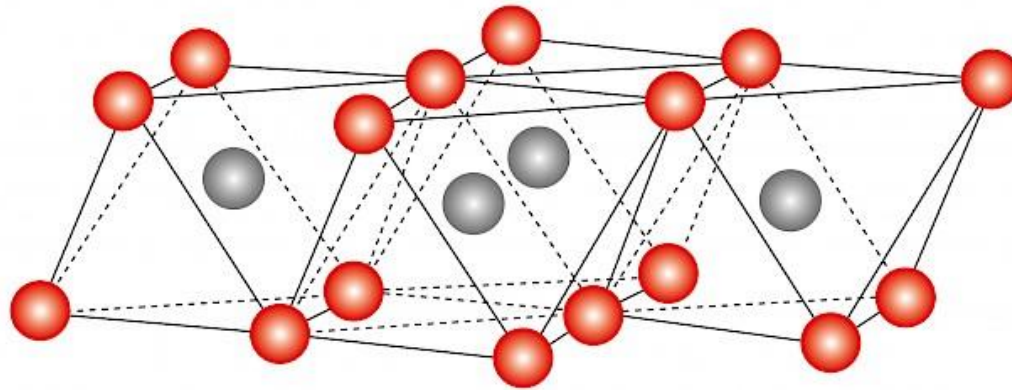
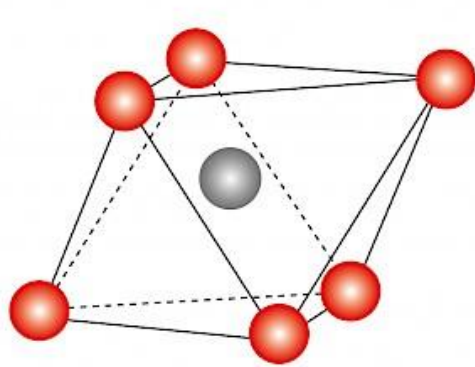
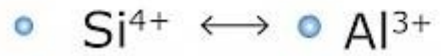




# Argilominerais (filossilicatos)



Tetraedros

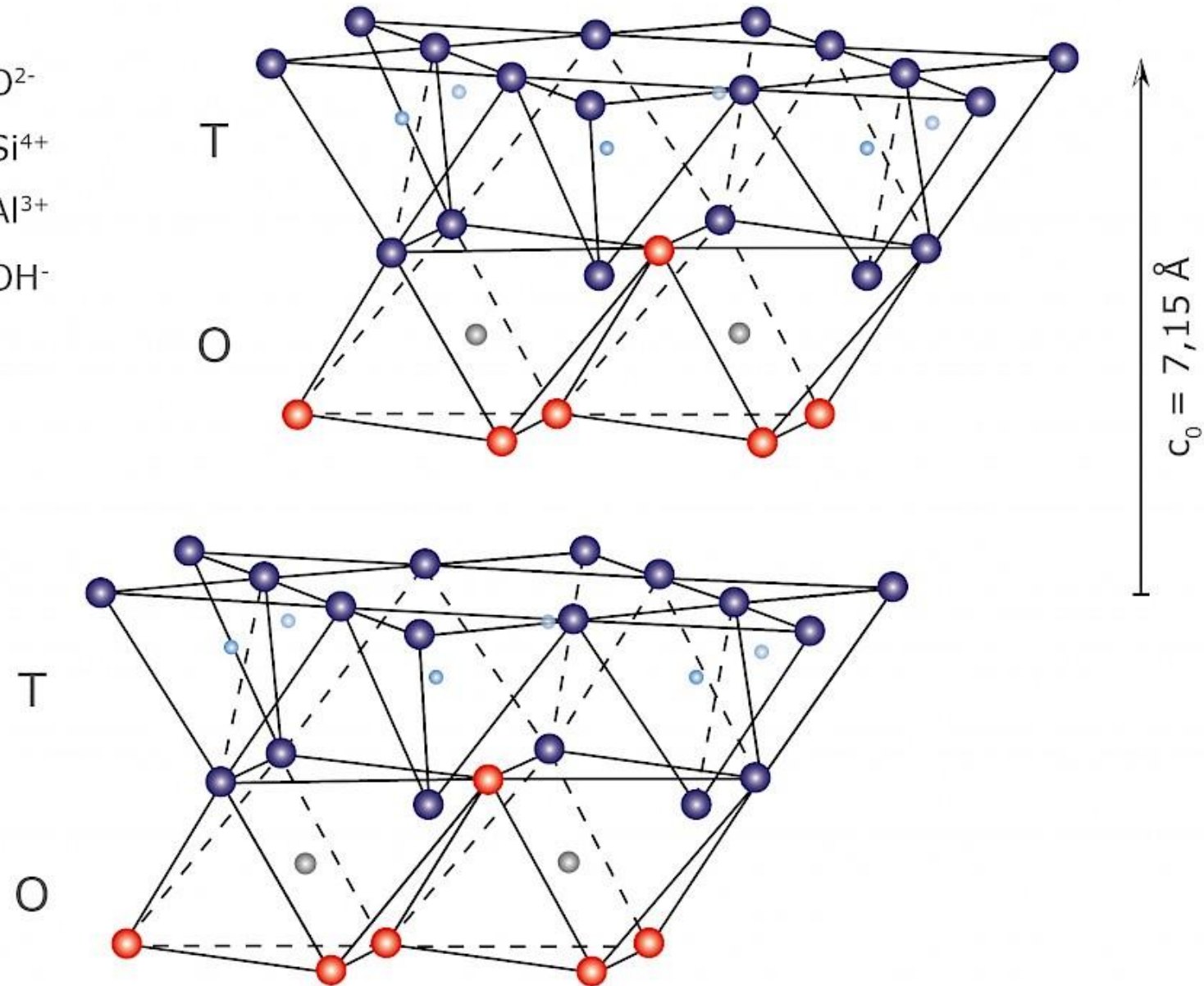


Octaedros

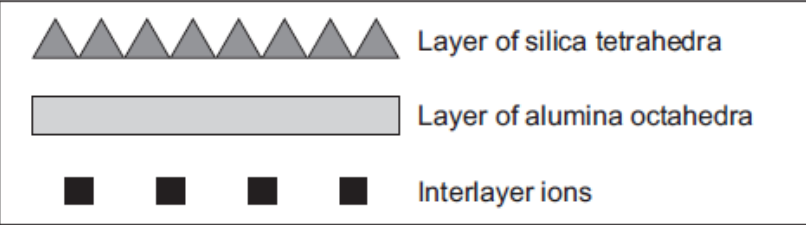


# Caulinita

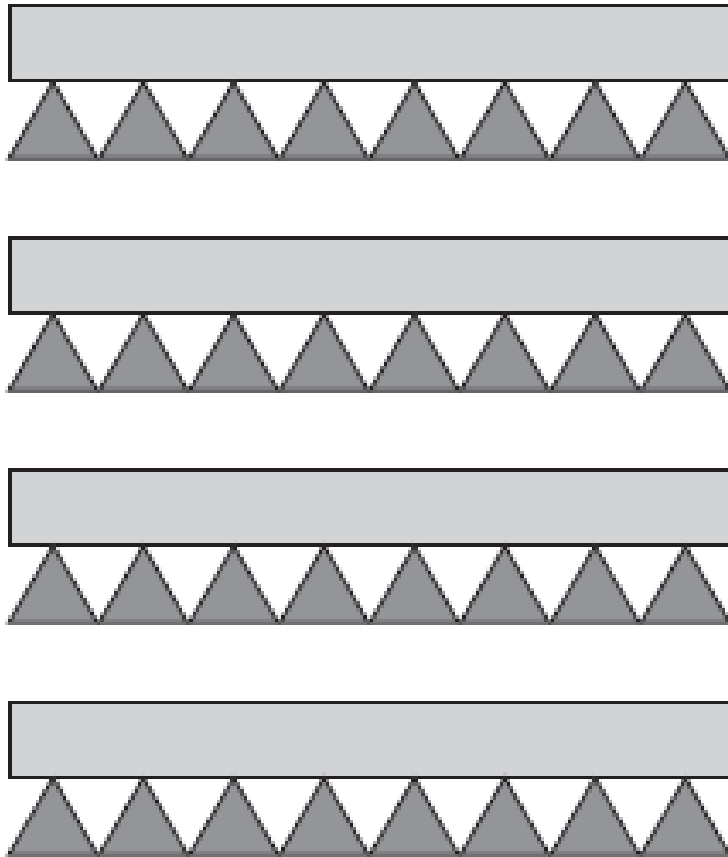
-   $O^{2-}$
-   $Si^{4+}$
-   $Al^{3+}$
-   $OH^{-}$



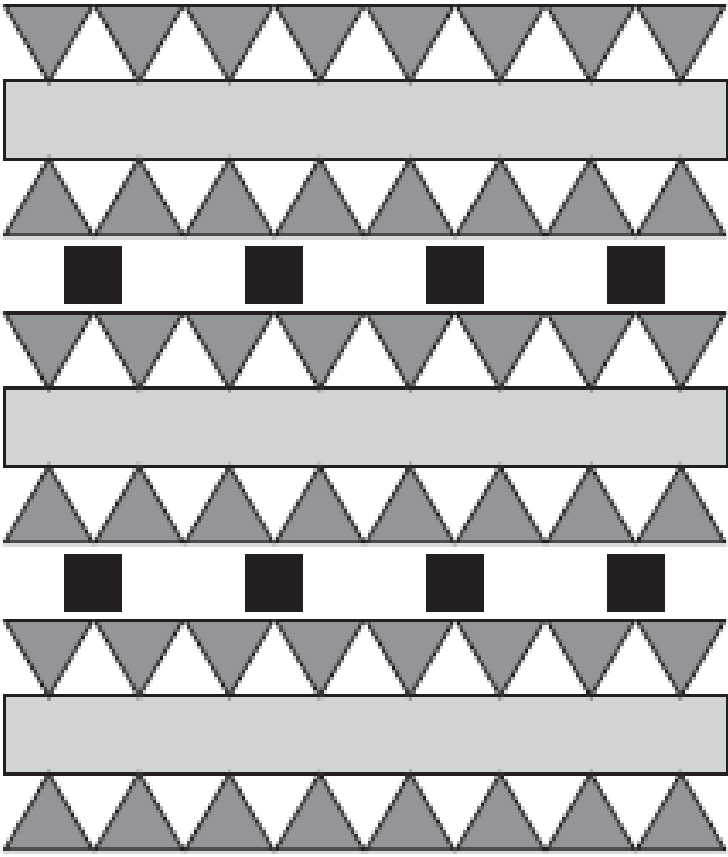
# Argilominerais

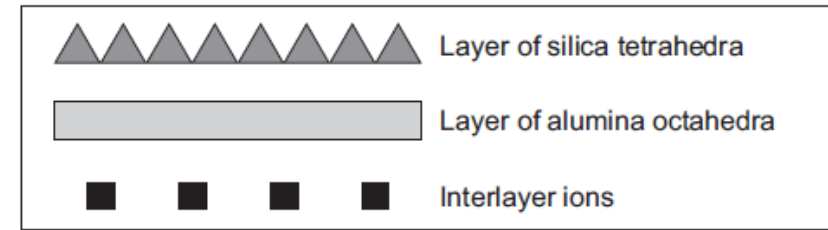


**Kaolinite: 2-layer clay**



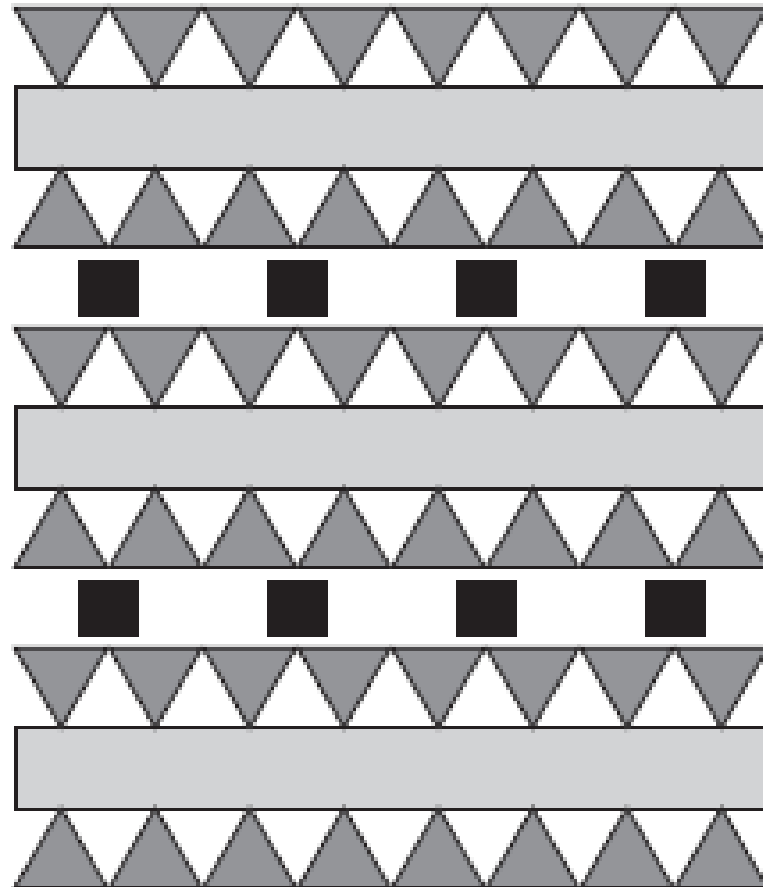
**Illite: 3-layer clay**  
Interlayer ions: K, OH, Fe, Mg



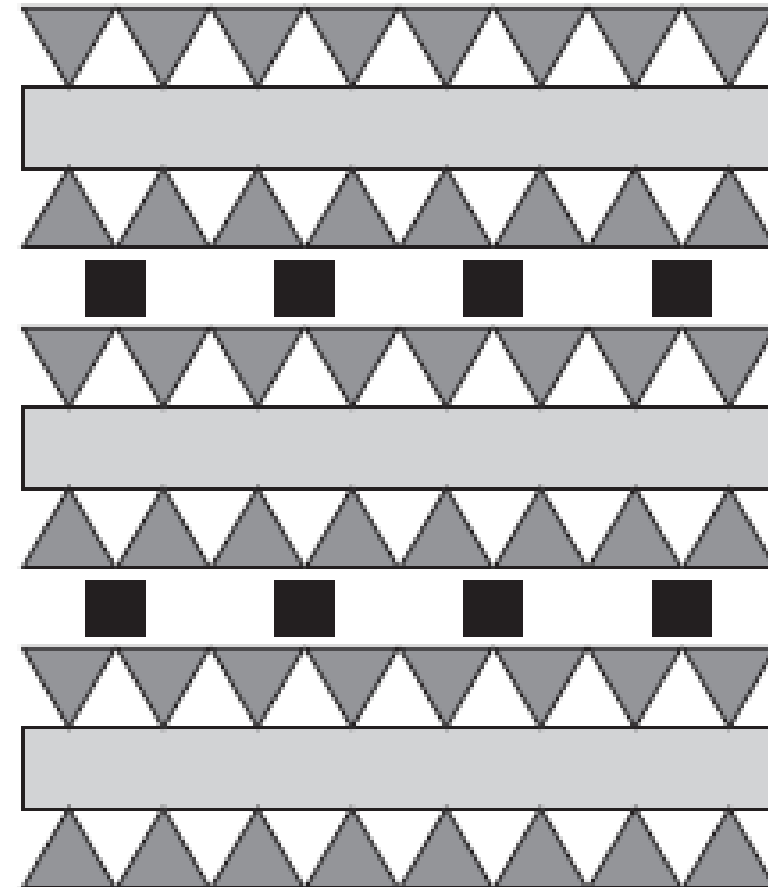


*Esmectita*

**Montmorillonite: 3-layer clay**  
 Interlayer ions: H<sub>2</sub>O, Ca

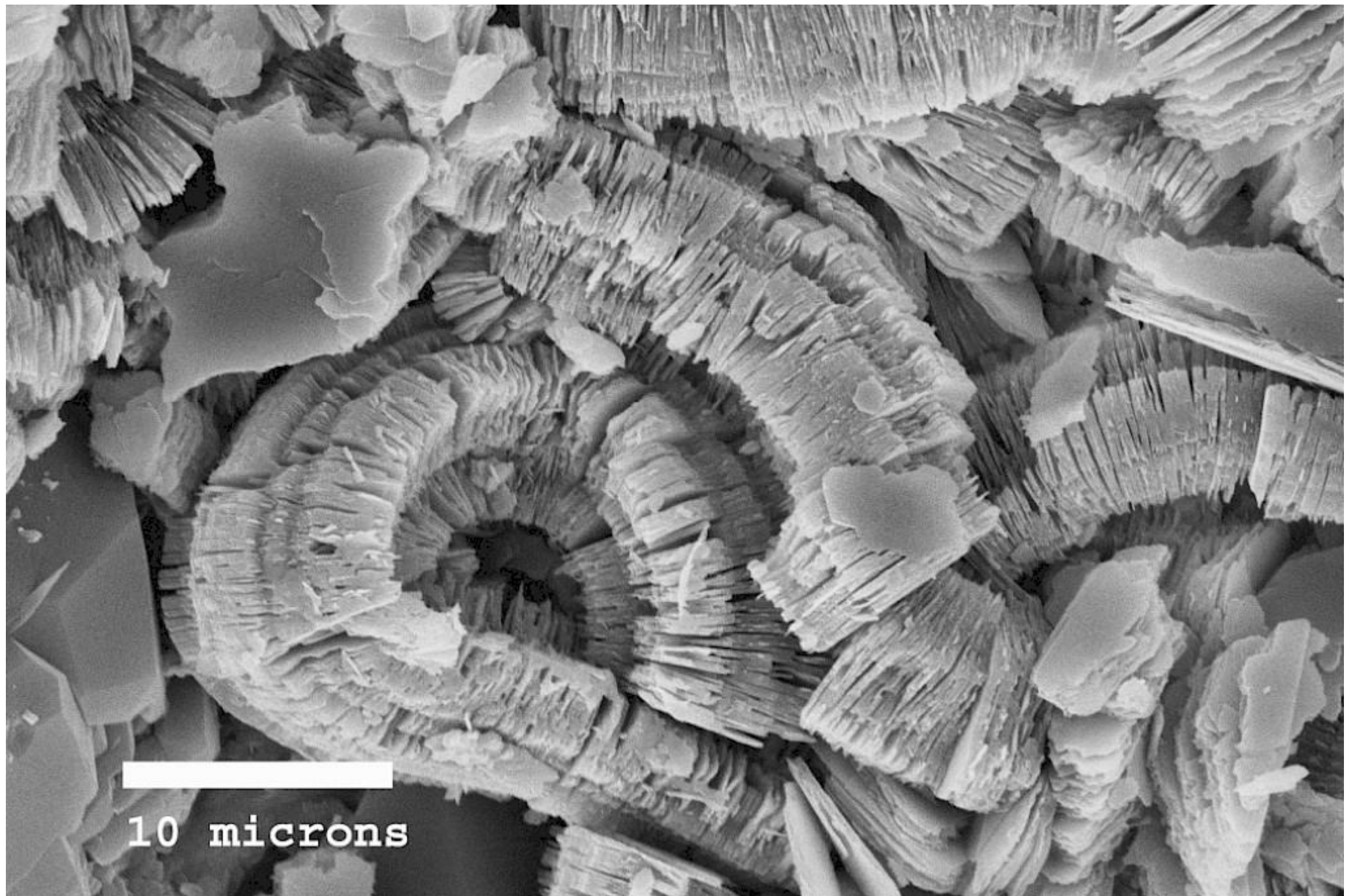


**Chlorite: 3-layer clay**  
 Interlayer ions: Mg, OH

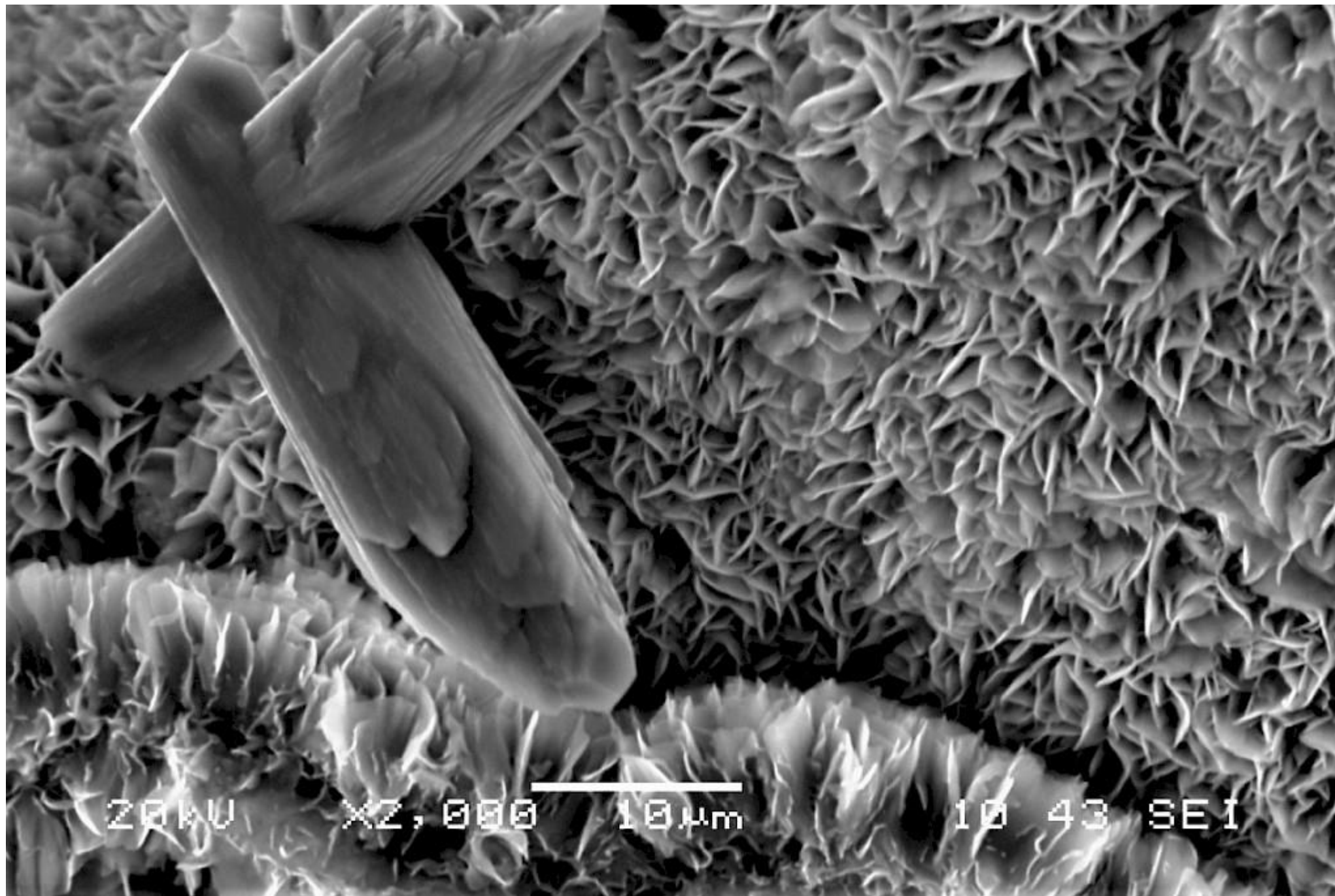




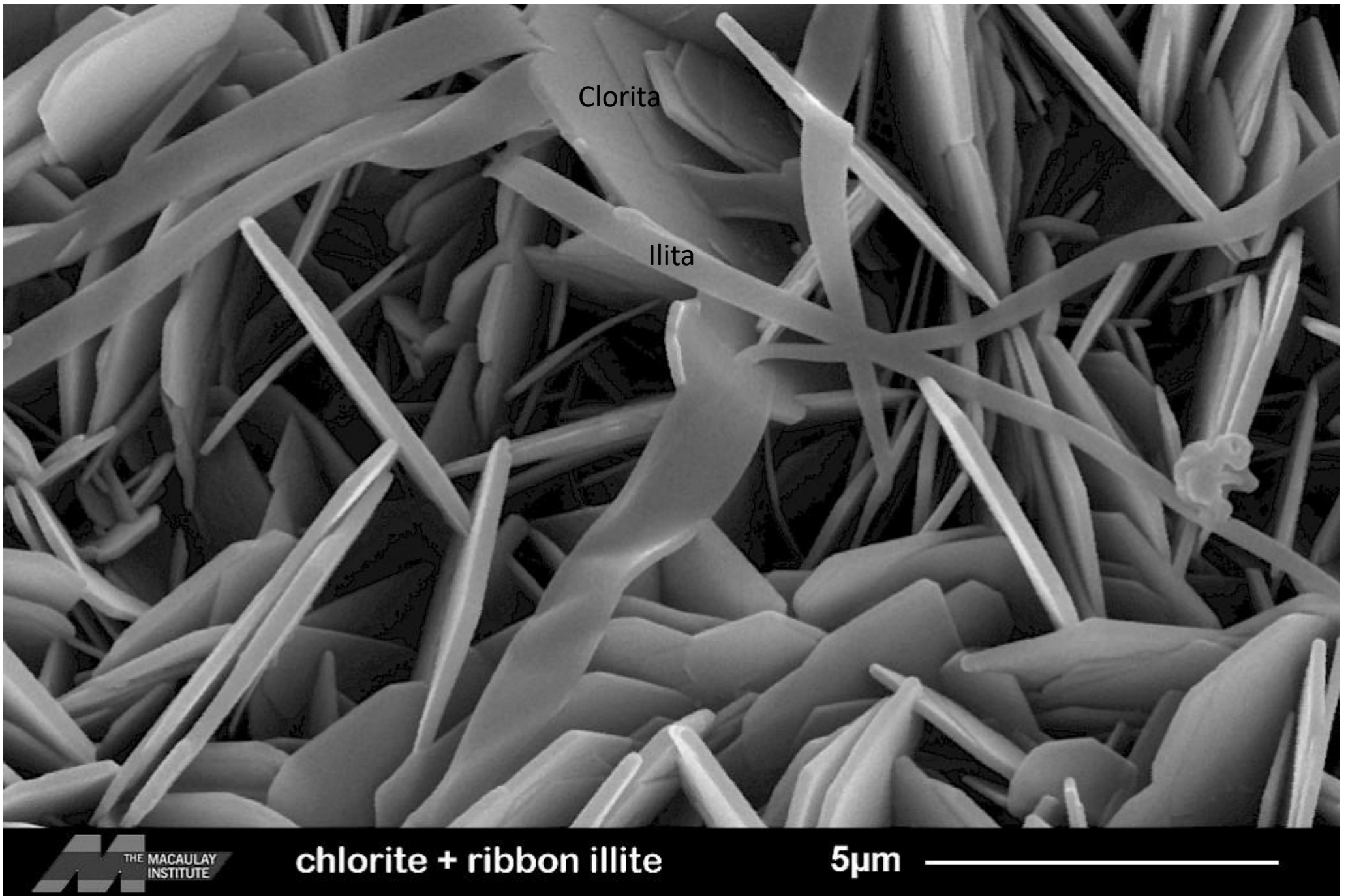
*Caulinita*



*Esmectita*

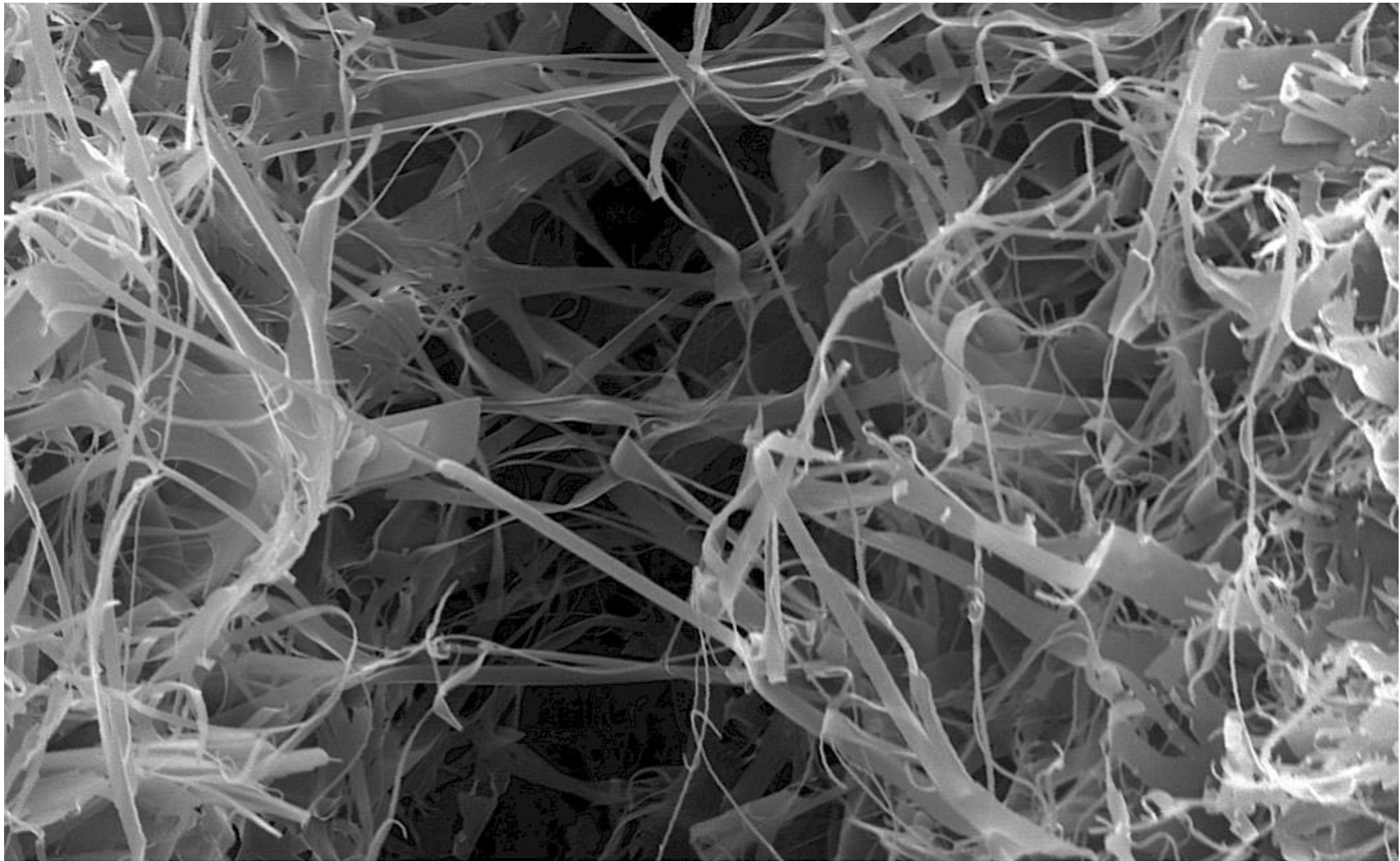


*Ilita e clorita*





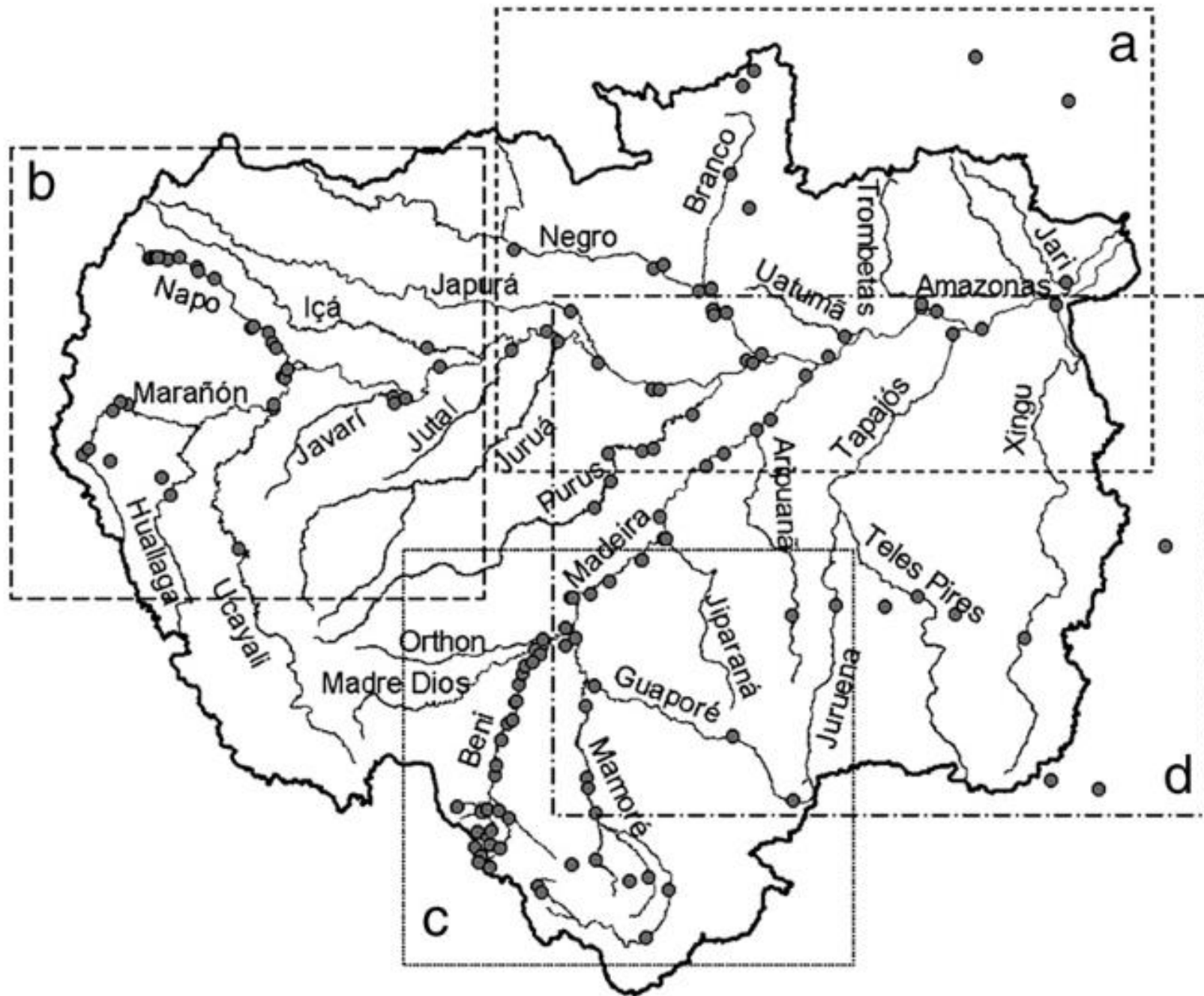
*Illite*













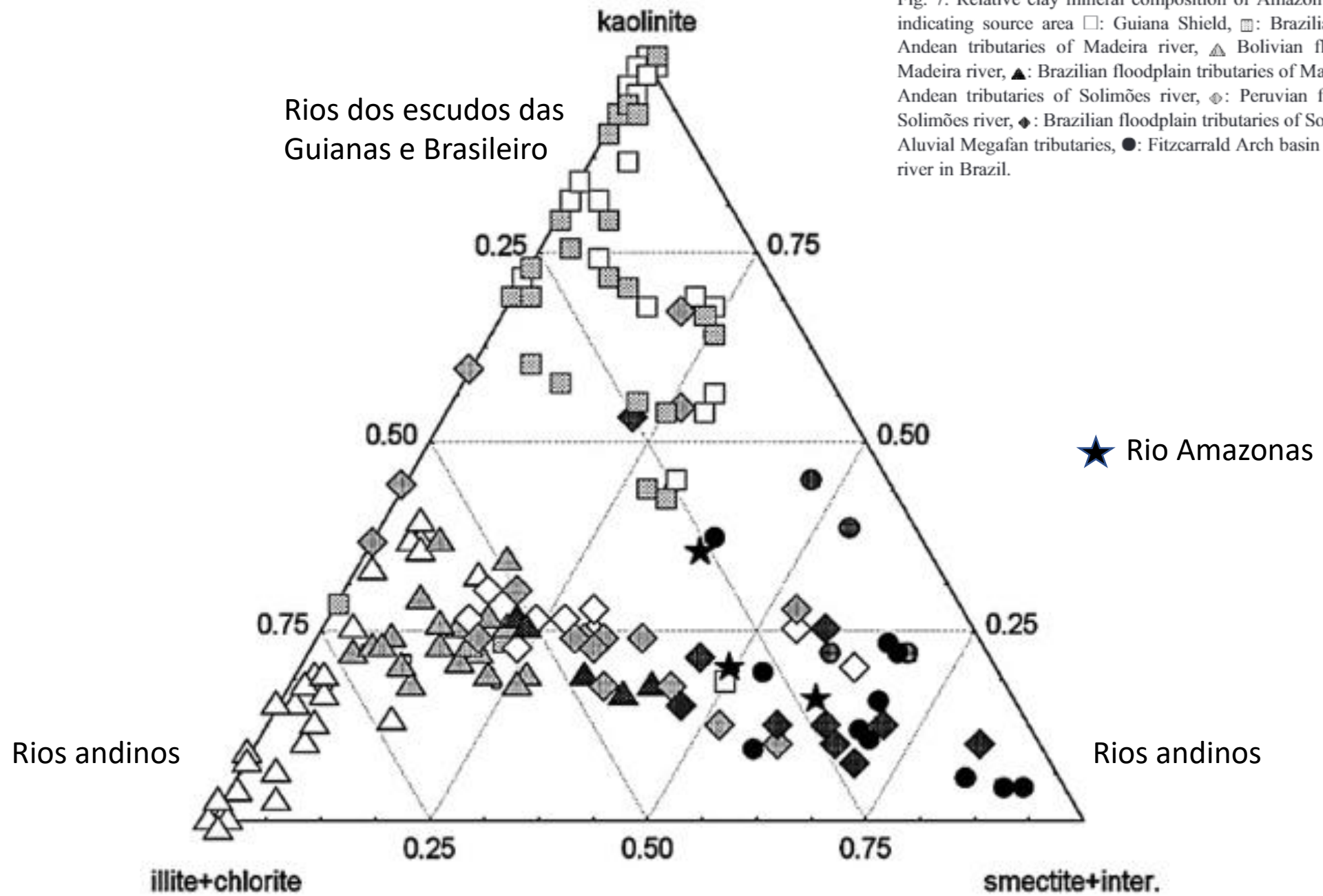
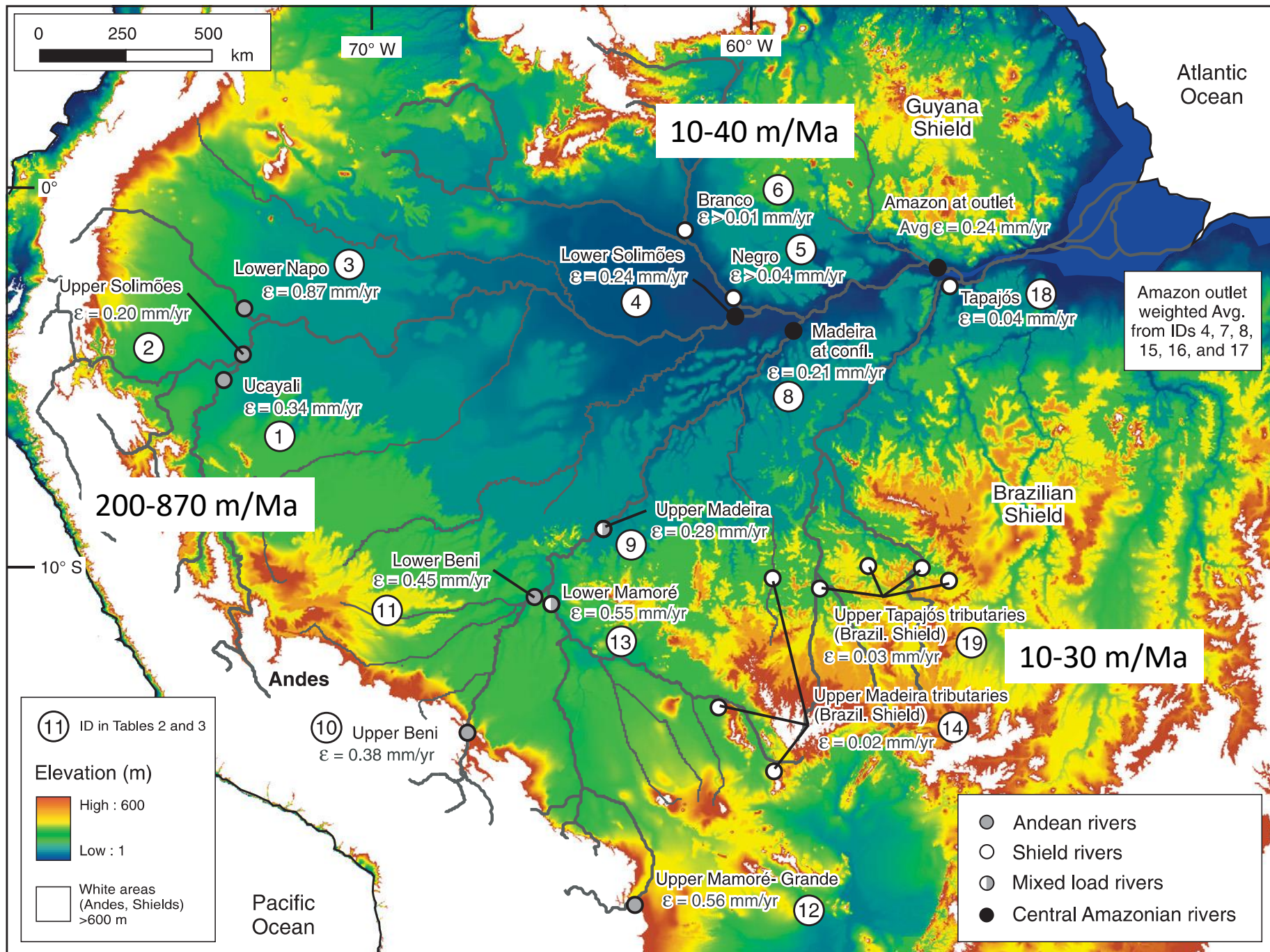
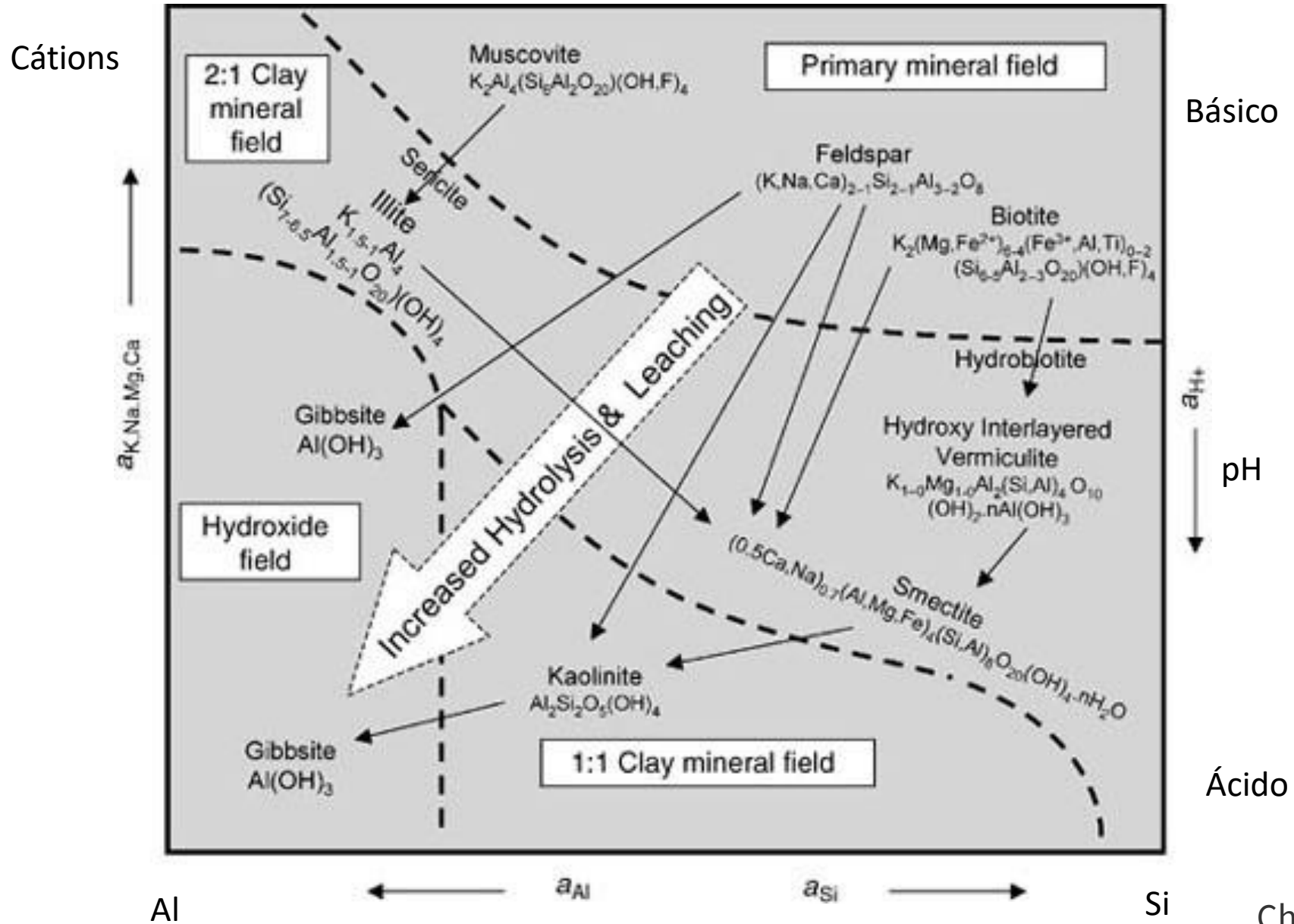


Fig. 7. Relative clay mineral composition of Amazon River basin tributaries, indicating source area □: Guiana Shield, ▣: Brazilian Shield, △: Bolivian Andean tributaries of Madeira river, ▴: Bolivian floodplain tributaries of Madeira river, ▲: Brazilian floodplain tributaries of Madeira river, ◇: Peruvian Andean tributaries of Solimões river, ◆: Peruvian floodplain tributaries of Solimões river, ◆: Brazilian floodplain tributaries of Solimões river, ●: Pastaza Aluvial Megafan tributaries, ●: Fitzcarrald Arch basin tributaries, ★: Amazon river in Brazil.



# Formação de argilominerais em solos





Espososolo





# Artigo



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**CATENA**

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## Clay mineral composition of river sediments in the Amazon Basin

J.L. Guyot <sup>a,\*</sup>, J.M. Jouanneau <sup>b</sup>, L. Soares <sup>b,c</sup>, G.R. Boaventura <sup>c</sup>, N. Maillet <sup>b</sup>, C. Lagane <sup>d</sup>

<sup>a</sup> *Institut de Recherche pour le Développement (IRD) Laboratoire des Mécanismes de Transfert en Géologie (UMR LMTG), Casilla 18-1209, Lima 18, Peru*

<sup>b</sup> *Université Bordeaux1, EPOC, CNRS, avenue des facultés 33405 Talence cedex, France*

<sup>c</sup> *Instituto de Geociências, Universidade de Brasília Campus Universitário Darcy Ribeiro, ICC Centro, 70910-900, Brasília, Brazil*

<sup>d</sup> *Institut de Recherche pour le Développement (IRD) Laboratoire des Mécanismes de Transfert en Géologie (UMR LMTG)38, rue des 36 ponts, F-31400 Toulouse, France*

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# Temas para pesquisa (Portfólio)

- Argilominerais autigênicos indicadores de ambientes de sedimentação
- Métodos de análise granulométrica
- Métodos analíticos de identificação de argilominerais