



“Jizzax akkumulyator zavodi “ AJ ning
temir tarkibli shlaklarini ekologik va
iqtisodiy samarali qayta ishlash

Jizzax akkumulyator zavodida
ikkilamchi qo'rg'oshinni qayta
ishlashda sutkasiga **2 tonna sodali
shlak** xosil bo'ladi.

TKTI laboratoriyasida ushbu
shlaklarni qayta ishlash orqali **temir
(III) oksidi** asosidagi **pigment** olindi.



Muammolar

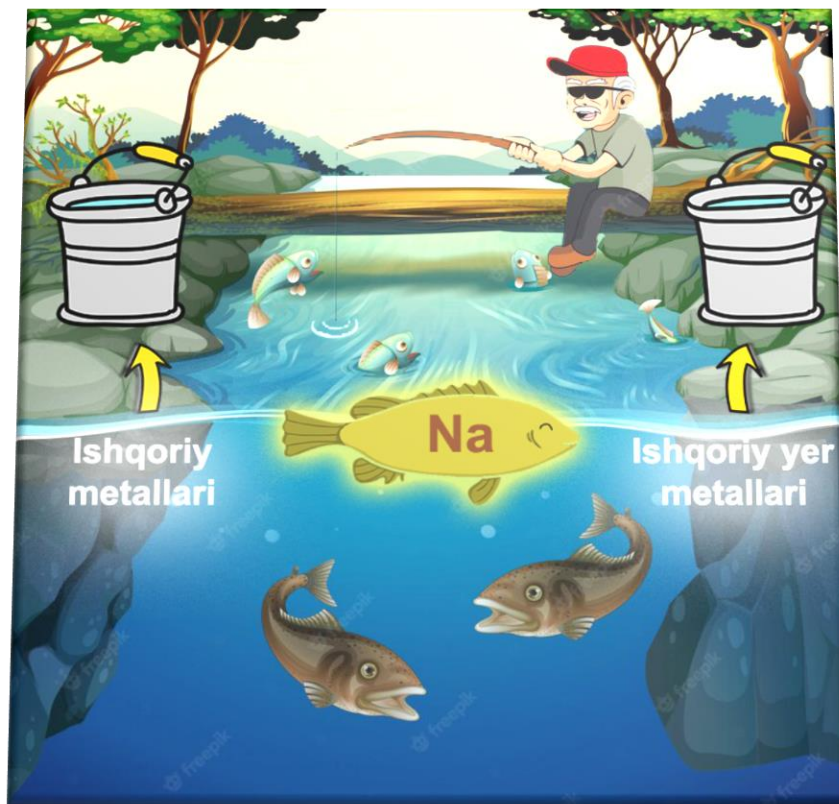
- O'zbekiston Respublikasiga Fe_2O_3 qizil pigmenti Xitoy davlatidan import qilinadi (1kg=3-6 dollar)



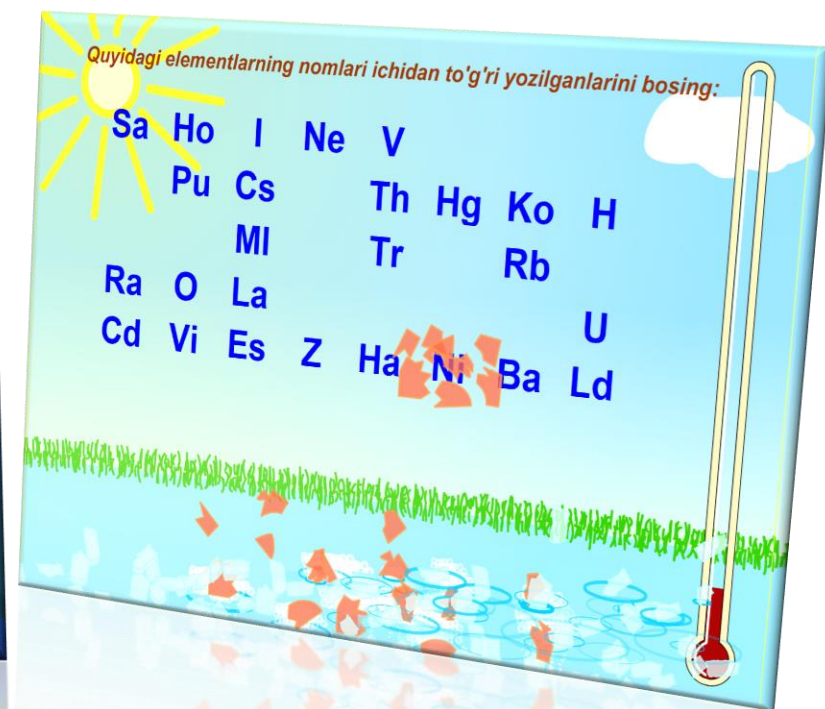
Muammolar



Ekologik jihatdan sodali shlaklar xavfli hisoblanadi:

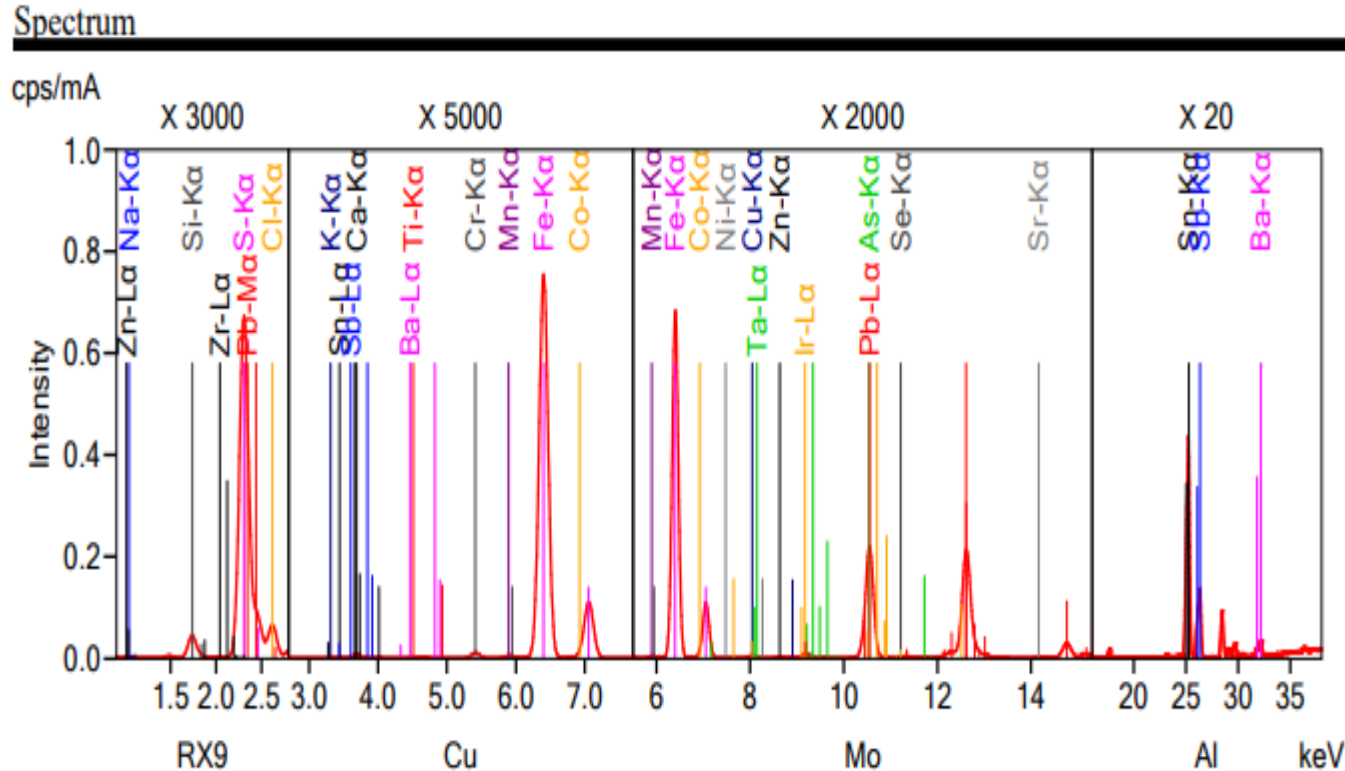


▪ Suvli eritmasi xavfli (pH 0.2-0.8)



▪ Chang (og'ir elementlar Fe, Pb, Na, Sb, Sn, Zn)

Shlakning tarkibi (rentgenoflyurosent spektometr yordamida)



Analyzed result(FP method, Scatter)

No.	Component	Result	Unit
1	Cl	0.746	mass%
2	Na ₂ O	22.7	mass%
3	SiO ₂	7.21	mass%
4	SO ₃	27.3	mass%
5	K ₂ O	0.170	mass%
6	CaO	1.54	mass%
7	TiO ₂	0.106	mass%
8	Cr ₂ O ₃	0.511	mass%
9	MnO	0.0992	mass%
10	Fe ₂ O ₃	28.6	mass%
11	Co ₂ O ₃	0.0651	mass%
12	NiO	0.0083	mass%
13	CuO	0.125	mass%
14	ZnO	0.0674	mass%
15	As ₂ O ₃	0.105	mass%
16	SeO ₂	0.0075	mass%
17	SrO	0.0074	mass%
18	ZrO ₂	0.289	mass%
19	SnO ₂	1.10	mass%
20	Sb ₂ O ₃	0.350	mass%
21	BaO	0.0989	mass%
22	Ta ₂ O ₅	(0.0095)	mass%
23	Ir ₂ O ₃	0.0782	mass%
24	PbO	4.11	mass%

Bizning yechim



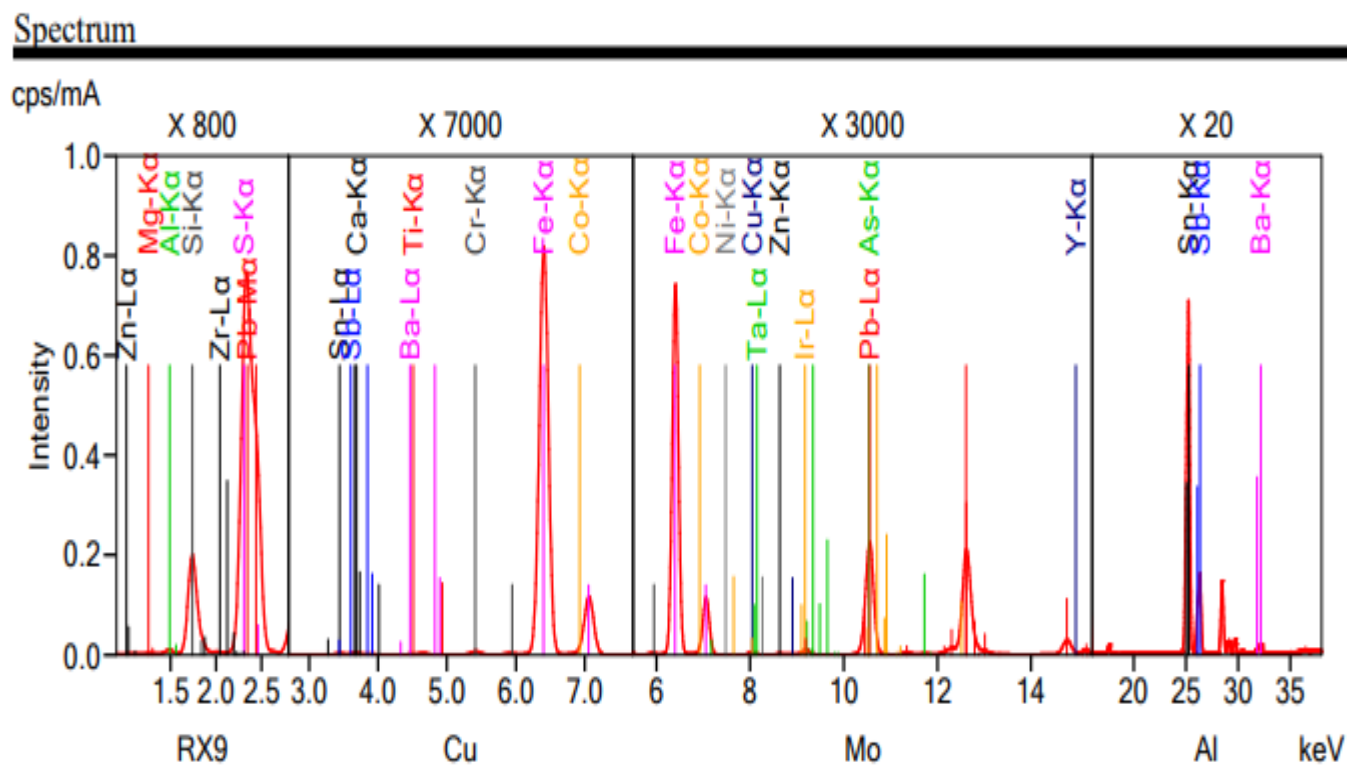
Shlakni
gidrometalurgik tanlab
eritish (kislota)

Olingan cho'kmani
pirometallurgik
kuydirish



Maxsulot
Qizil pigment

Qizil pigment tarkibi (rentgenoflyurosent spektometr yordamida)



Analyzed result(FP method, Scatter)

No.	Component	Result	Unit
1	MgO	0.655	mass%
2	Al2O3	1.07	mass%
3	SiO2	10.5	mass%
4	SO3	3.95	mass%
5	CaO	0.830	mass%
6	TiO2	0.201	mass%
7	Cr2O3	0.596	mass%
8	Fe2O3	65.3	mass%
9	Co2O3	0.136	mass%
10	NiO	0.0116	mass%
11	CuO	0.338	mass%
12	ZnO	0.0890	mass%
13	As2O3	0.414	mass%
14	Y2O3	(0.0118)	mass%
15	ZrO2	0.332	mass%
16	SnO2	2.03	mass%
17	Sb2O3	0.465	mass%
18	BaO	0.0515	mass%
19	Ta2O5	(0.0412)	mass%
20	Ir2O3	0.190	mass%
21	PbO	11.8	mass%

1 t shlakni qayta ishlashdan olinadigan maxsulotlar

1. Qizil temir oksidi pigmenti
miqdori 250 kg
5 mln so'm



narx: 1 kg / 20000 so'm

2. Qizil-qo'ng'ir temir oksidi pigmenti
miqdori 150 kg
2,25 mln so'm



1 kg / 15000 so'm

3. Texnik natriy saqlovchi kristallar (shisha i/ch)
miqdori 450 kg



1 kg / - so'm

Bozordagi talab

- Qurilish materiallari
- Lak bo'yoq pigmentlari



КРАСНЫЙ
ПИГМЕНТ



1 t shlakni qayta ishlash uchun sarf xarajatlar



7.25-3.65=3.6 mln so'm foyda

**150-200
Kislota
50-100 kg
Ishqor
1.5+1.5
mln**

**1000
kVt*soat
600 ming
so'm**

**10 t. suv
50 ming
so'm**



**Xasanov
Ubaydulla**

Talaba,
Toshkent kimyo-
texnologiya instituti

mas'uliyatli, talabchan,
tartibli, kreativ, kuchli
mulohazali, fantaziyasi boy



**Abduraxmonov Odiljon
Eshmuxammad o'g'li**

t.f.n., dosent,
Toshkent kimyo-
texnologiya instituti
“Silikat materiallar va
kamyob, nodir metallar
texnologiyasi” kafedrası

Biz bilan bog'lanish

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