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			pH	
(t)	R2			
		pH		(F)
		(86.69 ,168.29 ,73.3) F		
		(0.13 ,0.412 ,0.895) F		
			(0.07) F	
F				
				.(100.09)

)

(  
300-200 / (1).

( )

/ 10-2

/ 1  
pH

(10).

(3)

NaOH

		pH		pH	
					8.5
	pH	(7)			
/	7				
					9.5
			(2)		
		11 = pH			
CaOH		(9)			
	(5)				
			(4)		
			( )		
	/	90		8.5= pH	
SS	%98	COD		%76	
					%50
24			20-15		
			(6)		
9- 8.5					pH

MgO

pH

(F)

(t)

( )

(F)

(t)

(1)

Jar Test

pH

%2+ 55

( )

pH

pH

(Multi regration)

(R)

(F)

(t)

:pH

pH

9.5

pH

/ 11.25 - 11

pH

pH (1 ) %84.0 =R2

9.5

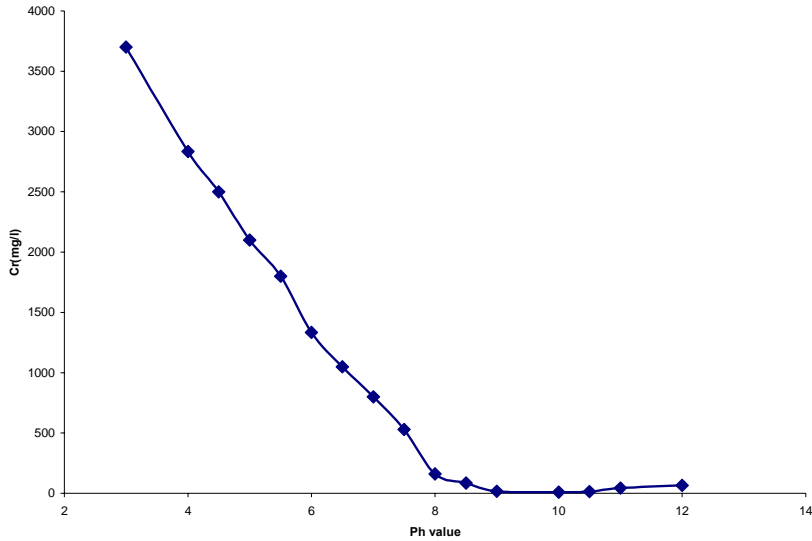
8.59 (t)

pH

pH

73.3 F

Model	Sumof Squares	df	Mean Square	F	Sig.
Regression	17978180	1	17978180		
Residual	3413522	14	243823	73.73	.000
Total	21391702	15			



(1): pH

:

160

/

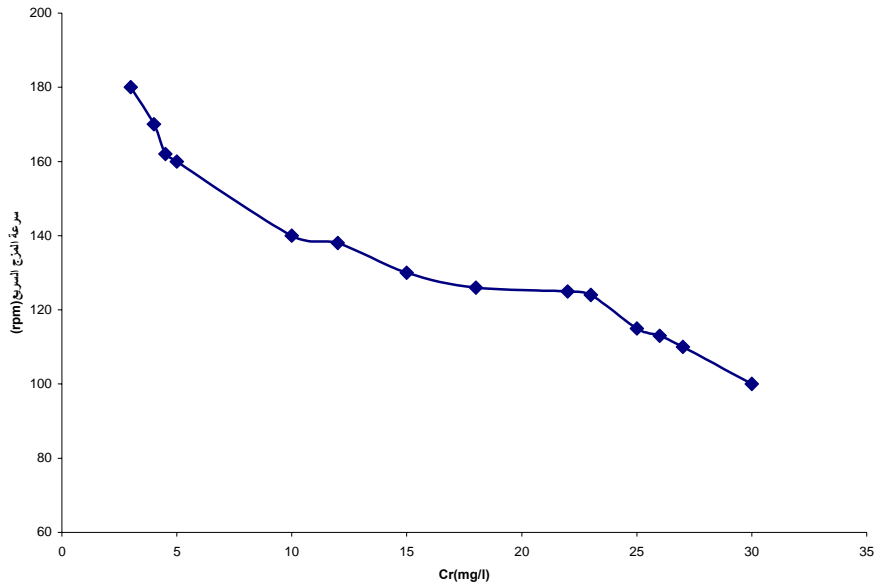
$$R^2 = 92.3\%$$

$$t = -12.97$$

(2)

$$F = 168.29$$

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1258.8	1	1258.8		
Residual	104.7	14	7.5	168.29	.000
Total	1363.5	15			



(2):

4

R<sup>2</sup> = 57.2%

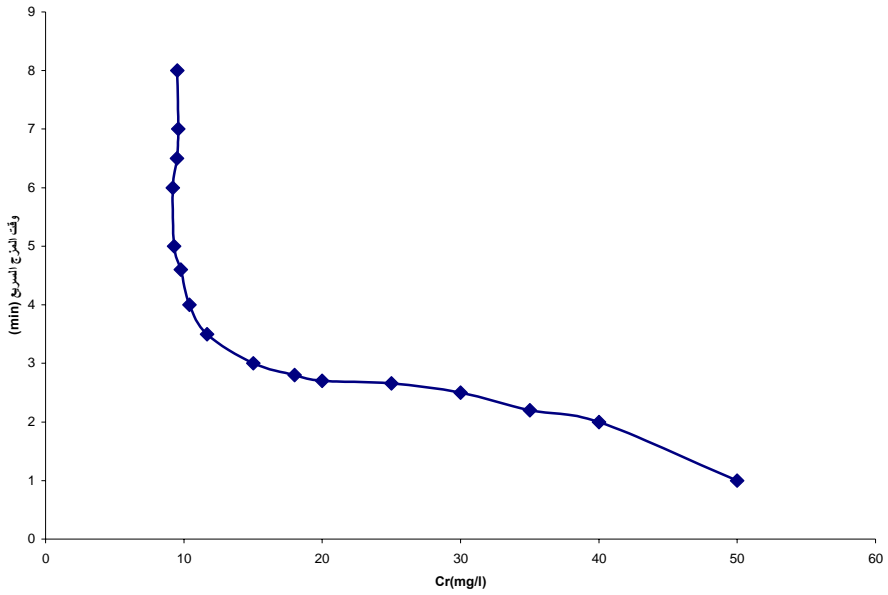
t = -4.32

(3)

F

F = 0.895

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1507.3	1	1507.3		
Residual	1130.0	14	80.7	18.67	0.001
Total	2637.3	15			



(3):

:

=PH

/ 40

9.5

0.1001=R2

0.06

(t)

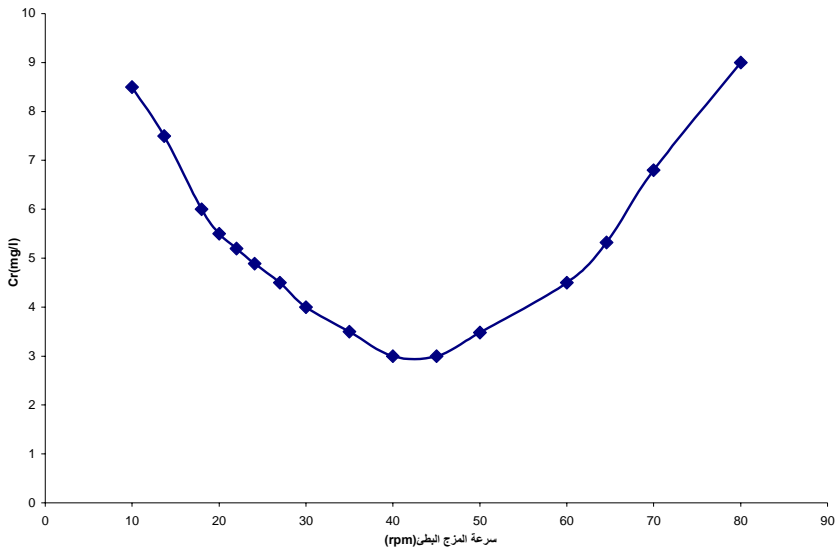
(4 )

F

.0412 =F



Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	0.014	1	0.014		
Residual	51.075	14	3.648	0.412	0.951
Total	51.089	15			



:(4)

:

( )

30

( )

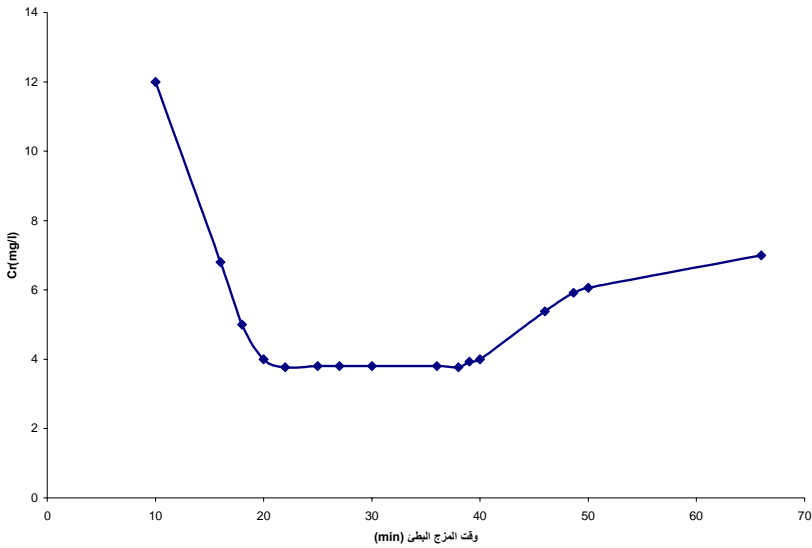
$$0.5217 = R^2$$

$$-0.37 = t$$

(5 )

$$.013 = F$$

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	0.668	1	0.668	0.13	0.720
Residual	69.641	14	4.974		
Total	70.309	15			



(5):

:

60

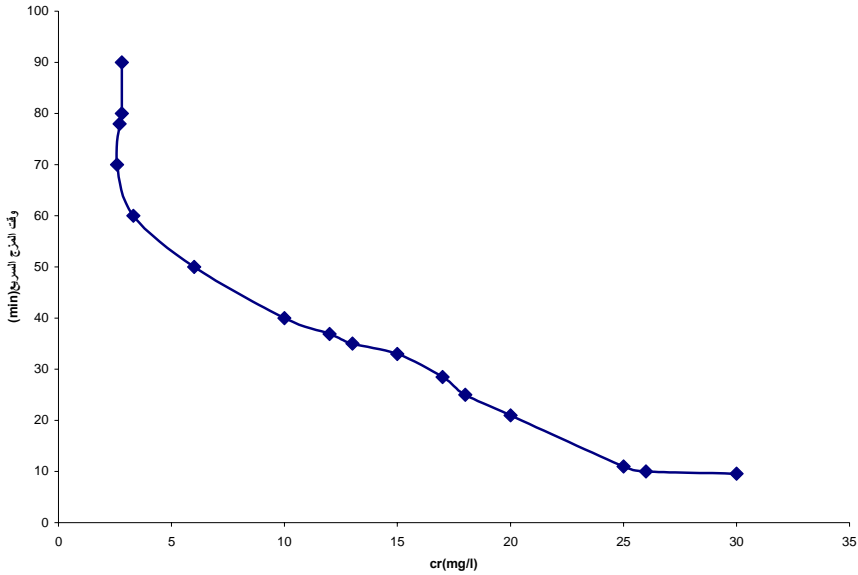
$$R^2 = 86.1\%$$

$$t = -9.31$$

(6)

$$F = 86.69$$

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1108.2	1	1108.2	86.69	0.000
Residual	179.	14	12.8		
Total	1287.2	15			



:(6)

( )

pH

:

:

.8:1

=R2

0.27 =t

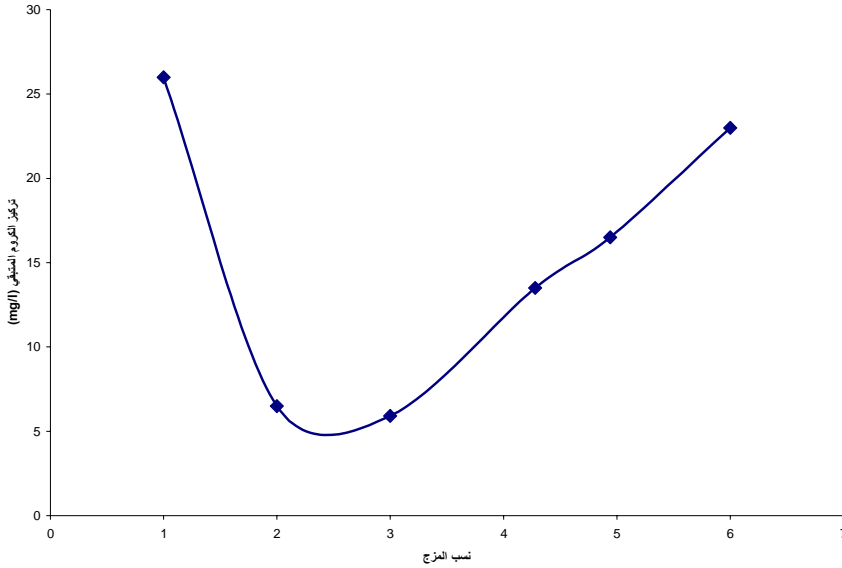
(7 )

%1.8

F

.007 =F

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	0.314	1	0.314	0.07	0.800
Residual	17.186	4	4.297		
Total	17.500	5			



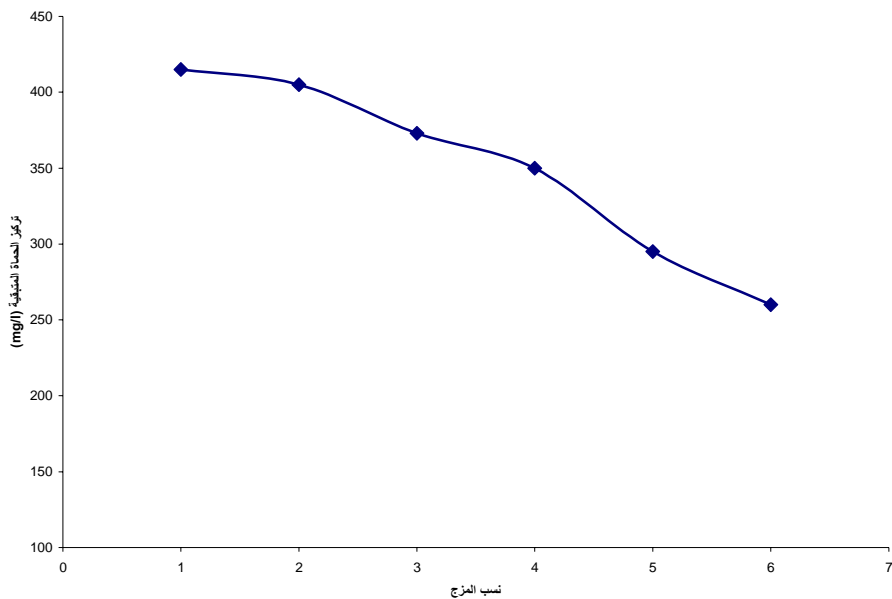
(7):

:

-t (8) %96.2 =R2  
10.00

.100.09 =F

Model	Sumof Squares	df	Mean Square	F	Sig.
Regression	16.828	1	16.828	100.09	.000
Residual	0.672	4	0.168		
Total	17.500	5			



:(8)

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:

		pH	.1
		9.5	
		pH	
(t)	R2	9.5	
		F	
			.2
	(t)		
	/ 160		
		F	
			.3
t			
	4		
		F	
			.4
		t	
	F	/ 40	
			.5
	t		

30

F

.6

t

60

F

.7

.8

(t)

F

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## Statically study for effect of some coefficients on chromium removal in leather waste

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### ABSTRACT

Leather wastewater considered the more dangerous industrial waste because of its toxic contain as sulphate ,chromium. Chromium removed by lime settling .which depended on many coefficients as pH value, rapid and slow mixing rate . rapid and slow mixing time , settling time.

Study focuses on founding statically correlation between chromium concentration and these coefficients .from (R<sup>2</sup>) value and correlation coefficient (t) in to find results depending and (F) value to find amoral differentiation of value . results appear that pH value , Rapid settling rate and settling time considered as in depended coefficient and its have a strong linear correlation with chromium remained concentration as shown at F value( 86.69,168.29 ,73.3).

while slow mixing rate and rapid and slow time considered as depended coefficients and have a weak correlation with chromium remained concentration and non moral differentiation value at F ( 0.895, 0.4120.13 ) .

at mixing of liming waste with leather waste at different mixing ratio note that non linear correlation between chromium remained concentration and mixing ratio and non moral correlation at F (0.07) . but a strong linear correlation mixing ratio and sludge volume and amoral correlation at F(100.09).