

(Supplementary File)

**Fabrication of lipidic nanocarriers of loratadine for facilitated intestinal permeation
using multivariate design approach**

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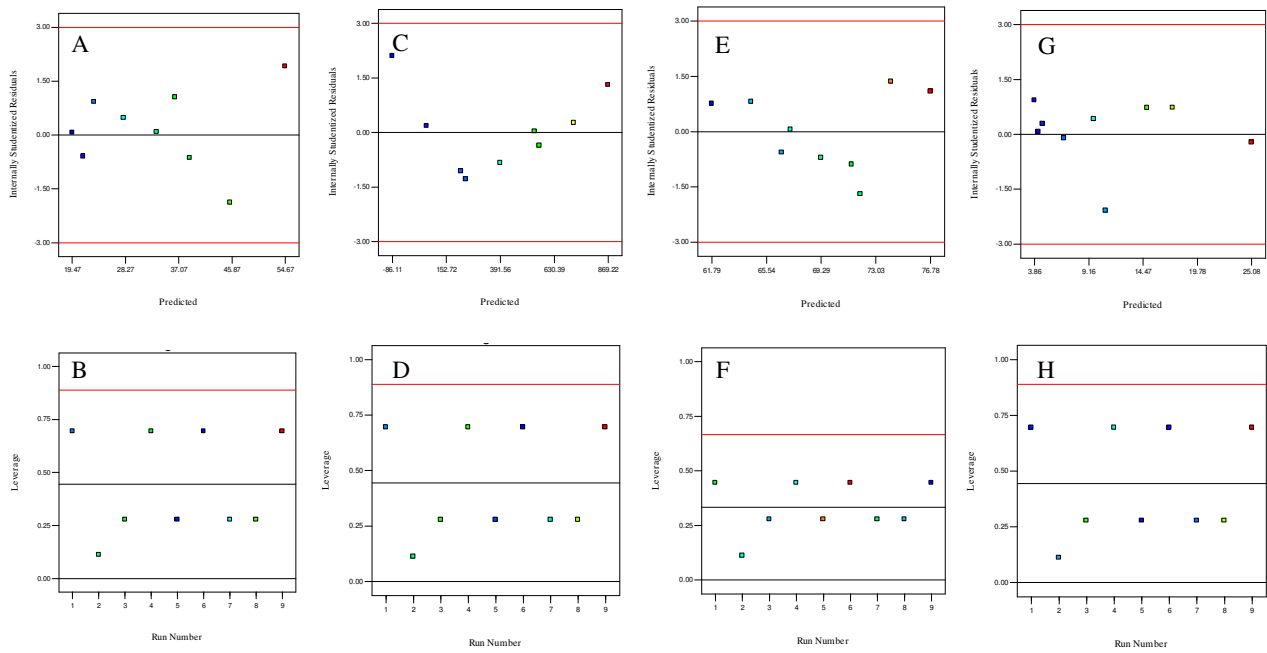
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Supplementary Figure F1



Supplementary Figure F1: Residual vs. Predicted data plots (first row) and leverage plots (second row) for the responses: mean globule size in Millipore water, Y1 (A, B); emulsification time, Y4 (C, D); %DE, Y5 (E, F) and T65%, Y6 (G, H). The red lines represent the border limits of the plots.

Supplementary Table T1

**Supplementary Table T1
Standardized Main Effects of the Factors and their corresponding ANOVA
on Quality attributes**

Responses	Source	Coeff. Value	SME	SS	d.f.	MS	F-value	p-value
Y1	Model (2FI)			1116.62	3	372.21	59.51	0.0002
	β_0	+33.43	40.28	-	-	-	-	-
	β_1	+12.15	11.91	885.01	1	885.01	141.50	<0.0001
	β_2	-5.45	-5.34	178.54	1	178.54	28.55	0.0031
	β_3	-3.64	-2.91	53.07	1	53.07	8.49	0.0333
	Residual	-	-	31.27	5	6.25 (MSE)	-	-
	Cor.Total	-	-	1147.89 (SST)	8	-	-	-
Y2	Model (2FI)			970.98	3	323.66	181.04	<0.0001
	β_0	+30.96	68.8	-	-	-	-	-
	β_1	+11.60	21.09	806.90	1	806.90	451.34	<0.0001
	β_2	-4.76	-8.65	135.95	1	135.95	76.04	0.0003
	β_3	-2.65	-3.96	28.14	1	28.14	15.74	0.0107
	Residual	-	-	8.94	5	1.79 (MSE)	-	-
	Cor.Total	-	-	979.92 (SST)	8	-	-	-
Y3	Model (2FI)			930.22	3	310.07	74.62	0.0001
	β_0	+34.51	50.75	-	-	-	-	-
	β_1	+11.00	13.25	726.00	1	726.00	174.72	<0.0001
	β_2	-5.32	-6.41	169.71	1	169.71	40.84	0.0014
	β_3	-2.94	-2.88	34.52	1	34.52	8.31	0.0345
	Residual	-	-	20.78	5	4.16 (MSE)	-	-
	Cor.Total	-	-	951.0 (SST)	8	-	-	-
Y4	Model (Linear)			7.750E+005	2	3.875E+005	44.67	0.0002
	β_0	+391.56	12.61	-	-	-	-	-
	β_1	+325.67	8.57	6.364E+005	1	6.364E005	73.36	0.0001
	β_2	-152.00	-3.99	1.386E+005	1	1.386E+005	15.98	0.0071
	Residual	-	-	52045.56	6	8674.26 (MSE)	-	-
		Cor.Total	-	-	8.270E+005(SST)	8	-	-
Y5	Model (Linear)			181.54	2	90.77	21.37	0.0019
	β_0	+69.29	100.42	-	-	-	-	-
	β_1	-4.79	-5.70	137.75	1	137.75	32.43	0.0013
	β_2	+2.70	3.21	43.79	1	43.79	10.31	0.0183
	Residual	-	-	25.48	6	4.25 (MSE)	-	-
		Cor.Total	-	-	207.02 (SST)	8	-	-
Y6	Model (2FI)			410.24	3	136.75	55.72	0.0003
	β_0	+10.81	20.788	-	-	-	-	-
	β_1	+6.56	10.25	258.07	1	258.07	105.15	0.002
	β_2	-4.05	-6.33	98.66	1	98.66	40.20	0.0014
	β_3	-3.66	-4.69	53.51	1	53.51	21.80	0.0055
	Residual	-	-	12.27	5	2.45 (MSE)	-	-
	Cor.Total	-	-	422.51 (SST)	8	-	-	-

SME: Standardized Mean Effect; SS: Sum of Squares; MS: Mean Sum of Squares; SST: Total Sum of Squares; MSE: Mean Square for error; d.f: Degrees of freedom