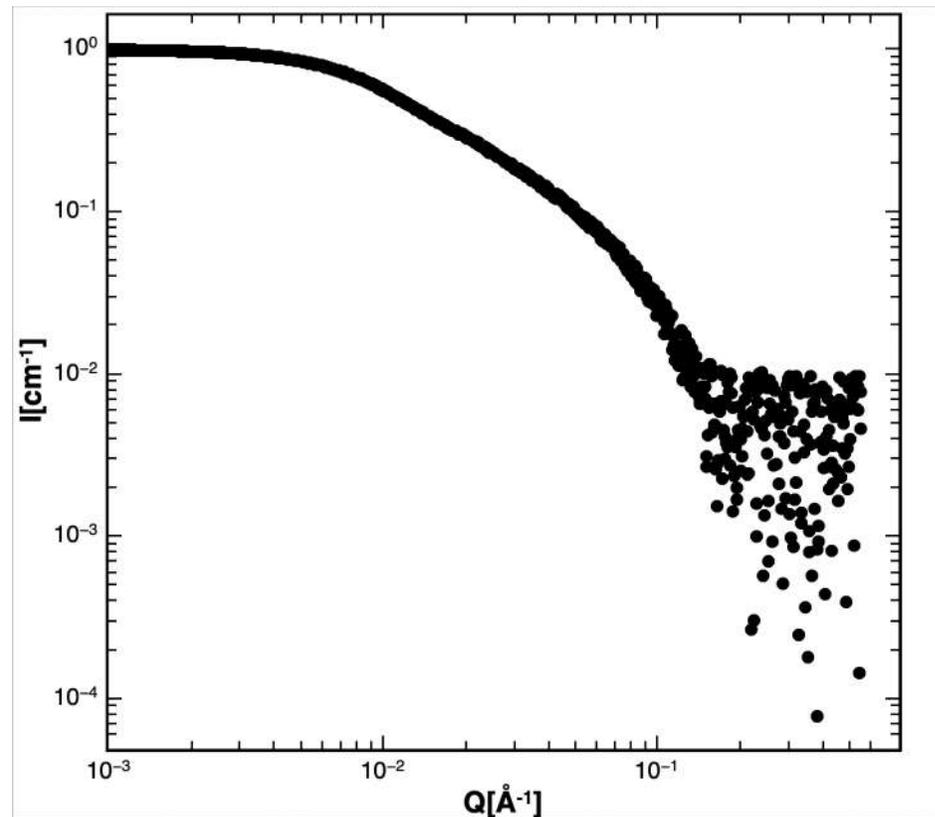
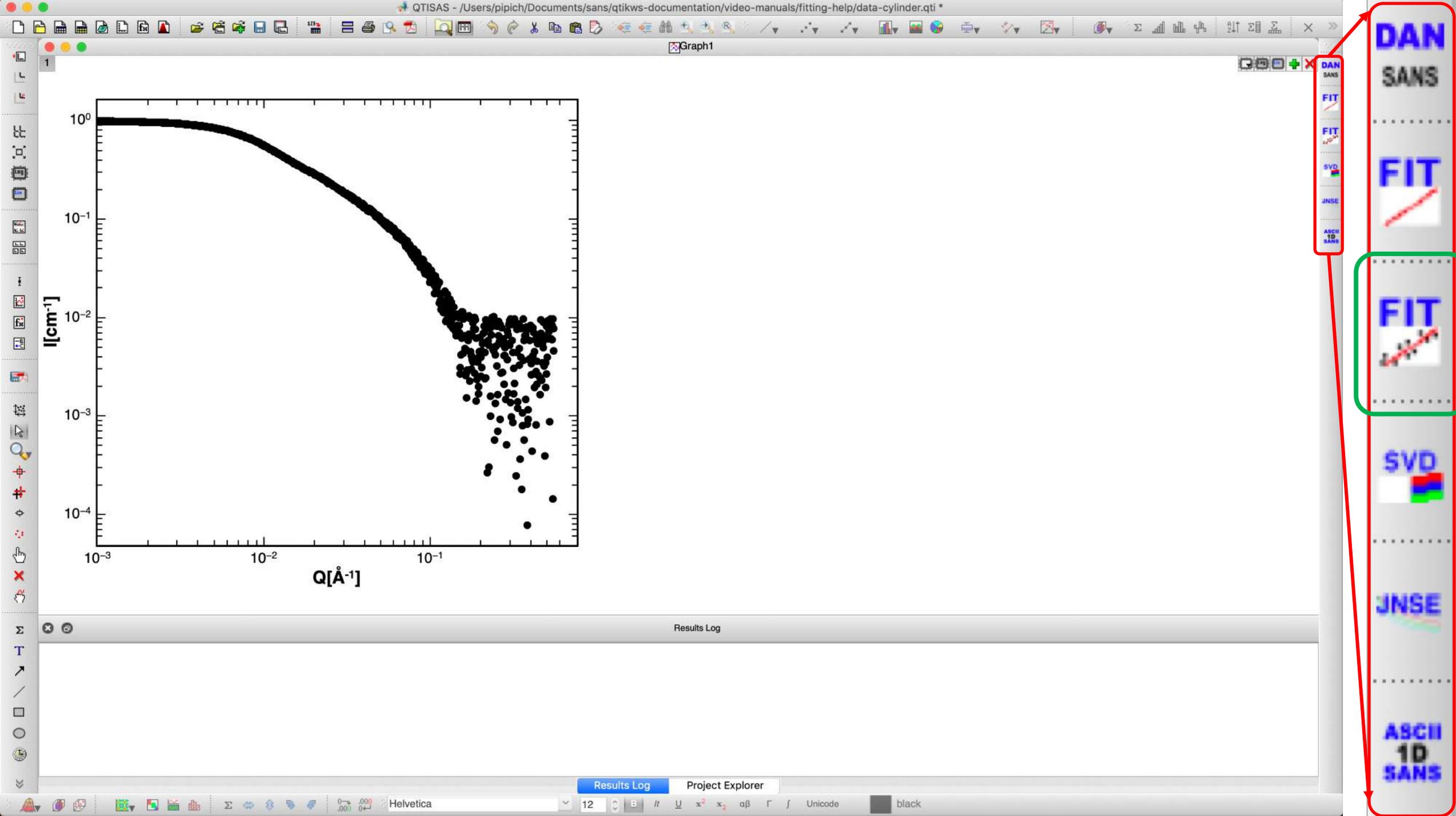


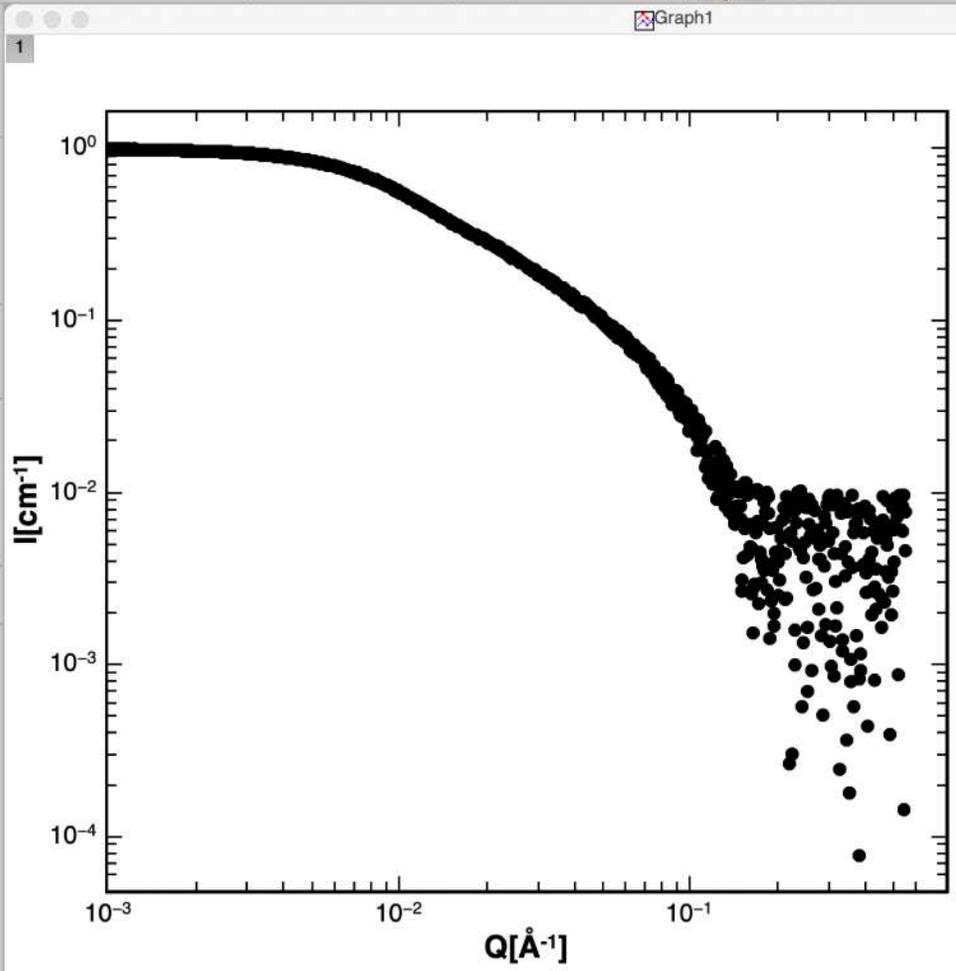


Fit.Curve(s): Standard Fit Mode



Function: Cylinder Form Factor





FITTABLE(s)

Load Fitting Session

... Select Function Fitting Session

Categories

- ALL
- BS-BackScattering
- Block Copolymer Micelles
- Cholesterol-liposomes
- Core::Shell
- Density Profile
- Distribution
- EGOR-FUNCTIONS
- EMBL
- End-cap-Thomas
- Flo
- Form Factors**
- Form Structure
- General
- HF
- Instrumentation
- Integrals Test
- Lipoproteins
- Linacoma-Scattering-SMA

Functions

- FlexCylExv-sourcecode-SASview-simulated-in-QTI
- Gauss-Coil
- HammodaTwoLevels
- HammodaTwoLevelsPlusGuinier
- KholodenkoWorm
- WormLikeCylinder-NEW
- cylinder-efit**
- mass-fractal-aggregate
- mass-fractal-aggregate-GuinierAgg
- mass-fractal-aggregate-sphAgg
- membrane-HF
- pearl-necklace-chain
- pearl-necklace-rod
- spherical-core-shell
- symmetricBilayer
- symmetricBilayerDMPSSchultz
- testmicelle-ohne-kern-vorfatkrowiestefan-andersintegrien

Info :: Function Info :: Parameters Options

Form Factor of Cylinder with Radius R and Length L:

$I(Q) = I_0 \times P(Q);$
 $P(Q) = \int_{[0..\pi/2]} F^2(Q,R,L,\alpha) \sin(\alpha) d\alpha;$
 $F(Q,R,L,\alpha) \Rightarrow 2J_1[QR\sin(\alpha)] / [QR\sin(\alpha)] \times \sin(QL\cos(\alpha)/2) / (QL\cos(\alpha)/2);$
 $J_1(x)$ - the regular cylindrical Bessel function of first order .

efit-ready
 v. 2019-10-09

Project Explorer

Name	Type	View	Created	Label
data	Table	Normal	11/11/15 00:11:19	Simulated Curve
Graph1	Graph	Maximized	25.02.21 10:29	

Project Explorer

Step 1: Select Function and Fit.Mode Options

Load Fitting Session

Select Function Fitting Session

Categories

- ALL
- BS-BackScattering
- Block Copolymer Micelles
- Cholesterol-liposomes
- Core::Shell
- Density Profile
- Distribution
- EGOR-FUNCTIONS
- EMBL
- End-cap-Thomas
- Flo
- Form Factors**
- Form Structure
- General
- HF
- Instrumentation
- Integrals Test
- Lipoproteins
- Liposomes

Functions

- FlexCylExv-sourcecode-SASview-simulated-in-QTI
- Gauss-Coil
- HammodaTwoLevels
- HammodaTwoLevelsPlusGuinier
- KholodenkoWorm
- WormLikeCylinder-NEW
- cylinder-efit**
- mass-fractal-aggregate
- mass-fractal-aggregate-GuinierAgg
- mass-fractal-aggregate-sphAgg
- membrane-HF
- pearl-necklace-chain
- pearl-necklace-rod
- spherical-core-shell
- symmetricBilayer
- symmetricBilayerDMPSSchultz
- testmicelle-ohne-kern-vorfatkrowiestefan-andersint

Info :: Function Info :: Parameters Options

Form Factor of Cylinder with Radius R and Length L:

$I(Q) = I_0 \times P(Q);$

$P(Q) = \int_0^{\pi/2} F^2(Q,R,L,a) \sin(a) da;$

$F(Q,R,L,a) \Rightarrow 2J_1[QR\sin(a)] / [QR\sin(a)] \times \sin(QL\cos(a)/2) / (QL\cos(a)/2);$

$J_1(x)$ - the regular cylindrical Bessel function of first order .

efit-ready
v. 2019-10-09

Info (function)

Load Fitting Session

Select Function Fitting Session

Categories

- ALL
- BS-BackScattering
- Block Copolymer Micelles
- Cholesterol-liposomes
- Core::Shell
- Density Profile
- Distribution
- EGOR-FUNCTIONS
- EMBL
- End-cap-Thomas
- Flo
- Form Factors**
- Form Structure
- General
- HF
- Instrumentation
- Integrals Test
- Lipoproteins
- Liposomes
- Liposome Scattering-SMA

Functions

- FlexCylExv-sourcecode-SASview-simulated-in-QTI
- Gauss-Coil
- HammodaTwoLevels
- HammodaTwoLevelsPlusGuinier
- KholodenkoWorm
- WormLikeCylinder-NEW
- cylinder-efit**
- mass-fractal-aggregate
- mass-fractal-aggregate-GuinierAgg
- mass-fractal-aggregate-sphAgg
- membrane-HF
- pearl-necklace-chain
- pearl-necklace-rod
- spherical-core-shell
- symmetricBilayer
- symmetricBilayerDMPSSchultz
- testmicelle-ohne-kern-vorfatkrowiestefan-andersint

Info :: Function Info :: Parameters Options

L	Length of Cylinder [Å]
R	Radius of Cylinder [Å]
I0	Forward Scattering calculated [1/cm]
bgd	Background [1/cm]
sldCylinder	SLD [1/cm/cm]
sldSolvent	SLD [1/cm/cm]
phi	volume fraction [0..1]

Info (parameters)

Load Fitting Session

Select Function Fitting Session

Categories

- ALL
- BS-BackScattering
- Block Copolymer Micelles
- Cholesterol-liposomes
- Core::Shell
- Density Profile
- Distribution
- EGOR-FUNCTIONS
- EMBL
- End-cap-Thomas
- Flo
- Form Factors**
- Form Structure
- General
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- Liposomes
- Liposome Scattering-SMA

Functions

- FlexCylExv-sourcecode-SASview-simulated-in-QTI
- Gauss-Coil
- HammodaTwoLevels
- HammodaTwoLevelsPlusGuinier
- KholodenkoWorm
- WormLikeCylinder-NEW
- cylinder-efit**
- mass-fractal-aggregate
- mass-fractal-aggregate-GuinierAgg
- mass-fractal-aggregate-sphAgg
- membrane-HF
- pearl-necklace-chain
- pearl-necklace-rod
- spherical-core-shell
- symmetricBilayer
- symmetricBilayerDMPSSchultz
- testmicelle-ohne-kern-vorfatkrowiestefan-andersint

Info :: Function Info :: Parameters Options

[Instrumental Fit] SANS

[Global Fit]

[Superpositional Function]

[show ONLY eFit functions]

Curves: 1

Functions: 1

e-FIT e-Fit+++

Fit.Mode (configuration)

Fit.Mode Options

The screenshot shows the FITTABLE(s) application window. At the top, there's a 'Load Fitting Session' section with a file input field and 'Select Function' and 'Fitting Session' buttons. Below this are two panes: 'Categories' on the left and 'Functions' on the right. The 'Options' tab is selected, showing several checkboxes and controls. Red boxes highlight the checkboxes for 'Instrumental Fit', 'Global Fit', 'Superpositional Function', and 'show ONLY eFit functions', labeled 1.1, 1.3, 1.5, and 1.7 respectively. Green boxes highlight the 'SANS' dropdown, the '# Curves: 1' and '# Functions: 1' spin boxes, and the 'e-FIT' and 'e-Fit+++' buttons, labeled 1.2, 1.4, 1.6, and 1.8 respectively.

1.1 **CheckBox [Instrumental Fit]**: if checked, you could select type of instrumental fit (in **1.2** ComboBox) within “Instumental.Fit.Mode”

1.3 **CheckBox [Global Fit]**: if checked you could set (in **1.4** SpinBox) number of curves to be fitted simultaneously in the frame of “Global.Fit.Mode”

1.5 **CheckBox [Superpositional Function]**: if checked the fitting function contains several sub-functions, and number of the sub-functions is defined in **1.6** SpinBox.

1.7 **CheckBox [show only eFit Functions]**: if checked, in the function explorer will be shown only “eFit ready” functions

1.8 eFit buttons and options

In this example, we use:
Standard Fit Mode

Step 2: Push Button "next" to "Fitting Session"

Load Fitting Session

Select Function **Fitting Session**

Categories

- ALL
- BS-BackScattering
- Block Copolymer Micelles
- Cholesterol-liposomes
- Core::Shell
- Density Profile
- Distribution
- EGOR-FUNCTIONS
- EMBL
- End-cap-Thomas
- Flo
- Form Factors**
- Form Structure
- General
- HF
- Instrumentation
- Integrals Test
- Lipoproteins
- Linacoma-Scattering-SMA

Functions

- FlexCylExv-sourcecode-SASview-simulated-in-QT
- Gauss-Coil
- HammodaTwoLevels
- HammodaTwoLevelsPlusGuinier
- KholodenkoWorm
- WormLikeCylinder-NEW
- cylinder-efit**
- mass-fractal-aggregate
- mass-fractal-aggregate-GuinierAgg
- mass-fractal-aggregate-sphAgg
- membrane-HF
- pearl-necklace-chain
- pearl-necklace-rod
- spherical-core-shell
- symmetricBilayer
- symmetricBilayerDMPSSchultz
- testmicelle-ohne-kern-vorfatkrowiestefan-andersint

Info :: Function | Info :: Parameters | **Options**

[Instrumental Fit] — SANS

[Global Fit] — # Curves: 1

[Superpositional Function] — # Functions: 1

[show ONLY eFit functions] — e-FIT | e-Fit+++

"Select Function"

Save Current Fitting Session

Select Function **Fitting Session** Generate Results

Data | Function | Parameters | Global Limits | Fit - Control

	Checks #1	Dataset #1
Data Set(s)		data_y
N	N	1000
First Point	<input type="checkbox"/>	1
Last Point	<input type="checkbox"/>	1000
Weighting	<input checked="" type="checkbox"/> on	

"Fitting Session"

Weighting Method

Variance = Y^2 [$w = 1 / Y^2$]

Y - independent variable to be fit

Fit | Simulate $\chi^2/\text{dof} = 2.66783068174\text{E-}03$

Script :: Before Fit $R^2 = 9.99929752746\text{E-}01$

Script :: After Fit time = 1.11E+03 ms - 18 iteration(s)

cylinder-efit

“Fitting Session” interface has “Tab-Widget” and “Fit Buttons”

The screenshot shows the FITTABLE(s) software interface. At the top, there is a window title bar with a close button and a maximize button. Below the title bar, there is a section titled "Save Current Fitting Session" containing three buttons: "Select Function", "Fitting Session", and "Generate Results".

The main area of the window is a tabbed interface with five tabs: "Data", "Function", "Parameters", "Global Limits", and "Fit - Control". The "Data" tab is currently selected. It contains a table with the following data:

	Checks #1	Dataset #1
Data Set(s)		data_y
N	N	1000
First Point	<input type="checkbox"/>	1
Last Point	<input type="checkbox"/>	1000
Weighting	<input checked="" type="checkbox"/> on	

Below the table, there is a section for "Weighting Method" with a dropdown menu showing "Variance = Y² [w = 1 / Y²]". Below this, it says "Y - independent variable to be fit".

At the bottom of the window, there is a section with "Fit" and "Simulate" buttons. To the right of these buttons are three rows of data:

$\chi^2/\text{dof} =$	2.66783068174E-03
R ² =	9.99929752746E-01
time =	1.11E+03 ms - 18 iteration(s)

At the very bottom, there is a dropdown menu showing "cylinder-efit".

"Tab-Widgets"

Data Function Parameters Global Limits Fit - Control

Checks #1 Dataset #1

Data Set(s) data_y

N N 1000

First Point 1

Last Point 1000

Weighting on

Variance = $Y^2 [w = 1 / Y^2]$

Y - independent variable to be fit

Data

Weighting

Data Function Parameters Global Limits Fit - Control

cylinder-efit

Parameters: 7 # Indep. Variables: 1 # Dep. Variables: 1

Form Factor of Cylinder with Radius R and Length L:

$I(Q) = I_0 \times P(Q);$
 $P(Q) = \int [0..r/2] F^2(Q,R,L,a) \sin(a) da;$
 $F(Q,R,L,a) \Rightarrow 2J_1[QR\sin(a)] / [QR\sin(a)] \times \sin(QL\cos(a)/2) / (QL\cos(a)/2);$
 $J_1(x)$ - the regular cylindrical Bessel function of first order .

L Length of Cylinder [A]
 R Radius of Cylinder [A]
 I0 Forward Scattering calculated [1/cm]
 bgd Background [1/cm]
 sldCylinder SLD [1/cm/cm]
 sldSolvent SLD [1/cm/cm]
 phi volume fraction [0..1]

Function Info

Data Function Parameters Global Limits Fit - Control

	Vary?	From..To	Value #1	Error #1
L	<input checked="" type="checkbox"/>	..	500	---
R	<input checked="" type="checkbox"/>	..	20	---
I0	<input type="checkbox"/>	..	1	---
bgd	<input type="checkbox"/>	..	0	---
sldCylinder	<input type="checkbox"/>	..	3E+10	---
sldSolvent	<input type="checkbox"/>	..	-5.6E+09	---
phi	<input checked="" type="checkbox"/>	..	0.01	---

Auto Simulation Scale Errors Save Session Statistics Notes [after Fit]

Fit? Local Limits

Parameters Init. Values

Data Function Parameters Global Limits Fit - Control

Global Limits for Parameters [FROM .. TO] ::

1	\leq	L	\leq	10000
1	\leq	R	\leq	1000
0	\leq	I0	\leq	1e+06
0	\leq	bgd	\leq	10
-inf	\leq	sldCylinder	\leq	inf
-inf	\leq	sldSolvent	\leq	inf
0.001	\leq	phi	\leq	1

Global Limits

Data Function Parameters Global Limits Fit - Control

Algorithm Levenberg-Marquardt

Significant Digits 9

Levenberg-Marquardt Options

Levenberg Mode [delta, scaled]
 Derivative Step Size 1e-4
 Stopping Criteria:
 Maximal # Iterations 1000
 Absolute Tolerance 0
 Relative Tolerance 0
 Reaching Constant χ^2 Derivative Step Size Variation

Fitting Algorithm

Step 3: Push Button "Fit"

The screenshot displays a software interface for data fitting. The main window, titled "Graph1", shows a log-log plot of intensity I [cm⁻¹] versus scattering vector Q [Å⁻¹]. The data points are black dots, and a solid black line represents the fit. The plot shows a sharp drop in intensity around $Q \approx 0.05$ Å⁻¹.

An "Iterations" window is open, showing the following data:

#	Stopping Criterion	chi ²
29[<1000]	1.853203443E-08 [<0]	1.67106765096E-01

The "FITTABLE(s)" panel on the right contains the following settings:

- Algorithm: Levenberg-Marquardt
- Significant Digits: 9
- Levenberg Mode: [delta, scaled]
- Derivative Step Size: 1e-4
- Maximal # Iterations: 1000
- Absolute Tolerance: 0
- Relative Tolerance: 0
- Reaching Constant χ^2 : Derivative Step Size Variation

The "Fit" button in the FITTABLE(s) panel is highlighted with a green box. Below the plot, the "Project Explorer" shows a table of project items:

Name	Type	View	Created	Label
data	Table	Normal	11/11/15 00:11:19	Simulated Curve
Graph1	Graph	Maximized	25.02.21 10:29	

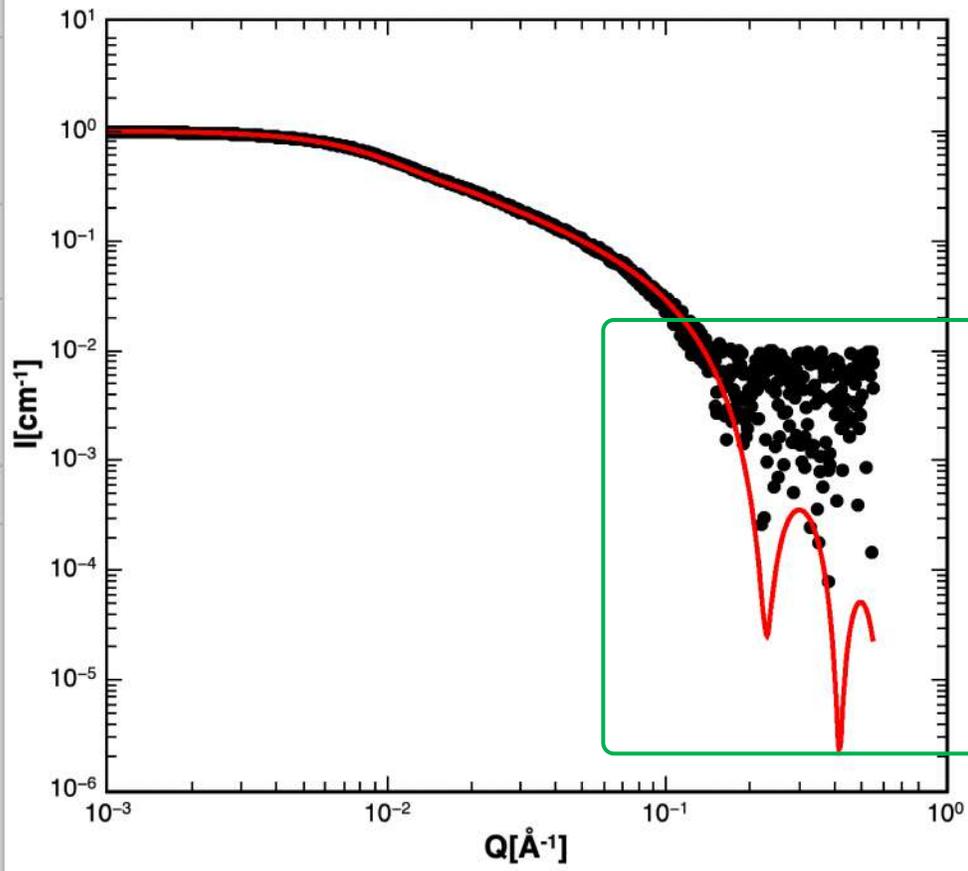
```

Fit|Init: 0.014sec
Fit|Started|Data Loading: 0.289sec
Fit|Started|Loaded|Fit Preparation: 0.356sec
Fit|Started|Loaded|Prepared|Iterations:
# (levenberg) 1[<1000] 3.3968 [< 0] chi^2 0.202428326 [ 496.603 19.7662 0.00154453 ] 1 [x const chi] 0.351sec
# (levenberg) 2[<1000] 19.225 [< 0] chi^2 0.1734698122 [ 477.378 18.3574 0.0015594 ] 0.672sec
# (levenberg) 3[<1000] 17.232 [< 0] chi^2 0.1686691554 [ 494.61 17.4949 0.00164753 ] 0.326sec
# (levenberg) 4[<1000] 17.003 [< 0] chi^2 0.1673645813 [ 511.613 17.0773 0.00169125 ] 0.328sec
# (levenberg) 5[<1000] 6.2538 [< 0] chi^2 0.16714799 [ 517.867 16.9101 0.0017092 ] 0.341sec
# (levenberg) 6[<1000] 2.6768 [< 0] chi^2 0.1671124956 [ 520.544 16.8436 0.00171567 ] 0.345sec
# (levenberg) 7[<1000] 0.37847 [< 0] chi^2 0.1671075469 [ 520.922 16.8196 0.00171858 ] 0.339sec
# (levenberg) 8[<1000] 0.19798 [< 0] chi^2 0.1671068698 [ 521.12 16.8108 0.00171959 ] 0.34sec
# (levenberg) 9[<1000] 0.040531 [< 0] chi^2 0.1671067793 [ 521.161 16.8075 0.00171999 ] 0.334sec
# (levenberg) 10[<1000] 0.03074 [< 0] chi^2 0.167106767 [ 521.192 16.8063 0.00172012 ] 0.33sec
# (levenberg) 11[<1000] 0.0035503 [< 0] chi^2 0.1671067653 [ 521.195 16.8059 0.00172017 ] 0.339sec
# (levenberg) 12[<1000] 0.0024742 [< 0] chi^2 0.1671067651 [ 521.198 16.8058 0.00172018 ] 0.357sec
# (levenberg) 13[<1000] 0.0003871 [< 0] chi^2 0.1671067651 [ 521.198 16.8058 0.00172018 ] 0.359sec
# (levenberg) 14[<1000] 8.1353e-05 [< 0] chi^2 0.1671067651 [ 521.198 16.8058 0.00172018 ] 0.354sec
# (levenberg) 15[<1000] 0.00018307 [< 0] chi^2 0.1671067651 [ 521.198 16.8058 0.00172018 ] 0.342sec
# (levenberg) 16[<1000] 3.7324e-05 [< 0] chi^2 0.1671067651 [ 521.198 16.8058 0.00172018 ] 0.348sec
# (levenberg) 17[<1000] 7.7269e-05 [< 0] chi^2 0.1671067651 [ 521.199 16.8058 0.00172018 ] 0.334sec
# (levenberg) 18[<1000] 0.00015815 [< 0] chi^2 0.1671067651 [ 521.199 16.8058 0.00172019 ] 0.338sec
# (levenberg) 19[<1000] 3.1621e-05 [< 0] chi^2 0.1671067651 [ 521.199 16.8058 0.00172019 ] 0.351sec
# (levenberg) 20[<1000] 6.3738e-05 [< 0] chi^2 0.1671067651 [ 521.199 16.8058 0.00172019 ] 0.395sec
# (levenberg) 21[<1000] 1.2586e-05 [< 0] chi^2 0.1671067651 [ 521.199 16.8058 0.00172019 ] 0.359sec
# (levenberg) 22[<1000] 2.5108e-06 [< 0] chi^2 0.1671067651 [ 521.199 16.8058 0.00172019 ] 0.361sec
# (levenberg) 23[<1000] 5.0257e-06 [< 0] chi^2 0.1671067651 [ 521.199 16.8058 0.00172019 ] 0.337sec
# (levenberg) 24[<1000] 7.4687e-08 [< 0] chi^2 0.1671067651 [ 521.199 16.8058 0.00172019 ] 1 [x const chi] 0.167sec
# (levenberg) 25[<1000] 9.7877e-05 [< 0] chi^2 0.1671067651 [ 521.199 16.8058 0.00172019 ] 2 [x const chi] 0.498sec
# (levenberg) 26[<1000] 3.0901e-07 [< 0] chi^2 0.1671067651 [ 521.199 16.8058 0.00172019 ] 0.736sec
# (levenberg) 27[<1000] 6.1768e-07 [< 0] chi^2 0.1671067651 [ 521.199 16.8058 0.00172019 ] 0.343sec
# (levenberg) 28[<1000] 1.2339e-06 [< 0] chi^2 0.1671067651 [ 521.199 16.8058 0.00172019 ] 0.344sec
# (levenberg) 29[<1000] 1.8532e-08 [< 0] chi^2 0.1671067651 [ 521.199 16.8058 0.00172019 ] 0.376sec
# (levenberg) 30[<1000] 3.7065e-08 [< 0] chi^2 0.1671067651 [ 521.199 16.8058 0.00172019 ] 0.34sec
# (levenberg) 31[<1000] 3.7065e-08 [< 0] chi^2 0.1671067651 [ 521.199 16.8058 0.00172019 ] 0.344sec
# (levenberg) 32[<1000] 3.7064e-08 [< 0] chi^2 0.1671067651 [ 521.199 16.8058 0.00172019 ] 0.337sec
# (levenberg) 33[<1000] 3.7066e-09 [< 0] chi^2 0.1671067651 [ 521.199 16.8058 0.00172019 ] 0.356sec
# (levenberg) 34[<1000] 3.7065e-09 [< 0] chi^2 0.1671067651 [ 521.199 16.8058 0.00172019 ] 0.347sec
# (levenberg) 35[<1000] 7.4131e-09 [< 0] chi^2 0.1671067651 [ 521.199 16.8058 0.00172019 ] 0.335sec
# (levenberg) 36[<1000] 7.413e-09 [< 0] chi^2 0.1671067651 [ 521.199 16.8058 0.00172019 ] 0.34sec
# (levenberg) 37[<1000] 7.4131e-10 [< 0] chi^2 0.1671067651 [ 521.199 16.8058 0.00172019 ] 0.368sec
# (levenberg) 38[<1000] 1.4826e-09 [< 0] chi^2 0.1671067651 [ 521.199 16.8058 0.00172019 ] 0.34sec
# (levenberg) 39[<1000] 1.4826e-09 [< 0] chi^2 0.1671067651 [ 521.199 16.8058 0.00172019 ] 0.337sec
# (levenberg) 40[<1000] 1.0919e-10 [< 0] chi^2 0.1671067651 [ 521.199 16.8058 0.00172019 ] 1 [x const chi] 0.072sec
# (levenberg) 41[<1000] 3.0684e-09 [< 0] chi^2 0.1671067651 [ 521.199 16.8058 0.00172019 ] 0.768sec
# (levenberg) 42[<1000] 6.1369e-13 [< 0] chi^2 0.1671067651 [ 521.199 16.8058 0.00172019 ] 1 [x const chi] 0.086sec
# (levenberg) 43[<1000] 3.0684e-12 [< 0] chi^2 0.1671067651 [ 521.199 16.8058 0.00172019 ] 2 [x const chi] 0.509sec
# (levenberg) 44[<1000] 3.0684e-12 [< 0] chi^2 0.1671067651 [ 521.199 16.8058 0.00172019 ] 3 [x const chi] 0.5sec
# (levenberg) 45[<1000] 3.0684e-12 [< 0] chi^2 0.1671067651 [ 521.199 16.8058 0.00172019 ] 4 [x const chi] 0.501sec
# (levenberg) 46[<1000] 8.5611e-05 [< 0] chi^2 0.1671067651 [ 521.199 16.8058 0.00172019 ] 5 [x const chi] 0.496sec
# (levenberg) 47[<1000] 3.9178e-09 [< 0] chi^2 0.1671067651 [ 521.199 16.8058 0.00172019 ] 6 [x const chi] 0.502sec
# (levenberg) 48[<1000] 3.9178e-09 [< 0] chi^2 0.1671067651 [ 521.199 16.8058 0.00172019 ] 7 [x const chi] 0.499sec
# (levenberg) 49[<1000] 8.5611e-05 [< 0] chi^2 0.1671067651 [ 521.199 16.8058 0.00172019 ] 8 [x const chi] 0.5sec
Fit|Finished
Fit|Finished|Jacobian Matrix: 0.344sec
Fit|Finished|Covariant Matrix: 0sec
Fit|Finished|Parameter Transfer: 0sec

```

In terminal:
 Iterations information

Graph1



Background should be also fitted

FITTABLE(s)

Save Current Fitting Session

Select Function Fitting Session Generate Results

Data Function **Parameters** Global Limits Fit - Control

	Vary?From..To	Value #1	Error #1
L	<input checked="" type="checkbox"/> ..	521.19878	± 19.8251934
R	<input checked="" type="checkbox"/> ..	16.8057663	± 0.16661837
I0	<input type="checkbox"/> ..	1.00819668	---
bgd	<input type="checkbox"/> ..	0	---
sldCylinder	<input type="checkbox"/> ..	3E+10	---
sldSolvent	<input type="checkbox"/> ..	-5.6E+09	---
phi	<input checked="" type="checkbox"/> ..	0.00172018583	$\pm 3.52083433...$

Auto Simulation
 Scale Errors
 Save Session
 Statistics Notes [after Fit]

 $\chi^2/\text{dof} =$

 $R^2 =$

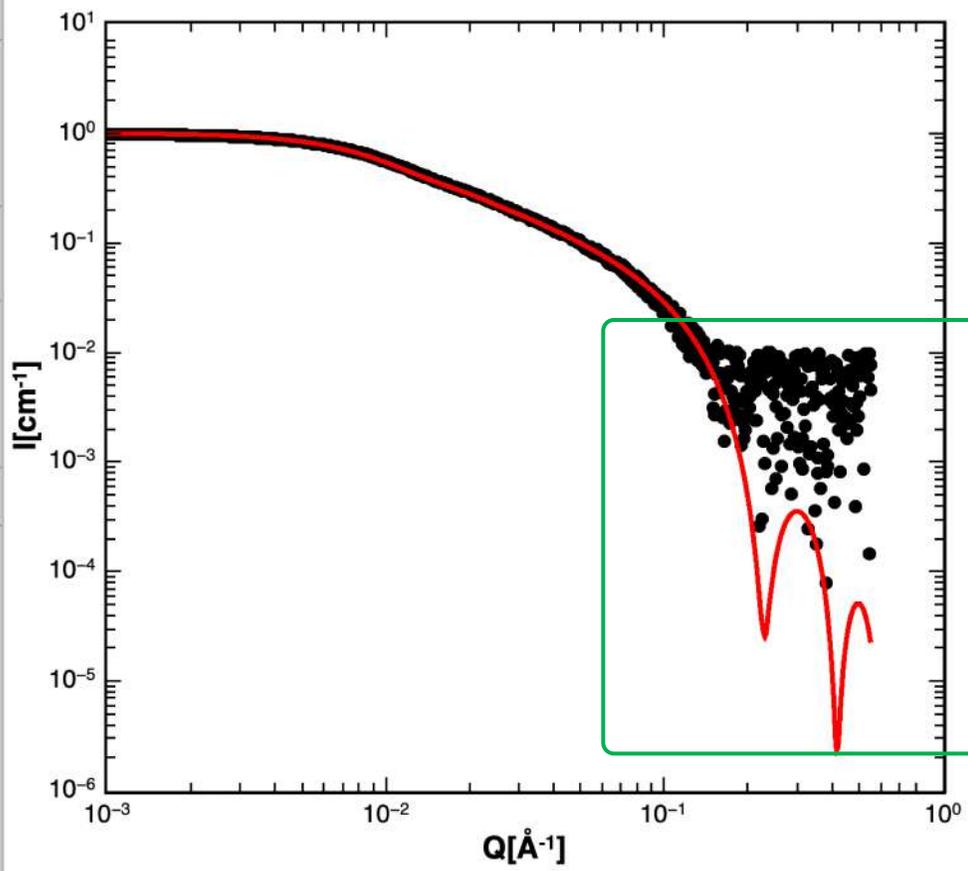
 time =

cylinder-efit

Project Explorer

Name	Type	View	Created	Label
data	Table	Normal	11/11/15 00:11:19	Simulated Curve
fitCurve-cylinder-efit	Table	Hidden	26.02.21 16:56	Fitting Curve
fitCurve-cylinder-efit-session	Table	Hidden	26.02.21 16:56	FIT1D::Settings::Table
Graph1	Graph	Maximized	25.02.21 10:29	

Graph1



FITTABLE(s)

Save Current Fitting Session

Select Function Fitting Session Generate Results

Data	Function	Parameters	Global Limits	Fit - Control
	Vary?From..To	Value #1	Error #1	
<input checked="" type="checkbox"/>	L	521.19878	± 19.8251934	
<input checked="" type="checkbox"/>	R	16.8057663	± 0.16661837	
<input type="checkbox"/>	l0	1.00819888	---	
<input checked="" type="checkbox"/>	bgd	0	---	
<input type="checkbox"/>	slidCylinder	3E+10	---	
<input type="checkbox"/>	slidSolvent	-5.6E+09	---	
<input checked="" type="checkbox"/>	phi	0.00172018583	$\pm 3.52083433...$	

Auto Simulation Scale Errors Save Session Statistics Notes [after Fit]

Fit Simulate $\chi^2/\text{dof} = 1.67106765096\text{E-}01$

Script :: Before Fit $R^2 = 9.99996984447\text{E-}01$

Script :: After Fit time = 2.02E+04 ms - 49 iteration(s)

cylinder-efit

Project Explorer

Name	Type	View	Created	Label
data	Table	Normal	11/11/15 00:11:19	Simulated Curve
fitCurve-cylinder-efit	Table	Hidden	26.02.21 16:56	Fitting Curve
fitCurve-cylinder-efit-session	Table	Hidden	26.02.21 16:56	FIT1D::Settings::Table
Graph1	Graph	Maximized	25.02.21 10:29	

Results Log Project Explorer

Data Function Parameters Global Limits Fit - Control
 Checks #1 Dataset #1
 Data Set(s) data_y
 N 1000
 First Point 1
 Last Point 1000
 Weighting on

Weighting Method
 Variance = $Y^2 [w = 1 / Y^2]$
 Y - independent variable to be fit

Weighting Method
 Variance = $Y^2 [w = 1 / Y^2]$
 Y - independent variable to be fit

QTISAS - /Users/plpich/Documents/sans/qtikws-documentation/video-manuals/fitting-help/data-cylinder.qti *

Graph1

FITTABLE(s)
 Save Current Fitting Session
 Select Function Fitting Session Generate Results

Data	Function	Parameters	Global Limits	Fit - Control
	Vary?From..To	Value #1	Error #1	
L	<input checked="" type="checkbox"/> ..	501.17397	±18.2374665	
R	<input checked="" type="checkbox"/> ..	17.8262883	±0.197617919	
l0	<input type="checkbox"/> ..	1.00630086	---	
bgd	<input checked="" type="checkbox"/> ..	0.000245290345	±2.19929156E-05	
slidCylinder	<input type="checkbox"/> ..	3E+10	---	
slidSolvent	<input type="checkbox"/> ..	-5.6E+09	---	
phi	<input checked="" type="checkbox"/> ..	0.00158696598	±3.41017218E-05	

Auto Simulation Scale Errors Save Session Statistics Notes [after Fit]

FIT $\chi^2/\text{dof} = 1.50009065580E-01$
 Script :: Before Fit $R^2 = 9.99997295702E-01$
 Script :: After Fit time = 1.73E+04 ms - 38 iteration(s)

cylinder-efit

Project Explorer

Name	Type	View	Created	Label
data	Table	Normal	11/11/15 00:11:19	Simulated Curve
fitCurve-cylinder-efit	Table	Normal	26.02.21 16:56	Fitting Curve
fitCurve-cylinder-efit-session	Table	Normal	26.02.21 16:56	FIT1D::Settings::Table
Graph1	Graph	Maximized	25.02.21 10:29	

Results Log Project Explorer

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FITTABLE(s)

Save Current Fitting Session

Select Function Fitting Session Generate Results

Data Function Parameters Global Limits Fit - Control

Checks #1 Dataset #1

Data Set(s) data_y

N 1000

First Point 1

Last Point 1000

Weighting on

Weighting Method

Statistical [w = 1 / |Y|]

Y - independent variable to be fit

Fit Simulate $\chi^2/\text{dof} =$ 6.67141415953E-04

Script :: Before Fit R² = 9.99963827868E-01

Script :: After Fit time = 4.73E+03 ms - 9 iteration(s)

cylinder-efit

Weighting Method

Statistical [w = 1 / |Y|]

Y - independent variable to be fit

QTISAS - /Users/pipich/Documents/sans/qtikws-documentation/video-manuals/fitting-help/data-cylinder.qti *

Graph1

Intensity I [cm⁻¹] vs. Scattering Vector Q [Å⁻¹]

better

FITTABLE(s)

Save Current Fitting Session

Select Function Fitting Session Generate Results

Data Function Parameters Global Limits Fit - Control

	Vary?From_To	Value #1	Error #1
L	<input checked="" type="checkbox"/> ..	499.504601	±1.88529447
R	<input checked="" type="checkbox"/> ..	18.5484749	±0.137200374
I0	<input type="checkbox"/> ..	1.00328945	---
bgd	<input checked="" type="checkbox"/> ..	0.00170998169	±8.09564899E-05
slidCylinder	<input type="checkbox"/> ..	3E+10	---
slidSolvent	<input type="checkbox"/> ..	-5.6E+09	---
phi	<input checked="" type="checkbox"/> ..	0.00146629202	±2.0710359E-05

Auto Simulation Scale Errors Save Session Statistics Notes [after FIT]

Fit Simulate $\chi^2/\text{dof} =$ 6.67141415953E-04

Script :: Before Fit R² = 9.99963827868E-01

Script :: After Fit time = 4.73E+03 ms - 9 iteration(s)

cylinder-efit

COMPILER FITTABLE(s)

Project Explorer

Name	Type	View	Created	Label
data	Table	Normal	11/11/15 00:11:19	Simulated Curve
fitCurve-cylinder-efit	Table	Normal	26.02.21 16:56	Fitting Curve
fitCurve-cylinder-efit-session	Table	Normal	26.02.21 16:56	FIT1D::Settings::Table
Graph1	Graph	Maximized	25.02.21 10:29	

Results Log Project Explorer

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FITTABLE(s)

Save Current Fitting Session

Select Function Fitting Session Generate Results

Data Function Parameters Global Limits Fit - Control

Checks #1 Dataset #1

Data Set(s) data_y

N N 1000

First Point 1

Last Point 1000

Weighting off ... [w=1] ...

Weighting Method

Variance = $Y^2 [w = 1 / Y^2]$

Y - independent variable to be fit

Fit Simulate $\chi^2/\text{dof} = 1.50009065580E-01$

Script :: Before Fit R² = 9.99997295702E-01

Script :: After Fit time = 1.73E+04 ms - 38 iteration(s)

cylinder-efit

Weighting off ... [w=1] ...

QTISAS - /Users/pipich/Documents/sans/qtikws-documentation/video-manuals/fitting-help/data-cylinder.qti *

Graph1

And here:
NO Weighting

FITTABLE(s)

Save Current Fitting Session

Select Function Fitting Session Generate Results

Data Function Parameters Global Limits Fit - Control

	Vary?From.To	Value #1	Error #1
L	<input checked="" type="checkbox"/> ..	500.064703	±0.308307234
R	<input checked="" type="checkbox"/> ..	19.8442501	±0.111775714
l0	<input type="checkbox"/> ..	1.00016123	---
bgd	<input checked="" type="checkbox"/> ..	0.00482167108	±0.000198500781
slcylinder	<input type="checkbox"/> ..	3E+10	---
slsolvent	<input type="checkbox"/> ..	-5.6E+09	---
phi	<input checked="" type="checkbox"/> ..	0.00127562952	±1.45002285E-05

Auto Simulation Scale Errors Save Session Statistics Notes [after Fit]

Fit Simulate $\chi^2/\text{dof} = 8.16005664478E-06$

Script :: Before Fit R² = 9.99947159193E-01

Script :: After Fit time = 1.22E+04 ms - 25 iteration(s)

cylinder-efit

Project Explorer

Name	Type	View	Created	Label
data	Table	Normal	11/11/15 00:11:19	Simulated Curve
fitCurve-cylinder-efit	Table	Normal	26.02.21 16:56	Fitting Curve
fitCurve-cylinder-efit-session	Table	Normal	26.02.21 16:56	FIT1D::Settings:Table
Graph1	Graph	Maximized	25.02.21 10:29	

Results Log Project Explorer

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fitCurve-cylinder-efit - Fitting Curve

	x[X]	y[Y]	weight[yEr]	sigma[xEr]	residues[Y]	Characteristics	Conditions	Parameters	Values	Errors
1	1.00000000E-03	9.980047983E-01	1.00000000E+00	00000000E+00	3.905201662E-03	Fitting Function	-> cylinder-efit	L	500.064703	±0.308307234
2	1.006340000E-03	9.979164839E-01	1.00000000E+00	00000000E+00	2.123516134E-03	Number of Parameters	-> 7	R	19.8442501	±0.111775714
3	1.012710000E-03	9.978272008E-01	1.00000000E+00	00000000E+00	1.699799198E-03	Time of Simulation	-> 16 ms	IO	1.0048088	---
4	1.019130000E-03	9.977366586E-01	1.00000000E+00	00000000E+00	-3.422658631E-03	x-Range Source	-> Same x as Fitting Data	bgd	0.00482167108	±0.000198500781
5	1.025590000E-03	9.976449868E-01	1.00000000E+00	00000000E+00	3.805013173E-03	x-min	-> 0.001	sldCylinder	3E+10	---
6	1.032090000E-03	9.975521751E-01	1.00000000E+00	00000000E+00	-3.548175085E-03	x-max	-> 0.55	sldSolvent	-5.6E+09	---
7	1.038620000E-03	9.974583572E-01	1.00000000E+00	00000000E+00	-9.413571576E-04	Number Points	-> 1000	phi	0.00127562952	±1.45002285E-05
8	1.045210000E-03	9.973630903E-01	1.00000000E+00	00000000E+00	-2.322090278E-03	Logarithmic Step	-> Yes			
9	1.051830000E-03	9.972667963E-01	1.00000000E+00	00000000E+00	-3.044796323E-03	y-min	-> 0			
10	1.058490000E-03	9.971693206E-01	1.00000000E+00	00000000E+00	2.581679352E-03	Dataset	-> data_y			
11	1.065200000E-03	9.970705050E-01	1.00000000E+00	00000000E+00	1.957495048E-03	N	-> 1000			
12	1.071950000E-03	9.969704845E-01	1.00000000E+00	00000000E+00	4.769515508E-03	np	-> 4			
13	1.078740000E-03	9.968692486E-01	1.00000000E+00	00000000E+00	-4.542485626E-04	DoF=N-np	-> 996			
14	1.085580000E-03	9.967666359E-01	1.00000000E+00	00000000E+00	-1.454635925E-03	chi^2	-> 8.12741641820E-03			
15	1.092450000E-03	9.966629358E-01	1.00000000E+00	00000000E+00	4.727064200E-03	chi^2/DoF	-> 8.16005664478E-06			
16	1.099380000E-03	9.965576831E-01	1.00000000E+00	00000000E+00	2.614316929E-03	TSS	-> 1.53809468408E+02			
17	1.106340000E-03	9.964513210E-01	1.00000000E+00	00000000E+00	3.638678957E-03	R^2=1-chi^2/TSS	-> 9.99947159193E-01			
18	1.113350000E-03	9.963435331E-01	1.00000000E+00	00000000E+00	-3.803533081E-03	R=1-sqrt(chi^2/TSS)	-> 9.92730831761E-01			
19	1.120410000E-03	9.962343053E-01	1.00000000E+00	00000000E+00	-4.639305291E-03					
20	1.127510000E-03	9.961237798E-01	1.00000000E+00	00000000E+00	4.176220157E-03					
21	1.134650000E-03	9.960119456E-01	1.00000000E+00	00000000E+00	-1.926945567E-03					
22	1.141840000E-03	9.958986332E-01	1.00000000E+00	00000000E+00	1.039366843E-03					
23	1.149070000E-03	9.957839875E-01	1.00000000E+00	00000000E+00	2.217012526E-03					
24	1.156360000E-03	9.956676771E-01	1.00000000E+00	00000000E+00	-2.536771046E-04					
25	1.163680000E-03	9.955501678E-01	1.00000000E+00	00000000E+00	-2.529167815E-03					

Structure of "Fitted Curve Table"

Project Explorer

Name	Type	View	Created	Label
data-cylinder	Table	Normal	11/11/15 00:11:19	Simulated Curve
fitCurve-cylinder-efit	Table	Maximized	26.02.21 16:56	Fitting Curve
fitCurve-cylinder-efit-coesion	Table	Normal	26.02.21 16:56	FIT1D::Settings::Table
fitCurve-cylinder-efit-statistics	Note	Normal	01.03.21 15:25	TableFit :: statistics info
Graph1	Graph	Normal	25.02.21 10:29	

Fitted Curve:

fitCurve-cylinder-efit-statistics - TableFit :: statistics info

1 [01.03.21 15:26]

2

3

4 Using Function: cylinder-efit

5

6

7 The Variance-Covariance Matrix $cov(i,i)$:

8

L	R	bgd	phi	
1.164861404E+04	-4.389593306E+02	1.553618937E+00	3.116928952E-02	L
-4.389593306E+02	1.531093556E+03	1.921605572E+00	-1.983609284E-01	R
1.553618937E+00	1.921605572E+00	4.828711602E-03	-2.569529733E-04	bgd
3.116928952E-02	-1.983609284E-01	-2.569529733E-04	2.576656442E-05	phi

16

17 Values, Errors and Dependences:

18

Value	Error[$\sqrt{\chi^2/(N-p) \cdot cov(i,i)}$]	Error[$\sqrt{cov(i,i)}$]	Dependency [$1-cov(i,i)/cov'(i,i)$]	Name
5.00064703E+02	$\pm 3.08307234E-01$	$\pm 1.07928745E+02$	8.95476570E-01	L
1.98442501E+01	$\pm 1.11775714E-01$	$\pm 3.91291906E+01$	9.99792823E-01	R
4.82167108E-03	$\pm 1.98500781E-04$	$\pm 6.94889315E-02$	7.92905420E-01	bgd
1.27562952E-03	$\pm 1.45002285E-05$	$\pm 5.07607766E-03$	9.99797988E-01	phi

26 $\chi^2 = 8.12741641820E-03$ $\chi^2/(N-p) = 8.16005664478E-06$ $\chi^2/(N-p)/Weight = 8.16005664478E-06$

27

Generated "Statistical Note"

FITTABLE(s)

Save Current Fitting Session

Select Function [] Fitting Session [] Generate Results []

Data Function Parameters Global Limits Fit - Control

	Vary?From..To	Value #1	Error #1
L	<input checked="" type="checkbox"/> ..	500.064703	± 0.308307234
R	<input checked="" type="checkbox"/> ..	19.8442501	± 0.111775714
l0	<input type="checkbox"/> ..	1.00016123	---
bgd	<input checked="" type="checkbox"/> ..	0.00482167108	± 0.000198500781
sldCylinder	<input type="checkbox"/> ..	3E+10	---
sldSolvent	<input type="checkbox"/> ..	-5.6E+09	---
phi	<input checked="" type="checkbox"/> ..	0.00127562952	$\pm 1.45002285E-05$

Auto Simulation Scale Errors Save Session Statistics Notes [after Fit]

Fit Simulate $\chi^2/dof = 8.16005664478E-06$

Script :: Before Fit $R^2 = 9.99947159193E-01$

Script :: After Fit time = 1.23E+04 ms - 26 iteration(s)

cylinder-efit

Project Explorer

Name	Type	View	Created	Label
data	Table	Normal	11/11/15 00:11:19	Simulated Curve
fitCurve-cylinder-efit	Table	Normal	26.02.21 16:56	Fitting Curve
fitCurve-cylinder-efit-session	Table	Normal	26.02.21 16:56	FIT1D::Settings::Table
fitCurve-cylinder-efit-statistics	Note	Maximized	01.03.21 15:25	TableFit :: statistics info
Graph1	Graph	Normal	25.02.21 10:29	

fitCurve-cylinder-efit-session - FIT1D::Settings::Table

Parameter	Parameter-Value
27 Session::Parameters::Use::3	0 <
28 Session::Parameters::Values::3	1.00016123 <
29 Session::Parameters::Ranges::3	.. <
30 Session::Parameters::Use::4	1 <
31 Session::Parameters::Values::4	0.00482167108 <
32 Session::Parameters::Ranges::4	.. <
33 Session::Parameters::Use::5	0 <
34 Session::Parameters::Values::5	3E+10 <
35 Session::Parameters::Ranges::5	.. <
36 Session::Parameters::Use::6	0 <
37 Session::Parameters::Values::6	-5.6E+09 <
38 Session::Parameters::Ranges::6	.. <
39 Session::Parameters::Use::7	1 <
40 Session::Parameters::Values::7	0.00127562952 <
41 Session::Parameters::Ranges::7	.. <
42 Session::Parameters::Errors	±0.308307234 ±0.111775714 --- ±0.000198500781 --- ±1.45002285E-05 <
43 Session::Fit::SaveSession	yes <
44 Session::Chi2	1.27989808882E-05 <
45 Session::R2	9.99917036421E-01 <
46 Session::Time	1.23E+04 ms - 26 iteration(s) <
47 Simulate::Color	0 <
48 Simulate::Color::Indexing	yes <
49 Simulate::Statistics	yes <
50 S	
51 S	
52 S	
53 Simulate::Uniform::Parameters	0.001 0.55 1000 1 0 <

Automatically saved "Fitting Session"

FITTABLE(s)

Save Current Fitting Session

Select Function Fitting Session Generate Results

Data Function **Parameters** Global Limits Fit - Control

	Vary?From..To	Value #1	Error #1
L	<input checked="" type="checkbox"/> ..	500.064703	±0.308307234
R	<input checked="" type="checkbox"/> ..	19.8442501	±0.111775714
l0	<input type="checkbox"/> ..	1.00016123	---
bgd	<input checked="" type="checkbox"/> ..	0.00482167108	±0.000198500781
sldCylinder	<input type="checkbox"/> ..	3E+10	---
sldSolvent	<input type="checkbox"/> ..	-5.6E+09	---
phi	<input checked="" type="checkbox"/> ..	0.00127562952	±1.45002285E-05

Auto Simulation Scale Errors **Save Session** Statistics Notes [after Fit]

Fit Simulate $\chi^2/\text{dof} =$ 8.16005664478E-06

Script :: Before Fit R² = 9.99947159193E-01

Script :: After Fit time = 1.23E+04 ms - 26 iteration(s)

cylinder-efit

Project Explorer

Name	Type	View	Created	Label
data	Table	Normal	11/11/15 00:11:19	Simulated Curve
fitCurve-cylinder-efit	Table	Normal	26.02.21 16:56	Fitting Curve
fitCurve-cylinder-efit-session	Table	Maximized	26.02.21 16:56	FIT1D::Settings::Table
fitCurve-cylinder-efit-statistics	Note	Normal	01.03.21 15:25	TableFit :: statistics info
Graph1	Graph	Normal	25.02.21 10:29	

Step 4 [optional]: Push Button “next” to go to “Generate Results”

Save Current Fitting Session

Select Function [next] Fitting Session [next] Generate Results

Data Function Parameters Global Limits Fit - Control

	Vary?From..To	Value #1	Error #1
L	<input checked="" type="checkbox"/> ..	499.504601	±1.88529447
R	<input checked="" type="checkbox"/> ..	18.5484749	±0.137200374
I0	<input type="checkbox"/> ..	1.00328945	---
bgd	<input checked="" type="checkbox"/> ..	0.00170998169	±8.09564899E-05
sldCylinder	<input type="checkbox"/> ..	3E+10	---
sldSolvent	<input type="checkbox"/> ..	-5.6E+09	---
phi	<input checked="" type="checkbox"/> ..	0.00146629202	±2.0710359E-05

“Fitting Session”

Auto Simulation Scale Errors Save Session Statistics Notes [after Fit]

Fit Simulate $\chi^2/\text{dof} = 6.67141415953E-04$

Script :: Before Fit $R^2 = 9.99963827868E-01$

Script :: After Fit time = 4.73E+03 ms - 9 iteration(s)

cylinder-efit

Save Current Fitting Session

Fitting Session [next] Generate Results [next] ...

Simulate Curve Generate Tables Batch-Fit [Set-by-Set]

L	499.504601
R	18.5484749
I0	1.00328945
bgd	0.00170998169
sldCylinder	3E+10
sldSolvent	-5.6E+09
phi	0.00146629202

... Output control ...

[active-plot] [active-graph] data & fit

red

Color Indexing Save Session

... Uniform Q:: Range ...

... Same Q as Fitting Data ...

data_y

N :: 1 ≤ 1 ≤ 1000 ≤ 1000

... Weight ...

auto Indexing

Simulate Delete All

time = 20 ms

$\chi^2 = 6.64472850289E-01$

$\chi^2/\text{dof} = 6.67141415953E-04$

$R^2 = 9.99963827868E-01$

np 4 # data points 1000

“Generate Results”

cylinder-efit

1. "Simulate Curve" interface

Save Current Fitting Session

Fitting Session

Simulate Curve **Generate Tables** Batch-Fit [Set-by-Set]

L	499.504601
R	18.5484749
IO	1.00328945
bgd	0.00170998169
sidCylinder	3E+10
sidSolvent	-5.6E+09
phi	0.00146629202

... Output control ...

[active-plot] [active-graph] data & fit

red

Color Indexing Save Session

... Uniform Q:: Range ...

... Same Q as Fitting Data ...

data_y

N: 1 ≤ 1 ≤ 1000 ≤ 1000

... Weight ...

auto Indexing

time= 20 ms

χ^2 = 6.64472850289E-01

χ^2/dof = 6.67141415953E-04

R²= 9.99963827868E-01

np 4 # data points 1000

cylinder-efit

2. "Generate Tables" interface

Save Current Fitting Session

Fitting Session

Simulate Curve **Generate Tables** Batch-Fit [Set-by-Set]

Results -> New Table (row)

Results -> New Table (col)

Results -> to Log-Window

Results -> to Log-Window (one line)

Results -> Active Graph

cylinder-efit

3. "Batch-Fit" interface

Save Current Fitting Session

Fitting Session

Simulate Curve **Generate Tables** Batch-Fit [Set-by-Set]

Pattern all y-columns

	fit?	[Y::Set]	[Weight]	L	R	IO	bgd
All	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
data	<input checked="" type="checkbox"/>	y		499.504601	18.5484749	1.00328945	0.00170998169
fitCurve-cylinder-efit	<input type="checkbox"/>	y	weight	499.504601	18.5484749	1.00328945	0.00170998169
fitCurve-cylinder-efit-sessio	<input type="checkbox"/>			499.504601	18.5484749	1.00328945	0.00170998169

Will be separately introduced

Q[min]= 0 Q[max]= 1

Table Code::

cylinder-efit

1. "Simulate Curve" interface

1.1 "... Same Q/x :: Range ..."

The screenshot shows the 'Simulate Curve' interface for the '... Same Q as Fitting Data ...' option. The interface includes a table of parameters, an 'Output control' section, and a 'Weight' section. A green box highlights the '... Same Q as Fitting Data ...' section, which contains a dropdown menu set to 'data_y' and a range selection for 'N' from 1 to 1000. The 'Weight' section is also checked.

L	499.504601
R	18.5484749
l0	1.00328945
bgd	0.00170998169
sldCylinder	3E+10
sldSolvent	-5.6E+09
phi	0.00146629202

... Output control ...
[active-plot] [active-graph] data & fit
red
 Color Indexing Save Session
 ... Uniform Q:: Range ...
 ... Same Q as Fitting Data ...
data_y
N :: 1 ≤ 1 ≤ 1000 ≤ 1000
 ... Weight ...

auto Indexing
Simulate Delete All
time= 20 ms
 χ^2 = 6.64472850289E-01
 χ^2/dof = 6.67141415953E-04
R²= 9.99963827868E-01
np 4 # data points 1000
cylinder-efit

1.2 "... Uniform Q/x :: Range ..."

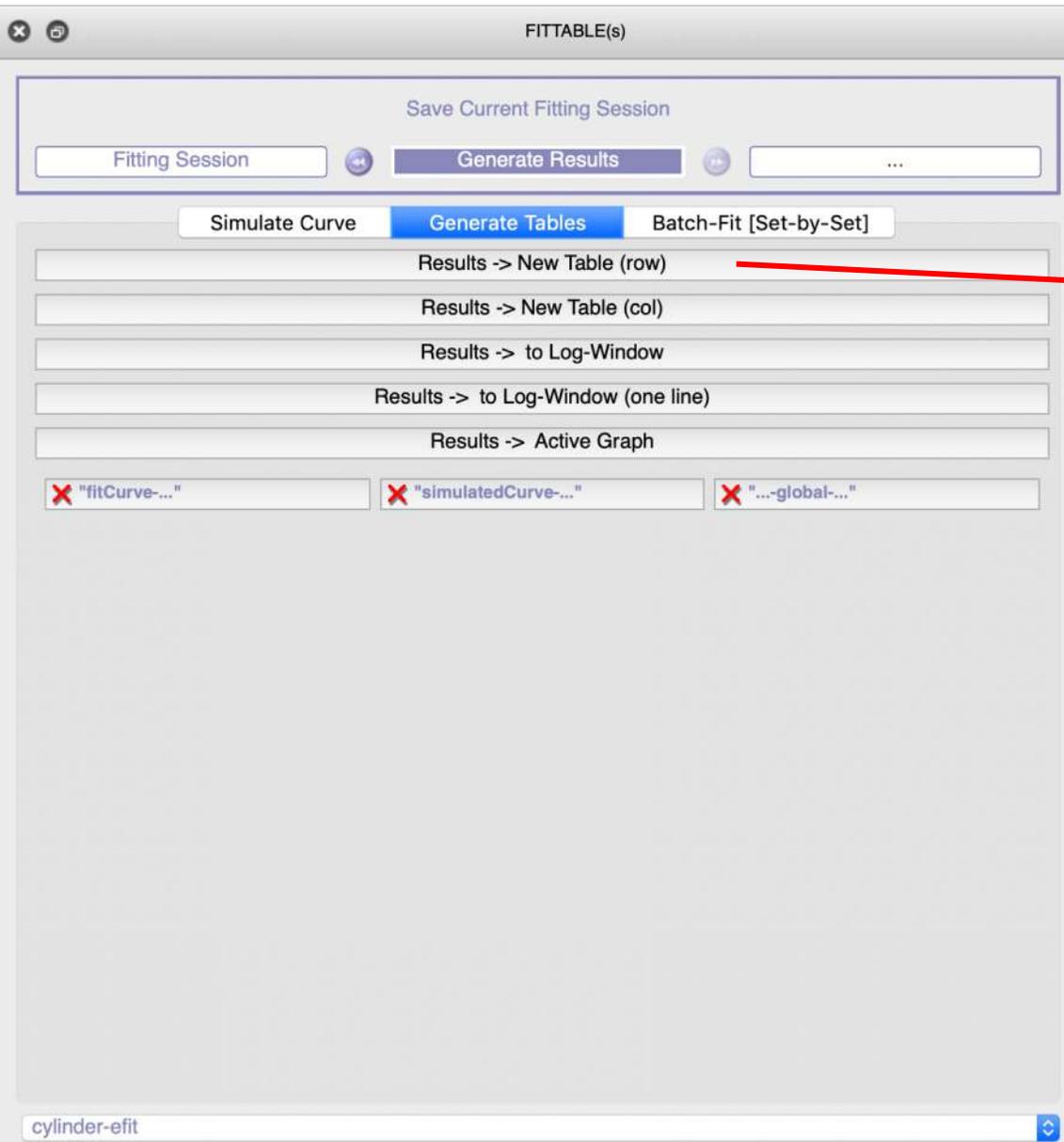
The screenshot shows the 'Simulate Curve' interface for the '... Uniform Q:: Range ...' option. The interface includes a table of parameters, an 'Output control' section, and a 'Uniform Q:: Range' section. A green box highlights the '... Uniform Q:: Range ...' section, which contains checkboxes for 'Logarithmic Step' and 'y[min]= 0', and input fields for 'Q[min]= 0.001', 'Q[max]= 0.55', and '# Points 1000'. The '... Same Q as Fitting Data ...' option is unchecked.

L	499.504601
R	18.5484749
l0	1.00328945
bgd	0.00170998169
sldCylinder	3E+10
sldSolvent	-5.6E+09
phi	0.00146629202

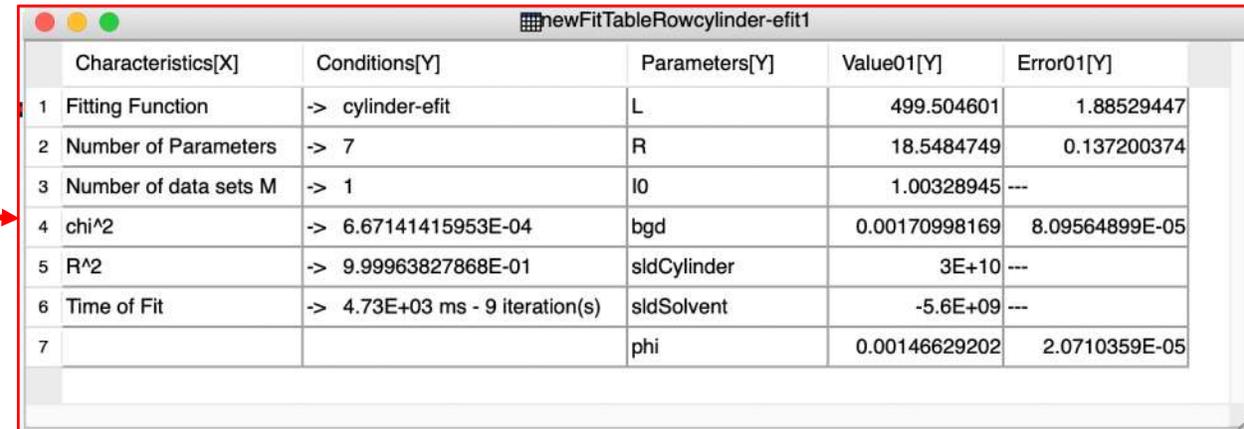
... Output control ...
[active-plot] [active-graph] data & fit
red
 Color Indexing Save Session
 ... Uniform Q:: Range ...
Q[min]= 0.001
Q[max]= 0.55
Points 1000
 Logarithmic Step y[min]= 0
 ... Same Q as Fitting Data ...

auto Indexing
Simulate Delete All
time= 20 ms
cylinder-efit

2. "Generate Tables" interface



The screenshot shows the FITTABLE(s) software interface. At the top, there is a window title bar with 'FITTABLE(s)'. Below it, a 'Save Current Fitting Session' section contains a 'Fitting Session' text field and a 'Generate Results' button. A main toolbar below has three buttons: 'Simulate Curve', 'Generate Tables' (highlighted in blue), and 'Batch-Fit [Set-by-Set]'. Underneath the toolbar are five buttons for result handling: 'Results -> New Table (row)', 'Results -> New Table (col)', 'Results -> to Log-Window', 'Results -> to Log-Window (one line)', and 'Results -> Active Graph'. At the bottom, there are three window tabs with red 'X' icons: '"fitCurve-..."', '"simulatedCurve-..."', and '"...-global-..."'. The status bar at the very bottom displays 'cylinder-efit'.



The screenshot shows a table window titled 'newFitTableRowcylinder-efit1'. The table has five columns: Characteristics[X], Conditions[Y], Parameters[Y], Value01[Y], and Error01[Y]. A red arrow points from the 'Results -> New Table (row)' button in the FITTABLE(s) interface to the first row of this table.

	Characteristics[X]	Conditions[Y]	Parameters[Y]	Value01[Y]	Error01[Y]
1	Fitting Function	-> cylinder-efit	L	499.504601	1.88529447
2	Number of Parameters	-> 7	R	18.5484749	0.137200374
3	Number of data sets M	-> 1	l0	1.00328945	---
4	chi^2	-> 6.67141415953E-04	bgd	0.00170998169	8.09564899E-05
5	R^2	-> 9.99963827868E-01	sldCylinder	3E+10	---
6	Time of Fit	-> 4.73E+03 ms - 9 iteration(s)	sldSolvent	-5.6E+09	---
7			phi	0.00146629202	2.0710359E-05

2. "Generate Tables" interface

FITTABLE(s)

Save Current Fitting Session

Fitting Session [Generate Results] ...

Simulate Curve **Generate Tables** Batch-Fit [Set-by-Set]

Results -> New Table (row)

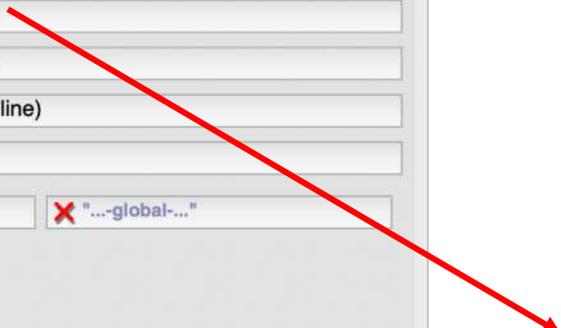
Results -> New Table (col)

Results -> to Log-Window

Results -> to Log-Window (one line)

Results -> Active Graph

✗ "fitCurve-..." ✗ "simulatedCurve-..." ✗ "...-global-..."



newFitTableColcylinder-efit1

Characteristics	Conditions	Nr[X]	L[Y]	LError[yEr]	R[Y]	RError[yEr]	I0[Y]	I0Error[yEr]	bgd[Y]	bgdError[yEr]	sldCylinder[Y]	sldCylinderError[yEr]
1 Fitting Function	-> cylinder-efit	1	499.504601	1.88529447	18.5484749	0.137200374	1.00328945	---	0.00170998169	8.09564899E-05	3E+10	---
2 Number of Parameters	-> 7											
3 Number of data sets M	-> 1											
4 chi^2	-> 6.67141415953E-04											
5 R^2	-> 9.99963827868E-01											
6 Time of Fit	-> 4.73E+03 ms - 9 iteration(s)											

cylinder-efit

2. "Generate Tables" interface

The screenshot displays the 'FITTABLE(s)' software interface. The main window has a menu bar with 'Simulate Curve', 'Generate Tables', and 'Batch-Fit [Set-by-Set]'. The 'Generate Tables' menu is open, showing options: 'Results -> New Table (row)', 'Results -> New Table (col)', 'Results -> to Log-Window', 'Results -> to Log-Window (one line)', and 'Results -> Active Graph'. A red arrow points from the 'Results -> to Log-Window' option to the 'Results Log' window at the bottom. The 'Results Log' window contains the following text:

```
[ 01.03.21 17:48 ]  
Fit Method: Levenberg-Marquardt  
Using Function: cylinder-efit  
data_y :  
L = 499.504601 ± 1.88529447  
R = 18.5484749 ± 0.137200374  
l0 = 1.00328945  
bgd = 0.00170998169 ± 8.09564899E-05  
slcCylinder = 3E+10  
slcSolvent = -5.6E+09  
phi = 0.00146629202 ± 2.0710359E-05  
chi^2 = 6.67141415953E-04  
R^2 = 9.99963827868E-01  
time = 4.73E+03 ms - 9 iteration(s)
```

The background shows a log-log plot of intensity versus $Q[\text{\AA}^{-1}]$. The x-axis ranges from 10^{-3} to 10^0 , and the y-axis ranges from 10^{-5} to 10^{-4} . The plot shows several data points and a fitted curve. The 'Results Log' window is titled 'Results Log' and has buttons for 'Results Log' and 'Project Explorer' at the bottom.

2. "Generate Tables" interface

FITTABLE(s)

Save Current Fitting Session

Fitting Session Generate Results

Simulate Curve **Generate Tables** Batch-Fit [Set-by-Set]

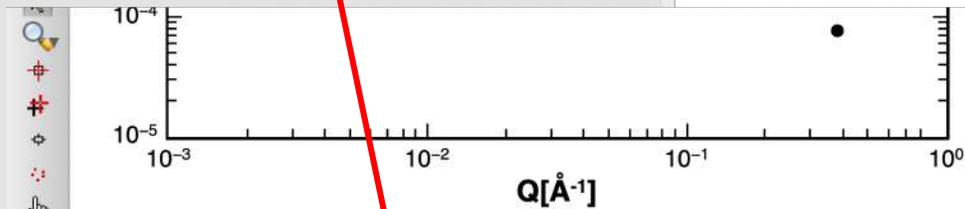
Results -> New Table (row)

Results -> New Table (col)

Results -> to Log-Window

Results -> to Log-Window (one line)

Results -> Active Graph



Results Log

[01.03.21 17:49]
Fit Method: Levenberg-Marquardt
Using Function: cylinder-efit

	L	L-error	R	R-error	I0	I0-error	bgd	bgd-error	sldCylinder	sldCylinder-error	sldSolvent	sldSolvent-error	phi	phi-error
Σ	499.504601	1.88529447	18.5484749	0.137200374		1.00328945	---	0.00170998169	8.09564899E-05		3E+10	---	-5.6E+09	---
T	(data_y)													
	chi^2 = 6.67141415953E-04													
	R^2 = 9.99963827868E-01													
	time = 4.73E+03 ms - 9 iteration(s)													

2. "Generate Tables" interface

FITTABLE(s)

Save Current Fitting Session

Fitting Session [Generate Results] ...

Simulate Curve **Generate Tables** Batch-Fit [Set-by-Set]

Results -> New Table (row)

Results -> New Table (col)

Results -> to Log-Window

Results -> to Log-Window (one line)

Results -> Active Graph

✗ "fitCurve-..." ✗ "simulatedCurve-..." ✗ "...-global-..."

cylinder-efit

