TAM Assistant Analysis Report
Kinetics

Model

Autocatalytic
d[C]/dt = k([A]o - (a/c)([C]-[C]o)) [C]

Model Input Parameters

a/c: 1

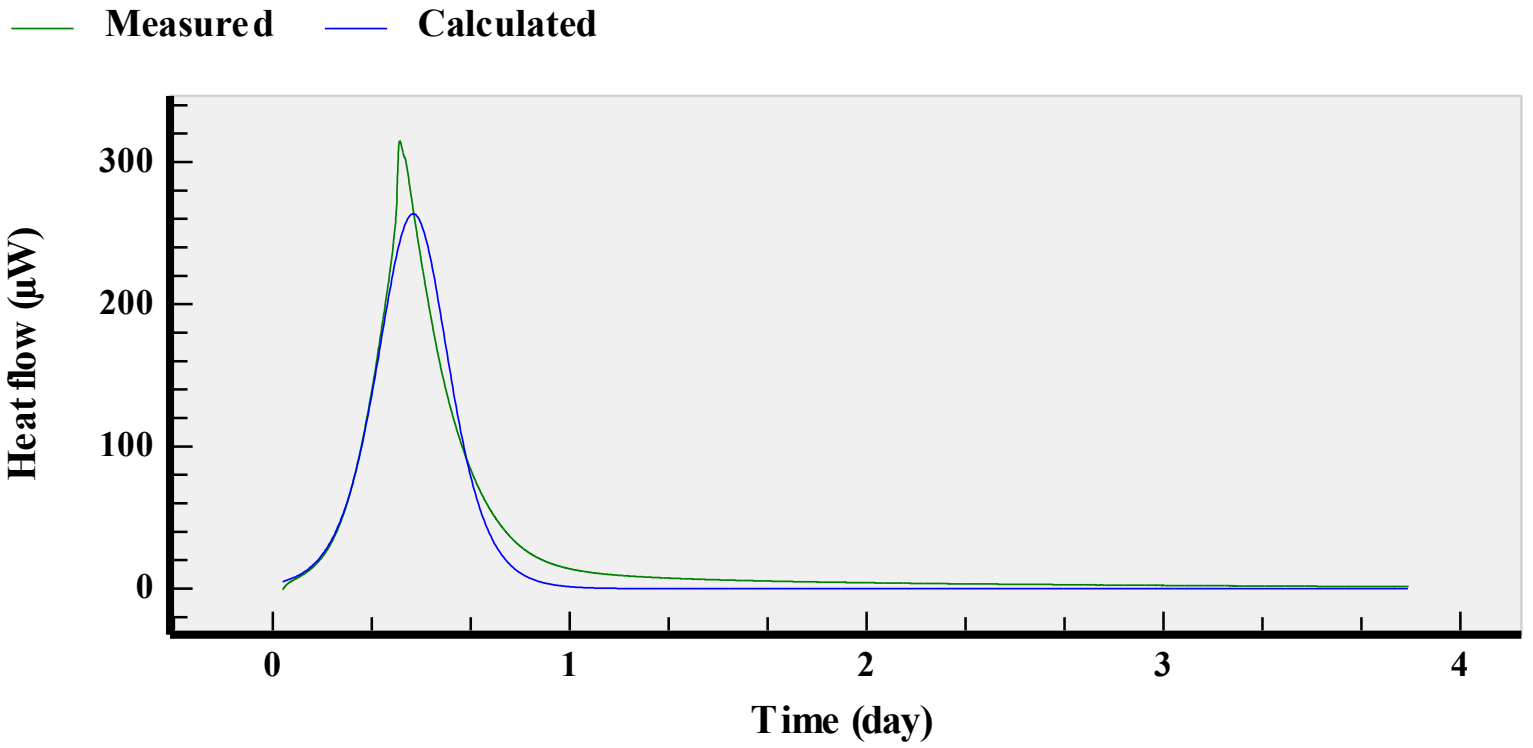
Signal - "3-NO2C6H4N2+ TfO- 85 Nitrogen 7-21-16.rslt"

Input

Results file path:	***S:\TAM-work\Diazo\Article-Diazo-Calorim-TAMIII\3 NO2C6H4N2+ TfO- 85 Nitrogen 7-21-16.rslt***
Measurement signal:	Data series.Signal
Mass:	10mg
[A]o:	3.3424mmol/g

Results

Po:	3.3162µW
k:	0.04272 g*s^-1*mol^-1 ± 9.8e-5 g*s^-1*mol^-1
dH:	219.5 kJ/mol ± 520 J/mol
Co:	1.06e-5 ± 1.3e-7
Standard deviation:	9.8849µW
NDF:	5562



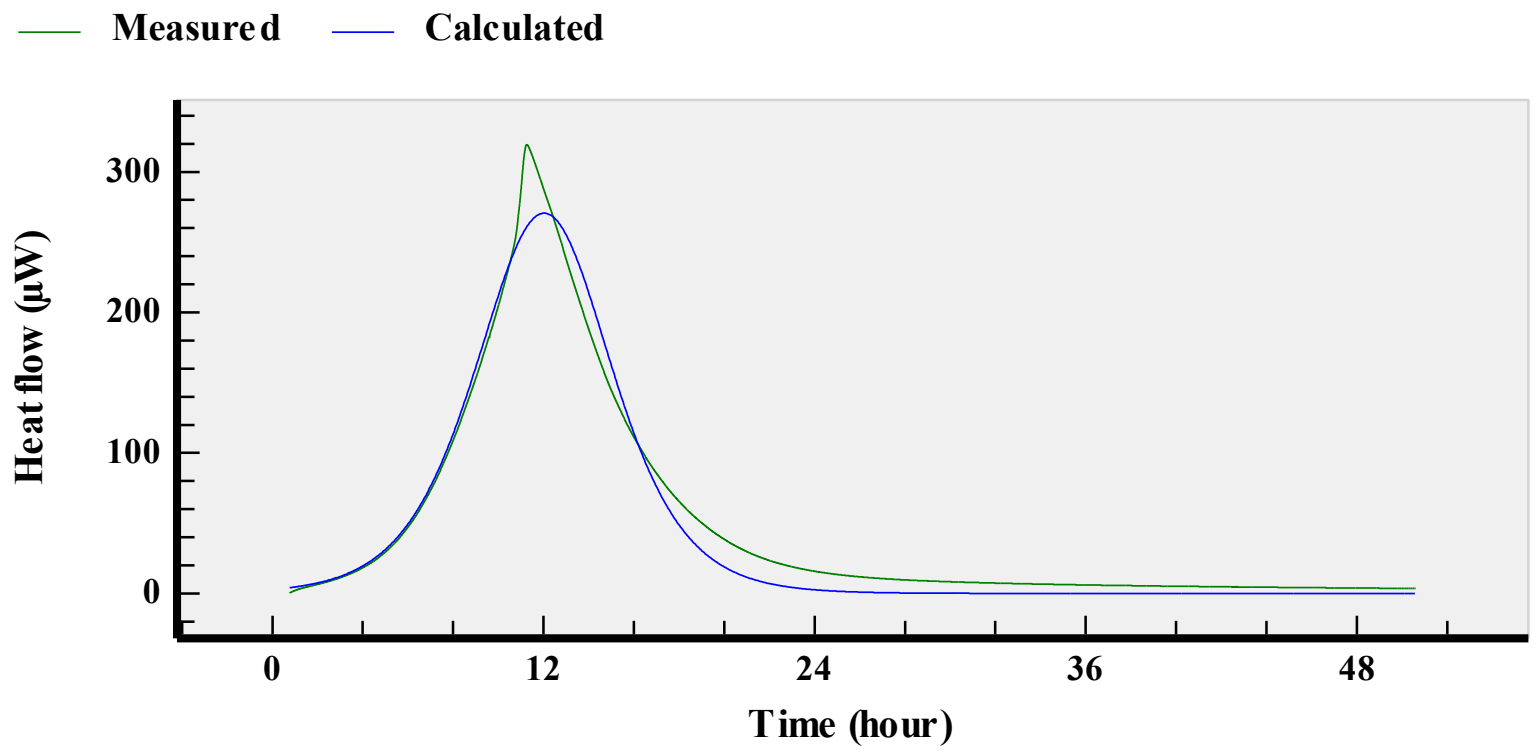
Signal - "3-NO2C6H4N2+ TfO- 85 Nitrogen 7-25-16.rslt"

Input

Results file path:	***S:\TAM-work\Diazo\Article-Diazo-Calorim-TAMIII\3 NO2C6H4N2+ TfO- 85 Nitrogen 7-25-16.rslt***
Measurement signal:	Data series.Signal
Mass:	10mg
[A]o:	3.3424mmol/g

Results

Po:	2.801µW
k:	0.04141 g*s^-1*mol^-1 ± 1.3e-4 g*s^-1*mol^-1
dH:	232.8 kJ/mol ± 540 J/mol
Co:	8.69e-6 ± 1.6e-7
Standard deviation:	11.408µW
NDF:	5333



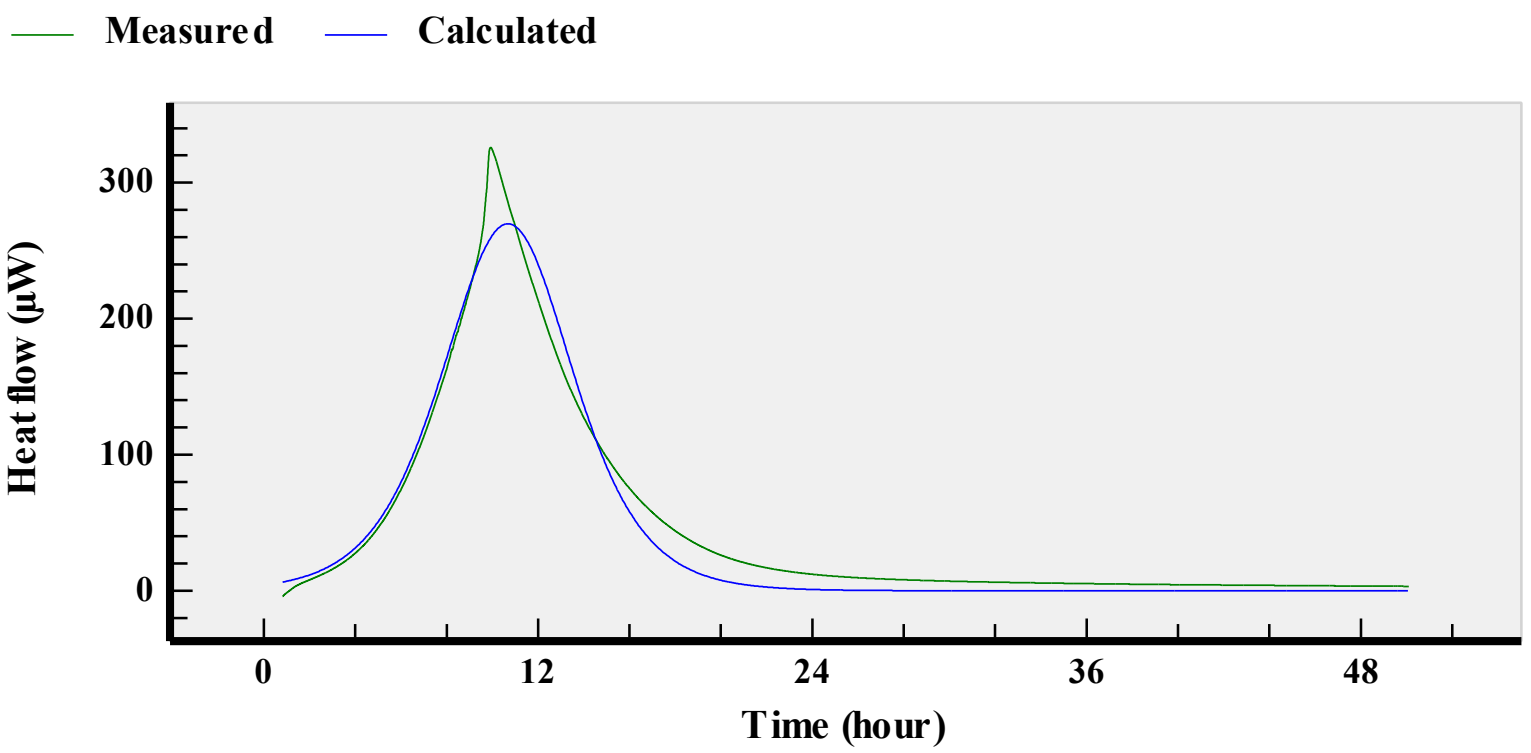
Signal - "3-NO2C6H4N2+ TfO- 85 Nitrogen 7-29-16.rslt"

Input

Results file path:	***S:\TAM-work\Diazo\Article-Diazo-Calorim-TAMIII\3 NO2C6H4N2+ TfO- 85 Nitrogen 7-29-16.rslt***
Measurement signal:	Data series.Signal
Mass:	10mg
[A]o:	3.3424mmol/g

Results

Po:	4.1968µW
k:	0.04336 g*s^-1*mol^-1 ± 1.5e-4 g*s^-1*mol^-1
dH:	221.0 kJ/mol ± 560 J/mol
Co:	1.31e-5 ± 2.5e-7
Standard deviation:	12.253µW
NDF:	5218



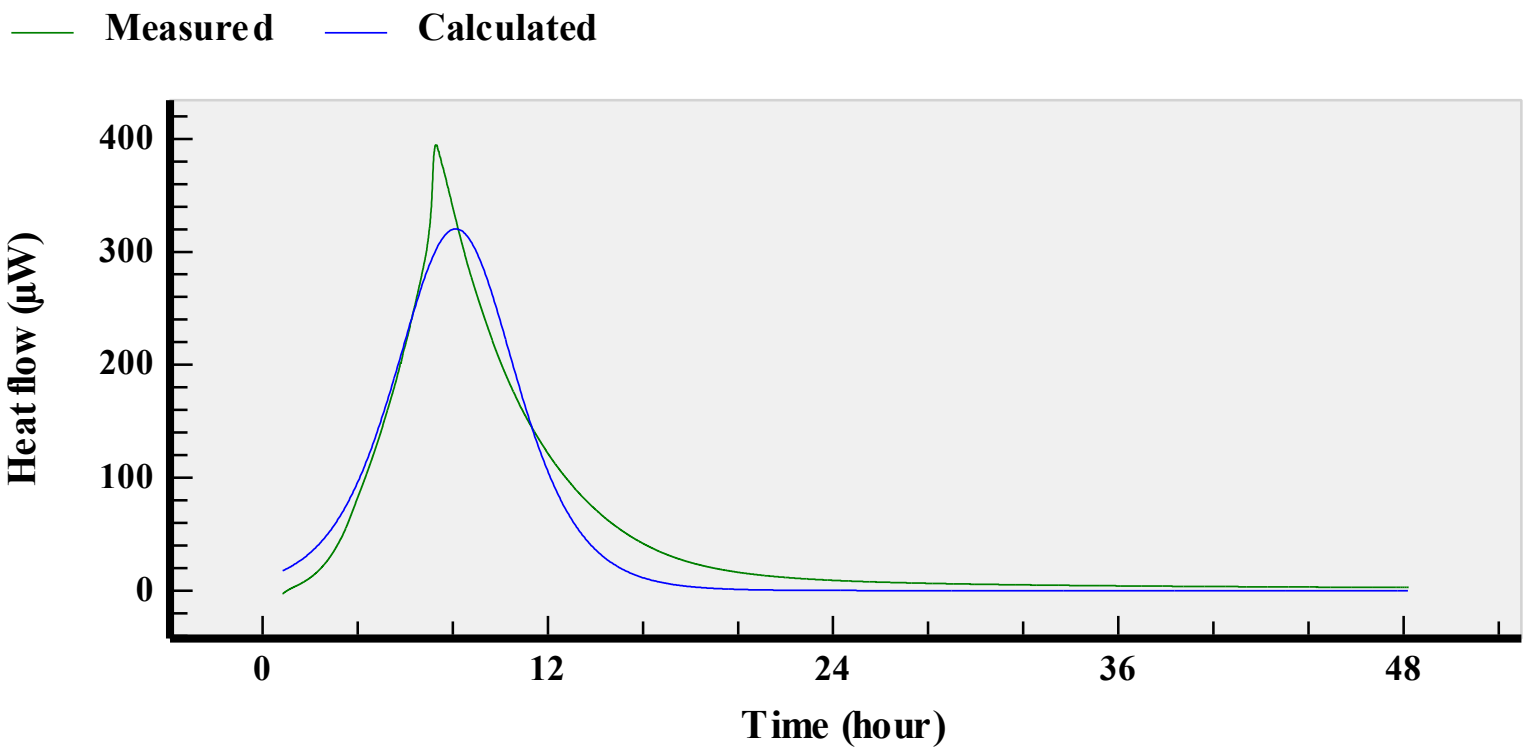
Signal - "3-NO2C6H4N2+ TfO- 85 Nitrogen 8-1-16.rslt"

Input

Results file path:	*S:\TAM-work\Diazo\Article-Diazo-Calorim-TAMIII\3 NO2C6H4N2+ TfO- 85 Nitrogen 8-1-16.rslt*
Measurement signal:	Data series.Signal
Mass:	10mg
[A]o:	3.3424mmol/g

Results

Po:	10.813µW
k:	0.04872 g*s^-1*mol^-1 ± 2.3e-4 g*s^-1*mol^-1
dH:	231.4 kJ/mol ± 750 J/mol
Co:	2.87e-5 ± 5.9e-7
Standard deviation:	17.903µW
NDF:	5319



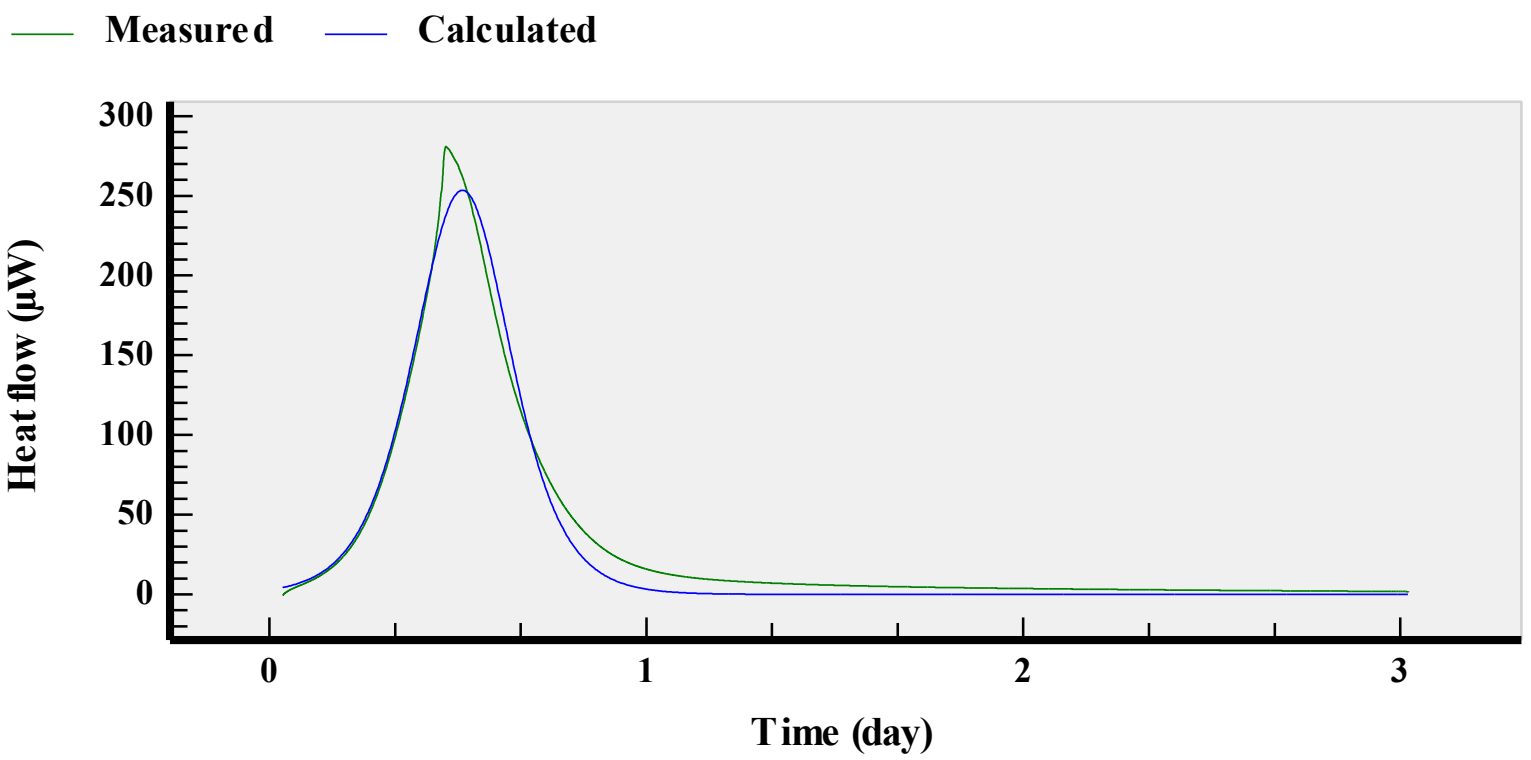
Signal - "3-NO2C6H4N2+ TfO- 85 Nitrogen 8-4-16.rslt"

Input

Results file path:	***S:\TAM-work\Diazo\Article-Diazo-Calorim-TAMIII\3 NO2C6H4N2+ TfO- 85 Nitrogen 8-4-16.rslt***
Measurement signal:	Data series.Signal
Mass:	10mg
[A]o:	3.3424mmol/g

Results

Po:	2.9152µW
k:	0.03994 g*s^-1*mol^-1 ± 1.1e-4 g*s^-1*mol^-1
dH:	225.9 kJ/mol ± 460 J/mol
Co:	9.67e-6 ± 1.5e-7
Standard deviation:	8.1925µW
NDF:	5529



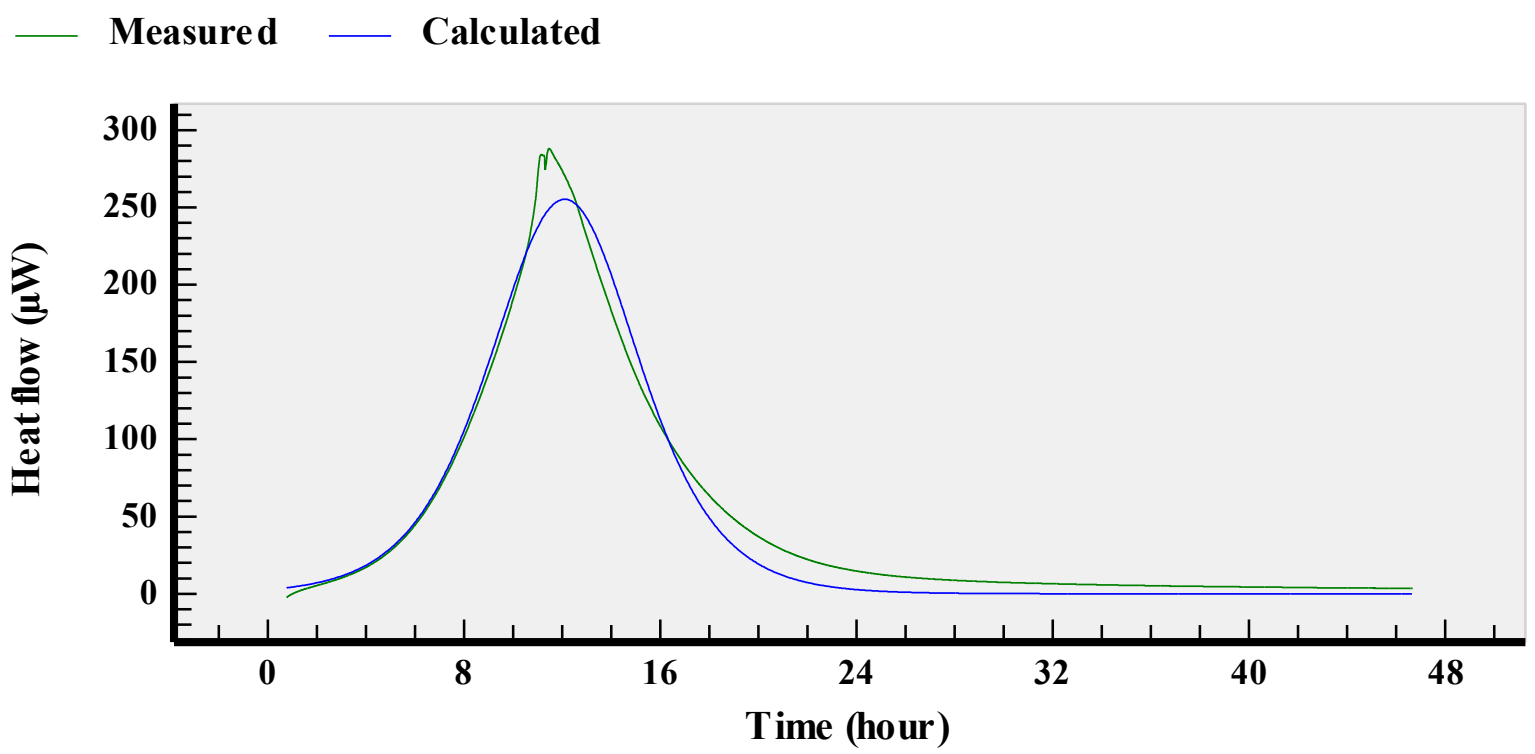
Signal - "3-NO2C6H4N2+ TfO- 85 Nitrogen 8-8-16.rslt"

Input

Results file path:	***S:\TAM-work\Diazo\Article-Diazo-Calorim-TAMIII\3 NO2C6H4N2+ TfO- 85 Nitrogen 8-8-16.rslt***
Measurement signal:	Data series.Signal
Mass:	10mg
[A]o:	3.3424mmol/g

Results

Po:	2.6876µW
k:	0.04098 g*s^-1*mol^-1 ± 1.2e-4 g*s^-1*mol^-1
dH:	221.8 kJ/mol ± 460 J/mol
Co:	8.84e-6 ± 1.4e-7
Standard deviation:	10.29µW
NDF:	5357


Measured
Calculated
Heat flow (μW)
300
250
200
150
100
50
0
0
8
16
24
32
40
48
Time (hour)