# CHEMDASH 2.0 USER GUIDE

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### ChemDash 2.0 Reference Guide

### Introduction

ChemDash 2.0 is a software for Serstech Raman Spectrometers towards a powerful solution for chemical intelligence. ChemDash is the perfect tool for storage, view and management of data including both libraries and measurements. ChemDash also offers the ability to gather and share information about substances, update one or many instruments. Specifically, ChemDash offers the following main features:

- The User can connect to the instrument via Wi-Fi connection or via USB cable to the PC for fast and local management of measurement data.
- The User can locally manage instruments, monitor their status, configure, and manage their instrument users.

• The User can also manage all Raman measurements made with the instruments which will be automatically uploaded to the PC as soon as they are connected. The spectra will be visible in the Data section for further work.

The User can manage and tailor spectral libraries according to their needs.
 The User can build its own spectral reference libraries and download them for use on selected devices. Libraries can be built from any combination of User owned data (instrument measurements).

• Last, but not least, the User can manage and administrate the personal account and the accounts of other users, their privileges and the system logs, licensing, and case reports.

2



### System requirements

For the system to be properly installed and work, the user must know the following system requirements:

- Processor: Intel, AMD or ARM processor with 64-bit support, 2GHz or faster
- Operating system: Windows 10 (64-bit) Version 1903 or later
- RAM: 4 GB (Recommended 8 GB or more)
- Hard Disk space: 10GB of available hard disk space, additional free space is required during installation and sync
- Monitor resolution: 1024x800 display or greater

### Administration

In this section only Users with administrative rights have access. From here, Users with administrative rights (Admin and the Super-Admin) can manage the ChemDash application User accounts and create new case report templates.

New users to the application are added under the User Management section. The User with administrative rights to the application can either import user accounts from the same Active Directory environment or Add User manually.

8	ChemDash	Welcome temporaryadmin				©	1	սե
ă C	MEASUREMENTS REPORTS							
	DEVICES LIBRARIES	≂ Q Ⅲ			Add User	Import A	zure AD us	ers
		Account	Domain	Name				
â	ADMIN		AzureAD	alexandru.muresan@serstech.com	Active			
			AzureAD	andrei.vig@serstech.com	Disabled			
			AzureAD	az@serstech.com	Disabled			

By clicking on the username in the list of users it is possible to give the user access to ChemDash. Important to mention that the User category should be chosen very



carefully as each User will get different access privileges to the application. The available User categories are:

- 'Disabled' this User's credentials will be de-activated.
- 'Active' normal User with basic access that the Admin will provide.
- 'Admin' this category has special rights: to create a User, to create report templates, to remove and add libraries.
- 'Super-Admin' has the same rights as the Admin and he is the one who gives the first Admin rights to the established users.

A user not available on the list, and thus without access to ChemDash, can be added by clicking `Add User'. When selecting the option 'Add User' a new window will pop up. The

name of the new User must be written and then, the category that the User will belong to must be selected.

	Add user		
= ੨ Ⅲ		Category	
	Name:	Disabled	
🗌 🚽 🔛 Domain		Active	
DESKTOP-BJE5IQ3		Admin	
		SuperAdmin	

After the category is selected, the User with administrative rights must fill in certain information and establish the new account privileges. Also, the name must be given at this point.

	ChemDash	Welcome temporaryadmin				Q	₽	d
=<	MFASUREMENTS	< User Management						
B	REPORTS							
		Select the device on which to view user properties		Select Device				
e	LIBRARIES	System properties		131B03EC0004				
6		Domain: NOEMID81C-MANUAL		Name: TestUser				
		Instrument Properties						
			Pair With Applic					
								5
						Cancel	Save	

After all steps are completed, the User with administrative rights must click on Save.

Another section that is visible only to the Admin and Super-Admin is the one related to the Report template creation.

	ChemDash	Welcome temporaryadmin	⊙ ≓	ւհ
≓ ∎	MEASUREMENTS			
	REPORTS DEVICES LIBRARIES	≂ α Ш	Create Report To	mplate
ê		* # Name     Template1	II Date 94/02/2021, 12:14:49	
		Default Template	04/02/2021, 08:12:58	

When clicking the 'Create Report Template' button, the User must name the template and choose which elements are to be selected and displayed in the report. The elements that can be selected are: Compare Spectra, Signature, Free text, Custom info, Substance Class, CAS info, GHS info, Label text, Device info, Measurement Meta Data, Identified Substance(s) Name, Header and Logo. These sections can be arranged in the desired order so that they appear on the report according to the User's needs.



### Connect the Instrument to ChemDash

### Connect via USB Cable

To connect the device to the ChemDash application using the USB cable the following procedure must be made in the following order:

1. Make sure that the instrument is switched off and that the ChemDash software is not running

- 2. Connect the instrument and the PC via the USB cable
- 3. Start the ChemDash software
- 4. Start the instrument and log in as Admin, using your own credentials.

Please note, that the instrument and ChemDash communicates via port 9093 and some fire walls need to be configured to allow traffic on this port. If you get any error messages about

communication via port 9093 then its most likely that your PC firewall needs to be configured to allow traffic via port 9093.

### Connect via Wi-Fi

To connect the instrument using a WiFi connection:

- 1. Start ChemDash
- 2. Connect the instrument via the USB cable, turn it on and log in as admin.

3. Go to Devices section, select the instrument you have connected and click on it so that the details are displayed.

	ChemDash	We	Icome temporaryadmin					ıl.
≓ ∎	MEASUREMENTS		<del>.</del> Q Ⅲ					
			Model Name					
	LIBRARIES		Serstech 100 Indicator	5.4.9	IND-1001-NEHP	131B03EC0004		

4. Go to the Network tab and select the WLAN SSID (your Wi-Fi network name)

5. Edit the Wi-Fi network password in the WLAN Encryption Key field, details that can be found in



5.1 File Explorer (found in the Computer/Control Panel/Network and Internet/Network and Sharing Center), click on the WiFi network, then on Wireless Properties, then check "Show characters" option and then you can see the network security key which is the password that you need.

Network and Sharing Centre						
🗘 🕹 > Control Pa	nel > Network and Internet >	Network and Sharing Centre	• ~	්	,O Search Control Panel	
Control Panel Home	View your basic net	twork information and	set up connections			
hange adapter settings	View your active network	S			→ WiFi Status	
hange advanced sharing ettings	MERCUSYS_E891 Public network		Access type: Internet Connections: M WiFi (MERCUSYS_Ed	891)	General	
fedia streaming options	Change your networking Set up a new cr Set up a broadl Troubleshoot p Diagnose and r	settings onnection or network band, dial-up or VPN connect roblems epair network problems or ge	ion, or set up a router or access point. It troubleshooting information.		Connection IPv4 Connectivity: IPv6 Connectivity: Media State: SSID: Duration: Speed: Signal Quality:	Interne No network acces Enabled MERCUSYS_E89 04:30:14 78.0 Mbp att
		Connection Security	Network Properties		Activity Wireless Pro	perties
		Security type: W Encryption type: Al	PA2-Personal × ES ×		Sent — Bytes: 77,305,041	Received 287,154,281
		Network security key XX	****		Properties	Diagnose
ee also			Show characters			Clos
itemet Options				1.0		
Windows Defender Firewall						

5.2 Then get the IP address of the ChemDash server; it can be found by typing in the taskbar Command Prompt

All Apps Documents Web More 🔻	ج ··· ج
Best match	
Command Prompt App	er.
Search the web Command prompt - See web results Settings (2)	Command Prompt App
	<ul> <li>□ Open</li> <li>□ Open file location</li> <li>□ Pin to Start</li> <li>□ Pin to taskbar</li> </ul>

5.3 Double-click on the app Command Prompt and type the command: "ipconfig" and click on 'Enter'. Then all information will pop up. Use the numbers shown with yellow color- IPv4 Address and type them on the field 'ChemDash server'.

Command Prompt	-	κ.
Media State : Media disconnected Connection-specific DNS Suffix . :		í
Wireless LAN adapter Local Area Connection* 4:		
Media State Media disconnected Connection-specific DNS Suffix . :		
Wireless LAN adapter Wi-Fi:		
Connection-specific DNS Suffix . : localdomain Link-local IPv6 Address : fe80::7dae:b850:f416:a6c3%5 IPv4 Address : 192.168.1.38 Subnet Mask : 255.255.255.0 Default Gateway : 192.168.1.1		
Ethernet adapter Bluetooth Network Connection:		
Media State Media disconnected Connection-specific DNS Suffix . :		
Ethernet adapter Serstech 100 Indicator (16):		
Connection-specific DNS Suffix .: Link-local IPv6 Address : fe80::4966:d915:1b67:6ef1%51 IPv4 Address : 192.168.137.1 Subnet Mask : 255.255.0.0 Default Gateway :		

6. Go back to ChemDash and fill in all requested information as per

indications.
--------------

ž	く Device 130503E90005 华					
Ð		Scan			System	
ē					wlan ssid $ c$	Serstech
	Netmask: 255.255.255.0			8.8.4.4	WLAN encryption key:	PASSWORD
ô			e. NTP Servers:	pool.ntp.org		1
				time1.google.com		
	Users Q					Add User
					Pin Code exp.	
		ic c	<b>1</b> > >i			Show 🔺

7. After the setup it is done, the information needs to be sent to the instrument. Sync the instrument with ChemDash, by clicking on the Sync icon.

	ChemDash	Welcome temporaryadmin		O	=	սե
ă C	MEASUREMENTS REPORTS			DEVICE 131803EC0004		
<b>B</b>	DEVICES					
ê	ADMIN	<ul> <li>Model Name</li> <li>Serstech 100 Indicator</li> </ul>	Product type			

8. The instrument will now automatically restart. Remove the USB cable and insert the Wi-Fi adaptor. A message pops up and shows that the device was connected.

Important to note that when the instrument goes into sleep mode, the wireless connection is broken.

### Pairing - Data Security

The instrument pairs itself to the first instance of a ChemDash. The main purpose with this feature is to prevent the user to upload measurements to an involuntary instance of ChemDash. Furthermore, before any data is transmitted to ChemDash, a user with "ChemDash Connection Privilege" must have logged in the instrument.

If the instrument is connected, the following symbol will be displayed in the Devices section:



If the instrument is disconnected, there will be a pop-up announcing that, and the symbol displayed will change:



		::	Model Name
D	SCONNECTED	)	
	ţ		Serstech 100 Indicator

Note that, If the instrument is connected via Wi-Fi, the icon will be different:

	Model Name	
(•	Serstech 100 Indicator	

To connect to a new instance of ChemDash, the User needs unpair the instrument from the previous instance of ChemDash. To unpair the instrument:

Log in the instrument as 'Admin'

Press the 'Quick Menu' button and select 'Settings'

After, select 'Administration' and 'Unpair Device'

Once the instrument is unpaired, it will restart.

Now the instrument is Unpaired. After it has been unpaired a User with the "ChemDash Connection Privilege" needs to log in on the instrument again, while it is connected to the new instance of ChemDash to allow data to be uploaded.



### **Device Management**

ChemDash offers to the User the possibility to manage all instruments and to establish different types of connection between them and the application. By entering the 'Devices' section on the left menu, the User can view all instruments that were paired to this ChemDash installation and edit their details.

	ChemDash	Welcome temporaryadmin			⊙ ≓	ıh
≕ 01	MEASUREMENTS	Statistics 71 Measurements	2 Libraries	51 Us	0 eers	
	DEVICES LIBRARIES					
ê	ADMIN	i Model Name ↓ Serstech 100 Indicator	Firmware version	Product type	Serial Number	

The following actions are available from the "Device" menu:

#### 1. View Logs

Many actions performed locally with the instrument are continually logged. Logs are automatically uploaded to ChemDash when the instrument is connected.

#### 2. View Commands

This option links to a history of all commands which have been sent between the instrument and the ChemDash. It can be used to verify that actions are accepted by the instrument as well as for general network debugging purposes.

#### 3. Upgrade Firmware

This is an option for updating the firmware on the connected device if firmware upgrade file is already downloaded on the computer.

#### 4. Restart

This option will restart the instrument.

By clicking on the instrument name, the User will be able to find all the details regarding the connected instrument.

	ChemDash	Welcome temporaryadı	nin						⊙ ≓	d.
= 0	MEASUREMENTS	Statistics	<b>71</b> Measurements		2 Libraries		<b>50</b> Use	) M3		
	DEVICES LIBRARIES	C Device 131B03E	сооо4 ψ	Score		Naturali		Sustan		
â	ADMIN		Serstech 100 Indicator 1318036C0004 5.4.9	Libraries: Lastest calibrat Lastest factory	NE ions: 01/03/2015, reset: None	04:00:00		11930/14896 [M8] 56%		
		Users 👻	<u></u> = Q <b>Ⅲ</b>							
				Family name				Pin Code exp.		
		Admin		Default	ć	3	N/A	01/01/2099, 00	0:00:00	
		Alex		AzureAD	ć	5	Active	31/12/2094, 2:	2:00:00	

On this screen, 'Device name', the 'State', 'Details', 'Scan settings', 'Network' and the 'System details' are displayed. 'Network' is the only tab that has some editable fields for the user to be able to connect the device via Wi-Fi.

The 'Users' section displays the User accounts that are on the instrument. Also, there is the possibility to add some more users to the selected instrument. This can be done by clicking on the connected device, then on "Add user" button and then, from the window that opens, the users must be selected by ticking them and then click on the "Add to Device" button.

	ChemDash	Welcome temporaryadmin					0	
=× 03 6	MEASUREMENTS	Statistics	<b>71</b> Measurements	2 נו	braries	50 Users		
	DEVICES	< Device 131B03EC0004						
ê		₽ Q <b>III</b>					Add To Der	lice
		Given name		Family name	Account		Pin Code exp.	
		Admin		Default			2099 01 01, 00:01	+
		Alex		AzureAD	â	Active	2094 12 31, 22:12	+

### Measurement Management

Measurements are automatically copied to Chemdash from the Serstech 100 Indicator when the instrument is connected to ChemDash.

Measurements uploaded to ChemDash from all instruments are available inside the Measurements section, on the menu on the left side.

	ChemDash	Welcome temporaryadmin				⊙ ≓	ılı.
=× ••	MEASUREMENTS REPORTS DEVICES LIBRARIES	Statistics 71 Measurements	2 Libraries		50 Users		
•		<b>≂</b> Q, <b>Ⅲ</b>				Show arch	ived 🌒
	ADMIN	🗆 🕳 🗮 Name	Device SN				
	ADMIN	Dodecylamine	131B03EC0004	10/02/2021, 16:59:12			
		(Z)-9-Tricosene	131B03EC0004	10/02/2021, 16:54:46			
		PET (plastic)	131B03EC0004	08/02/2021, 17:57:34			
		(Z)-9-Tricosene	131B03EC0004	08/02/2021, 17:51:17			
		Dodecylamine	131B03EC0004	08/02/2021, 17:40:27			
		Polyethylene	131B03EC0004	05/02/2021, 13:20:11			
		Lactose monohydrate	131B03EC0004	04/02/2021, 12:51:25			
		🗆 🚖 Caffeine	131B03EC0004	04/02/2021, 08:19:01			

On the top, the User can view the statistics (in green numbers) related to the measurements made and saved in ChemDash, together with libraries and users.

	ChemDash	Welcome tempo	raryadmin				© ≓	
	MEASUREMENTS REPORTS	Statistics	71 Measurements	2 Libraries		50 Users		
	DEVICES	<u></u> = Q ∎	n				Show archi	ived
A	ADMIN	□- ★ :		Device SN				
-			Dodecylamine	131B03EC0004	10/02/2021, 16:59:12			···
			(Z)-9-Tricosene	131B03EC0004	10/02/2021, 16:54:46			
			PET (plastic)	131B03EC0004	08/02/2021, 17:57:34			
			(Z)-9-Tricosene	131B03EC0004	08/02/2021, 17:51:17			
			Dodecylamine	131B03EC0004	08/02/2021, 17:40:27			
			Polyethylene	131B03EC0004	05/02/2021, 13:20:11			
			Lactose monohydrate	131B03EC0004	04/02/2021, 12:51:25			
			Caffeine	131B03EC0004	04/02/2021, 08:19:01			

The user has also the ability to alter column content and filter the measurements to find the measurement of

#### interest.

ath.	ChemDash	Welcome temporaryadmin
Ш Ш	MEASUREMENTS REPORTS	Statistics 71 Measurements
	DEVICES LIBRARIES	<b>■</b>  -
â	ADMIN	<ul> <li>□ ★ ∷ Name</li> <li>Dodecylamine</li> </ul>



### Finding measurements

### Filtering measurements

By clicking on the icon below the different filtering options are displayed. The different options are: Favorite, Name, Time or version.



Filtering using the time option allows a time range for the measurement to be set through a

drop-down

4	ChemDash	,	Welcon	ne tempora	aryadmin								
й 🗄 📶	MEASUREMENTS REPORTS		Statist	iics		71 Measu	urem	ents					
	DEVICES LIBRARIES		×	Favorite	Name	Time	Ver	rsion	С	ર		1	
â	ADMIN		] -	* =	Name	<b>Fe</b> Su	brua <sup>Mo</sup>	ry 20. Tu \ 2	21 <sup>We</sup>	Th 1	Fr 5	► Sa	:
				☆ ☆	Dodecy (Z)-9-Tr	<b>7</b> 14 21	8 15 22		<b>10</b> 17 24	<b>11</b> 18 25	<b>12</b> 19 26	<b>13</b> 20 27	
		C		☆	PET (pla			Re	eset				
		C		☆	(Z)-9-Tr	icosciic							



#### Searching for measurement

By clicking on the search icon, below, it is possible to search directly based on a specific term,





#### Display column content

By clicking on the icon below the possible column options are displayed



The different column options are displayed below.

÷	۹		ш		SI	sow archived 🌑
	Edit visible columns					
	Device ID     Device SN	Id Favorite			Version	
			CEM Serial Number	Time		

### Measurement Details

To view and edit the measurement details, the User must select the measurement and click on it. Then a new window will pop-up showing all measurement details. Important to mention

that on this section the User is able to add a comment to the measurement with the form of

'Tag'.

	ChemDash	Welcome temporaryadmin			ß	=	ıh
≡		Measurements	Libraries	Users			
8				Measurement Spectrum		::	
6	REPORTS	Lactose monohydrate		Show peak position 🔵 Show reference 🔍			
8	DEVICES	Measurement information		14,000			
_		Substance basic info		12,000			
A	ADMIN	Globally Harmonized System of Classification and Labelling of Chemicals (GHS)		18,000			

The information available is:

- Measurement information
- Substance basic info
- General Hazardous Information (GHS)
- Spectrum (with the possibility to show/hide the reference, the peak position

and maximize the graph).

	ChemDash	Welcome temporaryadmin				0	≓	ıl.
11 12 12	MEASUREMENTS REPORTS		50 Measurements	<mark>2</mark> Libraries	50 Users			
Ħ					Measurement Spectrum			
₿	LIBRARIES	Caffeine			Shaw peak position 📧 Shaw reference 📰			
Đ	ADMIN	Measurement information Top Device SN: Spectroscopist Total exposure time: Not of exposures Sequence No: Time: Substance hasic info Globalty Harmonized System of	7 191809CODQ4 Default Admin 4.662 1 67 04/62/2021,118.807 Classification and Labelling of Chemicals (CHS)					



#### Measurement information

Here, the instrument settings from the analysis are displayed. Information here is not editable, except for the Tag. The Tag can be used to link any free text information to the measurement.

#### Substance basic info

Substance information linked to the identified reference substance is displayed in this section. If no matching reference is found, this section is empty.

200	ChemDash	Welcome temporaryadmin	Welcome temporaryadmin				
≡×		Bromoethane					
16		Measurement information		~			
Ê	REPORTS						
	DEVICES	Substance basic info		^			
	LIBRARIES	Substance name: Substance synonym CAS Number:	Bromoethane Ethyl bromide 74-96-4				
â	ADMIN	Globally Harmonized System of (	Classification and Labelling of Chemicals (GHS)	~			

### General hazardous information

The information is displayed using the pictogram from GHS (Global Harmonized System of classification and labelling of chemicals). Information displayed are the GHS pictograms and the signal word for the matching reference identified. If no match is found, this section is empty.



### Spectrum graph

The graph from the measurement is displayed together with the reference spectrum from the match. The reference spectrum can be displayed / removed with the button "Show reference". Peak positions will sequentially be displayed, with their wavenumber, as the cursor is moved over the graph. This function can be turned on/off with the use of the button "Hide peak position"





### Measurement options

By clicking on the three dots on the far right of the measurement a dropdown

menu providing several options is displayed

	ChemDash	Welco	felcome temporaryadmin							
≕ 8	MEASUREMENTS REPORTS	Statistics 50 Measurements		50 Measurements	2 Libraries	50 <sub>User</sub>				
	DEVICES	Þ	<b>₹ Q Ⅲ</b>							
â	ADMIN		*		Device SN		Version			
				Dodecylamine	131B03EC0004	10/02/2021, 16:59:12				
					131B03EC0004	10/02/2021, 16:54:46				
				PET (plastic)	131B03EC0004					
					131B03EC0004	08/02/2021, 17:51:17				
				Dodecylamine	131B03EC0004	08/02/2021, 17:40:27				
				Polyethylene	131B03EC0004					
			ŵ	Lactose monohydrate	131B03EC0004	04/02/2021, 12:51:25	1			

Show archiv	ed
Add to library	
Archive Export as Jcamp	
 Export as CSV	
 Export as TXT	
 Create report	•••



### Add to library

With this option the selected measurement can be directly incorporated into library. Simply select which of the available libraires it should be included in.

Select library to add measurements!	×
Libraries	
1. Library 2	
2. Library 1	

#### Archive measurements

To get a better overview of the current measurements, the old or less relevant measurements can be archived. By selecting "Archive" in the list of options, the measurement will no longer be shown in the list of measurements. With the button "Show archived" it is possible to shift between displaying archived or active measurements.



An archived measurement can be brought back to the list of active measurement by displaying the archived measurement and then selecting "Unarchive".

# 



### Exporting spectra

With the Export function, the spectrum from the measurement is exported outside ChemDash and it can be used with other programs f. eg. excel. There are several formats that the measurement can be exported to: Jcamp, txt, csv and json.

There is also a batch export function where several spectra can be exported simultaneously. Here the measurements to be exported are chosen by ticking the boxes to the left, in the list of spectra. Then the small arrow next the box in the top left corner of the menu is clicked. Select the format for the export.

The selected spectra are exported as a .zip file. To select all spectra for export tick the box next to the small arrow.

≕< •••	MEASUREMENTS REPORTS	Statistics	50 Measurements	2 Libraries	5 U	0 sers	
	DEVICES LIBRARIES	≂ ० ш					Show archived <b>O</b>
<b>A</b>	ADMIN	□- ★ =		Device SN			
-	(	Compare	Dodecylamine	131B03EC0004			
			Z)-9-Tricosene	131B03EC0004	10/02/2021, 16:54:46		
			YET (plastic)	131B03EC0004			
			Z)-9-Tricosene	131B03EC0004	08/02/2021, 17:51:17		
			Jodecylamine	131B03EC0004	08/02/2021, 17:40:27		
		Create report	Volyethylene	131B03EC0004			
			Lactose monohydrate	131B03EC0004			

### Create report

By selecting "Create report" the measurement is included in a report. To include several spectra, follow the procedure for batch export.

#### Compare spectra

Select the spectra of the measurements to be compared, two or more, by ticking the box to the far right of the measurement. Then click the small arrow next to the box icon.

atta	ChemDash	Welcome temporar	yadmin	
		Statistics	50	
1.	MEASUREMENTS		50 Measurements	
	REPORTS			
	DEVICES			
ß	LIBRARIES	= <	]	
ô	ADMIN		Name	
		Compare	Dodecylamine	
		Add to library	Z)-9-Tricosene	
		Archive		
		Export as Jcamp	PET (plastic)	
		Export as CSV	Z)-9-Tricosene	
		Export as TXT		
		Export as JSON	Dodecylamine	
		Create report	Polyethylene	

The spectra are displayed together in the same graph with different colors. The different spectra can be selectively removed from the graph, with the display on/off buttons to the right of the graph.

### Libraries Management

In the library management, user defined libraries are handled. An essential functionality in ChemDash is the ability to build spectral reference libraries and download them to instruments for use in the field. This will allow the users to customize the solution to their specific needs.

The 'Libraries' are available on the left menu and if there are no libraries built yet, the following screen will be displayed:

	ChemDash	Welcome temporaryadmin				Ø	#	ılı
ă 2 a	MEASUREMENTS	Statistics 50 Measurements		2 Libraries	50 Users			
		<b>च Q Ⅲ</b>						
â	ADMIN	• II me	I State	10 10	. Version	He of substances		

To add a library to the application, the user has two options:

1. To import an already created library

If there is a library that was previously created and exported to the PC from another ChemDash instance, that library can be imported in the current instance by going to the Libraries section, click on the 'Import' button and a window will show, from which the user can select the desired library.

	ChemDash	Welcome temporaryadmin			⊙ ≓	н.
≕ 03 61		Statistics 50 Measuren	3 Libraries	50 Users		
•	DEVICES LIBRARIES	<u></u>			🛃 Import	ibrary
â		Pharma	000-81dae16e-0735-48d0-87d1-0c7d8a075c88			
		Miscellaneous	000-20dd1ece-cee0-47f2-8721-b2ed2378f878			
		Dangerous	000-8ea189a6-261b-41bf-9b04-35cee4696871			

2. To create a new library, by clicking on the 'Add Library' button

8	ChemDash	Welcome temporaryadmin				Q	Ħ	d.
â				New Library ×				
		Pharma						
		Miscellaneous						
		Dangerous			Add Libeary			

In case that the User had already created some libraries, the following screen would appear:

	ChemDash	Welcome temporaryadmin	me temporaryadmin						ılı
≍ 8	MEASUREMENTS	Statistics	<mark>50</mark> Measurements		3 Libraries	<mark>50</mark> Users			
			ii State		in.	# Version	Import		ary
â	ADMIN	Pharma	Ŧ		₩ 000-81dae16e-0735-48d0-87d1-0c7d8a075c88	1	3		
		Miscellaneous			000-20dd1ece-cee0-47f2-8721-b2ed2378f878				
		Dangerous	<i>y</i>		000-8ea189a6-261b-41bf-9b04-35cee4696871	2	9		

In order to see the items and all details, the user must click on one library and they will be displayed.

By clicking the Edit button, the User can change the description of the library, change the language, or add substances (from other libraries or from the measurements uploaded to ChemDash).

	ChemDash	Welcome temporaryadmin				0	=	×
×	MEASUREMENTS	Statistics 50 Mear		3 Libraries	50 Users			
	DEVICES LIBRARIES ADMIN	Pharma Venios: 1 Editado Orec No of substance 3 Last Language: English	relation Pharmaceutical su		Add Substance * From Measurements From Libraries			
		v III Name (Z)-9-Tricosene Dodecylamine	CAS lint 27519-02-4 124-22-1	D00-3ffb1626-6a36-11eb-8c83-e3fd4fe9f6f5 000-bc94a9b0-6a34-11eb-a35a-e3fd4fe9f6f5	Repulstory Type Narcotic: Clear, Explosive: Clear, Toxic: C Narcotic: Clear, Explosive: Clear, Toxic: C	Dear Dear		
		PET (plastic)	29038-59-9	000-211c4f94-6a37-11eb-810f-e3fd4fe9f6f5	Narcotic: Clear, Explosive: Clear, Toxic: C	lear		

A list with all available measurements will appear and the User can select the ones that wants to be added to the library.

=<										
8										
		Add	l Substand	es from Measurements						
٩	N			Substance Name			Device Serial Number	Â		
				2,2-DIMETHYLBUTANE			131B03EC0004			
٩										
				PARACETAMOL	11/01/2021, 09:04:01					
				Polyethylene	11/01/2021, 09:02:49					
				2,2-DIMETHYLBUTANE						
				2,2-DIMETHYLBUTANE			131B03EC0004	iiv	ive: Clear, Toxic: Clear	
				Sodiumhydrogen carbonate						
									ive: Clear, Toxic: Clear	
								~		
				nts Per Page 10 1-10 of 157			Add Cancel	÷	ive: Clear, Toxic: Clear	
			auuum	iyuruyen caruunate i 144-45	-o <u>uuu-eus</u>	0 110a-33ec-1 180-a300-6107 H	4922004 Marcout: CR	ear, Exprosi	ive: Clear, Toxic: Clear	

After adding all measurements into the library, the User can edit all substance information. To edit the substance information the User must click on the preferred substance and then click on 'Edit'. The substance window will show up. The data directly below the substance name 'Measurement information', represents information coming from the instrument and is not editable. This part has the information which will be shown to a User on a field analysis. It is important to mention that ChemDash supports two types of information: GHS and Custom. GHS (Globally Harmonized System of Classification and Labelling of Chemicals) is substance information formatted according to the international GHS

standard. ChemDash fully supports GHS, including relevant warning pictograms which are shown to the field officer when using the instruments. The ChemDash input form makes it easy to add GHS- formatted information to Users' library records. For a given substance we refer the user to find substance information in the safety data sheet from the supplier.

The Custom option allows User to add custom information, e.g., specific handling procedures or responder actions to be performed when the substance in question has been identified. Thus, the combination of GHS and Custom information constitutes a very flexible solution which can be adapted to User needs over time. The data on the right side of the screen (below the spectrum plot) is internal information only. It is reference information related to the measurement situation, type of instrument used, etc. This is never displayed on the instrument in the event of a match to this library entry but only visible to ChemDash Users. Once all changes are made to the library, the User can 'Save' the changes by clicking the correspondent button and the state of the library will be changed into 'Saved'.

 Title	State	Version	No of substances	
Miscellaneous	Ŧ	1	8	
Dangerous		1	0	
Medicines		1	0	

In order to be able to send a library to a device, the User needs to Publish it first and that can be made by clicking the corresponding button. This change will be visible on the main page too.

 Title	State	Version	No of substances	
Miscellaneous	T.	1	8	
Dangerous		2	3	
Medicines		1	0	
Food	ŧ	1	0	

Apart from editing a library, a User can also:

Export it to the PC

This action can be done from the main screen of the Libraries section, select the library that needs to be exported and click on "Export" button, as shown below:

R	ChemDash	Welcome temporaryadmin						
≕ 2	MEASUREMENTS	Statistics 50 Measure		3 Libraries	50 Users			
	DEVICES LIBRARIES	<b>≂</b> Q <b>Ⅲ</b>				ال Import ال		
â	ADMIN	Title	State		Version	No of substances		
		Pharma		000-81dae16e-0735-48d0-87d1-0c7d8a075c88		3 Edit		
		Miscellaneous		000-20dd1ece-cee0-47f2-8721-b2ed2378f878		Send to devi	) œ	
		Dangerous	4	000-8ea189a6-261b-41bf-9b04-35cee4696871	2	Remove 9		

Send it to the instrument

A library can be sent to a connected device only after it was Published. The user must select the desired library from the main page of Libraries section and click on "Send to device" button

	ChemDash	Welcome temporaryadmin				©	=	di
	MEASUREMENTS	Statistics 50 Measu		3 Libraries	50 Users			
	DEVICES LIBRARIES					🗄 Import		ary
ê	ADMIN	Pharma	II State	10 000-81dae16e-0735-48d0-87d1-0c7d8a075c88		No of substances		
		Miscellaneous		000-20dd1ece-cee0-47f2-8721-b2ed2378f878		0 Send to dev	ice	
		Dangerous		000-8ea189a6-261b-41bf-9b04-35cee4696871				

Remove it from the ChemDash application

ŭ -	MEASUREMENTS	Ŧ	२ <b>॥</b>			(J) Im	iport 📑 Add Lib	rary
	DEVICES		Title	State	Version	No of s	ubstances	
			Test		2	3		
ô	ADMIN						Remove	

When building a library, the User is allowed to use its own measurements made with the instrument as reference. The User can use measurements made with any of the methods in the instrument. But to ensure maximum data quality we recommend collecting reference data with the Add New Substance method.

### Library Status Changes

When working with libraries, the User will notice that the library status changes based on the activity. When the library is newly created, the status is 'Editable'. This indicates that the library has been created and is now being edited by the User. In this state the library cannot be downloaded to instrument and it is accessible only to the specified User. However, if something happens and the user does not have the chance to press the Save button and the application closes (e.g. due to a power outage), the changes that were made in the library will not be lost.

≡¢		Test					Add Substance 👻		Discard changes	
11	MEASUREMENTS									ł
8			Editable		18th 01 2021, 17 <del>:</del> 52				★ Save changes	
	DEVICES	Language:	English GB 🤝							
٥										
			Substance name		CAS	Id		Reg	ulatory type	
ô	ADMIN	No Library I	tems are available at	this moment						

Once the User has made and saved all changes, then the status changes to 'Saved'. This state shows the library has been edited by someone and then saved.

≅		Test			Edit      ✓ Publish
	MEASUREMENTS	Version: 1 Sa	wed Description:		
B	REPORTS			18th 01 2021, 17:54	
	DEVICES	Language: En	nglish GB		
		Substance name	CAS	🚦 ld	Regulatory type
ô	ADMIN	ACETONE	67-64-1	000-782f2b2e-5724-11eb-93b7-1dd8d06a15a7	Narcotic: Precursor, Explosive: Precursor, Toxi
		Cyclohexane	110-82-7	000-d35320aa-5698-11eb-8871-fe07891c56e3	Narcotic: Clear, Explosive: Clear, Toxic: Clear
		METHANOL	67-56-1	000-100af418-388b-11eb-b4b3-a7f20a4efe61	Narcotic: Clear, Explosive: Clear, Toxic: Clear

When the User clicks on 'Publish' then the status changes to 'Published' which means that the library is now ready to be sent to the instrument.

≕		Test			🛓 Edit 🗸 Publish
11.	MEASUREMENTS	Version: 2 Pt	ublished Description:		
B	REPORTS			18th 01 2021, 17:55	
	DEVICES	Language: Er	nglish GB		
٦					
		Substance name	CAS	🗄 Id	Regulatory type
â	ADMIN	ACETONE	67-64-1	000-782f2b2e-5724-11eb-93b7-1dd8d06a15a7	Narcotic: Precursor, Explosive: Precursor, Toxi
		Cyclohexane	110-82-7	000-d35320aa-5698-11eb-8871-fe07891c56e3	Narcotic: Clear, Explosive: Clear, Toxic: Clear
		METHANOL	67-56-1	000-100af418-388b-11eb-b4b3-a7f20a4efe61	Narcotic: Clear, Explosive: Clear, Toxic: Clear

### Case Reports, Template Creation and Management

There are many situations that require a specific case or comparisons between measurements and data stored. The user can select which template to use in order to get a report that suits the needs. This can be done from the Reports section on the left menu.

ChemDash comes installed with a default template that can be used to create a report. Also, the Admin can create some personalized templates that would better suit the needs.

As mentioned before, only the Users with administrative rights to the application can create report templates under the 'Admin' section and then 'Report Templates'. A report template will allow the user to choose what elements (information) must be shown on a case report based on their specific needs.



-	ChemDash	Welcome temporaryadmin	o = الم	
	MEASUREMENTS REPORTS DEVICES	User Management	Report templates	
٩	LIBRARIES	• # Name	Create Report Tomplate	
â		Template1	04/02/2021, 12:14:49 ····	
		Default Template	04/02/2021, 08:12:58	

The Admin can now select one or more Elements for the case report.

B					
		nplate Name: Report batch 1			
۶					
Α			+ Element		
		: 18/01/2021, 23:29:40	Cancel	Save	

	Compare spectra		
	Signature field(s)		
	Free text		
	Custom info		
	Substance class		

Template Name: Report batch	1			
	Header		Î	
	Compare spectra		: 1	
	Free text		: 1	
	Signature field(s)		: 1	
Created: 18/01/2021, 23:31:08	C	ancel	Save	

Once the Admin has finished adding elements, click on 'Save', so the case report template will be saved and be available for further use.

The Admin has also the ability to remove a template from the ChemDash application.

After creating the template, the User can now create a case report. A report can be created by clicking the 'Create Report' button from the Reports section on the left menu. The User can now choose a report template and add a substance or substances that will be shown on the report and then click on 'Generate'.

Create Report				
Choose report template:	Test 2 Template 1			
Measurements	Default Temp	blate		
٩				
Name	Sequence	Device S.N.	Time	Add
2,2-DIMETHYLBUTANE	195	131B03EC0004	11/01/2021, 09:32:24	+
SUCROSE	193	131B03EC0004	11/01/2021, 09:12:56	+
Sodiumhydrogen carbonate	192	131B03EC0004	11/01/2021, 09:10:37	+
Polyethylene	188	131B03EC0004	11/01/2021, 09:05:06	+
PARACETAMOL	187	131B03EC0004	11/01/2021, 09:04:01	+
			Add all	+
Measurements to Report				
			Cancel Ge	nerate

The case report is now saved in the Reports section.

The user will also have the option to download the report to the PC in a PDF format.

	ChemDash	Welcome temporaryadmin			
			3         50           Uters         Uters		
e e			Mentified Subtance Cafficine Name: Spectrum:		
â			15,000 mplate mplate 1		
		22 C	1,000 40 60 100 1,000 1,000 1,000 2,000 2,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,		
		Caffeine	C45 unition: 58 0F2 International Internationa International International Internation		
			efault Template		
			Cancel		

### Appendix

### How to import users to ChemDash 2.0

In order to import users in the application, the Admin must go to the Admin tab and click the "Import Azure Users" button; after having logged in again with the Microsoft credentials, the users will be imported and there will be a notification displaying that.





How to set different hierarchy levels and privileges to imported users

The hierarchy levels of the users is the following:

- 'Super-Admin' has the same rights as the Admin and he is the one who gives the first Admin rights to the established users.
- 'Admin' this category has special rights: to create a user, to create report templates, to remove and add libraries.
- 'Active' normal user with basic access that the Admin will provide.
- 'Disabled' this user's credentials will be de-activated.

The Admin and the Super-Admin have the right to set privileges and establish rights for the users. In order to do so, they must go to the Admin tab, click on Users Management section and select the user they want to work on.

< User Management				
			_	
Select the device on which to view user properties	131B03EC0004	-		
System properties			Disabled	
Family Name: AzureAD	Given Name: first.lastname@co	npany.com	Active	
Instrument properties			Admin	
	. —	<b></b>	SuperAdmin	
PIN-code: 1234	PIN Code Expiry: 29/01/2023, 00	800:00		
Privileges				
Modify Scan Sattings	Mount USB-Drive (read Only)	Account locked		
Add Substance	USB-drive Write Access			
Remove Measurements	Pair With Application			
Change Date And Time				
Change Language				
				Cancel Save

The Admin must select the Device on which the changes will also be visible on and after he/she can choose the different details to be changed (Name, User category – level of access, PIN code, PIN code expiry date, Privileges).

#### How to create and edit case reports

A report can be created by clicking the' Create Report' button. The User can now choose a report template and add a substance or substances that will be shown on the report and then click on 'Generate'.

Create Report				
Choose report template:	Test 2			
Measurements	lemplate T Default Temp	plate		
٩				
Name	Sequence	Device S.N.	Time	Add
2,2-DIMETHYLBUTANE	195	131B03EC0004	11/01/2021, 09:32:24	+
SUCROSE	193	131B03EC0004	11/01/2021, 09:12:56	+
Sodiumhydrogen carbonate	192	131B03EC0004	11/01/2021, 09:10:37	+
Polyethylene	188	131B03EC0004	11/01/2021, 09:05:06	+
PARACETAMOL	187	131B03EC0004	11/01/2021, 09:04:01	+
			Add all	+
Measurements to Report				
		Г		

The case report is now saved in the Reports section.

The user will also have the option to download the report to the PC in a PDF format.

#### How to create Case reports templates

To create a report template, please go under the 'Admin' section and then 'Report Templates'. A report template will allow the user to choose what elements (information) must be shown on a case report based on their specific needs.

	ChemDash	Welcome temporaryadmir	n			Q	=	ıb
Ξ¢		Statistics						
65	MEASUREMENTS		50 Massuramente	3 Librarias	51 Usars			
B	REPORTS		measurements	Libraries				
					$\frown$			
e	LIBRARIES				Report templates			
ê	ADMIN	<del>ऱ</del> Q <b>Ⅲ</b>				Create R	eport Templ	nte
		🖉 🛫 🗄 Name		Version	E Date			
		Template1			04/02/2021, 12:14:49			
		Default Templat	te		04/02/2021, 08:12:58			

The Admin can now select one or more Elements for the case report.

		plate Name: Report batch 1			
	<u>'</u>				
			+ Element		
		: 18/01/2021, 23:29:40	Cancel	Save	

	Compare spectra		
	Signature field(s)		
	Free text		
	6		
	Custom into		
	Substance class		

Header	•
Compare spectra	: 1
Free text	: 1
Signature field(s)	: 1

Once the Admin is done adding elements, he/she can click on Save, so the case report template will be saved and be available for further use.

The Admin has also the ability to remove a template from the ChemDash application.

#### How to connect the device to ChemDash 2.0 via USB

If the User wishes to connect the device to the ChemDash application using the USB cable the following procedure must be kept in order:

 Make sure that the instrument is switched off and that the ChemDash software is not running

- Connect the instrument and the PC via the USB cable
- Start the software ChemDash software
- Start the instrument and log in as Admin using your own credentials.

Please note, that the instrument and ChemDash communicate via port 9093 and some fire walls need to be configured to allow traffic on this port. If you get any error messages about communication via port 9093 then its most likely that your PC firewall needs to be configured to allow traffic via port 9093.

#### How to connect the device to ChemDash 2.0 via Wi-Fi

To connect the instrument using a Wi-Fi connection:

- Start ChemDash
- Connect the instrument via the USB cable, turn it on and log in as admin.
- Go to Devices section, select the instrument you have connected, tap the device details options.
- Go to the Network tab and select the WLAN SSID (your Wi-Fi network name),

Edit the Wi-Fi network password in the WLAN Encryption Key field, details that can be found in File Explorer (found in the Computer/Control Panel/Network and Sharing Center, then click on the Wi-Fi network and then on Wireless Properties button. Another window will appear, displaying the network

T S Control Pa     Control Pa     S     Control Pa     S     Control Pa     S     Control Pa     S     S     Control Pa     S     S     Control Pa     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S	nel > Network and Internet >	Network and Sharing Centre	~	0	Search Control Panel	
ontrol Panel Home	View your basic net	work information and	set up connections			
ange adapter settings	View your active networks				→ WiFi Status	
ange advanced sharing ttings	MERCUSYS_E891		Access type: Internet		General	
edia streaming options	Public fietwork		connections. and with (werecosts_ed.		Connection	
	Change your networking s	ettings			IPv6 Connectivity:	No network acces
	🕍 Set up a new co	nnection or network			Media State:	Enabled
	Set up a broadb	and, dial-up or VPN connectio	on, or set up a router or access point.		SSID:	MERCUSYS_E89
					Duration:	04:30:1
	Troubleshoot pro	oblems			Speed:	78.0 Mbp
	Diagnose and re	pair network problems or get	troubleshooting information.		Signal Quality:	-2013
		MERCUSYS_E891 Wireless 1	Network Properties $\times$		Details Wireless	Properties
		Connection Security			Activity	
					Sent	Received
		Security type: WP	A2-Personal ~		Bytes: 77.305.041	287,154,281
		Encryption type: AES	\$ v		-,	
		Network security key you	0000000000		Disable Disable	Diamana
					Properties Usable	Diagnose
e also			how characters			
ernet Options						Clos



Then get the IP address of the ChemDash server that can be found by typing

in the taskbar Command Prompt

All Apps Documents Web More 🕶	جې ···
Best match Command Prompt App Search the web	
<ul> <li>Command prompt - See web results</li> <li>Settings (2)</li> </ul>	Command Prompt App
	<ul> <li>□ Open</li> <li>□ Run as administrator</li> <li>□ Open file location</li> <li>□ Pin to Start</li> <li>□ Pin to taskbar</li> </ul>

• Double-click on the app Command Prompt and type "ipconfig" in the command line and hit Enter; you will find the IP address (IPv4 Address).

This IP number should be put in the ChemDash Server field, as shown below.



Go back to ChemDash and fill in all requested information as per indications.



	ChemDash	Welcome temporaryadmin				O	=	16
≕ 61	MEASUREMENTS REPORTS	Statistics 50 Measurements		3 Libraries	51 User			
	DEVICES LIBRARIES	く Device 131803EC0004 孕 Details	Scan			System		
ê	ADMIN	IP adress: 192,168,1.199 Netmask: 255,255,25,0 Default router: 192,168,1,1 ChemOxoli demdach.com Server:	DHCP enabled.	DNS Server 1: DNS Server 2: NTP Servers:	88.8.4 98.4.4 poolntporg time't google.com	WLAN 550 C WLAN encryption key: ***	, (	×

• After the setup it is done, the information needs to be sent to the instrument. Sync the instrument with ChemDash, by clicking on the Sync icon.

	ChemDash	Welcome temporaryadmin		©	=	ıĿ
	MEASUREMENTS REPORTS DEVICES			DEVICE 131803EC0004		
Û	LIBRARIES	₹         Q         III           If Model Name         Serstech 100 Indicator	E Product type IND-1001-NEHP			

• The instrument will now automatically restart. Remove the USB cable and insert the Wi-Fi adaptor. A message will pop-up and shows that the device was connected.

#### How to pair data

The instrument pairs itself to the first instance of a ChemDash. The main purpose with this feature is to prevent the user to upload measurements to an involuntary instance of ChemDash. Furthermore, before any data is transmitted to ChemDash, a user with "ChemDash Connection Privilege" must have logged in on the instrument.

To connect to a new instance of ChemDash, the User needs unpair the instrument from the previous instance of ChemDash. To unpair the instrument:

Log in the instrument as 'Admin'

- Press the 'Quick Menu' button and select 'Settings'
- After, select 'Administration' and 'Unpair Device'
- Once the instrument is unpaired, it will restart.

Now the instrument is Unpaired. After it has been unpaired a User with the "ChemDash Connection Privilege" needs to log in on the instrument again, while it is connected to the new instance of ChemDash to allow data to be uploaded.

#### How to synchronize the device

Sync the instrument with ChemDash, by clicking on the Sync icon. If the instrument is connected via USB cable or WiFi, the synchronization will take place immediately, causing a restart of the device. If the instrument is not connected, the synchronization will happen when the device will be connected to the app.

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#### How to manage the device through ChemDash 2.0

The instrument can be handled via the application by entering the Devices section; there the User can see all connected devices to the app. By clicking the expandable dots, he/she can see all the commands given to the device, the Logs, update the Firmware or restart the device. By clicking on a specific device, several sections will appear: Details, Scan, Network and System.

By connecting any instrument to the application, it will automatically pair with Chemdash.

#### How to add device users through ChemDash 2.0

In order to add some users to the selected device, the Admin must enter the Device details tab and then from the Users section, he/she must click on 'Add Users' button. Another

window will open displaying all the available users that can be added. The ones that are already there, are greyed out so they cannot be selected anymore.

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< De	vice 131B03EC0004							
Ŧ	Q III							
	Family NameFamily name		User CategoryUser Category	Chemdash User IdID	Given NameGiven name			
	Default				Admin			
	S	ð	SuperAdmin	S-1-5-21-3157838925-2358588427-846330340-1000	N			
	DESKTOP-BJE5IQ3			N/A	Noemi			
	Default		N/A	N/A	User			
	AzureAD	ð	Disabled	a678df8f-9bb6-4c53-99c6-6311026766ed	ChemDash.support@	erstech.co	om	
	AzureAD	6	Disabled	f94c3fc4-5e11-42ba-bd64-bdc2e69cb0e4	Emergency.user@sers	tech.com		+

After having selected the desired users, we click on "Add to Device" button and the action is done.