



NAWAH
scientific

Your one stop-shop for all
pharmaceutical services

www.nawah-scientific.com

Pharmaceutical Industry Unit

Life Sciences Research Unit

Food & Environment Unit





Excellence in Every Step!



Dear partner,

You have arrived at Nawah Scientific, where science and technology meet to create amazing solutions for your challenges. We are thrilled to join forces with you and unleash the power of innovation together.

At Nawah, we don't settle for anything less than excellence. Our team of brilliant and talented scientists are masters of their domains and are always eager to explore new frontiers. Our state-of-the-art facilities and equipment enable us to conduct rigorous and reliable research.

Since excellence is one of core values, we aim for perfection and constant growth in our processes and outcomes. We work diligently to understand your needs and provide tailor-made solutions that fit your budget and timeline. Whether you need a basic or applied research, product development or testing, consulting or training, we have the know-how and we take it as our own mission to help you get the task done.

Thank you for choosing Nawah as your trusted scientific partner.

Omar Sakr, PhD, MBA

Founder | CEO

What is Nawah Scientific?

Nawah is one of MENA's biggest private research centers, catering for natural and medical sciences. Nawah is a core hub of advanced research equipment that offers its services online and on demand. Nawah's online platform receives experiments requests, Nawah's scientists carry them out and return results online. Our state-of-the-art research lab facilities are spread amongst 3 countries, Egypt, Jordan and Saudi, and are led by the brightest minds and local experts in their respective fields.

Nawah is divided into 3 business units:

1- Pharmaceutical Industry Unit

2- Life Sciences Unit

3- Food & Environment Unit

8

Years old

300K+

Samples analyzed

5500+

Clients served

15

Countries



Why Nawah?



Advanced technologies

We operate state-of-the-art, well maintained, and frequently checked instruments.



Quality guarantee

We take the quality of our work very seriously. We use internal and external controls, and we refund any fees if a mistake was proven.



Experienced scientists

Top caliber team, 18 PhD holders graduating from top world universities leading a 120+ team of scientists.



Fast delivery of results

We value your time, and we manage our queues to get back to you ASAP.



Sample pickup

Don't waste your time travelling between cities and locations. Get your sample picked up anywhere in the globe.





Pharmaceutical Formulation

Your R&D team would never be enough for an aggressive growth plan. But we are here to aid you with more than a couple of extra free hands.

Range of expertise

Our R&D team members were senior formulators in top pharma companies in Egypt with extensive expertise in almost all types of pharmaceutical dosage forms, from simple syrups & suspensions to sustained-release tablets, semi-solids, neutraceuticals as well as sterile ampoules, vials and vaccines.

Do you have a theoretical formula?

If you need to check your recently purchased theoretical formula don't hesitate to practically test it out at Nawah. Our R&D team has devised a comprehensive formulation protocol that guarantees, with minimum risk, a successful stability study of your finished product. This is done by conducting a practical pre-formulation study that exposes potential incompatibilities in the formulation before it really happens in the market. Besides, we conduct a smart design of experiments within formulation scope to maximize the data gained with the available resources.

Fully equipped lab

You cannot improve what you cannot measure, right? Our R&D lab is fully equipped with all needed instruments to check the critical quality attributes of the developed formulation. All physical characterization tests needed to compare your generic version and the target brand products are available, such as tests for:

- Dissolution
- Disintegration
- Friability
- Hardness
- Viscosity
- Water content (by oven balance)
- Moisture (by Karl Fischer)
- Particle size measurement (by Mastersizer)
- Aerosol particle size characterization

Unexpected production problems?

Happens all the time! Here we combine our profound expertise with the strong analytical power to advice you on possible interactions, incompatibilities or even necessary change of supplier because the raw material quality is the root cause of your problems.

Track Record Highlights



Tablets

- Atorvastatin 10 mg, 20 mg, 40 mg
- Ciprofloxacin 500 mg
- Dapagliflozin 10 mg
- Desmopressin 0.1 mg, 0.2 mg
- Empagliflozin 25 mg
- Ezetimibe / simvastatin 10 / 40 mg
- Febuxostat 40 mg
- Pioglitazone 25 mg
- Hydroxychloroquine 200 mg
- Losartan / Hydrochlorothiazide 50 / 12.5 mg
- Losartan / Hydrochlorothiazide 100 / 50 mg
- Nebivolol 2.5 mg, 5.0 mg
- Nebivolol / Hydrochlorothiazide 5/ 12.5 mg
- Pantoprazole 40 / 20 mg delayed release
- Paroxetine 20 mg
- Ramipril / Hydrochlorothiazide 5 / 25 mg
- Ramipril 5mg
- Risperidone 2 mg, 4 mg
- Rosuvastatin 10 mg



Injections

- Atracurium Besilate 25 mg, 50 mg ampoules
- Bupivacaine HCl 5 mg / ml solution for Injection
- Famotidine 20 mg / 2 ml solution for IV Injection
- Norepinephrine 1 mg / ml (as bitartrate) IV solution
- Ondansetron 4 mg / 2 ml ampoule
- Sodium bicarbonate 8.4% w/w IV solution



Topical

- Dapsone 5%, 7.5% topical gel
- Desmopressin 0.1 mg / ml Nasal Spray
- Diclofenac sodium 4% Topical spray
- Erythromycin 40 mg /ml cutaneous solution



Cosmetics Formulation

Whether it's a facial mask, a 100% natural shampoo, a cooling scrub, Nawah's team of cosmetics artists got you covered!

Matching top brands?

In love with certain products and dreaming of producing similar ones at your company? We study the target product, procure top ingredients, adjust the formula to your own taste, check its stability then finally supervise your first production batches to make sure they comply with the agreed lab results.

Problematic formulation?

Cracking, coalescence, change in color or smell, loss of viscosity? There is always a reason and thanks to our top analytical tools and deep experience in root-cause analysis, we are the go-to-place to help you get your formula back on track.

Looking for a unique formula?

The market is very competitive and no more room for traditional copycats. We can inspire you with formulations of our own, that will bring you some killer competitive advantages.

Reliable production

You can now make sure that your product was manufactured in the manner and concentrations that were agreed upon. We do the required analyzes to ensure that.

Herbal & Nutraceuticals

Herbal-based products are loved by the general population, and the plant world is full of gems and secrets, therefore opportunities for innovative products.

Build an excellent product

Do you love some herbal ingredients and wish to develop a line of products around them?

We research the target products, identify the needed raw materials, reach out to the best suppliers, build the best formulations that are elegant, effective & stable, and then monitor the production batches to make sure they adhere to the target product specs.

Troubleshooting

Do you have challenging products that failed after production? Herbal products can be challenging but there is always a reason, and we are the go-to place to help you get your formula back on track. Rest assured that we will deploy our full analytical capabilities and extensive experience in root-cause analysis.

Stability Testing

- Our accredited stability center can perform:
 - 1- long-term stability studies
 - 2- Accelerated stability studies
- We offer stability testing for pharmaceutical & veterinary products, cosmetics, herbal products, disinfectants & insecticides
- No waiting time, we start the study as soon as your product arrives
- GC-FID is included in our EDA accredited scope of work

PDE Studies

Permitted Daily Exposure Studies

The potential risk of cross-contamination can be controlled or restricted by the use of PDE/ADE values derived from a scientific and toxicological risk assessment of clinical and non-clinical data. The PDE/ADE values are used in cleaning validation in manufacturing facilities to further determine the maximum acceptable carryover (MACO values). The PDE/ADE values of most hazardous substances like cytotoxic drugs, hormones, steroids, etc., Nawah has an expert team manned by a Professor of Pharmacology and Toxicology who can help you with this study.

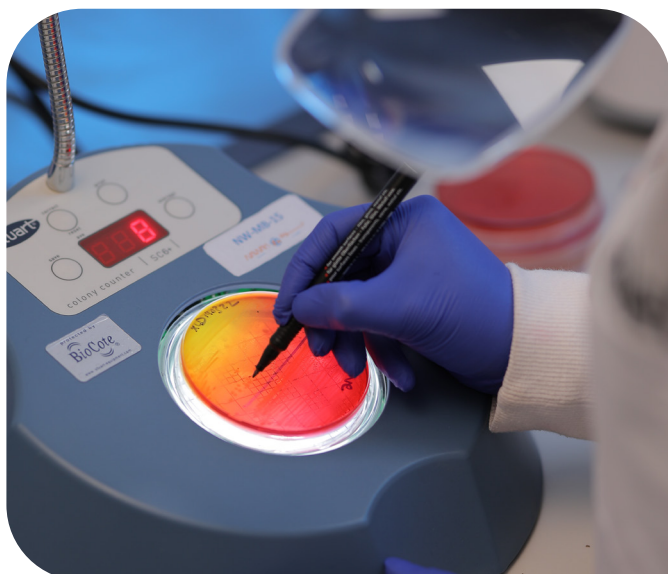
Regulatory Filing

Our team of consultants can help you in:

- 1- Preparing full scientific file for initial submission
- 2- CTD filing

Chemical Testing

- Analysis of raw materials & APIs
- Analysis of related substances and impurities (such as nitrosamine and azidomethyl impurities)
- Structure elucidation and impurities identification
- Analysis of heavy metals
- Analysis of sugars and Analysis of amino acids
- Analysis and validation of residual solvents
- Analytical method development & validation
- Pesticide analysis in herbal products



Microbiological Testing

- Sterility testing
- Bile tolerance bacteria
- Staphylococcus aureus enumeration
- Preservative challenge test
- Swabs and air quality testing
- Total Aerobic Microbial Count (TAMC)
- Total Yeast and Mold Count (TYMC)

Standardization of Herbal Extracts



How would you make sure that your herbal extracts are consistent?

Our phytochemistry team is well equipped to test the kind of herbs you are dealing with and provide you with a full report on the level of their main constituents and active components. Therefore, you can avoid batch to batch variation and ensure a consistent level of quality.

Extraction

We would also be happy to support you find the best way to extract active compounds from medicinal herbs as well as to prepare standardized extracts.

**The only producer of
accredited certified
reference materials
(CRMs) in Egypt**



- Our products are EDA accredited
- Quality guarantee (100% refund if any claim is proven correct)
- Fast delivery (3-7 working days)
- Competitive prices
- Detailed certificate of analysis verifying identity and quantity (using NMR, IR, Mass & HPLC)
- Monthly growing list of APIs, related compounds & herbal markers

**Check the full list at
www.nawah-scientific.com**

Custom Organic Synthesis



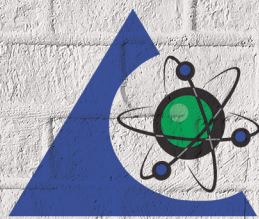
Looking for a special chemical compound that is not on public lists?

Nawah team of PhD holders in organic synthesis are experts in classical and modern organic techniques, which include but not limited to, organometallics, metal-catalyzed reactions, building fused/heterocyclic systems, parallel synthesis, and peptides synthesis.

Our modern facilities in separation techniques (automated flash chromatography and prep. HPLC) guarantee the utmost purity of your compounds. We also offer full characterization of new chemical entities (MS, NMR, IR, XRD, thermal analysis, elemental analysis....)

You design .. We execute

Accredited Quality You Can Trust



**PJLA
Testing**
Accreditation # 113722



**PERRY JOHNSON LABORATORY
ACCREDITATION, INC.**

Certificate of Accreditation

Perry Johnson Laboratory Accreditation, Inc. has assessed the Laboratory of:

NAWAH Scientific

Almokattam Mall, Street 9, 2nd floor, Al-Asmarat, Almokattam, Cairo, Egypt

(Hereinafter called the Organization) and hereby declares that Organization is accredited in accordance with the recognized International Standard:

ISO/IEC 17025:2017

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (as outlined by the joint ISO-ILAC-IAP Communiqué dated April 2017):

Chemical and Microbiological Testing
(As detailed in the supplement)

Accreditation claims for such testing and/or calibration services shall only be made from addresses referenced within this certificate. This Accreditation is granted subject to the system rules governing the Accreditation referred to above, and the Organization hereby covenants with the Accreditation body's duty to observe and comply with the said rules.

For PJLA:

Tracy Szeszen
President

Initial Accreditation Date:
April 13, 2022

Issue Date:
April 13, 2022

Expiration Date:
July 31, 2024

Accreditation No.:
113722

Certificate No.:
L22-292

Perry Johnson Laboratory
Accreditation, Inc. (PJLA)
755 W. Big Beaver, Suite 1325
Troy, Michigan 48064

The validity of this certificate is maintained through ongoing assessments based on a continuous accreditation cycle. The validity of this certificate should be confirmed through the PJLA website: www.pjla.com

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Certificate of Accreditation: Supplement

NAWAH Scientific

Almokattam Mall, Street 9, 2nd floor, Al-Asmarat, Almokattam, Cairo, Egypt
Contact Name: Mr. Kareem Ismail Phone: 00201121166886

Accreditation is granted to the facility to perform the following testing:

FIELD OF TEST	ITEMS, MATERIALS OR PRODUCTS TESTED	SPECIFIC TESTS OR PROPERTIES MEASURED	SPECIFICATION, STANDARD METHOD OR TECHNIQUE USED	RANGE (WHERE APPROPRIATE) AND DETECTION LIMIT
Chemical ^F	Pharma	Determination of PH	United States Pharmacopeia (USP) 43: online version, General Chapter 791	0 pH to 14 pH
	Water		Standard Methods for Examination of Water and Wastewater (SMWW), 23rd edition 2017, 4500 +H-B	
	Oil and Fat	Determination of peroxide value of oils and fats	ISO 3960: 2017	N/A
		Determination of free fatty acids	AOAC 940.28:2003	
Pharma		Determination total soluble solids (Brix)	United States Pharmacopeia (USP) 43: online version, General Chapter 831	Up to 85%
	Food		ISO 2173:2003	
	Pharma	Determination of Moisture	United States Pharmacopeia (USP) 43: online version, General Chapter 921.1a, Karl Fischer	N/A
Microbiological ^F	Water	Estimation of Heterotrophic Plate Count by Pour Plate method at 35.0 °C and 22.0 °C	Standard Methods for Examination of Water and Wastewater (SMWW), 23rd edition 2017, SM 9215B	
		Estimation of Heterotrophic Plate Count by Spread Plate method at 35.0 °C and 22.0 °C	Standard Methods for Examination of Water and Wastewater (SMWW), 23rd edition 2017, SM 9215C	

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Microbiological ^F	Water	Detection and Enumeration of Total Coliform by Membrane Filtration Technique	Standard Methods for Examination of Water and Wastewater (SMWW), 23rd edition 2017, SM 9222B	N/A
		Detection and Enumeration of Fecal Coliform by Membrane Filtration Technique	Standard Methods for Examination of Water and Wastewater (SMWW), 23rd edition 2017, SM 9222D	
		Detection and Enumeration of E. coli	Standard Methods for Examination of Water and Wastewater (SMWW), 23rd edition 2017, SM 9222H	
		Detection and Enumeration of Fecal Streptococci/Enterococci by Membrane Filtration Technique	Standard Methods for Examination of Water and Wastewater (SMWW), 23rd edition 2017, 9230C	
		Detection of Salmonella Spp.	ISO 19250:2010	
		Detection and Enumeration of Staphylococcus aureus by single plate procedure	Standard Methods for Examination of Water and Wastewater (SMWW), 23rd edition 2017, 9213B.6a	
Food		Enumeration of Microorganisms Part 1: Colony Count at 30 °C by pour plate technique	ISO 4833-1:2013	N/A
		Enumeration of Yeast and Molds for products with water activity greater than 0.95	Compact Dry YMR ISO 21527-1:2008	

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Microbiological ^F	Swabs	Enumeration of Yeast and Molds for products with water activity greater than 0.95	Compact Dry YMR ISO 21527-1:2008	N/A
		Enumeration of Microorganisms Part 1: Colony Count at 30 °C by pour plate technique	ISO 4833-1:2013	
		Enumeration of Coagulase Positive Staphylococci	ISO 6888-1:19999	
		Enumeration of β-glucuronidase positive Escherichia coli Part 2: Colony-count technique at 44 °C using 5-bromo-4-chloro-3-indolyl D-glucuronide	ISO 16649-2:2001	
		Detection of Salmonella Spp.	ISO 6579-1:2017	
		Enumeration of Coliform by colony count technique	ISO 4832:2006	
		Detection and Enumeration of Enterobacteriaceae Part 2: Colony Count technique	ISO 21528-2: 2017	
		Sterility Test	United States Pharmacopeia (USP) 43: online version (71) Sterility Test	
		Microbiological Examination of Nonsterile Products: Microbial Enumeration Tests by Membrane Filtration	United States Pharmacopeia (USP) 43: online version (61) Microbiological Examination of Nonsterile Products: Microbial Enumeration Tests	

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Microbiological ^F	Food	Enumeration of Yeast and Molds for products with water activity less than 0.95	ISO 21527-2:2008	N/A
		Enumeration of Coagulase Positive Staphylococci	ISO 6888-1:19999	
		enumeration of β-glucuronidase positive Escherichia coli Part 2: Colony-count technique at 44 °C using 5-bromo-4-chloro-3-indolyl D-glucuronide	ISO 16649-2:2001	
		Detection of Salmonella Spp.	ISO 6579-1:2017	
		Enumeration of Coliform by colony count technique	ISO 4832:2006	
		Detection and Enumeration of Enterobacteriaceae Part 2: Colony Count technique	ISO 21528-2: 2017	
		Enumeration of Sulfite Reducing Bacteria growing under anaerobic conditions	ISO 15213:2003	
		Enumeration of Clostridium perfringens-Colony Count technique	ISO 7937:2004	
		Detection of Listeria monocytogenes	ISO 11290-1:2017	
		Horizontal method for the enumeration of presumptive Bacillus cereus-Colony-count technique at 30 °C	Compact DRY BC ISO 7932:2004	

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Microbiological ^F	Pharma	Microbiological Examination of Nonsterile Products: Microbial Enumeration Tests by Plate Count Method	United States Pharmacopeia (USP) 43: online version (61) Microbiological Examination of Nonsterile	N/A
		Antimicrobial Effectiveness Testing	United States Pharmacopeia (USP) 43: online version (51) Antimicrobial Effectiveness Testing	
		Minimum Inhibitory Concentration (MIC) & Minimum Bactericidal Concentration (MBC) by Broth Microdilution method	Clinical and Laboratory Standard Institute, M07 Methods for Dilution Antimicrobial Susceptibility test for bacteria that Grow Aerobically, 11th edition, 2018	
		Minimum Inhibitory Concentration (MIC) & Minimum Bactericidal Concentration (MBC) by Broth Macrodilution method	Clinical and Laboratory Standard Institute, M07 Methods for Dilution Antimicrobial Susceptibility test for bacteria that Grow Aerobically, 11th edition, 2018	
Air		Air monitoring using air density settling plates	Standard Methods for Examination of Water and Wastewater (SMWW), 23rd edition 2017, 9200.3c	N/A

1. The presence of a superscript F means that the laboratory performs testing of the indicated parameter at its fixed location. Example: Outside Microbiometer^F would mean that the laboratory performs this testing at its fixed location.

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We Proudly Served



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PHARMACEUTICALS



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