

## C.V.

**Name:** Prof. Dr. Sharafaldin Al-Musawi

**Date of birth:** 1985/7/5

**Religion:** Muslim

**Specialization:** Nanobiotechnology

**Job:** University Professor

**Academic degree:** Professor

**Work address:** Al-Qasim district, Babylon Province, Iraq. Zipcode: 51013

**Mobile phone:** 07728628277

**Email:** dr.sharaf@biotech.uoqasim.edu.iq



### **First: Academic qualifications.**

Scientific Degree	University	College	Date
<b>Bachelor's</b>	University of Shahed (Iran)	College of Agriculture	2002-2006
<b>Masters</b>	Imam Khomeini International University (Iran)	College of Engineering	2007-2010
<b>Ph.D.</b>	Tarbiat Modares University (Iran)	College of Bioscience	2010-2014

No.	The Job	Position	The period from - to
1	<b>Teacher</b>	<b>Al Qasim Green University</b>	<b>2016-2019</b>
2	<b>Assistant Professor</b>	<b>Al Qasim Green University</b>	<b>2019-2024</b>
3	<b>Professor</b>	<b>Al Qasim Green University</b>	<b>From 2024</b>

**Third: University teaching.**

No.	College	University	Period from - to
1	College of Biotechnology	Al Qasim Green University	2016-2021
2	College of Food Sciences	Al Qasim Green University	2021-2024

**Fourth: The courses that I taught.**

No.	Subject	Department
1	Biotechnology	Applied Biotechnology
2	Nanobiotechnology	Applied Biotechnology
3	Pharmaceutical Biotechnology	Applied Biotechnology
4	Stem cells	Applied Biotechnology
5	Biosensors and biochips	Applied Biotechnology
6	Animal tissue culture	Applied Biotechnology
7	Biochemistry	Food Science and Technology
8	Organic chemistry	Food Science and Technology
9	Biological Safety and Hazards	Food Science and Technology
10	Professional ethics	Food Science and Technology

**Fifth: (Theses, theses) supervised by:**

No.	The name of the thesis or dissertation	Department	Year
3	Synthesis of Biopolymer with Nanoparticles by Laser Ablation as Controlled Drug Release	Applied Sciences	2017-2020

2	Superparamagnetic iron oxide nanoparticle synthesis using pulsed laser ablation in liquid method for biomedical applications.	Applied Sciences	2020-2022
1	In vitro study of antibacterial activity of Honey/chitosan Nano fibrous membrane enriched with Al <sub>2</sub> O <sub>3</sub> nanoparticles and clove extract for wound healing process.	Medical Biotechnology	2020-2022
4	Development of Intelligence Iron Oxide - Polymeric Nano-Carrier by Laser Ablation and Functionalized as Targeted Paclitaxel Drug Delivery	Applied Sciences	2020-2023
5	Laser synthesis and Nanoformulation of Metals Oxide/Nature Materials as Biomedical Application.	Applied Sciences	2022-continue
6	preparation and characterization of nanoparticles loaded with date seed powder and study of their physicochemical and sensory effects on the properties of yogurt.	Dairy	2023-continue
7	Folate Functionalized Fe <sub>3</sub> O <sub>4</sub> -Polymeric Nano-Carrier as Targeted Etoposide Drug Delivery for Lung cancer therapy	Biotechnology	2024-continue
8	Fe <sub>3</sub> O <sub>4</sub> @Au Core-Shell Nanoparticle Synthesis by Pulsed Laser Ablation in Liquid and its functionalization for Targeted Drug Delivery in Cancer Therapy.	physics	2022-continue

**■ Sixth: Scientific conferences and seminars in which I participated.**

No.	Title	Year	Place of its holding	Participation type
1	5th international congress of nanoscience and nanotechnology	2014	Tehran / Iran	Paper
2	11th Genetics Congress	2010	Gilan / Iran	Paper
3	6th Congress of Horticultural Sciences	2009	Tehran / Iran	Paper
4	5th International Scientific Conference for Nanotechnology and Advanced Materials and Their Applications ICNAMA	2015	Baghdad / Iraq	Paper
5	5th international congress of breast cancer	2016	Urmia / Iran	Paper
6	5 <sup>th</sup> international congress of breast cancer	2016	Kermanshah/ Iran	Paper

7	1th International Scientific Conference for medicine and biology	2017	Babylon / Iraq	Paper
8	First International Conference for Biotechnology	2017	Al-Qasim/ Iraq	Paper
9	Iraqi-Germany Conference	2017	Babylon / Iraq	Paper
10	12 <sup>th</sup> International Congress of Breast Cancer	2017	Tehran / Iran	Paper
11	First International Scientific Conference	2017	Qadisiyah / Iraq	Paper
12	6th international conference for nanotechnology and advanced materials and their applications	2018	Baghdad / Iraq	Paper
13	2nd national conference of nanoscience & nanotechnology	2018	Boroujerd / Iran	Paper
14	Nanotechnology and Advanced Material Center, University of Technology	2018	Baghdad / Iraq	Paper
15	6th international conference for nanotechnology and advanced materials and their applications	2018	Baghdad / Iraq	Paper
16	4 <sup>th</sup> conference on peptide and protein sciences (PPS4), University of Isfahan 1-2 may	2019	Isfahan / Iran	Paper
17	4th international congress of applied chemistry	2019	Urmia / Iran	Paper
18	8 <sup>th</sup> International Conference on Green Gold.	2019	Tehran/ Iran	Paper

19	16 <sup>th</sup> Iranian pharmaceutical science	2019	Kermanshah / Iran	Paper
20	The international conference of nanotechnology	2020	Erbil / Iraq	Paper
21	TMREES Conference Series: Technologies and Materials for Renewable Energy, Environment and Sustainability”	2020	Athens / Greece	Paper
22	1 th international conference of Scientific research in pandemics and crises, challenges of reality and future prospects	2020	Misan / Iraq	Paper
23	Ziggurat International Conference on Materials Science and Engineering	2020	London / United Kingdom	Paper
24	International Conference on Nanotechnology and Nanoscience	2020	Tehran / Iran	Paper
25	<i>TMREES-2021</i> The 16th Int'l Conf	2021	Athens / Greece	Paper
26	<i>TMREES-2021</i> The 16th Int'l Conf.	2021	Athens / Greece	Paper
27	<i>TMREES-2021</i> The 16th Int'l Conf	2021	Athens / Greece	Paper
28	The 17th Int'l Conf	2022	Grand-Est, France	Paper
29	The 17th Int'l Conf	2022	Metz, Grand-Est, France	Paper

30	International Conference on Advances in Interdisciplinary Nanosciences	2024	Kerla / India	Paper
----	---	------	---------------	-------

## ■ Seventh: Other scientific activities.

### Research published in international scientific journals

Hamidreza Kheiri Manjili, Hossein Naderi-Manesh, Maedeh Mashhadikhan, Leila Ma'mani, Safoora Nikzad, Sharafaldin Al-Musawi. "The effect of iron-gold core shell magnetic nanoparticles on the sensitization of breast cancer cells to irradiation". J Paramed Sci 2014, 5, 85-90.

Ma'mani L, Nikzad S, Kheiri-Manjili H, Al-Musawi S, Saeedi M, Askarlou S, Foroumadi A, Shafiee A. Curcumin-loaded guanidine functionalized PEGylated I3ad mesoporous silica nanoparticles KIT-6: Practical strategy for the breast cancer therapy. Eur J Med Chem. 2014; 18; 83:646-54. <https://doi.org/10.1016/j.ejmech.2014-06-069>.

Mirza Ali Mofazzal Jahromi, Sharafaldin Al-Musawi, Majid Pirestani, Mahdi Fasihi, Ramandi, Kazem Ahmadi, Hajar Rajayi, Zuhair Mohammad Hassan, Mahdi Kamali, Reza Mirnejad. "Curcumin-loaded Chitosan Tripolyphosphate Nanoparticles as a safe, natural and effective antibiotic inhibits the infection of Staphylococcus aureus and Pseudomonas aeruginosa in vivo. Iran J Biotech 2014, 12(3) 1-8.

Sharafaldin Al-Musawi, Hosein Naderi-Manesh, Zuhair Mohammad Hassan, Hamid Yeganeh, Safura Nikzad, Hamidreza Kheiri Manjili. "Construction of Polyurethane Polymeric-based Nano-carriers for Curcumin in Cancer Therapy" Mod. J. Med. Sci: Pathobiology, 2014, 17, 25-39.

Mofazzal Jahromi MA, Rajayi H, Al-Musawi Sh, Pirestani M, Fasihi Ramandi M, Ahmadi K, Sharifzadeh Peivasti V, Mohammad Hassan Z, Kamali M, Mirnejad R. "Evaluation of Antibacterial Effect of Curcumin Loaded Chitosan Nanoparticles" Journal of Fasa Univ of Med Sci: 2015, 5, 1, 134-141.

Al-Kinani, M.A., Haider, A.J. & Al-Musawi, S. Design, Construction and Characterization of Intelligence Polymer Coated Core-Shell Nanocarrier for Curcumin Drug Encapsulation and Delivery in Lung Cancer Therapy Purposes. J Inorg Organomet Polym 31, 70–79 (2021). doi: 10.1007/s10904-020-01672-w.

Sharafaldin Al-Musawi, Rahim Haddad., Qasem-ali Garoosi. A., Ramin Hosseini. "Cloning and structural Analysis of a Thioredoxin h (VvTrxh10) Gene from Yaquti Grape". Mod Genetic 2010. 1, 45-59.

Sharafaldin Al-Musawi, Rahim Haddad., Qasem-ali Garoosi. A., Ramin Hosseini. Molecular Cloning, Isolation and Characterization of a Pectate Lyase Gene from Grape". Agricultural researchs, 1, 45- 59, 2010.

Sharafaldin Al-Musawi. Folated-nanocarrier for curcumin drug delivery in breast cancer therapy. Eng. & Tech. Journal, Vol.33, No.9, 2015.

Kadhun SA, Hindi NKK, Al-Musawi S, Alkaim AF. Evaluation of Antimicrobial Activity of the Aquatic Extract against Bacterial isolates from URTI in Babylon Province, Iraq. J Global Pharma Tech. 2017; 12(9):296-301.

Al-Musawi S, Kadhim MJ, Hindi NKK. Folated-nanocarrier for paclitaxel drug delivery in leukemia cancer therapy. 2018;J Pharm Sc. J Pharm Sci & Res. 2018; 10(4): 749-754.

Abdul-Husin IF, Sharafaldin Al-Musawi S, A. Hindi NKK. Abudl-Mahdi S. Aqueous lemon extracts as antimicrobial agent against some pathogenic bacteria. Plant Archives. 2018; 18(1): 431-434.

Al-Awady MJ, Balakit AA, Al-Musawi S, Alsultani MJ, Ahmed Kamil, Alabbasi M. Investigation of Anti-MRSA and Anticancer Activity of Eco-Friendly Synthesized Silver Nanoparticles from Palm Dates Extract. Nano Biomed. Eng. 2019; 11(2):157-169. <https://doi:10.5101/nbe.v11i2.p157-169>.

Al-Musawi, Hadi AJ, Hadi SJ, Hindi NKK. Preparation and Characterization of Folated Chitosan-Magnetic Nanocarrier for 5-Fluorouracil Drug Delivery and Studying its Effect in Bladder Cancer Therapy. *J Global Pharma Tech.* 2019; 11(7):628-637.

Iman F Abdul-Husin, Sharafaldin Al-Musawi, Nada Khazal Kadhim Hindi, Samah Ahmed Kadhum, Ayad F Alkaim, Fatima Malik Abood, Huda H. Al-Hasnawy, Mays Hadi Jebur, Hiba Jassim Hamza, Ameera Jasim Al-Aaraji. Evaluation of disincentive effects of 70% isopropyl alcohol and 10% povidone -iodine safety antimicrobial agents of skin. *J Global Pharma Tech.*2020.

Al-Musawi, S.; Albukhaty, S.; Al-Karagoly, H.; Sulaiman, G.M.; Alwahibi, M.S.; Dewir, Y.H.; Soliman, D.A.; Rizwana, H. Antibacterial Activity of Honey/Chitosan Nanofibers Loaded with Capsaicin and Gold Nanoparticles for Wound Dressing. *Molecules* 2020, 25, 4770. doi: 10.3390/molecules25204770. <https://doi:10.3390/molecules25204770>.

Albukhaty, S.; Al-Musawi, S.; Abdul Mahdi, S.; Sulaiman, G.M.; Alwahibi, M.S.; Dewir, Y.H.; Soliman, D.A.; Rizwana, H. Investigation of Dextran-Coated Superparamagnetic Nanoparticles for Targeted Vinblastine Controlled Release, Delivery, Apoptosis Induction, and Gene Expression in Pancreatic Cancer Cells. *Molecules* 2020, 25, 4721. <https://doi:10.3390/molecules25204721>.

Albukhaty, S.; Al-Musawi, S.; Al-Karagoly.; Abood H. Current therapeutic protocols for COVID-19 and promising nanotechnology solution. *Misan Journal for Academic Researches.* 2020, 1047-1-67.

Al-Musawi, S; Albukhaty, S.; Al-Karagoly, H.; Sulaiman, G.M.; M S Jabir M.S; Naderi-Manesh H. Dextran-coated superparamagnetic nanoparticles modified with folate for targeted drug delivery of camptothecin. *Adv. Nat. Sci. Nanosci. Nanotechnol.* 2020; 11 (4) 045009. <https://doi: 10.1088/2043-6254/abc75b>.

Salim Albukhaty, L. Al-Bayati, H. Al-Karagoly & S. Al-Musawi (2020): Preparation and characterization of titanium dioxide nanoparticles and in vitro investigation of their cytotoxicity and antibacterial activity against Staphylococcus aureus and Escherichia coli, *Animal Biotechnology*, <https://doi:10.1080/10495398.2020.1842751>.

Al-Kinani, M.A., Haider, A.J. & Al-Musawi, S. High Uniformity Distribution of Fe@Au Preparation by a Micro-Emulsion Method. *IOP Conf. Ser.: Mater. Sci. Eng.* 2020; 987 012013. <https://doi:10.1088/1757-899X/987/1/012013>.

Al-Musawi, S.; Albukhaty, S.; Al-Karagoly, H.; Almalki, F. Design and Synthesis of Multi-Functional Superparamagnetic Core-Gold Shell Coated with Chitosan and Folate Nanoparticles for Targeted Antitumor Therapy. *Nanomaterials* 2020, 11, 1. <https://doi:10.3390/nano11010032>.

Al-Musawi, S.; Ibraheem, S.; Mahdi, S.A.; Albukhaty, S.; Haider, A.J.; Kadhim, A.A.; Kadhim, K.A.; Kadhim, H.A.; Al-Karagoly, H. Smart Nanoformulation Based on Polymeric Magnetic Nanoparticles and Vincristine Drug: A Novel Therapy for Apoptotic Gene Expression in Tumor. *Life* 2021, 11, 71. <https://doi.org/10.3390/life11010071>.

Al-Kaabi, W.J.; Albukhaty, S.; Al-Fartosy, A.J.M.; Al-Karagoly, H.K.; Al-Musawi, S.M.; Sulaiman, G.M.; Dewir, Y.H.; Alwahibi, M.S.; Soliman, D.A. Development of Inula graveolens (L.) Plant Extract Electrospun/Polycaprolactone Nanofibers: A Novel Material for Biomedical Application. *Appl. Sci.* 2021, 11, 828. <https://doi.org/10.3390/app11020828>.

Al-Kinani, M.A., Haider, A.J. & Al-Musawi, S. Design and Synthesis of Nanoencapsulation with a New Formulation of Fe@Au-CS-CU-FA NPs by Pulsed Laser Ablation in Liquid (PLAL) Method in Breast Cancer Therapy: In Vitro and In Vivo. *Plasmonics* (2021). <https://doi.org/10.1007/s11468-021-01371-3>.

Abdul Mahdi S, Kadhim AA, Albukhaty S, Nikzad S, Haider AJ, Ibraheem S, Kadhim HA, Al-Musawi S. Gene expression and apoptosis response in hepatocellular carcinoma cells induced by biocompatible polymer / magnetic nanoparticles containing 5-Fluorouracil. *Electron J Biotechnol.* 2021; 52, 21–28. <https://doi.org/10.1016/j.ejbt.2021.04.001>.

Al-Kinani M.A., Haider, A.J. & Al-Musawi, S. Study the Effect of Laser Wavelength on Polymeric Metallic Nanocarrier Synthesis for Curcumin Delivery in Prostate Cancer Therapy: In Vitro Study. *J of Applied Sci & Nanotech.* 2021; 1, 43-50.

Haider, A.J., Al-Kinani, M.A & Al-Musawi, S. Preparation and Characterization of Gold Coated Super Paramagnetic Iron Nanoparticle Using Pulsed Laser Ablation in Liquid Method. *Key Engineering Materials.* 2021. 886, 77-85. doi:10.4028/www.scientific.net/KEM.886.77.

Mahdi, S.A. and Al-Musawi, S. Impact of Al<sub>2</sub>O<sub>3</sub> & Fe<sub>3</sub>O<sub>4</sub> nanoparticles on genes expression levels on biofilm in Staphylococcus epidermidis. *AIP Conference Proceedings; Volume 2437, Issue 1.* (2022); doi: 10.1063/5.0093820.

Alnasraui, A.H.F. and Al-Musawi, S. Nanoformulation of intelligence polymeric nanocarrier for resveratrol targeted delivery and study its cytotoxic, apoptotic, and genetics effects in epidermoid carcinoma therapy. *AIP Conference Proceedings; Volume 2437, Issue 1.* (2022); doi: 10.1063/5.0092330.

Jawad, A. S., Thewaini, Q. N. O., & Al-Musawi, S. Honey/polymeric nanofiber enriched with clove (*Syzygium aromaticum* L.) extract and Al<sub>2</sub>O<sub>3</sub> nanoparticles: Antibacterial and in vitro wound healing studies. *AIP Conference Proceedings; Volume 2437, Issue 1.* (2022); doi: 10.1063/5.0092341.

Almansorri, A. K, Al-Shirifi, H. M. H, Al-Musawi, S\*, Ahmed B. B. Investigation of the Inhibition Activity of Aluminum Oxide Nanoparticles for Herpes Simplex Type 1. *Archives of Razi Institute*, 78:1, 207-213; 2023.

Almansorri, A. K, Al-Shirifi, H. M. H, Al-Musawi, S\*, Ahmed B. B. A Novel Application of Zinc Oxide Nanoparticles for Inhibition of Molluscum contagiosum Virus Infection. *Archives of Razi Institute*, 78:1, 277-285; 2023.

Almansorri, A. K, Al-Shirifi, H. M. H, Al-Musawi, S\*, Ahmed B. B. Inhibition activity of aluminium oxide nanoparticles for herpes simplex type 1. *Caspian Journal of Environmental Sciences*; 21:1; 125-133; 2023. DOI:10.22124/cjes.2023.6203.

Abdulwahid, F.S., Haider, A.J., Al-Musawi, S.; Iron Oxide Nanoparticles (IONPs): Synthesis, Surface Functionalization, and Targeting Drug Delivery Strategies: Mini-Review; *Nano*, 2022, 2230007. DOI: 10.1142/S1793292022300079.

Abdulwahid F, S.; Haider, A.J.; Al-Musawi, S. Folate decorated dextran-coated magnetic nanoparticles for targeted delivery of ellipticine in cervical cancer cells. *2023 Adv. Nat. Sci: Nanosci. Nanotechnol.* 14 015001. DOI 10.1088/2043-6262/aca606.

Al-Obaidy, R., Haider, A.J., Al-Musawi, S. et al. Targeted delivery of paclitaxel drug using polymer-coated magnetic nanoparticles for fibrosarcoma therapy: in vitro and in vivo studies. *Sci Rep* 13, 3180 (2023). <https://doi.org/10.1038/s41598-023-30221-x>.



Al-Obaidy, R., Haider, A.J., Al-Musawi, S. Calculation and Optimization Methods of SPION Concentration Formation with Different Laser Wavelengths in Liquid. AIP Conference Proceedings 2769, 020032 (2023) doi: <https://doi.org/10.1063/5.0129974>.

Abdulwahid, F.S., Haider, A.J., Al-Musawi, S.; Effect of Laser Parameter on Fe<sub>3</sub>O<sub>4</sub> NPs Formation by Pulsed Laser Ablation in Liquid. AIP Conference Proceedings 2769, 020039 (2023) doi: <https://doi.org/10.1063/5.0129824>.

Adawiya J. Haider, Fatima I. Sultan, Mohammed J. Haider, Bakr Ahmed Taha, Sharafaldin Al-Musawi, Mahdi S. Edan, Chadeer S. Jassim, and Norhana Arsad. Characterization of laser dye concentrations in ZnO nanostructures for optimization of random laser emission performance. *International Journal of Modern Physics B*. 2450111. doi: 10.1142/S021797922450111X.

SF Abbas, AJ Haider, S Al-Musawi. Antimicrobial and Wound Healing Effects of Metal Oxide Nanoparticles Enriched Wound Dressing. *NANO*, 2023. DOI: 10.1142/S1793292023300050.

Alnasraui A H F, Joe I H, Al-Musawi S. Design and synthesise of folate decorated Fe<sub>3</sub>O<sub>4</sub>@Au-DEX-CP nano formulation for targeted drug delivery in colorectal cancer therapy: In vitro and in vivo studies. *Journal of Drug Delivery Science and Technology*, 78;1, 2023, DOI: 10.1016/j.jddst.2023.104798.

Abbas, S.F., Haider, A.J., Al-Musawi, S. et al. Antibacterial Effect of Copper Oxide Nanoparticles Prepared by Laser Production in Water Against *Staphylococcus aureus* and *Escherichia coli*. *Plasmonics* (2023). <https://doi.org/10.1007/s11468-023-02135-x>.

Sheykh Hassan, M., La'ah, A.S., Ahmadieh-Yazdi, A., ... Kalhor, N., Al-Musawi, S. Advancement in off-the-shelf CAR T-cell therapy for cancer immunotherapy. *Critical Developments in Cancer Immunotherapy*, 2024, pp. 33–92.

Bispecific T-cell engagers (BiTEs) in immunotherapy Sheykh Hassan, M. , La'ah, A.S. , Ahmadieh-Yazdi, A. , ... Kalhor, N. , Al-Musawi, S. *Critical Developments in Cancer Immunotherapy*, 2024, pp. 205–234

Hussein F Alnasraui, A. , Joe, I.H. , Al-Musawi, S. Investigation of dextran-coated magnetic nanoparticles encapsulated by medication and modified with folate for targeted drug delivery: Invitro and docking studies *Materials Chemistry and Physics*, 2024, 32129446 ,1.

Abbas, S.F. , Haider, A.J. , Al-Musawi, S. , Selman, M.K. Impact of laser parameters on synthesis zinc oxide nanoparticles and evaluation of its antibacterial activity *Optical and Quantum Electronics*, 2024, 56(5), 901.

Haider, Adawiya J. Sultan, Fatima I. Haider, Mohammed J. Taha, Bakr Ahmed, Al-Musawi, Sharafaldin. Edan, Mahdi S. Jassim, Chadeer S. Arsad, Norhana. Characterization of laser dye concentrations in ZnO nanostructures for optimization of random laser emission performance. *International Journal of Modern Physics B*, 2024, 38(8), 2450111.

Design and Synthesis of Whey Protein-Based Nanoformulation of Fe Ion and Data Extract-Loaded Agents and Functionalized with Folic Acid for Studying its Effect on Yogurt Properties Al-Suwidi, M.Q.J. , Al-Saadi, J.M.S. , Al-Musawi, S. *Nano*, 2024, 2450114

**■ Tenth: Letters of thanks, awards and certificates of appreciation.**

<b>No.</b>	<b>A letter of thanks, award or certificate</b>	<b>The Donor</b>	<b>Year</b>
<b>1</b>	<b>Letter of thanks</b>	<b>Al Qasim Green University</b>	<b>2016</b>
<b>2</b>	<b>Letter of thanks</b>	<b>Al Qasim Green University</b>	<b>2016</b>
<b>3</b>	<b>Letter of thanks</b>	<b>Al Qasim Green University</b>	<b>2016</b>
<b>4</b>	<b>Letter of thanks</b>	<b>Al Qasim Green University</b>	<b>2016</b>
<b>5</b>	<b>Letter of thanks</b>	<b>Al Qasim Green University</b>	<b>2017</b>
<b>6</b>	<b>Letter of thanks</b>	<b>Al Qasim Green University</b>	<b>2017</b>
<b>7</b>	<b>Letter of thanks</b>	<b>Ministry of Higher Education and Scientific Research</b>	<b>2017</b>
<b>8</b>	<b>Letter of thanks</b>	<b>Al Qasim Green University</b>	<b>2017</b>
<b>9</b>	<b>Letter of thanks</b>	<b>Al Qasim Green University</b>	<b>2017</b>
<b>10</b>	<b>Letter of thanks</b>	<b>Al Qasim Green University</b>	<b>2018</b>
<b>11</b>	<b>Letter of thanks</b>	<b>University of Babylon</b>	<b>2018</b>

<b>12</b>	<b>Letter of thanks</b>	<b>Al Qasim Green University</b>	<b>2018</b>
<b>13</b>	<b>Letter of thanks</b>	<b>Al Qasim Green University</b>	<b>2018</b>
<b>14</b>	<b>Letter of thanks</b>	<b>Ministry of Higher Education and Scientific Research</b>	<b>2018</b>
<b>15</b>	<b>Letter of thanks</b>	<b>Al Qasim Green University</b>	<b>2018</b>
<b>16</b>	<b>Letter of thanks</b>	<b>Al Qasim Green University</b>	<b>2019</b>
<b>17</b>	<b>Letter of thanks</b>	<b>University of Technology</b>	<b>2019</b>
<b>18</b>	<b>Letter of thanks</b>	<b>Al Qasim Green University</b>	<b>2019</b>
<b>19</b>	<b>Letter of thanks</b>	<b>Al Qasim Green University</b>	<b>2019</b>
<b>20</b>	<b>Letter of thanks</b>	<b>Al Qasim Green University</b>	<b>2019</b>
<b>21</b>	<b>Letter of thanks</b>	<b>Ministry of Higher Education and Scientific Research</b>	<b>2019</b>
<b>22</b>	<b>Letter of thanks</b>	<b>Al Qasim Green University</b>	<b>2019</b>
<b>23</b>	<b>Letter of thanks</b>	<b>Al Qasim Green University</b>	<b>2020</b>
<b>24</b>	<b>Letter of thanks</b>	<b>University of Technology</b>	<b>2020</b>

<b>25</b>	<b>Letter of thanks</b>	<b>Al Qasim Green University</b>	<b>2020</b>
<b>26</b>	<b>Letter of thanks</b>	<b>Al Qasim Green University</b>	<b>2020</b>
<b>27</b>	<b>Letter of thanks</b>	<b>Al Qasim Green University</b>	<b>2020</b>
<b>28</b>	<b>Letter of thanks</b>	<b>Ministry of Higher Education and Scientific Research</b>	<b>2021</b>
<b>29</b>	<b>Letter of thanks</b>	<b>Al Qasim Green University</b>	<b>2021</b>
<b>30</b>	<b>Letter of thanks</b>	<b>Al Qasim Green University</b>	<b>2021</b>
<b>31</b>	<b>Letter of thanks</b>	<b>University of Baghdad</b>	<b>2021</b>
<b>32</b>	<b>Letter of thanks</b>	<b>Al Qasim Green University</b>	<b>2021</b>
<b>33</b>	<b>Letter of thanks</b>	<b>Al Qasim Green University</b>	<b>2022</b>
<b>34</b>	<b>Letter of thanks</b>	<b>Al Qasim Green University</b>	<b>2022</b>
<b>35</b>	<b>Letter of thanks</b>	<b>Ministry of Higher Education and Scientific Research</b>	<b>2022</b>
<b>36</b>	<b>Letter of thanks</b>	<b>Al Qasim Green University</b>	<b>2022</b>
<b>37</b>	<b>Letter of thanks</b>	<b>Al Qasim Green University</b>	<b>2022</b>
<b>38</b>	<b>Letter of thanks</b>	<b>Al Qasim Green University</b>	<b>2023</b>

39	Letter of thanks	Al Qasim Green University	2023
40	Letter of thanks	Al Qasim Green University	2023
41	Letter of thanks	Al Qasim Green University	2023
42	Letter of thanks	Ministry of Higher Education and Scientific Research	2023
43	Letter of thanks	Al Qasim Green University	2023
43	Letter of thanks	Al Qasim Green University	2024
43	Letter of thanks	Al Qasim Green University	2024
43	Letter of thanks	Al Qasim Green University	2024
43	Letter of thanks	Al Qasim Green University	2024

➤ **Some of the certificates of appreciation and scientific and administrative activities:**

- ✚ A distinguished university professor for the years 2017, 2018, 2020, 2021, 2022, and 2023.
- ✚ Inclusion in the list of world-class scientists and researchers according to the classification of Ad Scientific index.
- ✚ Diagnosis and registration of an isoform of the Thioredoxin gene at the US National Center for Biotechnology & Information <http://www.ncbi.nlm.nih.gov/nuccore/HM622264.1>

✚ Identification and registration of an isoform of the Pectate lyase gene at the US National Center for Biotechnology & Information <http://www.ncbi.nlm.nih.gov/nuccore/HQ333522.1>

✚ Evaluation of more than 100 international scientific research in reputable international journals and containers registered within the Web of Sciences classification.  
<https://www.webofscience.com/wos/author/record/1063555>

✚ Supervision of several master's theses and doctoral dissertations in several universities inside and outside Iraq.

✚ Participation in several discussion committees for MA and PhD students in various universities.

### ➤ **Scientific Index (H-Index) in Google Scholar, Scopus, Researchgate and Publons:**

✚ **Google Scholar H-Index: 18**

✚ **Scopus H-Index: 16**

✚ **Research gate H-Index: 17**

✚ **Publons H-Index: 13**

### ❖ **Administrative positions and responsibilities:**

✚ **Department manager in the College of Biotechnology**

✚ **Director of Scientific Affairs and Cultural Relations department**

✚ **Director of Quality Assurance and Academic Performance department**

**Peer reviewing of more than 200 documents (papers and book chapters)**