

# Curriculum Vita



**Full name:** **Monim Hakeem Khalaf Al-Jiboori, Ph.D.**

**Full Professor** in Atmospheric Physics and Atmospheric Environment, since 12/6/2010

**Present Postal Address:** Department of Atmospheric Sciences, College of Sciences, Al-Mustansiriya University, **Email:** [mhaljiboori@gmail.com](mailto:mhaljiboori@gmail.com) Telephone (mobile): 00964 (0) 7904579849 or 00964 (0)7724578605, Email: monim.atmsc@uomustansiriya.edu.iq

**Personal Data:** *Birth date:* 27 December, 1967 *Birthplace:* Baghdad, Iraq.

*Religion:* Muslim *Citizenship:* Iraqi *Martial status:* Married.

Languages: Arabic (mother), English, Chinese.

Google scholar: <https://scholar.google.com/citations?user=JlbCq7kAAAAJ&hl=en>

h-index: 8, 321 citations

Scopus: <https://www.scopus.com/authid/detail.uri?authorId=6603299356>, 128 citations, h-index: 5

**Publons:** publons.research/3169104/monim-al-jiboori/

**Researchgate:** researchgate.net/profile/Monim-Al-Jiboori2

## **Education:**

B.Sc. in Physics (Meteorology), Al-Mustansiriya University, Baghdad, 1990.

M.Sc. in Physics (Synoptic Meteorology), Al-Mustansiriya University, 1994.

Ph.D. in Atmospheric Physics & Environment, Nanjing University, China, 2001.

## **Distinction:**

Post-doctorate in Atmospheric Sciences, Institute of Atmospheric Physics, China, 2003.

## **Employment:**

1. 1995 – 1997: Assistant Lecturer in College of Sciences, Al-Mustansiriya University.

2. 1997–1998: Chinese language student, Nanjing Normal University, China.
3. 1998– 2001: Ph.D. student, Nanjing University, China.
4. 2001– 2003: Post-doctorate fellowship, Institute of Atmospheric Physics, China.
4. 2001– 2004: Lecturer, Faculty of Sciences, Sana'a University, Republic of Yemen.
5. 2005– 2007: Assistant Professor and Directory of the Dept of Atmospheric Sciences.
6. 2007 - 2012: Assistant Professor and Head of the Dept. of Atmospheric Sciences.
7. 2012 upto now: Full Professor in the Dept. of Atmospheric Sciences.
8. 2014 up to 2019: Professor and Headmaster of the Dept. of Atmospheric Sciences.
9. 2015 up to 2018 Chief of Consulting Bureau for College Science, Mustansiriyah University.
10. 2018 up to date: Full professor in Dept. of Atmospheric Sciences, College of Science.

### **Member broad Editor**

1. Sustainability in Environment from 2019 and continued.
2. Scientific Review Engineering and Environmental Sciences (Scopus Q3) from 2019 up to 2022.

### **Courses I teach**

**Undergraduate:** Atmospheric chemistry & air pollution, Weather analysis and forecasting, Physical climatology, Climate change, Principles of atmospheric observation, General meteorology, General physics, Geometric and physical optics, Electrical and magnetism, Atmospheric radiation and practical laboratories, cloud physics.

**Postgraduate:** Atmospheric boundary layers, Micrometeorology, Air-sea interaction, Advances in physical climatology, Aerosol chemistry, Advances in air pollution, Climate modeling, Mesoscale dynamics, Turbulence and diffusion.

### **Current research**

Focus is upon the urban environment with my long-term goal to contribute to a comprehensive understanding of the physics of the urban boundary layer, urban turbulence structure, urban climatology, Urban wind power, boundary layer meteorology and turbulence modeling, air pollution. Primary interest is in exchange transfer using field observations.

Other research is synoptic meteorology and weather forecasting. Lastly analyze climatology data and study of annual and seasonal variations of atmospheric fields.

I am now supervisor for more than five postgraduate (2 PhD and 3MSc) students.

### **Participations**

\*Workshop on Meso-scale System in Meiyu/Baiu Front and Hydrological Cycle, November 3-9, Xi'an, China, 1999.

\*Workshop on Integrated Drought Preparedness and Management in Iraq, Jordan, 13-15, 2010.

\*The Sixth Scientific Conference of College of Science, Al-Mustansiriya University, Baghdad, 2010.

\*First International Virtual Conference on Environment & Natural Resources 24-25 March 2021, College of Science, University of Al-Qadisiyah, Iraq.

**Chairman of Scientific Committee** for 1<sup>st</sup> Conference of Atmospheric Sciences, Atmospheric Dept, College of Science, Mustansiriyah University, 2020

### Supervising Experience

Supervised more than 18 MSc and 13 PhD students in the fields of Atmospheric Physics and Meteorology.

Participated in more than 20 M. Sc. and Ph. D. thesis defense.

**Referee** for many Iraqi and International Scientific Journals such as:

Urban Climate, Optics Communications, Total of environmental Science

Member of the consultative staff of Al-Mustansiriyah Journal of Science (2008–up to 2012).

### Textbook Authorship

- Al-Jiboori, M. and Sanaa, A., 2010: *Practical Experiments in Atmospheric Observing, Synoptic and Forecast*, Masir Murtadha for Iraqi Book Institutes, pp. 288.
- Al-Jiboori M., 2015: Atmospheric Pollution, Seemaa press, pp 235.
- Al-Jiboori M. Fattah A. and Nagham A., 2016: Practical Air Pollution, Underpublish.

### المحاضرات

1. القاء الكثير من المحاضرات العلمية عن التغيرات المناخية والتلوث البيئي في وزارات الشباب والرياضة/الرعاية العلمية
2. اقامة دورات تدريبية لتدريب ممثلي اقسام الجغرافية عن التنبو والرصد والتحليل في المكتب الاستشاري
3. القاء محاضرة عن اختيار أفضل مستوى نصب توربان طاقة الرياح/ الجمعية العراقية للمهندسين
4. القاء محاضرة عن مكامن طاقة الرياح في العراق/ مؤسسة أفريتش أربت الالمانية/فندق بابل
5. القاء محاضرات في كلية العلوم التعليم المستمر
6. لقاءات صحفية واذاعات وقنوات فضائية كالعراقية والحرية

### اللجان العلمية

1. رئيس اللجنة العلمي لقسم علوم الجو من 2014 وما زلت مستمرة
2. عضو اللجنة العلمي في قسم علوم الجو 2007- 2014
3. عضو لجنة اختيار افضل البحوث العلمي لكليات العلوم الصرفة 2013
4. عضو لجنة اختيار افضل مشاريع التخرج لطلبة المراحل المنتهية 2012
5. عضو اللجان العلمية لمؤتمرات كلية العلوم المستنصرية
6. عضو لجنة مجلس الوزراء العراقي لانشاء اطلس طاقة الرياح 2014
7. عضو لجنة التغيرات المناخية الوزارية 2017 وما زلت مستمرة
8. عضو لجنة خبراء البيئة الوزارية 2017 وما زالت مستمرة
9. عضو لجنة آثار العواصف الغبارية الوزارية 2017 وما زالت مستمرة
10. عضو اللجنة العلمية للمؤتمر الرابع الدولي لجمعية المهندسين العراقية
11. عضو لجنة خبراء اقسام علوم الجو والفلك والتحسس النائي والجيوفيزياء

## Scientific Publications

1. Al-Jiboori, M., 1999: Study and determination of the location lifting condensation level at Baghdad, Al-Mustansiriya J. of Science, 10 (1), 57-62.
2. Al-Naimi, R. and Al-Jiboori, M., 1998: Vertical wind in Iraq, Al-Mustansiriya J. of Science, 9(1), 45-52.
3. Awni, A, Rita, I. and Al-Jiboori, M., 1998: The effects of Meteorological Factors on ultraviolet radiation measured at Baghdad, Al-Mustansiriya J. of Science, 9 (3), 57-62.
4. Al-Jiboori, M., Xu, Y. and Qian, Y., 1999: Diurnal Variation of turbulent fluxes in the tower layer atmosphere over Beijing, Workshop on meso-scale system in Meiyu/Baiu front and hydrological cycle, pp. 110-113.
5. Al-Jiboori, M., Xu, Y. and Qian, Y., 2000: Local similarity relationships of non-dimensional wind and temperature in the tower-layer atmosphere over Beijing city, Advances in atmospheric sciences, 17 (4), 636-648.
6. Al-Jiboori, M., Xu, Y. and Qian, Y., 2001: Local similarity relationships in the boundary layer, Boundary-layer meteorology, 102, 63-82.
7. Al-Jiboori, M., Xu, Y. and Qian, Y., 2001: Turbulence characteristics over complex terrain in the west China, Boundary-layer meteorology, 101, 109-126.
8. Al-Jiboori, M., Xu, Y. and Qian, Y., 2001: Vertical structure of second-moment turbulent variables, ACTA meteorological sinica, 15 (2), 218-232.
9. Al-Jiboori, M., Xu, Y. and Qian, Y., 2001: Effects of different standard deviations of wind velocity components, published electronically by Atmospheric science letters, doi: 10.1006/asle.2001.0038, [www.academicpress.com](http://www.academicpress.com).
10. Al-Jiboori, M., Xu, Y. and Qian, Y., 2001: Velocity spectra over different terrain, published electronically by Atmospheric science letters, doi: 10.1006/asle.2001.0038, [www.academicpress.com](http://www.academicpress.com).
11. Li, X., Hu, F., Pu, Y. and Al-Jiboori, M., 2002: Identification of coherent structures of turbulence at the atmospheric surface layer, Advances in atmospheric sciences, 19, 687-698.
12. Al-Jiboori, M., 2004: Availability wind power at inland and coastal station of Yemen, Faculty of sciences bulletin, 17, 1-171.
13. Al-Jiboori, M. and Hu, F., 2005: Surface roughness around a meteorological tower of 325-m and its effect on urban turbulence, Advances in atmospheric sciences, 22 (4), 595-605.
14. Al-Jiboori, M. and Hu, F.: Vertical turbulent structure within and over an urban area, unpublished.
15. Al-Jiboori, M., 2006: Seasonal variability of mixing height over Baghdad city, J. of education college, 1, 19-26.
16. Al-Jiboori, M., 2009: Third-moment turbulent characteristics in urban boundary layer, Al-Mustansiriya J. sciences, 20 (1), 154-164.
17. Al-Jiboori, M., 2007: Reynolds stress and heat flux within and above a neutrally urban boundary layer, Al-Mustansiriya J. sciences, 18 (3), 93-101.
18. Al-Jiboori, M., 2007: Assessment of physiological human comfort in Iraq, Al-Mustansiriya J. sciences, 18 (1), 63-75.
19. Al-Jiboori, M., 2008: Correlation coefficients in urban turbulence, Boundary-layer meteorology, 126, 311-323.
20. Al-Jiboori, M., 2009: Study of convective clouds over Baghdad city, J. of education college, 40 (1), 357-364.

21. Al-Timimi, Y. and Al-Jiboori, M., 2009: Annual and seasonal temperature trends for selected regions in Iraq, J. of college of basic education, 15 (60), 9-18.
22. Al-Jiboori, M., and Al-Draji, A., 2010: Aerodynamic surface roughness length of Baghdad city, J. of Al-Nahrain university, 13 (1), 96-102.
23. Al-Jiboori, M., 2010: Determining of neutral and unstable wind profiles over Baghdad city, Accepted by Iraqi J. of sciences, 51, 343-350.
24. Al-Jiboori, M., 2015: Analysis and study of some stability parameter and their relations in the atmospheric boundary layer, Submitted to Al-Mustansiriya J. sciences.
25. Al-Jiboori, M., 2010: Sound speed propagation in the atmosphere of International Baghdad Airport, Al-Mustansiriya J. sciences, 12(7).
26. Al-Jiboori M. K. and Arakan, 2011: Determination of air turbulences over Iraq airport, Al-Mustansiriya J. sciences,
27. Al-Timimi Y. K., George L. E. and **Al-Jiboori M. H.**, 2012: Drought Risk assessment in Iraq using remote sensing and GIS techniques, Iraqi J. of sciences, 53, 1078-1082.
28. Al-Timimi Y. K. and **Al-Jiboori M. H.**, 2013: Assessment of spatial and temporal drought in Iraq during the period 1980-2010, International J. of energy and environment, 4, 291-302.
29. Al-Timimi Y. K. and **Al-Jiboori M. H.**, 2014: Drought assessment in Iraq using analysis of standardized precipitation index (SPI), Iraqi J. of physics, 12, 36-43.
30. Hasan H. H and **Al-Jiboori M. K.**, 2015: Mathematical model for estimating particle deposition velocity over Baghdad city, Al-Mustansiriya J. sciences 26 (1).
31. Eimad A. Jasim and **Al-Jiboori M. K.**, 2015: High pressure systems effect with sky atmosphere in producing forest in Iraq, Al-Mustansiriya J. sciences, 26 (1).
32. Naghm A., Bidoor and **Al-Jiboori M. K.**, 2012: Analytical study of boundary layer depth over Iraq using TCMWF data, Al-Mustansiriya J. sciences, 23 (12) , 4-135.
33. نجلاء ومنعم الجبوري وخالد العمار: 2014: دراسة الخشونة والاستقرارية في تحديد المقاطع العمودية للرياح في جو الحلة الشبه حضري مجلة بابل للعلوم الصرفة.
34. طعمه علي ومنعم الجبوري وخالد العمار: دراسة ظاهرة الجزيرة الحرارية الحضرية وتأثيراتها البيئية في مدينة الحلة: 2015.
35. Amal J. S. and Al-Jiboori M. K., 2015: Spectral characteristics of climatological air temperature for selected cities in Iraq, Global J. of advanced research, Vol. 2, Issue 9, 1409-1418.
36. حاجم مها ومنعم الجبوري: 2016: تقييم ملوثات الاوزون واسبابه وعلاقته بمسبياته في الجو الحضري النهاري لمدينة بغداد، مجلة علوم المستنصرية، 27، العدد الثاني.
37. Hashim B. M., Al-Jiboori M. K., Hassan A. S., 2016: Evaluation of CO<sub>2</sub> emission due to venting and flaring of natural gas and oil in Iraq using IPCC methods, Accepted by Al-Mustansiriya J. sciences, Vol. 27.
38. Hashem B. M., Al-Jiboori M. K., Hassan A. S., 2016: Evaluation of industrial CO<sub>2</sub> emissions from cement production and Transportation sector in Iraq using IPCC methods, Diyala Journal For Pure Science 12 (4-part 2), 58-69.
39. Al-Jiboori M. K. and Abdul Redha H. H., 2016: Seasonal variation of SST in Mediterranean sea, Accepted by Al-Mustansiriya J. sciences.
40. Al-Jiboori M. K. and Abdul Redha H. H., 2016: The relationship between the SST of the surface Mediterranean and the temperature/precipitation of Middle east using EOF for the period (1980-2009), Accepted by Al-Mustansiriya J. sciences.

41. Saadiyah H, Al-Jiboori and Usama, Impact of dust storm strength on meteorological elements and aerosol optical properties over Baghdad city, send to J. of Meteor. Research.
42. Saadiyah H, Usama and Al-Jiboori, 2017: Impact of dust events on aerosol optical properties over Iraq, Arab. J. Geosci., 10:263.
43. Saadiyah H, Al-Jiboori and Usama, Impact of dust storm intensity on some meterological elements and aerosol optical properties (case study: Baghdad, Iraq), British J. of Applied sciences and technology, 18 (6), 1-10.
44. Haraj SA and Al-Jiboori M, 2019: Study of aerodynamic surface roughness for Baghdad city using signal-level measurements, Baghdad Science Journal, 16(1), 215-220.
45. Shubbar R, Suadi A, Al-Jiboori M, 2019: Study the Concentration of SO<sub>2</sub> emitted from Daura refinery by using screen view model, Al-Mustansiriyah J. of Science, 29(3), 2018, 7-15.
46. Al-Jiboori M and Qassim M Choosing of relevant low height for operation wind turbine over urban Baghdad city, IOP Conf. Series: J. of Physics: Conf. Series 1032 (2018) 012011 doi:10.1088/1742-6596/1032/1/012011, 1-5
47. Al-Jiboori, M. H. & Sundus J (2019). Characteristics of Cμ<sup>2</sup> derived from ultrasonic anemometer in an urban boundary layer. *Scientific Review Engineering and Environmental Sciences*, 28 (1), 14-24. doi: 10.22630/PNIKS.2019.28.1.2
48. Sundus H and Al-Jiboori M, 2019, the study of refractive-index structure coefficient behavior derived from two weather stations at Baghdad city. Vol. 29 accept, Al-Mustansiriyah J.of science
49. Zaki K , Al-Jiboori M , Ibrahim R 2018, The effect of rainfall on the ratio of atmospheric Carbon Dioxide drift for the 2015-2016 season, Indian Journal of Public Health Research & Development, Vol. 9(12), 1181-1187.
50. محمد احمد، الجبوري صبا والجبوري منعم، 2017، تأثير بعض العوامل الموقعيه في حالة التغيير المكاني والزمني لكمية مفقودات الترب من بعض ترب المناطق الجافة في العراق، مجلة الزراعة العراقية البحثية، المؤتمر العلمي الأول لمكافحة التصحر، العدد 1(1)، 261-266.
51. Mina S. Hadad and Monim H. Al-Jiboori, 2018, Choosing Minimum height for continuing operation wind energy generation over urban cities, accepted by J. of college of education for pure science.
- 52 Hazim D. Mohsen, Al-Jiboori H M Israa K , 2019, The relation between disturbance of the polar jet stream and the surface low pressure intensity, Al-Mustansirya J. sciences, Vol. 29, No. 3.
53. Hazim D. Mohsen, Al-Jiboori MH, Israa K , 2019, Estimate surface low pressure system using polar jet stream core during winter, Al-Mustansirya J. sciences, Vol. 29, No. 3.
54. Nadia M. Abed, **Al-Jiboori MH** and Abdel Wahab MM, 2019, Part I: study of the synoptic characteristics of a severe dust storm over Iraq using Regional Climate Model4, Diyala Journal for Pure Science, Vol. 15(4).
55. **Al-Jiboori MH**, Nadia M. Abed and Abdel Wahab MM, 2020, Part II: the impact of dust storms on aerosol optical depth and radiative forcing for 03 May 2005 over Iraq, Diyala Journal for Pure Science, Vol. 15(5), 1-14.
56. Abbas T. A., **Al-Jiboori M. H.** and Al-Tmimi A. I., 2019: Spectral and statistical analysis of wind spectrum for Ali Al-Gharbi Area in Iraq, Iraqi Journal for science, Vol. 60 (7), 1649-1657.
57. Abbas, T.A., **Al-Jiboori M.H.** and Altmmimi A.I., 2019: Estimating potential wind power as a source of electrical power generation in Al-Shihabi area, Iraq, J. of college of education, 35-44.
58. Anad, A. M., **Al-Jiboori M.H.** and Hasoon A. F., 2019: Simulation effect of stability classes on NO<sub>2</sub> concentration in Daura Refinery and neighboring regions. Mustansiriyah J. of sciences, Vol. 29, No. 3, 1-8.
59. **Al-Jiboori M.H.**, Abu-Shaeer MJ and Hassan AS, 2020, Statistical forecast of daily maximum air temperature in arid areas at summertime, J. Mat. Fund. Sci. Vol. 52 (3), 353-365
60. **Al-Jiboori M.H.**, Abu-Shaeer MJ and Ahmed MM, 2019, Impact of land surface changes on air temperatures in Baghdad, Kuwait Journal of Science, 47 (4), 118-126.

61. Shahad and **Al-Jiboori M.H.**, 2019: Study of surface heat inversions characteristics around Baghdad station, *Scientific Review Engineering and Environmental Sciences*, 28 (4), 610-618. doi: 10.22630/PNIKS.2019.28.4.10
62. Hassan Z.M., **Al-Jiboori M.H.**, Hazima M. Al-Abassi, 2019, Study of heat extremes and waves in Baghdad and their impacts on mortality rate, accepted by Mustansiriya Journal sciences.
63. Anad AM, Hassoon AF and **Al-Jiboori M.H.**, 2022, Assessment of air pollution around Durra Refinery (Baghdad) from emission NO<sub>2</sub> gas at April month, Baghdad Science Journal , 29 (3), 515.
64. Arkan A. Mozan, **Al-Jiboori M.H.** and Osama T. Al-Taai, 2019, Study of dust storms over Iraq by using ECMWF data, Global Scientific J. of Environmental Research 2, 52-62.
65. Nssaif W. G, Al-Temimi B. I. and **Al-Jiboori M. H.**, 2020: Temporal and Spatial Analysis of Alpha and Beta Activity Concentration at Al-Tuwaitha Site, Baghdad, *Nature Environment and Pollution Technology*.
67. Naqi, NM, **Al-Jiboori M.H.**, AST Al-Madhachi, 2021, Statistical analysis of extreme weather events in the Diyala River basin, Iraq, *J. of Water and Climate Change*, 12(8), 3770-3785.
68. T Al-Rbayee, and **Al-Jiboori M.H.**, 2021, Estimating of the optical turbulence profile for clear sky over Baghdad, *IOP Conference Series: Earth and Environmental Science* 790 (1)
69. S Salwa, T Al-RBAYEE, **Al-Jiboori M.H.**, 2021, Detecting the relations between meteorological elements and alpha and beta activity concentration at Al-Tuwaitha site, Baghdad, *Scientific Review – Engineering and Environmental Sciences*, DOI 10.22630/PNIKS.2021.30.3.33.
70. Al-Zahraa A Mohsen, **Al-Jiboori M.H.**, Yaseen K Al-Timimi, 2021, Investigating the Aerodynamic Surface Roughness Length over Baghdad City Utilizing Remote Sensing and GIS Techniques, *Baghdad Science Journal*, 18
71. Shahad Al-Ghrybawi, **Al-Jiboori M.H.**, 2021, Study of Intensity and Thickness of Surface Heat Inversion for Baghdad , *Journal of Physics: Conference Series*,
72. Salwa S. NAIF, Najlaa Mohamed HAD, **Al-Jiboori M.H.**, 2020, Study of temporal variations of nocturnal and daytime urban heat island in Baghdad, , *Scientific Review – Engineering and Environmental Sciences*.
73. SH Jaber, LM Al-Saadi, **Al-Jiboori M.H.**, 2020. SPATIAL VEGETATION GROWTH AND ITS RELATION TO SEASONAL TEMPERATURE AND PRECIPITATION IN BAGHDAD *Int. J. Agricult. Stat. Sci.* Vol 16 (1), 2021-2026
74. Tawfeek, FH Jasim, **MH Al-Jiboori M.H.**, 2020, A Study of Canopy Urban Heat Island of Baghdad, Iraq, *Asian Journal of Atmospheric Environment (AJAE)* 14 (3).
75. SS Naif, DA Mahmood, **Al-Jiboori M.H.**, 2020, Seasonal normalized difference vegetation index responses to air temperature and precipitation in Baghdad, *Open Agriculture* 5 (1), 631-637.
76. SR Al-Ghrybawi, **Al-Jiboori M.H.**, 2020, Study the Relationship of Thermal Reflection Intensity with Its Height and Thickness, *Al-Mustansiriyah Journal of Science*, 32
77. LM Al-Saadi, SH Jaber, **Al-Jiboori M.H.**, 2020, Variation of urban vegetation cover and its impact on minimum and maximum heat islands, *Urban Climate*, 34.
78. AM Al-zahraa, **Al-Jiboori M.H.**, YK Al-Timimi, , Estimation of roughness and zero-displacement heights over Baghdad utilizing remote sensing and GIS techniques, *Scientific Review Engineering and Environmental Sciences* 2021 (1)), 171-181.
- 79 Wahab B.I., Naif S.S and **Al-Jiboori M. H.**, 2022: Development of annual urban heat island in Baghdad under climate change, *Journal of Environmental Engineering and Landscape Management*, 30(1), 179-187. <https://doi.org/10.3846/jeelm.2022.16374>
80. Dalia A. Mahmood, Salwa S. Naif, Monim H. Al-Jiboori and Thoalfaqar Al-Rbayee , 2022: Study the Relationships among Stability Parameters in the Atmospheric Surface Layer Adjacent to Oil Refinery, Baghdad submitted to Kufa Conference.

81. Farant H. S. Lagenean, Salwa S. Naif and \*Monim H. Al-Jiboori, 2022: Study of Some Stability Parameters in the Atmosphere of Oil Al-Dura Refinery, Southeast Baghdad, submitted to J of Atmospheric Sciences
82. Mohowes Z.T. and Al-Jiboori M.H., 2022: Impact of urbanization expansion around International Baghdad airport on aviation micrometeorology using Landsat data, accepted by Indian Journal of Ecology, 48(19).