# Curriculum Vitae

# **Dr. Thaer Obaid Roomi**

Mustansiriyah University – College of Sciences Mobile: 07712351239

Email: th.roomi.atmsc@uomustansiriyah.edu.iq

# **PERSONAL SUMMARY**

- I have been a member (Assistant Professor) of the teaching faculty of Department of Atmospheric Sciences, College of Science, Mustansiriyah University since 2005.
- I am specialized in atmospheric dynamics and numerical weather prediction .
- I am interested in NWP, synoptic meteorology, dust storms, boundary layer meteorology and air pollution.
- I was born in Baghdad in August 1971. I am married and have 5 kids.

### **EDUCATION:**

- PhD in atmospheric sciences, Department of Atmospheric sciences, College of Science, Mustansiriyah University, Baghdad, Iraq (2013).
  - -Thesis title: "Evaluation of Three Numerical Weather Prediction Models over the Middle East."
- M.Sc. in meteorology, Department of Meteorology, College of Science, Mustansiriyah University, Baghdad, Iraq (2000).
  - -Dissertation Title: "Estimation of the Vertical Distribution of Wind Speed and Temperature within the Lower 100m above Baghdad."
- B.Sc. in physics. Department of Physics, University of Baghdad, Baghdad, Iraq (1993).

# **ACADEMIC HONORS AND AWARDS:**

- Acknowledgment from the dean of the College of Science, no 772 in 30 December 2021 for the distinguished efforts in supporting the scientific process inside and outside the academic establishment.
- Acknowledgment from the dean of the College of Science, no 592 in 1 December 2021 for the distinguished efforts in the committee of audit in the department of Atmospheric Sciences.
- Acknowledgment from the Minister of the Higher Education and the Scientific Research, no 1354 on 16 August 2021 for the distinguished efforts in completing the academic tasks.
- Acknowledgment from the dean of the College of Science, no 220 in 3 June 2021 for the distinguished efforts in contribution in donation to the Orphanage of Mother Teresa to Disabled Children.
- Acknowledgment from the dean of the College of Science, no 174 in 27 April 2021 for the distinguished efforts in the success of the examinations of the first semester examinations.
- Acknowledgment from the Minister of the Higher Education and the Scientific Research, no 432 on 1 March 2021 for the distinguished efforts in teaching and scientific research.
- Acknowledgment from the president of Mustansiriyah University, no. 22452 in 31 December 2020 for the
  distinguishing efforts in holding the First International Conference of Atmospheric Sciences (28-29 September
  2020).
- Acknowledgment from the Research and Development Department in the Ministry of Higher Education and the Scientific Research, no 4443/5 on 27 September 2020 for the distinguished efforts during the academic year 2019-2020 in the electronic teaching throughout the COVID19.
- Acknowledgment from the Minister of the Higher Education and the Scientific Research, no 532 on 11 August 2020 for the distinguished efforts in preparation of the electronic examinations.
- Acknowledgment from the University of Mustansiriyah Presidency, no. 10039 in 15 July 2020 for the distinguishing efforts during COVID19 period.

- Acknowledgment from the University of Mustansiriyah Presidency, no. 8511 on 13 May 2020 for the distinguishing efforts in rehabilitation of the Department of Atmospheric Sciences facilities.
- Acknowledgment from the College of Science Dean, no 3093 in 14 June 2016 for the occasion of taking the college of science the first place in the universal evaluation study of colleges quality assurances.
- Acknowledgement from Air Force, Air Force Operation Directorate, Meteorology Main Center for participating in Fundamental Surface Observation Course 28-10-2015.
- Acknowledgment from the University of Mustansiriyah Presidency no. 4710 in 10 September 2015 for participating in the training course of the Public mobilization Troops in the University.
- Granting seniority for one month and acknowledgement from the University of Mustansiriyah Presidency, no. 4502 in 31 August 2015 for working in the examination committee.
- Acknowledgment from the College of Science Dean, no 2809 in 18 May 2015 for participating in giving lectures in the continuous education program in the department.
- Acknowledgment from the College of Science Dean, no 2505 in 28 April 2015 for the completing of the Self-Assessment Report of the quality assurance of the Atmospheric Sciences Department.
- Acknowledgment from the University of Mustansiriyah Presidency, no. 11308 in 17 April 2014 for the distinguishing efforts on the occasion of the 51's Anniversary of the University of Mustansiriyah.
- Acknowledgment from the College of Science Dean, no 1064 in 25 February 2014 for the distinguished efforts in holding a video conference with Professor Neven Duić from University of Zagreb in 3 Feb. 2014.
- Acknowledgment from the College of Science Dean, no 1870 in 28 April 2009 for the distinguished efforts in rehabilitation of the surface observation station of the Atmospheric Sciences Department.
- Acknowledgment from the IT College Dean, Imam Ja'afar Al-Sadiq University, no. 109 in 20 January 2009 for the distinguished efforts.
- Ministerial acknowledgement for getting the third rank in the world exam of IC3 test.

# ACADEMIC / TEACHING EXPERIENCE:

- Numerical Weather Prediction 2019-up to now.
- English Language for PhD and MSc studies.
- Atmospheric Dynamics 2017-2019.
- Numerical Weather Modeling, 2010-2017
- Atmospheric Prediction lab, 2007-2010.
- Analytical meteorology lab, 2006-2007
- Boundary layer meteorology lab. 2005-2006
- Computation Theory (IT College-Imam Sadeq Univ.) 2006-2012.

#### **PROFESSIONAL AFFILIATIONS:**

- Member of the Ministerial Committee of the Sendai Framework for Disaster Risk Reduction 2017-2022.
- Member of examination committee (4 times before) 2021-2022.
- Member of the academic accreditation (2020-2022)
- Head of committee of quality insurance and performance evaluation (2011-2016)
- Member of atmospheric sciences department council (3 times)
- Head of department Library Committee.
- Head of the media Committee.

### **PUPLICATIONS:**

# Papers and Textbooks.

- 1. Almusawi, V. J., T. O. Roomi, A. M. Al-Lami, 2021: Using and Evaluating the Efficiency of GRIMs Model in Making Some Simulations of Weather Variables in Three Countries in Middle East: A Snowfall Case Study. Iraqi Journal of Science, 62 (11), 4489-4502.
- 2. Roomi, T. O. Roomi, H. A. Nemah, R. M. Shubbar, 2021: A Model to Compute the Solar Parameters in Relation to Determining the Optimal Angles for Solar Panels in Many Locations in Iraq. Iraqi Journal of Science, 62 (11), 4260-4271.
- 3. Roomi T. O. and F. S. Basheer, 2021: The Synoptic Characteristics, Causes, and Mechanisms of Kahlaa Tornado in Iraq on 14th April 2016. Baghdad Science Journal, 18 (2), 1038-1047.
- 4. Roomi T.O. and A. S. Abed, 2021: Estimating Gaseous Pollutants in the Air Near Daura Refinery, Daura Power Plant and South of Baghdad Power Plant by Calculating the Fuel Discharge. Scientific Review Engineering and Environmental Sciences, 30 (1), 195–207.
- 5. Hassoon A.F., F.S. Basheer, and T.O. Roomi, 2019: Temporal and Spatial Assessments of Carbon Monoxide Columns over Iraq Using ECMWF Dataset. J. Eng. Sustain. Dev., 23, 12-21.
- 6. Roomi T.O. and K.J. Al-Jumaily, 2018: Evaluation of Weather Research and Forecasting (WRF) Model Simulations over Middle East. Al-Mustansiriyah J. Sci., **29**, 26-33.
- 7. Roomi, T. O., K. N. Zeki, and A.F. Hassoon, 2017: A Comprehensive Case Study of a Frontal Mineral Dust Storm in Spring over Iraq. Iraqi J. Sci., **58**, 2236-2251.
- 8. Roomi, T. O. et al. 2016: Earth Science. A Textbook of 5<sup>th</sup> Year secondary school. General Directorate of Curricula, Ministry of Education, Baghdad, Iraq.
- 9. Roomi, T. O., 2016: Designing an Open Circuit Wind Tunnel for Atmospheric Boundary Layers. *Diyala J. Pure Sci.*, **12**, 12-25.
- 10. Roomi, T. O., K. J. Al-Jumaily and R. H. Salih, 2013: Weather Forecast Simulation in the Middle East Region Using Single-Level Primitive Equations Model. Al-Mustansiriyah J. Sci., **24** (2), 147-158.
- 11. Roomi, T. O., 2013: A Regional-Scale Forecasting by Nondivergent Barotropic Model. Al-Mustansiriyah. J. Sci., **24** (6),129-140.

### PROFFESSIONAL DEVELOPMENT

#### • Certifications.

- Ph.D. certificate in Atmospheric Sciences from the University of Mustansiriyah 2013.
- MSc. certificate in Meteorology from the University of Mustansiriyah 2000.
- BSc. certificate in Physics from the University of Baghdad 1993.
- English proficiency exam success certificate from the College of Languages in the University of Baghdad in 7 December 1996 (rank: 269 out of 489).
- TOEFL ITP score certificate in 5 March 2011 (Total score: 497), Ibn\_Rushed Institute, College of Arts, University of Baghdad.
- Full computer course certificate from The Computer Center in the University of Mustansiriyah, 22 August -29 October, 1998. (passing the course with very good degree)
- The Third Fundamental Forecasting course in Main Meteorological Center, Air Force, 1995. (rank: First)
- The Meteorology Efficiency Course, Main Meteorological Center, Air Force, 2000. (rank: First)
- IC3 certificate from Certiport practice test.( Marks: 900)

#### • Conferences.

- 1. 2nd International Conference of Al-Karkh University of Science (ISC2/KUS2020), 2-3 Dec. 2020, Baghdad, Iraq.
- 2. The First International Conference of Atmospheric Sciences, 28-29 Sept, 2020, College of Science, Mustansiriyah University, Baghdad, Iraq.
- 3. The First International Conference for Physics in the Sustainable Development, 28-30 October 2014, College of Science, University of Al Nahrain.

# Workshops.

- 1. Study of Haboob Dust storms in Iraq Workshop. College of Science, Google Meet Platform, 18 Nov. 2021.
- 2. GeoGebra: its uses in Mathematics and the Animated Illustrations. College of Science, Google Meet Platform, 25 Feb. 2021.
- 3. Long-term Rain Forecasting Symposium: Investigation of Five Years Rainfall (2017-2021) in the Eastern Regions of Iraq, College of Science, Google Meet Platform, 20 May 2021.
- 4. The Universe and the Emergence of Gases of Earth Atmosphere Workshop: Part 2: The Emergence of Gases of Earth's Atmosphere. College of Science, Google Meet Platform, 14 Jan. 2021.
- 5. The Iraqi Marshes situation under the climate changes. College of Science, Google Meet Platform, 8 June 2020.
- 6. Method to calculate the points of document of performance evaluation workshop. Department of Atmospheric Sciences, 30 April 2019.
- 7. How to Write a Scientific Research in English Language Training Course, Department of Atmospheric Sciences, 10-14 April 2019.
- 8. KOHA system and PDA database for the Central Library Training Course, Central Library, Mustansiriyah Univ., 28 April-5 May 2019.
- 9. Sendai Framework for Disaster Risk Reduction workshop, College of Science, Mustansiriyah Univ., 11 March 2019.
- 10. GIS Training Course, Department of Atmospheric Sciences, 17-24 Feb. 2019.
- 11. The Training course of Public Mobilization Troops in the University of Mustansiriyah 3-18 August 2015.
- 12. Training course in the Continuous Learning Division in the University of Mustansiriyah, 16-20 November, 2014: "How to set up strategic plans within the quality management"
- 13.2014 APCC Training Program, 25-30 August 2014: "Producing High Resolution Climate Information and its Application Using Downscaling Schemes" in APEC Climate Center, Busan, Korea.
- 14. The 3rd Training Course on WMO SDS-WAS Products, 8-12 December 2013 at the Centre of Excellence for Training on Meteorological Satellites, Sultan Qaboos University, Muscat, Oman.
- 15. A Research scholarship in the University of Manchester, SEASE School, 2012: Training on WRF model.

### Skills.

- 1. Computer: Windows, Linux, MS Office, Sigma Plot, MATLAB, Visual Basic dot net, FORTRAN.
- 2. Modeling and database systems: Weather Research and Forecasting model (WRF), Database development by Visual Basic, modeling by Matlab for atmospheric sciences applications.
- 3. Languages: Arabic and English.