

# Curriculum Vitae



## **Emad Kamal Mohamed**

Birth Date: 02/02/1981

Associate Professor

Seismology Department

National Egyptian Seismic Network Laboratory

National Research Institute of Astronomy and Geophysics (NRIAG)

11421, Helwan, Cairo, Egypt

Tel: +202 25560645, +202 25583887

Mobile: +201100642455

Fax: +202 25548020

E-Mail: [emadk\\_2006@yahoo.com](mailto:emadk_2006@yahoo.com), [ekamal@nriag.sci.eg](mailto:ekamal@nriag.sci.eg)

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### **Education:**

- \* **B. Sc.:** In Special Geology with grade 82.4% very good (Honor's degree) Faculty of Science, Al-Azhar University (2003)
- \* **M. Sc.:** In Geophysics, Earthquakes Seismology, Faculty of Science, Al-Azhar University (2011)
- \* **PhD:** In Geophysics, Earthquakes Seismology, Geophysics Department, Faculty of Science, Ain Shams University (2016)

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### **Former Career:**

- \* **Researcher Assistant:** National Research Institute of Astronomy and Geophysics (NRIAG), Seismology Department, (2006-2011).
- \* **Assistant Researcher:** in the same department (2011-2016).
- \* **Researcher:** in the same department (2016 up to Now).
- \* **Associate Professor (June 2022)**

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### **RESEARCH INTERESTS**

- \* Earthquake source parameters and mechanism.
- \* Stress field pattern of the earth's crust.
- \* Applications of near-surface geophysics, and local site effect investigation using MASW technique and ambient seismic noise.
- \* Satellite image analysis for Earth Observation in the field of earthquakes precursors

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### **Participation in Scientific Meetings**

- \* a participant in the first Arab Conference on Astronomy and Geophysics. (2008).
- \* a participant in the seminar on regional climate change and natural disaster management. (2009)
- \* An applicant for the second Arab Conference on Astronomy and Geophysics. (2010).
- \* An applicant for the Fourth Arab Conference on Astronomy and Geophysics. (2014).

- \*An applicant in the **11<sup>th</sup> International Conference for Geoscience** on the Campus of King Saud University-Riyadh. (2015).
- \*A participant in The First General Assembly for the African Seismological Commission Luxor-Aswan, Egypt 2-5 April 2016.
- \* A participant in **DEVELOPING THE CEMENT INDUSTRY**, Helwan, Egypt, 29 September 2020.
- \* A participant in 2020 WORLD TSUNAMI AWARENESS DAY, Helwan, Egypt, 05 November 2020.
- \* Attendance online in Remote sensing Vision, USA, Texas, 01-05 September 2021.
- \* A participant in THE ROLE OF THE EGYPTIAN NATIONAL SEISMIC NETWORK (ENSN) IN The Arab Conference on Astronomy and Geophysics, ACAG 7, Helwan, Egypt, 11-14 October 2021.
- \* A participant in Joint General Assembly of Asian and African Seismological Commissions, Hurghada, Egypt from 10-13 October 2022.
- \* A participant in 11TH International Conference on the Geology of Africa, Assiut, Egypt from 08-09 November 2022.

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### **Awards and Abroad**

- \*As a participant in **Global Seismological Course (JICA)** from January to March 2013 in Tsukuba City, Japan
- \* PhD. The program at UCN, **Universidad Católica Del Norte, Antofagasta, Chile** from May 2013 to April 2014.
- \* As a participant in (geographic information system course) at **Geological Survey Of India Training Institute** from 10 January to 06 February 2018. Hyderabad, India
- \* Scientific mission in research cooperation with the **Institute of Geophysics, the Czech Republic** from May 06 to May 20, 2018, at the Department of Seismology
- \* Scientific mission at **International Institute of Geophysics**, Hyderabad, India from June 06 to June 20, 2019, the Department of Geophysics.
- \* Scientific mission at **Josaphat Laboratory (JMRS), Chiba University**, Japan from February 01 to February 20, 2020.

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### **Languages**

Arabic: Native  
 English: Excellent  
 Spanish: Basic

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### **Computing Skills and Experience**

- \* Operating and dealing with different seismological software packages, SEISAN (Earthquake data analysis), GMT (Generic Mapping Tools), FOCAL (Earthquakes focal mechanism), Geopsy Software, SeisImager/SW.
- \* Satellite Image Analysis using Arc GIS, ENVI, and SeaDAS Software.
- \* Have experience in Installing and deploying the seismological networks.

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### **Extra-Curricular Activities**

- \*Academic Supervisor for M. Sc. student and graduate students (graduation project), Department of Geophysics, Faculty of Science, Ain Shams University, Egypt.

- \* Have experience in Installing and deploying the seismological networks in Chile during the period from May 2013 to April 2014.
- \* Earthquakes recording and monitoring around Dabaa Nuclear Power Plant Site.
- \* Lecturer at Geology Department, Faculty of Science, Alexandria University 2017/2018 fiscal year (Fundamental of Seismology).
- \* Lecturer at Geology Department, Faculty of Science, Alexandria University 2017/2018 fiscal year post graduate (M. Sc. students).

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### Accounts of Academic Activity

<https://www.researchgate.net/profile/Emad-Mohamed-4>  
<https://scholar.google.com/eg/citations?user=BsauAr0AAAAJ&hl=en>  
<https://nriag.academia.edu/EmadKamal>  
<https://orcid.org/0000-0002-7774-4580>  
<https://publons.com/researcher/1736445/emad-k-mohamed/>  
<https://www.scopus.com/authid/detail.uri?authorId=57188736074>

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### Publications

- Mohamed, Emad K., Hassoup, A. Abou Eleneana K. M., Adel A.A. Othman, Diao-El- din M. K. Hamed, (2015).** Earthquakes focal mechanism and stress field pattern in the northeastern part of Egypt, NRIAG Journal of Astronomy and Geophysics 4 (Issue 2), 205–221, <https://doi.org/10.1016/j.nrjag.2015.09.001>
- Hassoup, Awad, Mostafa Toni, Shokry, M. M. F. Helal, A. M. A. Mohamed, Emad K. (2016).** Source mechanism and parameters of the 19 October 2012 earthquake, northern Egyptian continental margin, Arabian Journal of Geosciences, v 9 (4), page 313. <https://doi.org/10.1007/s12517-016-2338-5>
- Mohamed Emad K., Shokry, M. M. F. Hassoup A., Helal, A. M. A., (2016).** Evaluation of local site effect in the western side of the Suez Canal area by applying H/V and MASW techniques, Journal of African Earth Sciences 123 (2016) 403-419. [DOI:10.1016/j.jafrearsci.2016.07.004](https://doi.org/10.1016/j.jafrearsci.2016.07.004)
- Mohamed E. K. (2019)** Source mechanisms and simulation of ground motions of 18 and 22 July 2014 Suez earthquakes, NRIAG Journal of Astronomy and Geophysics, 8:1, 34-44, <https://doi.org/10.1080/20909977.2019.1615807>
- Ahmed Badawy, Khaled Omar, Gad-El-Kareem A, **Mohamed Emad K.**, Hazem Badreldin, (2020). Source characterizations of the New Cairo earthquake, Egypt. April 2020, Journal of African Earth Sciences 167:103846, <https://doi.org/10.1016/j.jafrearsci.2020.103846>
- Emad K. Mohamed,** Vineet K. Gahalaut, Aliihsan Sekertekin, Samed Inyurt, Atmospheric, ionospheric and earth-related variations associated with the 11th August 2012 earthquakes, Ahar, Iran, Journal of Atmospheric and Solar-Terrestrial Physics, Volume 216, 2021, 105595, ISSN 1364-6826, <https://doi.org/10.1016/j.jastp.2021.105595>.
- Ghamry E, **Mohamed Emad K.**, Mohamed S. Abdalzaher, Mohamed Elwekeil, Dedalo Marchetti, Angelo De Santis, Mostafa Hegy, Akimasa Yoshikawa, Adel Fathy, 2021. Integrating pre

earthquake signatures from different precursor tools. IEEE Access, vol. 9, pp. 33268-33283, 2021, DOI: [10.1109/ACCESS.2021.3060348](https://doi.org/10.1109/ACCESS.2021.3060348)

**Mohamed, E. K.**, Elrayess, M. & Omar, K. Evaluation of Thermal anomaly Preceding Northern Red Sea Earthquake, the 16th June 2020. Arab J Sci Eng (2022). <https://doi.org/10.1007/s13369-021-06524-4>

Omar, K., Chorozoglou, D., **Mohamed, E. K.**, Medhat Elrayess (2022). Studying the Evolution of Earthquake Network Measures for the Main Shock on June 24, 2015 in Egypt. Geotectonics. (2022). <https://doi.org/10.1134/S0016852122020108>

Essam Ghamry, **Emad K. Mohamed**, Alihsan Sekertekin, Adel Fathy (2023). Integration of multiple earthquakes precursors before large earthquakes: A case study of 25 April 2015 in Nepal, Volume 242, 2023, 105982, ISSN 1364-6826, <https://doi.org/10.1016/j.jastp.2022.105982>

Gomaa, M., **Moahmed, E. K.**, Radwan, A. M., Rashwan, M., Mansour, K., & Rayan, A. (2023). The investigation of geodynamics parameters in the south of Egypt using geodetic and earthquake activities. NRIAG Journal of Astronomy and Geophysics, 12(1), 132-142.

El Kenawy, A. M., Aboelkhair, H., **Kamal, M. E.**, Gaber, I. M., Fernández-Duque, B., Peña-Angulo, D., & Abdelaal, M. M. (2024). Modes of summertime thermal urban stress over major cities in the Middle East: A comprehensive assessment of heat exposure risks. Sustainable Cities and Society, 105236.