

CURRICULUM VITAE

Associate Professor/ Medhat Mohamed Elrayess

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Gender: Male
Date of birth: October, 3, 1976
Nationality: Egyptian
Language: Arabic (native), and English
Marital status: Married
Current position: Associate Professor, Seismology Dept., National Research Institute
of Astronomy and Geophysics (NRIAG), Egypt
Address: National Research Institute of Astronomy and Geophysics,
Imarsed St., 11421 Helwan, Cairo, Egypt.

Education:

1994-1996 Suez secondary school- Suez , Egypt
1996-1999 B. Sc. in Geophysics, Faculty of Science, Suez Canal University.
2010 M. Sc. In Geophysics, Faculty of Science, Zagazeg University,
Egypt. Title of thesis:
"Study of Attenuation Properties of Seismic Waves in Sinai Microplate, Egypt"
2016 PhD In Geophysics, Faculty of Science , Suez University, Egypt.
Title of thesis
"Seismic hazard assessment in some areas of the Nile Delta, Egypt"

Job Title

1999to 2005 Geologist at ceramic Cleopatra group
2005 to 2011 Assistant Researcher
2011 to 2016 Researcher Assistant
2016 to 2022 Researcher at Seismology department
2022 till now Associate Professor, head of seismology Lab. National Research
Institute of Astronomy and Geophysics (NRIAG)
2023 till now Directory of seismology Lab.

Computer Experience:

- ICDL Certificate

English Experience

1- TOFEL from AMIDEAST Cairo IPT Course (April 12 2011)
2- TOFEL from AMIDEAST Cairo Pre IPT Course (April 12 2010)

(spring term 2008)

(spring term 2006)

Monitor and analyses earthquakes of Egyptian national seismological network.
Seismic refraction and Seismic noise surveying H/V also (SPAC and CCA) Array
Constructions and Operating strong motion acceleration in the Egyptian strong motion network.

Study the prediction of ground motions and the effects of geologic conditions (**Site effect**)

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|-------------------------|--|---------------------------------|---------|
| - Oct 9, 2023 - 12 Oct | Attended “Arab Conference on Astronomy and Geophysics 8 edition “ | Cairo | Egypt |
| -Nov 8-9 2022 | Attended “international conference on the geology of Africa 11 edition “ | Assuit | Egypt |
| - Oct 10.2022 - 13 Oct | Attended “Joint General Assembly of Asian and African Seismological Commissions” | Hurgada | Egypt |
| -Oct 20, 2018 - 21 Oct. | School on microtremor HVSR method and its Applications, | | Egypt |
| - 1 jun 2017 – 30 jun | scientific co-research at CRAAG. | | Algeria |
| - Dec 9 2013 - 20 | School on Earthquake and Tsunami Hazard and Risk, | | Algeria |
| - 1 Jun 2013 – Dec 2013 | scientific co-research at Trieste Univ. | | Italy |
| - Sep 15 2012 - 22 Oct. | GFZ Training Course “Seismology, Seismic data analysis, Hazard assessment and risk mitigation “from, | | Morocco |
| -May 2012- Aug. 2012 | participating in Refraction data acquisition and analysis at | North Nile Delta Region, Egypt | |
| -June 2011- July 2011, | participating in Refraction data acquisition and analysis at | North Nile Delta Region, Egypt. | |
| -Oct. 2010- Nov. 2010 | participating in Refraction data acquisition and analysis at | North Sinai Region, Egypt. | |
| - Mar 2009 – May 2009 | participating in Refraction data acquisition and analysis at | North Sinai Region, Egypt. | |
| - April 2008, | Participating in Microtremor data acquisition and analysis at | Greater Cairo City, Egypt | |
| - 2005 – Present: | Participating in the Egyptian Seismic Network data processing. | | |
| -2005 – Present: | Participating in the preparation of the Egyptian seismological bulletin. | | |
| - 2008 – Present: | Participating in the construction and analysis of the Nile Delta Strong Motion | | |

M. A. Morsy, I. A. Marzouk, M. Maher, and **M. El Rayess** "CODA WAVES QUALITY FACTOR IN SINAI PENINSULA, EGYPT" Journal of the National Research Institute of Astronomy and Geophysics (NRIAG), Ser. "B" 2008 Cairo, Egypt.

Imam A. Marzouk, Abou Elela A. Mohamed, Hesham Hussein, Mamdouh A. Morsy, **Medhat M. El-Rayess** and Asem M. Taha " *STRONG MOTION NETWORK IN THE NILE DELTA, EGYPT*" Under publication in (Journal of the National Research Institute of Astronomy and Geophysics (NRIAG)) Vol. Oct.2010 pp 233-248

Seddeq I. Marzouk , Mohammad G. Al-Ibiary , Abuo El-Ela A. Mohamed, Mostafa Toni , **Medhat M. El-Rayess** " ENGINEERING SEISMOLOGICAL STUDIES FOR THE NORTHERN EXTENSION OF THE 15th OF MAY CITY, CAIRO, EGYPT" *Egy. J. Appl. Geophys.*, Vol. 17, No. 2, September 2018, 197-214.

F Khedr, I Marzouk and **M Elrayess** "Shallow Seismic Refraction technique and Engineering Parameters for Seismic Microzonation in Nile Delta, Egypt. January 2019 NRIAG Journal of Astronomy and Geophysics 8(1):84-96 DOI: 10.1080/20909977.2019.1617551

Mostafa Toni , Toshiaki Yokoi , **Medhat El Rayess** " Site characterization using passive seismic techniques: A case of Suez city, Egypt" May 2019, Journal of African Earth Sciences 156 ,DOI: 10.1016/j.jafrearsci.2019.05.004 .

Mostafa Toni , **Medhat El Rayess**, H.E. Abdel Hafiez "Local site characteristics and earthquake ground motion parameters around the Nile River, south of Cairo, Egypt " Journal of Applied Geophysics Doi.org/10.1016/j.jappgeo.2021.104528

Emad K. Mohamed, **Medhat Elrayess**, Khaled Omar (2022). Evaluation of Thermal anomaly Preceding Northern Red Sea Earthquake, 16th June 2020. Arabian Journal for Science and Engineering, <https://doi.org/10.1007/s13369-021-06524-4>

Khaled Omar, Chorozoglou D., Emad K. Mohamed, **Medhat Elrayess**, (2022). Studying the evolution of earthquake network measures for the main-shock of 24 June 2015 in Egypt, Geotectonics. DOI: 10.1134/S0016852122020108

Medhat Elrayess ,Ezzelarab M , Abouelela A.Mohamed , Shokry M. M. F, Helal .A.M.A, (2022) " Deterministic Seismic Hazard Evaluation for the Northwestern part of Egypt " *Egy. J. Appl. Geophys.*,

My video links in the Media

- 1- <https://www.youtube.com/watch?v=Fgu7ZhKQSfE>
- 2- <https://www.youtube.com/watch?v=vVJPSh6PHSk&t=15s>
- 3- <https://www.youtube.com/watch?v=0QJgDA7B4Ec&t=1606s>
- 4- https://www.youtube.com/watch?v=73dp8JOq6_c&t=54s
- 5- <https://gate.ahram.org.eg/daily/News/204421/3/891100/%D8%AA%D8%AD%D9%82%D9%8A%D9%82%D8%A7%D8%AA/%C2%AB%D8%AA%D8%B3%D9%80%D9%88%D9%86%D8%A7%D9%85%D9%89%C2%BB-%D8%A7%D9%84%D8%B4%D8%A7%D8%A6%D8%B9%D8%A7%D8%AA-%D8%AA%D9%86%D8%A8%D8%A4%D8%A7%D8%AA-%D8%AE%D8%A7%D8%B7%D8%A6%D8%A9->

- [6- %D8%A8%D8%A7%D9%84%D9%87%D8%B2%D8%A7%D8%AA-%D9%88%D8%AA%D9%88%D9%82%D8%B9%D8%A7%D8%AA.aspx](https://www.albawabhnews.com/4751419)
- 7- <https://www.okaz.com.sa/variety/na/2126481>

There are many lectures to transfer and facilitate science in community settings.

References:

Prof Dr / Hisham Hosin Mousa

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Prof Dr / Shreef El hady

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