

Curriculum Vitae

Dr. Nureddin Mohamed Saadi

Qualifications: 2011 Postdoctoral Fellowship, Japan Society for the Promotion of Science, Japan
2009 Ph.D. Earth Resources Engineering, Kyushu University, Japan
2003 M.Sc. Electronic Engineering and Physics, Dundee University, United Kingdom.
1994 B.Sc. Geology, University of Tripoli, Libya.

Contact:

Department of Geological Engineering, Faculty of Engineering, University of Tripoli
Email: n.saadi@uot.edu.ly

Employment Records:

- October 2021 – Present: Department of Geological Engineering, Faculty of Engineering, University of Tripoli, Libya.
- June 2013 – April 2021: Department of Earth Resources Engineering, Faculty of Engineering, Kyushu University, Japan.
- September 2012 – May 2013: Geology Department, Faculty of Science, Tripoli University, Libya.
- October 2011 – March 2012: Geothermal Laboratory, Faculty of Engineering, Kyushu University, Japan.
- October 2009 – September 2011: Postdoctoral Assistant at Earth Resources Department, Kyushu University, Japan.
- March 1998 – March 2006: Digital Image Processing Group, BRSC, Tripoli, Libya.

Education:

- 1991-1994: B.Sc. degree, Department of Geology, Faculty of Science, University of Tripoli, Libya.
Project title “Investigation of tectonic structure and stratigraphy of Hakim oil field, Sirte Basin, Libya”.
Fundamental study of tectonic structure and stratigraphy of Hakim oil field using well logs data.
- 2001-2003: M.Sc. degree, Department of Electronic Engineering and Physics, Faculty of Engineering and Physical Science, Dundee University, United Kingdom.
Master’s studies “Remote Sensing, Image Processing and Applications”.
Investigating the use of Landsat Thematic Mapper data for generating a geological map of Hun area, Libya.
- 2006-2009: Ph.D. degree, Department of Earth Resources Engineering, Faculty of Engineering, Kyushu University, Fukuoka, Japan.
PhD studies: “Integration of optical-radar-DEM remote sensing data and potential fields for geological mapping in different geological environments in Libya”.
The study presents a detailed analysis of a digital integration methodology using geological data, remote sensing images, digital elevation models, geophysical surveys, and field work to reduce the ambiguity of geological interpretations in different geological environments in Libya.

Major Publications:

- **N. M. Saadi**, Using Landsat ETM+ imagery and ERS-2 SAR data for extraction and mapping Lineaments in Eljufra area, Proceedings of International Workshop on Earth Resources Technology, Fukuoka, Japan, pp. 71-75, April, 2007.
- **N. M. Saadi**, K. Watanabe, and A. Imai, 2007. Analysis of multi temporal images for environmental impact. Japan Geoscience Union Meeting, Tokyo, May, 2007.
- **N. M. Saadi**, and K. Watanabe, Geological Map of Eljufra Area, Libya from remote sensing data, 4th International Symposium on Gondwana, Fukuoka, Japan, p. 128, November, 2007.
- **N. M. Saadi**, K. Watanabe, A. Imai and H. Saibi, Integrating potential fields with remote sensing data for geological investigation in the Eljufra area of Libya, Earth, Planets and Space, Vol. 60, No. 6, pp. 539-547, July, 2008.
- **N. M. Saadi** and K. Watanabe, Lineaments extraction and analysis in Eljufra area, Libya, Journal of Applied Remote Sensing, Vol. 2, No. 1, 023538, September, 2008.
- **N. M. Saadi**, E. Aboud, H. Saibi and K. Watanabe, Integrating data from remote sensing, geology and gravity for geological investigation in the Tarhunah area, Northwest Libya, International Journal of Digital Earth, Vol.1, No.4, pp.347-366, December, 2008.
- **N. M. Saadi**, and K. Watanabe, Remote Geological Mapping in Tarhunah area, Libya, Proceedings of the 2nd International Symposium of Novel Carbon Resource Sciences, ITB, Indonesia, pp. II-32 – II-41, March, 2009.
- **N. M. Saadi** and K. Watanabe, Assessing image processing techniques for geological mapping: a case study in Eljufra, Libya, Geocarto International, Vol. 24, No. 3, pp. 241-253, June, 2009.
- **N. M. Saadi**, and K. Watanabe, Multisource Data Integration for Geological Mapping in Gharyan area, Libya, International Conference of Earth Science and Technology, Yogyakarta, Indonesia, pp. 21-26, August, 2009.
- **N. M. Saadi**, E. Aboud and K. Watanabe, Integration of DEM, ETM+, geologic, and magnetic data for geological investigations in the Jifara Plain, Libya, IEEE Transactions on Geoscience and Remote Sensing, Vol. 47, No. 10, pp. 3389-3398, October, 2009.
- **N. M. Saadi**, K. Watanabe and H. Mizunaga, Preliminary Remote Sensing Investigation towards Geological Mapping in Northwest Libya, The 15th CEReS International Symposium on Remote Sensing, Chiba, Japan, pp. 156-161, December, 2009.
- **N. M. Saadi**, K. Watanabe and H. Mizunaga, Image Processing Methods in Different Geological Environments in Libya, Arabian Journal of Geosciences, Vol. 4, No. 3-4, pp. 635–643, April, 2011.
- **N. M. Saadi**, M. Abdel Zaher, F. El Baz and K. Watanabe, Integrated remote sensing data utilization for investigating structural and tectonic history of the Ghadames Basin, Libya, International Journal of Applied Earth Observation and Geoinformation, Vol. 13, No. 5, pp. 778-791, October, 2011.
“*Nominated for ENI award 2012*”
- M. Abdel Zaher, **N. M. Saadi** and K. Watanabe, Geological applications potential of DEM, ETM+, and gravity data in arid and semi-arid regions with special reference to south Western Desert, Egypt, Arabian Journal of Geosciences, 1-12 , March 06, 2013.

- M. Abdel Zaher, M. El Nuby, E. Ghamry, K. Mansour, **N. M. Saadi** and H. Atef, Geothermal studies in oilfield districts of Eastern Margin of the Gulf of Suez, Egypt, *NRIAG Journal of Astronomy and Geophysics*, Vol. 3, No. 1, pp. 62-69, June, 2014.
- R. Salehi, **N. M. Saadi**, A. Khalil, and K. Watanabe, Integrating remote sensing and Magnetic Data for Geological Invisigations in the Pegmatites Area, Eastern Afghanistan, *Journal of Applied Remote Sensing*, Vol. 9, No. 2, 096097, January, 2015.
- S. Rustami, **N. M. Saadi**, K. Yonezu, and K. Watanabe, A Preliminary study on remote sensing data and geochemical analysis to characterize iron deposits in Hajigak, Afghanistan, *International Symposium on Earth Science and Technology*, Fukuoka, Japan, pp. 21-24, December, 2015.
- S. Rustami, **N. M. Saadi**, K. Yonezu, and K. Watanabe, Application of Remote Sensing and Mineralogical Analysis for Mineral Predictive Mapping, of Hajigak, Central Afghanistan, 66th Annual academic lecture resources Geological Society, University of Tokyo Koshiba Hall, Japan, P-03, June, 2016.
- S. Rustami, **N. M. Saadi**, E. Aboud, K. Yonezu, and K. Watanabe, Using ALOS Images, Gravity Data and Mineralogical Analysis for Geological Investigations in the Hajigak Iron Deposit, Afghanistan, 6th Asia Africa Mineral Resources Conference, Akita University, Japan, September, 2016.
- S. Rustami, **N. M. Saadi**, E. Aboud, K. Yonezu, and K. Watanabe, Integrating Gravity Data with Remotely Sensed Data for Geological Investigation of Central Afghanistan, *International Symposium on Earth Science and Technology*, Fukuoka, Japan, pp. 112-117, December, 2016.
- S. Rustami, **N. M. Saadi**, E. Aboud, K. Yonezu, and K. Watanabe, Investigating Structural and Tectonic Evolution of Central Afghanistan Using Remote Sensing and Gravity Data, *Journal of Geology & Geophysics*, Vol. 6, No. 6, 1000313, November, 2017.
- A. Mahecha, **N. M. Saadi**, K. Yonezu, and K. Watanabe, Lineament extraction using SRTM data on Geothermally Potential Northern Tanzania Volcanic area, *International Symposium on Earth Science and Technology*, Fukuoka, Japan, pp. 694-697, December, 2017.
- Applications of Remote Sensing in Geoscience. Hakim Saibi, Mohand Bersi, Mohamed Bodruddoza Mia, **Nureddin Mohamed Saadi**, Khalid Mohamed Saleh Al Bloushi and Robert W. Avakian. Published: July 25th 2018. Open access peer-reviewed chapter. DOI: 10.5772/intechopen.75995.
- A. Mahecha, **N. M. Saadi**, K. Yonezu, K. Watanabe, and J. Mayalla, Mapping of hydrothermal alteration of the Lake Natron – Oldoinyo Lengai geothermal area in Northern Tanzania using satellite imagery. 7th African Rift Geothermal Conference Kigali, Rwanda 31st October-2nd November 2018.
- A. Mahecha, **N. M. Saadi**, K. Yonezu, and K. Watanabe, Alteration mineralogy of Meru Volcano, Tanzania and implication to geothermal exploration. *Geothermal Research Society of Japan (GRSJ)* 16 November, 2018.
- A. Mahecha, Y. Umetsu1, **N. M. Saadi**, T. Tindell, K. Yonezu, A. Imai, and K. Watanabe, Assessment of Carbon Dioxide Flux in Relation to Permeable Structures at Meru Volcano, Northern Tanzania. *International Symposium on Earth Science and Technology*, Fukuoka, Japan, pp. 206-210, November, 2018.

- A. Mahecha, **N. M. Saadi**, K. Yonezu, K. Watanabe and S. Josephat, The Quest for Fluid Pathways at Meru Volcanic Area, Tanzania, Using Remote Sensing and Soil Gas Analysis, Proceedings World Geothermal Congress 2020, Reykjavik, Iceland, April 26 – May 2, 2020 (Accepted).
- M. Ngerezi, A. Imai, **N. M. Saadi**, and E. Aboud, Remote Sensing, Geophysical and Geological Data for Structural and Alteration Mapping of Chipanga Gold Prospect, Central Tanzania. International Symposium on Earth Science and Technology, Fukuoka, Japan, pp. 158-161, November, 2020.
- Y. Samod, K. Yonezu, and **N. M. Saadi**, Hydrothermal Alteration Mapping Using Landsat 8 Image in Hanle Geothermal Prospect, Djibouti. International Symposium on Earth Science and Technology, Fukuoka, Japan, pp. 90-95, November, 2020.
- **N. M. Saadi**, Comparative assessment of image processing techniques in the different geological environments in Libya. Third International Conference on "Cyprus Issue: Environmental Challenges and Energy Security", Nicosia, Cyprus 21-23 December, 2022.
- **N. M. Saadi**, O. Elkoul, and S. A. Sadeg, Integrating Remote Sensing and Aeromagnetic Data for Lithological and Structural Lineaments Mapping in Abu Ghaylan - Kiklah - Tighrinna, Northwest Libya. Visnyk of V.N. Karazin Kharkiv National University, series "Geology. Geography. Ecology", (58), 97-110, 2023.
- A. Mahecha, **N. M. Saadi**, E. Aboud, A. Imai and K. Yonezu, Evaluation of geological structures and geothermal resources in the North Tanzania Volcanic area using remote sensing and gravity data analysis. Visnyk of V.N. Karazin Kharkiv National University, series "Geology. Geography. Ecology", (59), 28-43, 2023.
- M. Ngerezi, **N. M. Saadi**, A. Imai, and W. Ibrahim, Integration of SRTM and ASTER data for litho-structural and alteration mapping in Nholi area, central Tanzania. Baltica Journal, (37), 1-14, 2024.
- G. Swei, B. Tabib, **N. M. Saadi**, O. Shtawei, and Z. Farhat, Automated Fault Detection and Interpretation Using Seismic Attributes and GIS Techniques: El Feel Oil Field, Murzuq Basin, Libya. Exploration Geophysics, Remote Sensing and Environment, XXXI.2, 40-56, 2024.

Web Links:

Nureddin Saadi - Google Scholar

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

Nureddin Saadi - ResearchGate

<https://www.researchgate.net/profile/Nureddin-Saadi>

Nureddin Saadi - University of Tripoli

<https://uot.edu.ly/eng/geoe/staff/index.php?id=6651&lang=en>