**Curriculum Vitae**

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**Personal Information**

**Name:** Abdalrhman Ibrahim Nayl Edam**.**

**Nationality:** Sudanese.

**Date of Birth**: 22/12/1982.

**Place of Birth:** Khartoum - Sudan.

**Religion:** Muslim.

**Marital Status:** married.

**Permanent Address:** Radiation Safety Institute (RSI), Sudan Atomic Energy Commission (SAEC), Ministry of Higher Education, Elgama street, P.O.Box: 3001, Khartoum - Sudan.

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**Academic Certifications**

* PhD in Medical Physics, August 2018, Sudan Academy of Since, Khartoum - Sudan.
* Masters in Medical Physics, January 2015 to December 2016, joint program between the International Center for Theoretical Physics (ICTP) & University of Trieste, Trieste - Italy. The program is accredited by the International Organization for Medical Physic (IOMP) 2016.
* Master of Medical Physics, April 2007 to January 2010, Sudan Academy of Sciences, Khartoum - Sudan.
* BSc Physics (honor 2:1, very good), December 1999 to October 2005, University of Khartoum, Khartoum - Sudan.
* Sudanese Secondary Certification, 1999, Khartoum - Sudan.
* Basic Certification, 1996, Khartoum - Sudan.

**Employment History and Experiences**

* **From 01/07/2006 up to 31/12/2019 (Khartoum - Sudan):**

Clinical medical physicist and researcher in diagnostic radiology at Radiation Safety Institute, Sudan Atomic Energy Commission. Routine work and duties included:

1- Performing Quality Assurance (QA) and Quality Control (QC) for diagnostic X-rays modalities including: conventional and dental X-ray, CT scanners, digital fluoroscopy, mammography, CR and DR (IPEM report No.91 protocols).

2- Acceptance testing of a new medical imaging equipment (X-ray modalities).

3- Development and performing radiation protection services for government and private hospitals and helping diagnostic radiology staff to establish the quality assurance program in their departments and local radiation protection program.

4- Assessment of X-ray rooms shielding design and related calculations.

5- Data analysis and reports writing for testing results of the tested medical imaging equipment.

6- Patients dose assessment using different approaches used in dosimetry in diagnostic radiology i.e. DAP, ESD, TLD, CTDI, Film badges, ambient dose, as well theoretical calculations.

7- Giving recommendations and advices to medical staff of diagnostic radiology departments helping them to achieve the optimization of medical exposure (ALARA principle).

8- Dealing with radiation detectors and dose survey meters, survey meters calibration at SSDL, electronic personal dosimeters (films, TLDs).

9- Train the trainers in diagnostic radiology QA & QC and radiation protection in the field, as well the radiation protection officers.

10- Providing consultancies and audits to hospitals concerning radiation safety issues and imaging equipment performance as well as X-ray rooms design.

11- Performing researches and producing publications in diagnostic medical imaging field.

12- Implementation of the IAEA technical projects in Sudan.

13- Establish Dose Reference Levels (DRLs) for X-ray modalities in Sudan.

14- Help regularity authority to establishing and updating the regulations and requirements for save use of radioactive sources used in medical applications in Sudan, as well radiation protection program.

* **From 01/11/2016 to 13/12/2016 (Trieste - Italy):**

Clinical training in nuclear medicine (Trieste major hospital, Trieste - Italy), department of medical imaging. The training were included:

1- Gamma camera QC testing in dual head SPECT/CT and radiation protection considerations.

2- MRI safety and QC using Siemens multipurpose phantom,

3- Radiopharmaceuticals QC, waste management and spectroscopy using high purity Germanium detector.

4- Non ionizing radiation measurements for medical equipment concern worker safety.

* **From 27/8 to 27/11/2017 (Kuwait - Kuwait):**

Locum contract at Kuwait Cancer Control Center for Three months included:

1- Radiation protection measurements for I-131 patients and isolation rooms.

2- Gamma Knife QC (Leksell Gamma Knife Icon).

* **From 01/01/2020 (Khartoum - Sudan):**

Head of QC for Diagnostic Radiology Department, Radiation Safety Institute, Sudan Atomic Energy Commission.

* **Teaching Experience (Khartoum - Sudan):**

1- Teaching assistant, Faculty of Science, Khartoum University during academic year 2006 - 2007.

2- Part-time lecturer, Faculty of radiological sciences & medical imaging, University of Alzaiem Alazhari, academic years 2011 to 2014.

**Training Courses**

* Basic radiation protection course, Sudan Atomic Energy Commission, 16 Sep to 16/12/2006, Khartoum - Sudan.
* National training course on QA & QC applied to diagnostic radiology, 28/10 to 1/11/2007. RSI - SAEC in cooperation with the International Atomic Energy Agency (IAEA), Khartoum - Sudan.
* Training course on medical physics (radiotherapy), 13/12/2008 to 8/1/2009, National Cancer Institute, Radiotherapy & Nuclear Medicine department, Cairo - Egypt.
* National training course on repair, maintenance and QC of fluoroscopy and digital X-ray systems, 9 to 19/11/ 2009, in frame of IAEA projects in Sudan with cooperation with (IAEA) experts, Khartoum - Sudan.
* PET/CT application on treatment planning system workshop, 29/2 to 1/3/2012, king Fisal Hospital & Research Center. Activity has been accredited by the Saudi Commission for Health Specialties, Riyadh - Saudi Arabia.
* SAEC training course on Radiation Protection (advance topics), 29/07 to 09/08/2012,RSI -SAEC, Khartoum - Sudan.
* IAEA Regional meeting on the use of the SAFRON and SAFRAD safety reporting systems, 15 to 19/09/ 2013, Alger - Algeria.
* International training course in nuclear medicine, 1 to 5/12/2013, Arab Atomic Energy Agency, Kuwait Cancer Control Center, Kuwait.
* Workshop on Safety Analysis and Safety Documents for Research Reactors,12 to 16/05/ 2014, IAEA, Vienna - Austria.
* School on medical physics for radiation therapy: dosimetry and treatment planning for basic and advanced applications, 13 to 24/04/ 2015, ICTP, Trieste - Italy.
* Joint ICTP-IAEA workshop on transitioning from 2D brachytherapy to 3D high dose rate brachytherapy, 16 to 20/11/ 2015, International Center for Theoretical Physics (ICTP), Trieste - Italy.
* Joint ICTP-IAEA workshop in Computed Tomography (CT): QC, dosimetry and optimization, 2 to 13/05/2016, ICTP, Trieste - Italy.
* 7th Alpe - Adria Medical Physics Meeting (AAMPM), 19 to 21/05/ 2016, Zagreb - Croatia.
* College on Medical Physics: Enhancing the Role of Physicists in Clinical Medical Imaging: Procedure Optimization, QA, Risk Management, 05 to 23/09/2016, ICTP, Trieste - Italy.
* Joint ICTP-IAEA Workshop on Internal Dosimetry for Medical Physicists Specializing in Nuclear Medicine, 21 to 25/11/2016, ICTP, Trieste - Italy.
* IAEA Training Course on Radiation Protection and Safety of Patients in Nuclear Medicine, 10 to 14/07/2017, Lusaka - Zambia.
* Workshop on Adopting and Adapting Clinical Imaging Guidelines, in cooperation with the IAEA, 13 to 15/03/2018, Khartoum - Sudan.
* IAEA Training course in train the trainer for radiation protection officers, 05 to 09/11/2018, Rabat - Morocco.

**Fellowships**

* IAEA Fellowship in Medical Exposure Controlling (QA & QC for diagnostic radiology machines) held at St George’s Hospital (NHS), London - UK, with cooperation with the IAEA from 24/06 to 24/08/2010.

**Professional Qualifications and Licenses**

* Radiation Protection Officer in nuclear medicine (Khartoum - Sudan).
* Medical Physics Specialist, Sudanese National Council for Medical & Health Professionals (Khartoum - Sudan).
* Radiation Protection Expert, Sudan Nuclear and Radiological Regulatory Authority (SNRRA), Khartoum - Sudan.

**Associations & Memberships**

* Member of Sudan Atomic Energy Commission Scientific Council.

**Awards & Prizes**

* Excellence Award in Scientific Publishing 2019 (SAEC scientific council).

**Publications**

* **Paper:** Nada A. Ahmed and A. I. Nayel: Pediatric Radiation Dose During Cardiac Catheterization Procedures In Sudan, 2016, Radiation Protection Dosimetry, Doi:10.1093/rpd/ncw 222.
* **Paper:** Nada A. Ahmed, A. I. Nayl, I. I. Suliman: Equipment performance and radiation protection status in X-ray fluoroscopy units in Sudan, 2011, Radiation Protection Dosimetry, Doi: 10.1093/rpd/ncr 006.
* **Paper:** [A. N. Edam](https://www.sciencedirect.com/science/article/pii/S0969804317314938?via%3Dihub#!), M. R. Fornasier, [M. De Denaro](https://www.sciencedirect.com/science/article/pii/S0969804317314938?via%3Dihub#!), [A. Sulieman](https://www.sciencedirect.com/science/article/pii/S0969804317314938?via%3Dihub#!), [M. Alkhorayef](https://www.sciencedirect.com/science/article/pii/S0969804317314938?via%3Dihub#!), [D. A. Bradley](https://www.sciencedirect.com/science/article/pii/S0969804317314938?via%3Dihub#!): Quality control in dual head gamma-cameras: Comparison between methods and software used for image analysis, 2018, Applied radiation and isotopes, Dio: 10.1016/j.apradiso.2018.07.027.
* **Paper****:** [A. N. Edam](https://www.sciencedirect.com/science/article/abs/pii/S0969806X18314543?via%3Dihub#!), [A. Sulieman](https://www.sciencedirect.com/science/article/abs/pii/S0969806X18314543?via%3Dihub#!), [A. K. Sam](https://www.sciencedirect.com/science/article/abs/pii/S0969806X18314543?via%3Dihub#!), [I. Salih](https://www.sciencedirect.com/science/article/abs/pii/S0969806X18314543?via%3Dihub#!), [M. Alkhorayef](https://www.sciencedirect.com/science/article/abs/pii/S0969806X18314543?via%3Dihub#!), [D. A. Bradley](https://www.sciencedirect.com/science/article/abs/pii/S0969806X18314543?via%3Dihub#!):

Quality control of radiopharmaceuticals and diagnostic nuclear medicine equipment, 2019, Radiation Physics and Chemistry, Dio: [10.1016/j.radphyschem.2019.03.051](https://doi.org/10.1016/j.radphyschem.2019.03.051).

**Projects**

* Main country coordinator of IAEA RAF9064 project (Improving capabilities of AFRA member states in Radiation Protection of Patients, 2020 to 2022).

**Books**

* Fluoroscopy Quality Control, [LAP Lambert Academic Publishing](https://www.libreriauniversitaria.it/books-publisher_LAP+Lambert+Academic+Publishing-lap_lambert_academic_publishing.htm), April 2014.

**Languages & computer skills**

* Arabic (native), English (Fluent, IELTS 2017)
* Microsoft office (word, excel, PowerPoint), Mat Lap basics.

**References**

* **Prof. Renato Padovani**, International Centre for Theoretical Physics (ICTP), [www.ictp.it](http://www.ictp.it),

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* **Dr. Abdelmoneim Adam Sulieman** (Professor), Radiology and Medical Imaging Department, College of Applied Medical Sciences, Prince Sattam bin Abdulaziz University, P.O.Box 422,  Alkharj11942 , Saudi Arabia, E-mail: [a.sulieman@psau.edu.sa](mailto:a.sulieman@psau.edu.sa), Office: +966 11 5886334, Mobile: +966503297046, Fax:+96611588301.
* **Dr. Ibrahim Idris Suliman**, Associated Professor,  Physics Department, College of Science, Imam Mohammad Ibn Saud Islamic University (IMSIU), Saudi Arabia, E-mail: i.i.suliman@gmail.com, Tel: +966538918127.