

Curriculum Vitae

Name Dr Dafaalla Mohamed Hag Ali (BSc, MSc, PhD, AMRSC)

Contact Information

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Personal Information

Current Position: Assistant Professor in Chemistry.
Date of Birth: Jan 1, 1964.
Place of Birth: East of Gazira, Sudan.
Citizenship: Sudanese.
Gender: Male.
Marital Status: Married with children.

Education

Ph. D. in Chemistry, August 2004.

School of Chemical Sciences, **Universiti Sains Malaysia**, Penang, Malaysia.

Thesis: Phytochemical and Biological studies on *Melastoma Malabathricum* L.

Supervisor: Dr Wong Keng Chong.

In this study 16 triterpenoids, flavonoids, and glycolipids were isolated and purified by different chromatographic techniques (CC, TLC, GC) and characterized by spectroscopic techniques such as MS, GC-MS, MALDI-TOF-MS, IR, 1D/2D-NMR, and UV. Antibacterial activity of the crude extracts and the isolated compounds was evaluated.

M. Sc. in Chemistry, June 1996.

Faculty of Science, **University of Khartoum**, Sudan.

Thesis: Comparative Phytochemical Study on Volatile Oils of *Mentha* Species Grown in Sudan.

Supervisor: Dr Ibrahim A. M. Elmhaina.

The content and physical and chemical properties of volatile oils of *Mentha* Species from three areas in Sudan were studied. The chemical constituents and their percent for each oil sample were determined by GC and GC-MS.

B. Sc. in Chemistry, May 1987.

Faculty of Science, **Cairo University**, Cairo, Egypt.

Research Visit Certificate, 1995.

Royal Holloway - University of London, United Kingdom.

Supervisor: Dr Paul Finch.

A sandwich program during the M. Sc. study for 4 Months, the visit was supported by a grant from **Altajir Trust**, UK. GC and GC-MS analyses of volatile oils were carried out.

German language (level 1 & 2), 1992.

Goethe Institute, Khartoum, Sudan.

Training

Certificate of Attendance, July 2008.

Sudan University of Science and Technology, College of Medical Laboratory Science. A workshop on "Setting Good Exams", 12 July 2008.

Certificate of Attendance, 28/07/2007-28/08/2007.

Computer Centre, **Sudan University of Science and Technology**, Sudan.

A course on preparation of educational materials using computer "Adobe Photoshop, CorelDraw, Adobe Audition, MGI VideoWave and CamStudio".

Certificate of Attendance, 2002.

School of Chemical Sciences, **Universiti Sains Malaysia**, Malaysia.

Workshop on the Latest development and application of FT-NMR.

Certificate of Attendance, 2001.

A training course by Bruker, Switzerland, at **Universiti Sains Malaysia**, Malaysia.

Title: Avance 1D/2D training course on high resolution Nuclear Magnetic Resonance.

Certificate of Attendance, 1997.

Sudan University of Science and Technology and **UNESCO Office in Cairo**.

Workshop on Modern techniques in teaching basic and engineering sciences.

Scholarships, Assistantships and Grants

Scholarship, 1993-1995.

Provided by **Ministry of Industry**, Sudan.

Conduct a research leading to M. Sc. in Chemistry at **University of Khartoum**, Sudan.

Scholarship, 2000-2004.

Provided by **Sudan University of Science and Technology**, Sudan.

To pursue a Ph. D. abroad at **Universiti Sains Malaysia**, Malaysia.

Assistantship, Federal Universities of the Islamic World (FUIW), 2000-2003.

Provided by **Universiti Sains Malaysia**, Malaysia.

A financial assistantship covered the tuition fees for the Ph. D. studies.

A Research Visit Grant, 1995.

Provided by **Altajir Trust**, SW7 5QG, London, UK.

To carry out part of the M. Sc. research at **Royal Holloway - University of London**, United Kingdom.

Academic and Non-academic Jobs

Assistant Professor in Chemistry, 2004-Present.

College of Science, **Sudan University of Science and Technology**, Sudan.

Lecturer in Chemistry, 1996-2004.

College of Science, **Sudan University of Science and Technology**, Sudan.

Teaching assistant in Chemistry, 1995-1996.

College of Science, **Sudan University of Science and Technology**, Sudan.

Chemist, 1990-1995.

Administration of Industrial Control, **Ministry of Industry**, Sudan.

Some experience in industry world; food & beverage industries, vegetable oils and soap industries.

Part-timer Academic Jobs

Lecturer in Chemistry, 1998-2000.

Faculty of Hygiene, **University of Khartoum**, Sudan.

Course: General chemistry.

Lecturer in Chemistry, 1999.

Faculty of Hygiene, **Elazhari University, Khartoum**, Sudan.

Course: General chemistry.

Lecturer in Chemistry, 1998.

Faculty of Science, **Omdurman Islamic University**, Sudan.

Course: Organic chemistry.

Teaching assistant in Chemistry, 1992-1996.

Faculty of Science, **University of Khartoum**, Sudan.

Courses: Practical chemistry (qualitative and quantitative analysis) and Practical organic chemistry for higher classes, major chemistry students.

Teaching assistant in Chemistry, 1993-1995.

Faculty of Science, **University of Elnileen, Khartoum**, Sudan.

Course: Practical chemistry (qualitative and quantitative analysis).

Teaching Experiences at Sudan University of Science and Technology

- Practical chemistry (qualitative and quantitative analysis).
- Practical organic chemistry for higher classes, major chemistry students.
- General chemistry; College of Engineering and College of Medical Laboratories.
- Organic chemistry; first year, major chemistry students.
- Organic chemistry; third year major chemistry and third year scientific laboratories students (Stereochemistry, Alicyclic compounds, Diazonium salts, Grignard reagents, Polyaromatic hydrocarbons).
- Natural products chemistry; fourth year, major chemistry students (Carbohydrates, aminoacids and proteins, terpenoids, alkaloids and flavonoids).
- Organic chemistry; second and third year, Intermediate Diploma in Chemistry students.
- Spectroscopic identification of organic compounds; Higher Diploma in Chemistry students (MS, IR, NMR, and UV).
- Organic chemistry; M. Sc. in Chemistry students (Advanced stereochemistry).
- Organic chemistry; M. Sc. in Chemistry students (Structure reactivity correlations).

Other Related Experiences and Duties at Sudan University of Science and Technology

- Involved in research activities in Chemistry at College of Science.
- Supervising many final years B. Sc. and Higher Diploma in Chemistry graduates.
- Supervising 3 students conducting research leading to M. Sc. degree in chemistry.
- Internal examiner for 4 M. Sc. in chemistry students, College of Science.
- Member of the Accreditation Committee, Chemistry Department, College of Science.
- Responsible for the College of Science homepage on the internet.
- Recently participated in a committee for revising the B. Sc. in Chemistry curriculum and participated in many departmental activities as well.
- Coordinator for the M. Sc. in Chemistry course work program offered by College of Science.

Skills

- Very skilled in using **PowerPoint** for preparation of lectures and presentations.
- Very skilled in using: MS Word, internet and ChemDraw.
- Developing some skills now in Adobe Photoshop, CorelDraw, Adobe Audition, MGI VideoWave and CamStudio.
- Expert in using chromatographic techniques, such as TLC, CC, HPLC and GLC for isolation and purification of organic compounds.
- Expert in analysis of organic compounds by spectroscopic techniques, such as IR, UV, MS, GC-MS, and 1D- and 2D-NMR.

Research Interest

Isolation and characterization of biologically active compounds, such as flavonoids, terpenoids, steroids and alkaloids, from natural resources emphasizing on medicinal plants. Special attention is given to the analysis of volatile oils by GC and GC-MS.

Languages

Fluent in Arabic and English and weak in German language.

Publications

- K. C. Wong, M. S. Tan, **D. M. H. Ali**, S. G Teoh, H. Osman and S.K. Tan. Essential oil of the leaves of *Sarcandra glabra* (Thunb.) Nakai, *Journal of Essential Oil Research*. (Accepted for publication).
- Wong, K. C., Lim, T. B. and **Ali, D. M. H.** (2006). Essential oil of *Homalomena sagittifolia* Jungh, *Flavour and fragrance journal*, **21**, 786. (Available online: <http://www3.interscience.wiley.com/cgi-bin/abstract/112579232/ABSTRACT> .
- **Ali, D. M. H.**, Wong, K. C. and Lim, P. K. (2005). Flavonoids from *Blumea balsamifera*, *Fitoterapia*, **76** (1), 128. (A new biflavonoid is reported, it is available online at: <http://dx.doi.org/10.1016/j.fitote.2004.10.015> .
- **Ali, D. M. H.**, Elmihaina I. A. M. and Finch, P. (2000). Chemical constituents of volatile oil of *Mentha specata* L., *Journal of science and technology* (Sudan University of Science and Technology), **1**(1), 71-80.

Presentations

- **Ali, D. M. H.**, Wong, K. C., Boey, P. L. and P. Ibrahim (2007). Antibacterial activity of *Melastoma Malabathricum*, **National Conference in Chemistry 2007**, Makkah, Kingdom of Saudi Arabia.
- **Ali, D. M. H.**, Wong, K. C., Boey, P. L. (2006). Separation and Identification of Flavonoids from *Melastoma Malabathricum*, **4th Conference on Scientific Research Outlook & Technology Development in the Arab World**, Umayyad Palace, Damascus, Syria.
- **Ali, D. M. H.**, Wong, K. C. and Boey P. L. (2004). Phytochemical and biological study on *Melastoma malabathricum* L., **Regional Conference for Young Chemists**, University Science Malaysia, Penang, Malaysia.
- **Ali, D. M. H.**, Wong, K. C. and Boey P. L. (2002). Some triterpenoids and glycolipids from *Melastoma malabathricum* L., **Simposium Kimia Analisis Malaysia ke 15 dan Ekspo Peralatan Sains Serantau**, Penang, Malaysia.
- **Ali, D. M. H.**, Wong, K. C. and Boey P. L. (2001). Three triterpenoids and glycolipid from *Melastoma malabathricum* L., **Malaysian Chemical Conference**, Penang, Malaysia.

Membership in Professional and Scientific Societies

- Associate member of **Royal Society of Chemistry** (AMRSC), United Kingdom, since 2002.
- Member of **Sudanese Chemical Society**.
- Member of the executive committee, **Sudanese Chemical Society**, 1992-1994.
- President of the **Postgraduate Students Club**, School of Chemical Sciences, **Universiti Sains Malaysia**, Malaysia, 2001-2003.