

# SAMAH BABIKER DAFFALLA BALAL

## *Current Address*

**Department of Chemical Engineering, Faculty of Engineering, University of Khartoum.**

**ELGAMAA Street, P. O. Box: 321, Sudan**

E-mail: [samah\\_daffalla@uofk.edu](mailto:samah_daffalla@uofk.edu) ; [samahb.daffalla@gmail.com](mailto:samahb.daffalla@gmail.com)

H. Ph: **+249905605954**

## PERSONAL DETAILS

**Gender** : Female  
**Date of birth** : 14February 1983  
**Place of birth** : Khartoum - Sudan  
**Nationality** : Sudanese  
**Marital Status** : Married

## QUALIFICATIONS

- **PhD** in Chemical Engineering, Chem. Eng. Dept. Universiti Teknologi PETRONAS (UTP), Malaysia, March 2014.
- **M.Sc.** Chemical Engineering, College of Graduate Studies, University of Khartoum, Khartoum, Sudan 2008.
- **B.Sc.** (Honours) in Chemical Engineering, First Class, Faculty of Engineering, University of Khartoum, Khartoum, Sudan,2004.

## FIELDS OF INTEREST

- Mass Transfer Operation
- Chemical Engineering Thermodynamics
- Water and Wastewater Treatment.
- Environmental Health and Safety.

- Adsorption Studies using Low-cost Adsorbents Developed from Agriculture Wastes.
- Solid and Liquid Waste Management.
- Environmental Management and Sustainability.
- Characterization using different techniques such as SEM, FTIR, PSA, CHNS and BET-Surface area instruments.

## LANGUAGE SKILLS

**ARABIC:** Mother tongue.

**ENGLISH:** Excellent.

## COMPUTER SKILLS

**Office Tools:** Microsoft Word, Excel, Power Point, SPSS

**Programming Lang.:** MATLAB, SuperPro, MathCAD

## PROFISSIONAL EXPERIENCE

- **(2015-Present Date):** **Head**, Chemical Engineering Department, Faculty of Engineering, University of Khartoum.
- **(2014-2015)** : **Assist. Prof. & Master Program Coordinator**, Chemical Engineering Department, Faculty of Engineering, University of Khartoum.
- **(2008-2009)** : **Lecturer**, conduct lectures in Chemical Engineering Thermodynamics, Reactor Engineering, Numerical Methods, Chemical Process Industries, Computer Applications at department of Chemical Engineering, Faculty of Engineering and Architecture, University of Khartoum, Khartoum- Sudan.
- **(2004-2008)** : **Teaching Assistant**, Chemical Engineering Department, Faculty of Engineering, University of Khartoum.

## PERSONALITY SKILLS

- Excellent problem solving skills
- Strong research and analytical abilities
- Excellent communication and interpersonal skills.
- Capability to work with other team members effectively
- Ability to work in a fast-paced environment
- Strong organizational skills

## AWARDS RECEIVED

- **International Water Conference 2016 (IWC2016)** prize for the Best Poster Presentation Award.
- **University of Khartoum** prize for the best academic performance, 2004, Department of Chemical Engineering, Faculty of Engineering.
- **The National Electricity Corporation of Sudan** prize for the best academic performance, 2004, Department of Chemical Engineering, Faculty of Engineering.
- **Sudanese Sugar Company** prize for the best academic performance, 2004, Department of Chemical Engineering, Faculty of Engineering.

## PUBLICATIONS

### International Journals

- S.B. Daffalla, H. Mukhtar and M.S. Shaharun (2010), Characterization of Adsorbent Developed from Rice Husk: Effect of Surface Functional Group on Phenol Adsorption, J. Applied Sci.
- Samah B. Daffalla, Hilmi Mukhtar, Maizatul S. Shaharun, (2012), Properties of Activated Carbon Prepared from Rice Husk with Chemical Activation, Int. J. Global Environmental Issues, vol. 12, pp. 107-129.

- Samah B. Daffalla, Hilmi Mukhtar, Maizatul S. Shaharun , (2012), Effect of Organic and Inorganic Acid Pretreatment on Structural Properties of Rice Husk and Adsorption Mechanism of Phenol, International J. of Chem. and Environ. Eng. vol. 3, pp. 102-200.
- Samah B. Daffalla, Hilmi Mukhtar, Maizatul S. Shaharun , (2013), Removal of Phenol from Aqueous Solutions using Rice Husk Ash, Caspian J. of Applied Sci. Res, pp. 36-49.
- Samah B. Daffalla, Hilmi Mukhtar, Maizatul S. Shaharun, (2014), Preparation and Characterization of Rice Husk Ash for Adsorption of Phenol from Aqueous Solutions. J. of Applied Mechanics and Materials.

### **Conferences**

- Samah B. Daffalla, Hilmi Mukhtar, Maizatul S. Shaharun, (2010), Characterization of Adsorbent Developed from Rice Husk: Effect of Surface Functional Group on Phenol Adsorption, International Conference on Process Engineering and Advanced Material (ICPEAM 2010). Malaysia. Kuala Lumpur.
- Samah B. Daffalla, Hilmi Mukhtar, Maizatul S. Shaharun, (2010), Properties of Activated Carbon Prepared From Rice Husk with Chemical Activation, International Conference on Environmental (ICENV 2010). Malaysia. Penang.
- Samah B. Daffalla, Hilmi Mukhtar, Maizatul S. Shaharun, (2011), Effect of Organic and Inorganic Acid Pretreatment on Structural Properties of Rice Husk and Adsorption Mechanism of Phenol, International Chemical and Environmental Engineering Conference (ICEEC, 2011). Malaysia. Kuala Lumpur.
- Samah B. Daffalla, Hilmi Mukhtar, Maizatul S. Shaharun, (2012), Batch Studies of Adsorption of Phenol From Aqueous Solutions Using Rice Husk Ash, International Conference on Civil, Offshore and Environmental Engineering (ICCOEE2012). Malaysia. Kuala Lumpur.
- Samah B. Daffalla, Hilmi Mukhtar, Maizatul S. Shaharun, (2012), Removal of Phenol from Aqueous Solutions using Rice Husk Ash, AWAM International Conference on Civil Engineering (AICCE'12/GIZ'12). Malaysia. Penang.

- Samah B. Daffalla, Hilmi Mukhtar, Maizatul S. Shaharun, (2012), Sorption of Phenol from Aqueous Solutions using Acid-treated Rice Husk, 8<sup>th</sup> International Conference on Urban Regeneration and Sustainability. Malaysia. Putrajaya.
- Samah B. Daffalla, Hilmi Mukhtar, Maizatul S. Shaharun, (2013), Sorption of Phenol from Aqueous Solutions Using Acid-treated Rice Husk, Annual Postgraduate Conference (2013), Universiti Teknologi PETRONAS, Malaysia.
- Samah B. Daffalla, Hilmi Mukhtar, Maizatul S. Shaharun (2014), Preparation and Characterization of Rice Husk Ash for Adsorption of Phenol from Aqueous Solutions. International Conference on Process Engineering and Advanced Material (ICPEAM). Malaysia. Kuala Lumpur.
- Samah B. Daffalla, Rayan O. Ahmed, Shaza M. Mohammed, Leena B. Mohammed (2015), Removal of Cadmium from Aqueous Solutions Using Bagasse as Low-cost Adsorbent. International Conference on Chemistry and Chemical Engineering (ICCCE), Dubai, UAE.
- Samah B. Daffalla, Mohammed A. Mahmoud, Alaa O. Abdalhamed, Shahd S. Mamou (2015), Adsorption of Phenol from Aqueous Solutions Using Groundnut Shell International Conference on Chemistry and Chemical Engineering (ICCCE), Dubai, UAE.
- Samah B. Daffalla and Nahla M. Hassan (March, 2016), The Adsorption of Chromium (VI) From Wastewater Using Activated Carbon Prepared From Groundnut Shell. International Water Conference 2016 (IWC2016). Muscat, Oman.

## CONTACTABLE REFEREES

**1. Assoc. Prof. Dr. Hilmi Mukhtar**

Department of Chem.Eng. Universiti  
Teknologi PETRONAS, SerIskandar, 31750  
Tronoh, Perak Darul Ridzuan, Malaysia

**Tel:** +605 - 368 8686

**Fax:** +605 - 368 8362

**HP:** +6019-5559248

**Email:** [hilmi\\_mukhtar@petronas.com.my](mailto:hilmi_mukhtar@petronas.com.my)

**3. Assist.Prof. Dr. Maizatul Shima**

Department of Chem. Eng. Universiti  
Teknologi PETRONAS, SerIskandar,  
31750 Tronoh, Perak Darul Ridzuan,  
Malaysia.

**Tel:** +605-368-8360/+605-368-7682

**Fax:** +605-365-5905

**Email:** [maizats@petronas.com.my](mailto:maizats@petronas.com.my)

**2. Assoc. Prof. Abdelmotalab F.kheiralla**

**Vice Dean,**

Faculty of Engineering, University of  
Khartoum, Sudan

**Tel:** +249-915071529

**E-mail:** [Kheiralla65@yahoo.com](mailto:Kheiralla65@yahoo.com)

**4. Prof. Kamil Wagialla**

Department of Chemical Engineering,  
Faculty of Engineering, University of  
Khartoum

**Tel:** +249111301767

**E-mail:** [kwagialla@gmail.com](mailto:kwagialla@gmail.com)