

**السيرة الذاتية (الاستاذ الدكتور المهندس محمد حمزة عبد السادة الهاشمي)**

**Curriculum vitae (Prof. Dr. Mohammed Hamza Abdulsada Alhashimi)**

	المعلومات الشخصية:	
	الاسم	محمد حمزة عبد السادة بخيت الهاشمي
	الجنسية / الديانة	عراقي/مسلم
	مكان /تاريخ التولد	العراق/12-21-1971
	اللغات	العربية والانكليزية
	البريد الالكتروني	<a href="mailto:mohammedabdulsada@gmail.com">mohammedabdulsada@gmail.com</a> <a href="mailto:mohammed.abdulsada@qu.edu.iq">mohammed.abdulsada@qu.edu.iq</a> <a href="mailto:counsellor@iraqiculturalattache.org.uk">counsellor@iraqiculturalattache.org.uk</a>
رقم الهاتف	009647809181781	

الدرجات العلمية الحاصل عليها	الاقاب العلمية
دكتوراه في الهندسة الميكانيكية-اختصاص طاقة(محركات توربينية) 2012 جامعة كاردف/كاردف/ويلز/بريطانيا/ عنوان الأطروحة " دراسة خصائص رجوع اللهب والانطفاء في حارق المحرك التوربيني".	أستاذ 10.09.2020
ماجستير في الهندسة الميكانيكية-اختصاص طاقة(ديناميكا الغازات) 1996 جامعة النهرين/بغداد/العراق/المعدل النهائي(75.33%) عنوان أطروحة" أداء خارج التصميم لمرحلة واحدة في ضاغط محوري الجريان".	أستاذ مساعد 24.06.2015
بكالوريوس علوم في الهندسة الميكانيكية, 1993 جامعة بابل/بابل/العراق تسلسل 3 من 62 بمعدل نهائي(76.11%). عنوان مشروع التخرج"قياس درجة حرارة السماء الفعلية للإشعاع في مدينة الحلة"	مدرس 24.04.2012
	مدرس مساعد 16.10.2003

**الخبرة التدريسية**

2020-2012: مدرس في جامعة القادسية/ كلية الهندسة/قسم الهندسة الميكانيكية لمواد الرياضيات وميكانيك الموائع.  
2012-2008: تدريس مادة ANSYS في جامعة كاردف -كلية الهندسة والاشراف على مختبر (Impact of the Water Jet)  
2007-2003: مدرس في جامعة القادسية/ كلية الهندسة/قسم الهندسة الميكانيكية لمواد الرياضيات وميكانيك الموائع.  
2003-2001: محاضر في جامعة سبها كلية العلوم قسم الرياضيات.  
2003-2001: محاضر في معهد المعلمين/قسم الرياضيات في سبها.  
2003-1997: مدرس في المعهد العالي للمهن الشاملة وأعداد المدربين سبها في قسم الهندسة الميكانيكية لمواد الرياضيات والديناميكا الحرارية وميكانيك الموائع ومحركات الاحتراق الداخلي والاشراف على العديد من مشاريع التخرج.

**الخبرة العملية**

2003-لحد الان: العمل في المكتب الاستشاري جامعة القادسية كلية الهندسة في مختلف التصاميم والاشراف على مجموعة من المشاريع: 1- مشروع أعداد تصاميم كلية الهندسة في جامعة القادسية 2-أعداد تصاميم مشروع مجاري السماوة الكبير 3-الاشراف على مشروع سجن بابل المركزي.

2012-2008:العمل في جامعة كاردف في (Gas Turbine Research Center)

2005-2003:العمل في الدائرة الهندسية في جامعة القادسية في الاشراف وتنفيذ مجموعة كبيرة من المشاريع.

**المناصب التي شغلتها**

2020-.....: المستشار الثقافي في المملكة المتحدة وأوربا الغربية

2019-2017: مدير قسم شؤون الطلبة والتسجيل في جامعة القادسية

2017-2013: مدير قسم العلاقات الثقافية في جامعة القادسية

2007-2003 : معاون عميد للشؤون العلمية في كلية الهندسة جامعة القادسية

**العمل مع منظمات وجامعات عالمية:**

1-العمل على موضوع الحاضنات التكنولوجية مع مؤسسة القانون التجاري وتطوير البرامج التابعة لوزارة التجارة الامريكية للعمل على تاسيس قانون الحاضنات التكنولوجية في العراق. (Commercial Law Development Program) 2013- 2015.

2- العمل مع الاتحاد الاوربي كمنسق اداري لمشروع تطوير أقسام وكليات الاثار في العراق (WALADU) 2015-2019.

3- ممثل جامعة القادسية مع مركز الدراسات العراقي في جامعة فريدريك ألكسندر إيرلانغن نورنبرغ (Friedrich-Alexander-Universität Erlangen-Nürnberg) في 2016/05/20 حسب مذكرة التعاون الموقعة من قبل السيد رئيس جامعة القادسية ومدير المركز.

## Curriculum vitae (Prof. Dr. Mohammed Hamza Abdulsada Alhashimi)

الاستاذ الدكتور المهندس محمد حمزة عبد السادة بخيت الهاشمي

### Occupation and Contact detailed

Occupation: Iraqi Consular Attaché in the United Kingdom and West Europe

Address: 4 Elvaston Pl, Kensington, London SW7 5QG

Mobile Number: 009647809181781

Email:counsellor@iraqiculturalattache.org.uk

Email:mohammedabdulsada@gmail.com

Email:mohammed.abdulsada@qu.edu.iq



### Degree Obtained

- Doctor of philosophy in Mechanical Engineering Power Engineering (Gas Turbine), 16 May 2012, Cardiff University, Cardiff, Wales, United Kingdom. Thesis title” **Flashback and Blowoff Characteristics of Gas Turbine Swirl Combustor**”
- Master in Mechanical Engineering, Power Engineering (Gas Turbine), 19 February 1996, AL-Nahrain University, Baghdad, Iraq, final average (75.33%). Dissertation title” **Off-Design Performance of an Axial Flow Compressor Stage**”
- Bachelor Degree in Mechanical Engineering, June 1993, University of Babylon, Hilla, Iraq, (3<sup>rd</sup> out of (62) graduates, final average (76.11%). Graduation project title ”**Measurement of Sky Temperature in Hilla City**”

### Experiences

2012- 2020: Instructor at AL-Qadissiyah University college of Engineering and the Director of scholarship and cultural relationship at the main university.

2009-2012: Instructor and Lab Demonstrator at Cardiff University/ School of Engineering /Mechanical Department/ Energy Institute Impact Water Jet Lab and teaching Fluent Tutorial.

2008-2012: PhD student at Cardiff University/ College of Engineering /Mechanical Department/ Energy Institute. Work in Gas Turbine Research centre in Port Talbot, Wales, United Kingdom.

2003-2008: Instructor and staff teaching members in college of Engineering at AL-Qadissiyah University.

1997-2003: Instructor at Higher Institute for General professions and Training preparing in Libya.

1996-1997: Instructor at AL-Qadissiyah University

### Position held

2020- till now: the cultural attaché in the United Kingdom and west Europe

2017-2019: Director of registration and student’s affair at University of Al-Qadissiyah.

2013-2017: Director of scholarship and cultural relationship at University of Al-Qadissiyah.

2003-2008: Scientific Assistance Dean at the college of Engineering / University of Al-Qadissiyah

## **Journal Papers:**

- [1] Alkaabi, A.A., Obaid, A.A., Abdulsada, M.H.” Investigation the impact of using the recess air bio-filter (TBAB) with integrated system of a cyclic 2-recess adsorption/desorption unit for treatment of squander gas streams” *Periodicals of Engineering and Natural Sciences*,2022, 10(1), pp. 212–227
- [2] Mohammed Abdulsada “Propagation of Turbulent Flame in Swirl Combustor” *TEST Engineering & Management*. Vol. 83 May - June 2020 p.p. 16738 – 16744.
- [3] Mohammed Abdulsada “Working Design Map of Alternative Fuel for High Swirl Burner” *TEST Engineering & Management*. Vol. 82 January- February 2020 p.p.14124-14132.
- [4] H JANNA, M ABDULSADA “The Effect of Confinement Shapes upon the Blowoff Limit on Tangential Swirl Burner” *International Journal of Mechanical and Production Engineering Research and Development (IJMPERD)*,Vol. 9, No. 6, December 2019, p.p.1119-1128.
- [5] Mohammed Abdulsada “Operational gas turbine swirl combustors design map for pure methane and different outlet configurations” *Periodicals of Engineering and Natural Sciences*, Vol. 7, No. 4, December 2019, pp.1886-1891.
- [6] Mohammed Abdulsada,” Finite Element Analysis of Fins with Convection and Radiation Heat Transfer” *Al-Qadisiyah Journal for Engineering Sciences*, Vol. 8, No. 2, 2015.
- [7] Valera-Medina A., N. Syred , M. Abdulsada,”Flashback Analysis in Tangential Swirl Burners” *Ingeniería Investigación y Tecnología*. Vol. XII, Núm. 4, 2011, 487-497.
- [8] N. Syred , A. Giles, J. Lewis, M. Abdulsada, A. Valera Medina, R. Marsh, P.J. Bowen, A.J. Griffiths" Effect of inlet and outlet configurations on blow-off and flashback with premixed combustion for methane and a high hydrogen content fuel in a generic swirl burner" *Applied Energy* 116 (2014) 288–296
- [9] Mohammed Abdulsada, Nicholas Syred, Philip Bowen, Tim O’Doherty, Anthony Griffiths, Richard Marsh, Andrew Crayford ‘Effect of exhaust confinement and fuel type upon the blowoff limits and fuel switching ability of swirl combustors’*Applied Thermal Engineering* , *Applied Thermal Engineering* 48 (2012) 426-435.
- [10] Nicholas Syred, Mohammed Abdulsada, Anthony Griffiths, Tim O’Doherty, and Philip Bowen, The effect of hydrogen containing fuel blends upon flashback in swirl burners, *Applied Energy*, *Applied Energy* 89 (2012) 106–110.
- [11] Nicholas Syred, Mohammed Abdulsada, Anthony Griffiths, Tim O’Doherty, and Philip Bowen, Reprint of The effect of hydrogen containing fuel blends upon flashback in swirl burners, *Applied Energy*, *Applied Energy* 53 (2013) 348–357.
- [12] Mohammed Abdulsada, Nicholas Syred, Anthony Griffiths, Phil Bowen, and Steve Morris Effect of Swirl Number and Fuel Type Upon the Combustion Limits in Swirl Combustors GT2011-45544 Proceedings of the ASME Turbo Expo 2011 VOLUME 2 PART A COMBUSTION, FUELS AND EMISSIONS presented at The ASME 2011 Turbo Expo June 6-10, 2011 Vancouver, British Columbia, Canada. PP.531-540
- [13] Mohammed Abdulsada “THE COMBINATION OF SWIRL COMBUSTORS WITH FURNACES” *International Journal of Innovation Sciences and Research* Vol.4, No, 6, pp.242-247, June- 2015 Department of Mechanical Engineering, College of Engineering, Al-Qadisiyah University, Iraq.
- [14] Mohammed Abdulsada “BURNER FLAME STABILISATION OF ALTERNATIVE FUELS USING NOZZLE CONSTRICTIONS” *International Journal of Current Research* Vol. 7, Issue, 06, pp. 16815-16827, June, 2015 Department of Mechanical Engineering, College of Engineering, Al-Qadisiyah University, Iraq **ISSN: 0975-833X**.
- [15] Mohammed Abdulsada “Design of the Basic Performance Characteristics Maps of an Axial Flow Turbine Stage” *Academic Research International* Vol. 6(3) pp.22-30 May 2015 Department of Mechanical Engineering, College of Engineering, Al-Qadisiyah University, Iraq ISSN: 2223-9944, eISSN: 2223-9553.

## Conferences:

- [1] Mohammed Abdulsada, Using hydrogen blends as fuel in a swirl burner, IOP Conference Series: Materials Science and Engineering, 2020, 870(1),012154
- [2] Mohammed Abdulsada, Nicholas Syred, Phillip Bowen, Antony Griffiths, Pure Hydrogen and Its Blends Advantages and Disadvantages as Fuel in the Gas Turbine Swirl Combustor, 50th AIAA Aerospace Sciences Meeting Including the New Horizons Forum and Aerospace Exposition, Nashville, Tennessee 9-12 January 2012, **AIAA 2012 -1120421**.
- [3] Mohammed Abdulsada, Nicholas Syred, Philip Bowen, Tim O’Doherty, and Anthony Griffiths, Effect of Swirl Number and Fuel Type upon the Blowoff Limits in Unconfined and Confined Swirl Combustors, PRO-TEM, TATA Conference Meeting, Newcastle, 25<sup>th</sup>-26<sup>th</sup> October, 2011.
- [4] Mohammed Abdulsada, Nicholas Syred, Steve Morris and Phillip Bowen, Effect of Swirl Number and Fuel Type upon the Blow off Limits in Swirl Combustors. Conference paper accepted in The Fifth European Combustion Meeting is to be held in Cardiff University, Cardiff, UK 28<sup>th</sup> June - 1<sup>st</sup> July 2011.
- [5] Mohammed Abdulsada, Nicholas Syred, Antony Griffiths, Phillip Bowen and Steve Morris, Effect of Swirl Number and Fuel Type upon the Combustion Limits in Swirl Combustors, ASME Turbo-Expo conference in Canada, Vancouver 6-10 June 2011, **GT2011-45544**.
- [6] Mohammed Abdulsada, Nicholas Syred, Antony Griffiths, Phillip Bowen, Effect of Swirl Number and Fuel Type upon the Flashback in Swirl Combustors, 49th AIAA Aerospace Sciences Meeting Including the New Horizons Forum and Aerospace Exposition 4<sup>th</sup> -7<sup>th</sup> January 2010, Orlando, Florida, **AIAA 2011- 889442**.
- [7] Nicholas Syred, Mohammed Abdulsada, Anthony Griffiths, Tim O’Doherty, and Philip Bowen, The effect of hydrogen containing fuel blends upon flashback in swirl burners, PRO-TEM, TATA Conference Meeting, Newcastle, 3<sup>rd</sup> November, 2010.
- [8] Agustin Valera-Medina, Mohammed Abdulsada, Nicholas Syred and Anthony Griffiths, Studies of Large Coherent Structures and their Effects on Swirl Combustion, 48th AIAA Aerospace Sciences Meeting Including the New Horizons Forum and Aerospace Exposition 4<sup>th</sup> -7<sup>th</sup> January 2010, Orlando, Florida, **AIAA 2010-1168**.
- [9] A. Valera-Medina, M. Abdulsada, N. Shelil, A. Griffiths & N. Syred, Flashback Analysis In Swirl Burners Using Passive Nozzle Constrictions And Different Fuels, 16<sup>th</sup> International IFRF Members’ Conference 8<sup>th</sup>-10<sup>th</sup> Jun, 2009. Boston, USA.
- [10] A. Valera-Medina, M. Abdulsada, A. Griffiths & N. Syred, Flashback Avoidance Analysis using Geometrical Constrictions in a Tangential Swirl Burner 9 - 10 March 2009 British – French Flame Days 2009.
- [11] Mohammed Abdulsada, Preliminary design charts of an axial flow compressor stage Fifth Magribain Conference of Mechanical Engineering 5-7 February 2001 Brack-Libya.
- [12] Mohammed Abdulsada, Finite element Analysis of fins with convection and radiation Fifth Conference of AL-Qadisiyah University 21-22 January 2005 AL-Qadisiyah-Iraq.
- [13] Mohammed Abdulsada Current Research in Combustion: A Forum For Research Students and Early Career Researchers IOP Combustion Physics Group "**Flashback Avoidance Analysis using Geometrical Constrictions in a Tangential Swirl Burner**" Loughborough University, Leicestershire, UK Tue, 22 Sep 2009.
- [14] Mohammed Abdulsada 1<sup>st</sup> Iraqi conference for Science and engineering for the PhD Iraqi students in The UK Iraqi Cultural Attaché “**Effect of Swirl Number and Fuel Type upon the Combustion Limits in Gas Turbine Swirl Combustors**” University of London UCL, London, UK 1<sup>st</sup> – 2<sup>nd</sup> October 2011.

## Prizes and Awards

### **Second Best Poster Award**

Event Title Current Research in Combustion: A Forum For Research Students and Early Career Researchers  
Organised by IOP Combustion Physics Group  
Title of poster **Flashback Avoidance Analysis using Geometrical Constrictions in a Tangential Swirl Burner**  
Place of conference Loughborough University, Leicestershire, UK  
Date of conference Tue, 22 Sep 2009

### **Best Paper**

Event Title 48th AIAA Aerospace Sciences Meeting Including the New Horizons Forum and Aerospace Exposition  
Organised by American Institute of Aeronautics and Astronautics  
Title of paper **Studies of Large Coherent Structures and their Effects on the Swirl Combustion**  
Place of conference Orlando, Florida, USA  
Date of conference 4 - 7 January 2010  
Paper No. AIAA 2010-1168

### **Best Paper and Presentation prize**

Event Title 1<sup>st</sup> Iraqi conference for Science and engineering for the PhD Iraqi students in The UK  
Organised by Iraqi Cultural Attaché  
Title of poster **Effect of Swirl Number and Fuel Type upon the Combustion Limits in Gas Turbine Swirl Combustors**  
Place of conference University of London UCL, London, UK  
Date of conference 1<sup>st</sup> – 2<sup>nd</sup> October 2011

## Working with international organizations and universities:

- 1- Working on the issue of technology incubators with the Commercial Law Foundation and developing programs affiliated with the US Department of Commerce to work on establishing the Technology Incubators Law in Iraq. (Commercial Law Development Program) 2013-2015.
- 2- Working with the European Union as an administrative coordinator for the project to develop archeology departments and colleges in Iraq (WALADU) 2015-2019.
- 3- A representative of the University of Al-Qadisiyah with the Iraqi Studies Center at the University of Friedrich-Alexander-Universität Erlangen-Nürnberg on 05/20/2016 according to the memorandum of cooperation signed by the President of the University of Al-Qadisiyah and the director of the center