Professor Bassam Dally is a Professor of Mechanical Engineering and a member of the Clean Combustion Research Center at KAUST.

Over the last 30 years, Prof Dally has contributed seminal works on a variety of research topics under the broad field of Thermo-Fluids. His major contributions are in turbulent reacting flows, MILD combustion, soot in flames, plasma propulsion, hybrid of concentrated solar thermal and combustion, and applied laser diagnostics. He has attracted millions of dollars for his research and have published more than 170 papers in leading scientific journals. He won many awards over the years, including 'Energy Professional of the Year in South Australia', and recently was awarded a Fellowship of the Combustion Institute.

CAREER AND TRAINING HISTORY NAME: Bassam Dally Position: Professor

ADDRESS: Clean Combustion Research Center

> King Abdullah University of Science and Technology Thuwal, 23955-6900, Kingdom of Saudi Arabia

Telephone: + 962 544 700 107

E-mail: bassam.dally@kaust.edu.sa

EDUCATION

Doctor of Philosophy (Combustion), University of Sydney 1998 1988 Bachelor of Science in Mechanical Engineering, Technion

HONOURS AND AWARDS

1998

1994

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2019	Fellow of the Combustion Institute, International Combustion Institute, Pittsburgh, USA
2016	SA Energy Professional of the Year 2016, Australian Institute of Energy
2011	Opportunity South Australia, Innovation Showcase, winner of Best Pitch award
2010	Korean Institute of Machinery and Materials, sponsored speaking tour of South Korea (4 talks)
2009	Austrade - Visiting Research Fellowship (Speaking tour: Stuttgart, Darmstadt, Aachen and Delft)
2006	Australian academy of Science travel grant to North America (Sandia National Labs and Stanford)
2006	Visiting Fellow at CRF, Sandia National Laboratories, Livermore, CA
2006	Visiting Fellow at ITM, RWTH, Aachen, Germany
2005	Best Paper Award (co-author) 4th Australian Conf. on Laser Diag. in Fluid Mechanics and Comb.
2002	Visiting Fellow at ITM, RWTH, Aachen, Germany
2001	Visiting Fellow at CRF, Sandia National Laboratories, Livermore, CA
2001	National Engineering Innovation Competition, Re-Engineering Australia Forum (team award)

DR Warren Travelling Fellowship of the Australian and New Zealand Section of the Comb. Inst.

PROFESSIONAL APPOINTMENTS

2021-	Professor	Clean Combustion Research Center, KAUST
2009-2020	Deputy Director	Centre for Energy Technology, The University of Adelaide
2013-2020	Professor	School of Mechanical Engineering, The University of Adelaide
2010-2104	Head	School of Mechanical Engineering, The University of Adelaide
2001-2010	Deputy Head	School of Mechanical Engineering, The University of Adelaide
2008-2013	Associate Professor	School of Mechanical Engineering, The University of Adelaide
2002-2008	Senior Lecturer	School of Mechanical Engineering, The University of Adelaide
1998-2002	Lecturer	School of Mechanical Engineering, The University of Adelaide
1998	Research Assistant	School of Chemical Engineering, The University of Sydney

TEACHING AND TRAINING, INCLUDING SUPERVISION

PROFESSIONAL DEVELOPMENT IN TEACHING 2003 Effective supervision

> 1999 Teaching at University, ACUE

CURRICULUM DEVELOPMENT

2010-2014 CHAIR - SCHOOL CURRICULUM COMMITTEE

Australian Postgraduate Award

2005-2007 CHAIR - THERMO-FLUIDS TEACHING GROUP SUB COMMITTEE

2008-2014 MEMBER - SUSTAINABLE ENERGY TEACHING GROUP SUB-COMMITTEE

COURSE, SUBJECT AND TOPIC COORDINATION

1999-2005	Air Conditioning (UG, PG)	(developed, taught and coordinated)	
1999-2019	Heat Transfer and Thermodynamics (UG, PG)	(developed, taught and coordinated)	
1999-2004	Thermodynamics 1	(adopted, taught and coordinated)	
2001-2019	Combustion Technology & Emission Control (UG,PG)(developed 20%, taught & coordinated)		
2005-2008	Automotive Comb. Tech., Power Train and NVH (UG) (developed, taught & coordinated)		
2007-2009	CFD for Engineering Applications (UG)	(developed and coordinated)	

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RESEARCH, SCHOLARSHIP AND CREATIVE ACTIVITY

RESEARCH FUNDING

CAREER TOTAL: \$18,250,000 (5 ARC DISCOVERY (\$2.72m), 3 ARC LINKAGE (\$0.88m), 5 ARC LIEF (\$3.08m) OTHER (\$11.57m)

SCIENTIFIC PUBLICATIONS

Career Total: 170 journal papers, 169 conference papers, 4 review papers and 18 invited talks.

Scopus 5617 citations and h-index = 41

Google Scholar 7802 citations, h-index = 44 and i10-index = 124 (details)

RESEARCH TRAINING

Supervision

11 Research Fellows

39 Postgraduate students

COLLABORATIONS

Dr Robert Barlow from Sandia National Laboratories in the US, **Prof Jamie Mi** from Peking University in China, **Prof Heinz Pitsch** from RWTH University in Germany, **Dr Alesandro Parente** from University of Brussels in Belgium, **A/Prof Mattias Ihme** from the Stanford University in the US, **A/Prof Michael Mueller** from Princeton University in the US, **Prof Michael Oschwald** from DLR- Lampoldshausen in Germany, **Prof Georg Herdrich** from the University of Stuttgart in Germany and **Dr Sung Hoon Shim** from Korean Institute for Machinery and Materials, South Korea. While nationally my collaboration extends to the **Prof Michael Brear** form the University of Melbourne, **Prof Assaad Masri** from the University of Sydney, **Prof Evatt Hawkes** from the University of New South Wales, **Prof Alexander Klimenko** from the University of Queensland, **Prof Dongke Zhang** from the University of Western Australia, and **Prof William Roberts** from KAUST among others.

REFEREING OF PAPERS SUBMITTED TO JOURNALS

Combustion and Flame, Progress in Energy and Combustion Science, Combustion Science and Technology, Energy and Fuels, Combustion Theory and Modelling, International Journal of Heat Transfer, Fuel, Experimental Thermal and Fluid Science, Applied Energy, International Journal of Hydrogen Energy, International Journal of Thermal Sciences, Journal of Enhanced Heat Transfer,

REFEREEING OF GRANT AND FELLOWSHIP APPLICATIONS

Australian Research Council of Australia

Dutch Funding Agency STW European Research Council

Luiopean Nesearch Council

U.S. Department of Energy, Office of Sciences

Fondo Nacional de Desarrollo Científico y Tecnológico (FONDECYT) – Chile

Natural Science and Engineering – Research Council of Canada Norwegian University of Science and Technology - Norway

EDITORIAL PUBLICATIONS

Editor: Energy-AIMS Press

Guest Editor: Special edition of "Experimental, Thermal and Fluid Sciences Journal"

Volume 27 (5), May 2003

Proceedings Editor: Fifth Asia Pacific Conference on Combustion 2005

The 4th Australian Conf. on Laser Diagnostics in Fluid Mechanics and Combustion, 2005

Fourteenth Australasian Fluid Mechanics Conference 2001

PATENTS

G.J. Nathan, <u>BB Dally</u>, etc.. (2012), "A Hybrid Receiver Combustor", Provisional Patent Application No. 2012901258, Date: 29 March 2012

G.J. Nathan, D Battye, P.J. Ashman, E. Hu, <u>B.B. Dally</u>, Z.T. Alwahabi, (2009), "A Boiler System Receiving Multiple Energy Sources", Provisional Patent Application, Date: 16 October 2009

Matthews, J., Nathan, G.J., <u>Dally, B.B.</u>, Smith, E.J. and Harris, P. (2003) "An Apparatus and Method for the Treatment of Weed Seeds Using Heat" Provisional Patent Application No. 2003905821, Priority Date: 23 October, 2003.