

# PUBLICATION LIST SINCE 2002-FEBRUARY 2008

Dr Bassam Dally

| <b>Books / Monographs / Symposia/Book Chapter (3)</b>  | <b># OF PAGES</b> | <b>Contribution %</b> |
|--|-------------------|-----------------------|
| <u>B.B.Dally</u> , J. Denier, R.M. Kelso and G.J. Nathan, <b>Guest Editor</b> , Experimental, Thermal and Fluid Sciences Journal, 2004, Elsevier   | 80                | 60                    |
| Z.T. Alwahabi, <u>B.B. Dally</u> , P.A.M Kalt, G.J. Nathan and C.Y. Chong, <b>Editors</b> , Proceedings of the 4 <sup>th</sup> Australian Conference on Laser Diagnostics in Fluid Mechanics and Combustion, 2005  | 150               | 30                    |
| G.J. Nathan, <u>B.B. Dally</u> and P.M. Kalt, <b>Editors</b> , Proceedings of the Fifth Asia-Pacific Conference on Combustion, 2005, Adelaide University   | 600               | 40                    |
| <b>Journal Articles (10)</b>   |                   |                       |
| <i>Career total 18</i>   |                   |                       |
| S.Afsharvahid, P. J. Ashman and <u>B.B. Dally</u> , 'Investigation of NOx Conversion Characteristics in a Porous Medium', <i>Combustion and Flame</i> , Volume 152, Issue 4, March 2008, Pages 604-615   | 20                | 40                    |
| P.R. Medwell, P.A.M. Kalt and <u>B.B. Dally</u> , 'Imaging of Diluted Turbulent Ethylene Flames Stabilised on a Jet in Hot Coflow (JHC) Burner', <i>Combustion and Flame</i> , Volume 152, Issues 1-2, January 2008, Pages 100-113                               | 20                | 30                    |
| P.R. Medwell, P.A.M. Kalt and <u>B.B. Dally</u> , 'Simultaneous Imaging of OH, formaldehyde and Temperature of Turbulent Nonpremixed Jet Flames in a Heated and Diluted Coflow', <i>Combustion and Flame</i> , Volume 148, Issues 1-2, January 2007, Pages 48-61 | 7                 | 40                    |
| C. Allison and <u>B.B. Dally</u> , 'Assessment of Compact Heat Exchanger Consisting Entirely of Tubes Arranged in a Turbulence Generating Mesh', <i>Australian Journal of Mechanical Engineering</i> , Vol 4, No. 1, p. 51-57, 2007                              | 20                | 40                    |
| C. Allison and <u>B.B. Dally</u> , 'Effect of a Delta-Winglet vortex pair on the performance of a tube-fin heat exchanger', <i>International Journal of Heat and Mass Transfer</i> , Volume 50, Issues 25-26, December 2007, Pages 5065-5072                     | 21                | 40                    |
| F.C. Christo and <u>B.B. Dally</u> , 'Modelling Turbulent Reacting Jets Issuing into a Hot and Diluted Coflow', <i>Combustion and Flame</i> , 142 (2005) 117-129   | 13                | 40                    |
| S.H. Kim, K.Y. Huh and <u>B.B. Dally</u> , 'Conditional Moment Closure Modeling of Turbulent Nonpremixed Combustion in Diluted Hot Coflow', <i>Proceedings of the Combustion Institute</i> , vol. 30 (2005) 751-757  | 6                 | 20                    |
| <u>B.B. Dally</u> , E. Riesmeier and N. Peters, 'Effect of Fuel Mixture on MILD Combustion', <i>Combustion and Flame</i> , 137 (2004) 418-431  | 14                | 60                    |
| <u>B.B. Dally</u> , A.R. Masri, R.S. Barlow and G.J. Fiechtner, 'Two-Photon Laser-Induced Fluorescence Measurement of CO in Turbulent Nonpremixed Bluff Body Flames', <i>Combustion and Flame</i> , 132 (2002) 272-274   | 3                 | 80                    |
| <u>B.B. Dally</u> , A.N. Karpetis, R.S. Barlow, 'Structure of Turbulent Nonpremixed Jet Flames in a Diluted Hot Coflow', <i>Proceedings of the Combustion Institute</i> , 29 (2002), 1147-1154   | 8                 | 70                    |
| <b>Refereed Conference Papers (29)</b>   |                   |                       |
| <i>Career Total 46</i>   |                   |                       |
| <u>B.B. Dally</u> , G.G. Szegő, G. J. Nathan, High Efficiency and Low Emission Using MILD Combustion Technology, pp. 321-330, 3 <sup>rd</sup> <i>International Solar Cities</i>  | 10                | 70                    |

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| Congress 2008, Adelaide, Australia, February 2008   |   |    |
| S.H. Shim, B.B. Dally, P.J. Ashman, G. Szegő, R. Craig, "Sawdust Application to MILD Combustion", <i>Proceeding of the Australian Combustion Symposium</i> , Sydney, December 2007, pp. 94-97   | 4 | 40 |
| G. G. Szegő, B. B. Dally, G. J. Nathan, "Stability Limits of a Parallel Jet MILD Combustion Burner System", <i>Proceeding of the Australian Combustion Symposium</i> , Sydney, December 2007, pp. 62-65   | 4 | 40 |
| P. R. Medwell, P. A. M. Kalt and B. B. Dally, "Influence of Fuel Composition on the MILD Combustion Reaction Zone Structure in a JHC Burner", <i>Proceeding of the Australian Combustion Symposium</i> , Sydney, December 2007, pp. 54-57   | 4 | 30 |
| P. R. Medwell, P. A. M. Kalt and B. B. Dally, "Influence of Fuel Type on Turbulent Nonpremixed Jet Flames Under MILD Combustion Conditions", <i>16th Australasian Fluid Mechanics Conference</i> , Gold Coast, Australia, December 2007   | 6 | 30 |
| <u>B.B. Dally</u> and N. Peters, 'Heat Loss-Induced Oscillation of Methane and Ethylene in a Perfectly Stirred Reactor', 6th Asia-Pacific Conference on Combustion, Nagoya Congress Center, Nagoya, Japan, 20-23 May 2007   | 6 | 80 |
| G.G. Szegő, <u>B.B. Dally</u> , G.J. Nathan and F.C. Christo, 'Performance Characteristics of a 20kW MILD Combustion Furnace', 6th Asia-Pacific Conference on Combustion, Nagoya Congress Center, Nagoya, Japan, 20-23 May 2007   | 6 | 30 |
| F.C. Christo, G.G. Szego and <u>B.B. Dally</u> 'Molecular Fluxes Effect on Predictions of JHC Flames', 6th Asia-Pacific Conference on Combustion, Nagoya Congress Center, Nagoya, Japan, 20-23 May 2007   | 6 | 20 |
| P.R. Medwell, P.A.M. Kalt and <u>B.B. Dally</u> , 'Structure of Ethylene Based Nonpremixed Flames Stabilised on a JHC Burner, 6th Asia-Pacific Conference on Combustion, Nagoya Congress Center, Nagoya, Japan, 20-23 May 2007  | 6 | 30 |
| Allison, C. and <u>Dally, B.</u> , 'Development of a compact heat exchanger consisting of tubes and interconnecting struts forming parallel plate arrays-Part 1: Flow Visualisation', 8 <sup>th</sup> Australasian Heat and Mass Transfer Conference, Curtin University, Western Australia, July 2005 | 5 | 30 |
| Allison, C. and <u>Dally, B.</u> , 'Development of a compact heat exchanger consisting of tubes and interconnecting struts forming parallel plate arrays-Part 1: Flow Visualisation', 8 <sup>th</sup> Australasian Heat and Mass Transfer Conference, Curtin University, Western Australia, July 2005 | 5 | 30 |
| Allison, C. and <u>Dally, B.</u> , 'Assessment of Compact heat Exchangers Consisting Entirely of Tubes Arranged in a Turbulence Generating Mesh', 8 <sup>th</sup> Australasian Heat and Mass Transfer Conference, Curtin University, Western Australia, July 2005                                     | 5 | 30 |
| Medwell, P.R., Kalt, P.A.M. and Dally, B.B., "Effect of Reynolds Number on the Spatial Distribution of OH and Formaldehyde in Jet Flames in a Heated and Diluted Coflow", 5 <sup>th</sup> Asia-Pacific Conference on Combustion, July 2005, Adelaide, Australia                                       | 4 | 30 |
| Medwell, P.R., Kalt, P.A.M. and Dally, B.B., "Effect of Fuel Dilution on Jet Flames in a Heated and Diluted Coflow", 5 <sup>th</sup> Asia-Pacific Conference on Combustion, July 2005, Adelaide, Australia  | 4 | 30 |
| Afsharvahid, S, and Dally, B.B., "Investigation of NOx reburning in a Porous  | 4 | 40 |

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| Burner”, 5 <sup>th</sup> Asia-Pacific Conference on Combustion, July 2005, Adelaide, Australia  |   |    |
| P. R. Medwell, P. A. M. Kalt and B. B. Dally, ‘Quantification of OH–LIF in Jet Diffusion Flames’, Fourth Australian Conference on Laser Diagnostics in Fluid Mechanics and Combustion, The University of Adelaide, South Australia, Australia, 7–9 December 2005  | 6 | 30 |
| Allison, C. and Dally, B., ‘Performance of compact tube-fin heat exchangers having alternative shaped tubes’, 3 <sup>rd</sup> International Conference on Heat Transfer, Fluid Mechanics and Thermodynamics, Cape Town, South Africa, June 2004   | 6 | 40 |
| Christo, F.C., Szego, G.G. and B.B. Dally, ‘Modelling turbulent reacting jets under MILD combustion conditions’, 5 <sup>th</sup> Asia-Pacific Conference on Combustion, Adelaide, July 2005   | 4 | 20 |
| E.J. Smith, G.J. Nathan, and B.B. Dally, (2004) “Preliminary Examination of a “Round Jet Initial Conditions Anomaly” for k-ε Turbulence Model”, 15 <sup>th</sup> Australasian Fluid Mechanics Conference Proceedings, Sydney, December 2004   | 4 | 20 |
| F.C. Christo and B.B. Dally, (2004) ‘Application of Transport PDF Approach for Modelling MILD Combustion’, 15 <sup>th</sup> Australasian Fluid Mechanics Conference Proceedings, Sydney, December 2004  | 4 | 40 |
| G.G. Szego, B.B. Dally, G.J. Nathan and F.C. Christo, ‘Design Optimisation of a MILD Combustion Furnace Based on CFD Modelling’, <i>Proceedings of the 2003 Australian Symposium on Combustion and the 8<sup>th</sup> Australian Flame Days, December 2003, D. Honnery (ed.), Monash University, Victoria.</i>                                    | 4 | 30 |
| S. Afsharvahid, B.B. Dally, and F. Christo, ‘Numerical Study of flame stabilisation inside Porous Burner’, <i>Proceedings of the 2003 Australian Symposium on Combustion and the 8<sup>th</sup> Australian Flame Days, December 2003, D. Honnery (ed.), Monash University, Victoria.</i>  | 4 | 30 |
| S. Afsharvahid, B.B. Dally, and F. Christo, ‘On The Stabilisation Of Ultra Lean Methane and Propane Flames in Porous Media’, <i>The Fourth Asia-Pacific Conference on Combustion, 2003, Nanjing, China, editors: Xu, X. and Zhao, C. Southeast University Press</i>   | 6 | 30 |
| Z.T. Alwahabi, J. Reppel, G.J. Nathan, K.D. King and B.B. Dally, ‘Application of Saturated Laser Polarisation Spectroscopy in Combustion Diagnostics’, <i>Proceedings of the 2003 Australian Symposium on Combustion and the 8<sup>th</sup> Australian Flame Days, December 2003, D. Honnery (ed.), Monash University, Victoria.</i>              | 4 | 5  |
| E.J. Smith, G.J. Nathan, and B.B. Dally, (2003) “Assessment of a Simple 2-D Steady State Model of the Flow Field Emerging from the Precessing Jet Nozzle”, <i>5th International Congress on Industrial and Applied Mathematics, EMAC Proceedings</i> , editors R.L. May and W.F. Blyth, 7-11 July, Sydney, Australia.                             | 6 | 20 |
| E.J. Smith, G.J. Nathan, and B.B. Dally, (2003) “Assessment of the Robustness of the K-Epsilon Model to Variations in Turbulence Constants for Simulation of Increased Jet Spreading”, <i>5th International Congress on Industrial and Applied Mathematics, EMAC Proceedings</i> , editors R.L. May and W.F. Blyth, 7-11 July, Sydney, Australia. | 6 | 20 |
| E.J. Smith, G.J. Nathan, and B.B. Dally, (2003) “Range Of Validity Of A Modified K-Epsilon Model Of The Non-Reacting Flow From A Precessing Jet Nozzle”, <i>Third International Conference on CFD in the Minerals and Process Industries</i> , CSIRO, 10-12 December, Melbourne, Australia  | 6 | 20 |
| B.B. Dally, A.N. Karpetis, R.S. Barlow, ‘Structure of Jet Laminar Nonpremixed Flames under Diluted Hot Coflow Conditions’, <i>2002 Australian Symposium on Combustion and The Seventh Australian Flame Days</i> , January 2002, Adelaide, Australia.  | 4 | 80 |
| S. Afsharvahid, P.V. Lanspeary, B.B. Dally, and F. Christo, ‘On The Design Of   | 4 | 20 |

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| An Ultra Lean Porous Burner', 2002 <i>Australian Symposium on Combustion and The Seventh Australian Flame Days</i> , January 2002, Adelaide, Australia.  |    |     |
| <b>Invited Conference Papers (2)</b>   |    |     |
| * <u>BB.Dally</u> , (2005), "On the Transition to MILD Combustion: Experimental and Computational Study", <b>Invited Lecture</b> , Flameless Combustion Workshop, Lund, Sweden, 19-21, June 2005   | 16 | 100 |
| G.J. Nathan, and <u>B.B. Dally</u> , (2003), "Challenges and Progress in the Modelling of Heat Transfer and NO <sub>x</sub> Emissions from Rotary Kiln Flames Involving Unsteady Flows", Lead Session <b>Invited Lecture</b> , <i>Third International Conference on CFD in the Minerals and Process Industries</i> , CSIRO, Melbourne, Australia, 10-12 December 2003. | 10 | 40  |