

TJ McCarthy - Academic Publications 2011-1983 (See also 34 Other contributions and Commissioned Publications)

	Ref #	Year of Publication	Reference details
C	66	2011	<i>Taut-slack Algorithm for Analyzing the Geometric Nonlinearity of Cable Structures</i> , Wang, Z, McCarthy TJ and Sheikh MN, <i>Proceedings of the Twenty-first (2011) International Offshore and Polar Engineering Conference, Maui, Hawaii, USA, June 19-24, 2011, pp 188-194 Publ International Society of Offshore and Polar Engineers (ISOPE)</i>
C	65	2011	<i>Observing cultural interactions in engineering design</i> , Goldfinch, T, Layton, C, Gardner, A, Thomas G, Henderson, A and McCarthy TJ <i>Proceedings of the 22nd Annual Conference for the Australasian Association for Engineering Education 5-7 December 2011, Fremantle - Western Australia, Paper 184</i>
C	64	2011	<i>Adaptive Tutorials to Target Threshold Concepts in Mechanics — A Community Of Practice Approach</i> , Gangadhara B. Prusty, Carol Russell, Robin Ford, Dror Ben-Naim, Shaowei Ho, Zora Vrcelj, Nadine Marcus, Timothy McCarthy, Thomas Goldfinch, Roberto Ojeda, Anne Gardner, Tom Molyneaux, Roger Hadgraft <i>Proceedings of the 22nd Annual Conference for the Australasian Association for Engineering Education 5-7 December 2011, Fremantle - Western Australia, Paper 305</i>
C	63	2010	<i>Teaching the concept of free body diagrams</i> . McCarthy, T. J. & Goldfinch, T. (2010). In A. Gardner & L. Jolly (Eds.), <i>The 21st Annual Conference for the Australasian Association for Engineering Education</i> , Sydney 5-8 Dec 2010 (pp. 454-460). Australasian Association for Engineering Education.
C	62	2010	<i>Encouraging cultural awareness in engineering students</i> . Goldfinch, T., Layton, C. & McCarthy, T. (2010). <i>The 21st Annual Conference for the Australasian Association for Engineering Education</i> , Sydney 5-8 Dec 2010 (pp. 602-607). Australasian Association for Engineering Education.
C	61	2010	<i>A tool for online mechanics learning resource sharing</i> . Goldfinch, T., Gardner, A., McCarthy, T., Henderson, A., Thomas, G. & Carew, A. L. (2010). <i>Proceedings of the 21st Annual Conference for the Australasian Association for Engineering Education</i> (pp. 448-607). Sydney, N.S.W: Dec 5-8, 2010
J	60	2010	<i>'Yield Curvature for Seismic Design of Circular Reinforced Concrete Columns'</i> MD Sheikh. TJ McCarthy, <i>Magazine of Concrete research</i> , Vol 62 No 10 pp 741-748 2010
J	59	2010	<i>'Rational Revalidation'</i> H Aleem, Tim McCarthy, R Edwards <i>Journal of Validation Technology</i> Spring 2010 Vol 16 No2 ISSN: 1079-6630
J	58	2010	<i>'Study on bond and anti-abrasion performance of repairing mortar for hydraulic concrete'</i> , Chao-Hua JIANG, Tim McCarthy, Da CHEN, Qing-qing Dong, <i>Journal of Key Engineering Materials</i> Vol 426-427 pp 403-408 2010 doi:10.4028/www.scientific.net/KEM.426-427
J	57	2010	<i>'Influence of basalt fiber on performance of cement mortar'</i> Chao-Hua JIANG, Tim McCarthy, Da CHEN, Qing-qing Dong, <i>Journal of Key Engineering Materials</i> Vol 426-427 pp93-96 2010 doi:10.4028/www.scientific.net/KEM.426-427
C	56	2009	<i>A Particle Swarm Optimisation Approach to Reinforced Concrete Beam Design according to AS3600</i> , TJ McCarthy and S McCluskey, Paper 92 <i>Proceedings First International Conference on Soft Computing Technology in Civil, Structural and Environmental Engineering Madeira, Sept Civil Comp Press Topping, B and Tsompanakis Y (Eds) 2009</i> ,
C	55	2009	<i>'Improving Sustainability of Concrete'</i> , Bruce H Standen and Timothy J McCarthy, <i>Concrete</i> 2009, 17 th -19 th September 2009, Luna Park, Sydney 24th Biennial Conference of the Concrete Institute of Australia (pp. 1-10). Sydney, Australia: Concrete Institute of Australia.
C	54	2009	<i>'A Knowledge Framework for Engineering Education Research'</i> T Goldfinch, A L Carew, T J McCarthy, <i>Research in Engineering Education Symposium</i> , 20-23 July 2009, Cairns QLD.
C	53	2008	<i>'A Cross-institutional Comparison of Mechanics Examination: A guide for the curious'</i> T Goldfinch, A L Carew, A Gardner, TJ McCarthy A Henderson, G Thomas, 19 th Annual Conference of Australasian Association for Engineering Education AAEE2008 Yeppoon December 8-10, 2008
C	52	2008	<i>'Improving Learning in Engineering Mechanics: The Significance of Understanding'</i> T Goldfinch AL Carew, TJ McCarthy, 19 th Annual Conference of Australasian Association for Engineering Education AAEE2008 Yeppoon December 8-10, 2008
C	51	2008	<i>'Influence of Joint Stiffness on the Free Vibrations of a Marine Riser Conveying Fluid'</i> , S Kaewunruen, T McCarthy, J Leklong, S Chucheeprakul, <i>Proceedings of the Eighth (2008) ISOPE Pacific/Asia Offshore Mechanics Symposium Bangkok, Thailand, November 10-14, 2008, pp113-120 ISBN 978-1-880653-52-4</i>

C	50	2008	<i>'Yield Curvature for the Design of Normal- and High- Strength Circular Reinforced Concrete Columns'</i> NM Sheikh, HH Tsang and TJ McCarthy Paper 129 9 th International Conference on Computational Structures Technology, Athens Greece, September 2-5 2008, CivilComp Press
C	49	2008	<i>'Encapsulating sustainability principles for structural design of buildings'</i> TJ McCarthy, NM Sheikh, A Gardner, Paper 383 25 th International Conference on Passive and Low Energy Architecture, PLEA2008, October 22-24, Dublin
C	48	2008	<i>'Sustainable Structural Design: Conceptual Design of Adaptable Commercial Buildings' Australian'</i> E Kelly and T J McCarthy, Paper 61 ASEC2008, Melbourne June 2008
C	47	2007	Sheikh, M. N., Legeron, F., Tsang, H. H., Lam, N. & McCarthy, T. J. (2007). Earthquake engineering for transportation network in low to moderate seismicity regions. In N. Lam, J. Wilson, G. Gibson & S. Anderson (Eds.), <i>Earthquake Engineering in Australia (AEES 2007)</i> (pp. 1-7). Australia: Australian Earthquake Engineering Society.
C	46	2007	Goldfinch, T. L., Carew, A. L., Cook, C. D., Olivares, P., Cooper, P., McCarthy, T. J. & Nightingale, S. A. (2007). Initiating curriculum review: The Chilean experience. In H. Søndergaard & R. Hadgraft (Eds.), <i>Proceedings of the 18th Conference of the Australasian Association for Engineering Education</i> (pp. 1-8). Melbourne Vic. 3010, Australia.: Department of Computer Science and Software Engineering, The University of Melbourne.
C	45	2007	<i>'Truss topology optimisation using genetic algorithms'</i> TJ McCarthy and A Fenwick Paper AI.9, 9 th Int Conf Applications of Artificial Intelligence in Civil, Structural and Environmental Engineering, BHV Topping (Ed) Malta, 18-21 Sept 2007, ISBN 978-1-905088-20-1
C	44	2006	<i>'Providing a Context for First Year Engineering Students: A report on attempts at course inversion'</i> R A Dwight, T J McCarthy, A Carew and B Ferry, Paper 27 17 th Annual Conference of Australasian Association for Engineering Education, Auckland, New Zealand, Dec 10-13 2006 Editors: Gerard Rowe and Gillian Reid, Published in New Zealand by: School of Engineering, Auckland University of Technology, Auckland, New Zealand. ISBN 978-0-473-11881-5
C	43	2006	<i>'Fitness Evaluation for Structural Optimisation Genetic Algorithms Using Neural Networks'</i> K. Ward and T.J. McCarthy, 5 th International Conference on Engineering Computational Technology, Las Palmas, Spain, 12-15 Sept 2006, Paper 51, 11 pages B. H. V. Topping, and Montero, G. and Montenegro, R Eds, Publ Civil Comp Press, Stirling, 2006
C	42	2004	<i>'Excel spreadsheets for design of steel beams with multiple web openings'</i> (T J McCarthy, R Schneider, N Cunliffe and C Barnshaw) Paper 158 Computational Structures Technology Conference, Lisbon, 7-9 Sept 2004, B. H. V. Topping and C. A. Mota Soares Eds, Publ Civil Comp Press, Stirling, 2004
C	41	2004	<i>'The Management of City Centre Parking Traffic: Drivers' Information Needs and the Effectiveness of Parking Guidance and Information Systems'</i> Paper TEM05(i) European Transport Conference, 4 - 6 October in Strasbourg, France. D J Ling and I Tsopelas and TJ McCarthy
C	40	2004	<i>Evolutionary Design of Marine Riser Systems</i> , 23 rd International Conference on Offshore Mechanics and Arctic Engineering, Paper OMAE2004-51415, June 20-25 2004, Vancouver, Canada N Cunliffe, TJ McCarthy, A Trim and C Baxter
J	39	2003	<i>'Optimisation of tapered stress joints for offshore catenary risers'</i> (N Cunliffe, TJ McCarthy and AD Trim) The Structural Engineer, Vol 81, No 20, pp 35-40
C	38	2003	<i>'Application of Genetic Algorithms for the Automated Design of Offshore Riser Systems'</i> N Cunliffe and T J McCarthy Proc 7 th Int. Conf. on the Application of Artificial Intelligence to Civil and Structural Engineering, Egmond aan Zee, The Netherlands 2-4 September 2003 (BHV Topping Ed) Paper 35, Civil Comp Press, 11 pages
J	37	2003	<i>'Reinterpreting validation'</i> S Lord, TJ McCarthy, H Aleem, Y Zhao, PN Sharratt, Proc of Inst Mech Engrs , Journal of Process Mechanical Engineering, Vol 217 Part E, pp 287-293
J	36	2003	<i>'An Information Based Approach to Validation'</i> H Aleem, S Lord, T McCarthy, P Sharratt and Y Zhao Pharmaceutical Engineering, Volume 23 No. 4 July/August 2003
J	35	2003	<i>'Pharmaceutical Process Validation: An Overview'</i> H.Aleem, Y. Zhao, S.V.Lord, T.J.McCarthy and P N Sharratt Proc of Inst Mech Engrs , Journal of Process Mechanical Engineering, Vol 217 Part E, pp 141-151
C	34	2002	<i>'Information Modelling for Validation in GMP'</i> S.V.Lord, Y.Zhao, T.J.McCarthy, P.N.Sharratt 9th ISPE International Conference on Concurrent Engineering Conference, Cranfield, 27 th -31 st July 2002
C	33	2002	<i>'Process Modelling of Validation and product lifecycles'</i> S.V.Lord, H.Aleem, T.J.McCarthy and P N Sharratt 8 th European Conference of Product and Process Modelling, Portoroz, Slovenia, Sept 9-

			11 2002
Chap	32	2002	'Knowledge based systems in structural steelwork design - A review' TJ McCarthy in Engineering Computational Technology Edited by: B.H.V. Topping and Z. Bittnar Saxe-Coburg Publications: pp 53-74, 2002: ISBN 1-874672-17-2
J	31a	2002	'Creating a Car Park Search Engine for Manchester's Drivers'. Tsopelas I, Ling D.J. and McCarthy T. J. Traffic Engineering and Control, 43(5), 180-182.
J	31	2002	'Car park search engine' I Tsopelas DJ Ling and TJ McCarthy Journal of Traffic Engineering and Control, May 2002, pp 352-354
C	30	2002	'Maximize the Benefits of the Health and Safety File' HA Nour and T J McCarthy 2 nd Int Conference of Postgraduate Research in the Built and Human Environment, Salford 11-12 April 2002 , pp 650-660
C	29	2001	'Driver attitudes to the Parking Guidance Information System in Manchester' I Tsopelas D J Ling and TJ McCarthy, Volume 1 UTSG 33 rd Annual Conference, Oxford 3-5 Jan 2001.
C	28	2000	'Knowledge management in the designer/constructor interface' (with Kahn HJ, Elhag TMS, Williams AR, Milburn R, Patel MB, Morris, PWGM) in Computing in Civil and Building Engineering Volume 2, Fruchter R et al Eds, Publ. ASCE 2000 pp 836-843 ISBN 0-7844-0513-1
C	27	2000	'The role of IT in capturing and managing knowledge for organisational learning on construction projects' (with Patel MB, and Morris PWG, the Conference on Construction Information Technology, Reykjavik, Iceland June 28-30 2000.
J	26	1999	'AutoCAD2000 Productivity Study' (with R Shepherd) Engineering Designer, Journal of the Institution of Engineering Designers, Vol 25 No 6 pp 4-7 ISSN 0013-7858
C	25	1999	'A World Wide Web Based Crane Information System for Structural Designers', (with D Ruikar) in Artificial Intelligence Applications in Civil & Structural Engineering, Kumar, B and Topping B (Eds), CivilComp Press pp 23-29 ISBN0948749644
B	24	1999	'AutoCAD Express NT', Springer Verlag, London 1999 (ISBN 3540761551) 293 pages
J	23	1998	'Teaching Engineering Drawing through CAD' Habitat, No 6 pp 26-30 (ISSN 1362-5020)
C	22	1997	'Structural Design for Safety in a Computer integrated system' (with AS Khalil and ID Jones) in Computing in Civil Engineering, Adams, T (Ed), ASCE pp527-534, (ISBN 0-7844-0250-7)
C	21	1997	'A decision support system for construction led design' (with KO Yusuf, NJ Smith and W Tizani) in Proceedings of 4 th Congress on Computing in Civil Engineering, Adams, T (Ed), ASCE pp183-198, (ISBN 0-7844-0250-7)
C	20	1997	'Simulation of Steel Fabrication using JAVA' (with CH Ong) in Innovation in Civil & Construction Engineering, Leeming, MB and Topping (Eds) Civil Comp Press pp 281-286
C	19	1996	'Holistic Design in a Computer integrated construction environment' (with AS Khalil) in Knowledge-Based Systems in Structural Engineering - Current Developments and Future Trends, Anumba C. J. (Ed.), Institution of Structural Engineers, London, 1996
J	18	1996	'Object oriented fabrication cost model for the economic appraisal of tubular truss design' (with Tizani, WMK, Nethercot, DA, Davies, G, Smith, NJ) Advances in Engineering Software, Vol 27, No 1-2 pp 11-20, 1996
J	17	1996	'Incorporation of WWW Resources in Undergraduate Courses, Snapshots of Innovation, UMIST pp 40-43.
C	16	1995	'User interface for integrated design system' (with K O Yusuf and W M K Tizani), in Developments in Computer Aided Design and Modelling for Structural Engineering, Topping B (Ed), Civil Comp Press, pp 229-235
C	15	1995	'Learning through Computer Assisted Design and Detailing of Reinforced Concrete Beams' (with N Zygouris and M R Lamb), in Developments in Artificial Intelligence for Civil & Structural Engineering, Topping, B (Ed), Civil Comp Press, pp 247-253
J	14	1994	'A construction-led design process for tubular trusses' (with W Tizani and G Davies), Int Journal of Design Studies, Vol 15, No 3, pp 248-259
C	13	1994	'Cost modelling for the economic appraisal of tubular truss design' (with W Tizani et al), Artificial Intelligence and Object Oriented Approaches for Structural Engineering, Topping, BHV and Papadrakakis, M (Eds), Civil Comp Press, pp 59-67
C	12	1994	'Knowledge based design of Reinforced Concrete Structures' (with N Jain and J Attard), Artificial Intelligence and Object Oriented Approaches for Structural Engineering, Topping, BHV and Papadrakakis, M (Eds), Civil Comp Press, pp 43-46
C	11	1993	'A knowledge based approach to construction led structural design' (with W Tizani et al), in Informing Technologies for Construction, Civil Engineering and Transport, James A Powell and

			Roger Day (Eds), Publ SERC and Brunel University, London, 1993, pp 301-309
C	10	1993	'A knowledge based approach to the mitigation of the effects of construction delays' (with A Oztas and N J Smith), ARCOM 9th Annual Conference, Oxford 14-16 September 1993, pp 85-94.
C	9	1993	'Economic Appraisal of Tubular Truss Design' (with W Tizani et al), Fifth International Symposium on Tubular Structures, Nottingham 25-27 August 1993.
C	8	1993	'Knowledge based systems interface design: an object oriented approach' (with Z. Nouas), in Information Technology for Civil and Structural Engineers, B H V Topping and A I Khan (Eds) Proceedings of Third Int Conf on the Application of Artificial Intelligence to Civil and Structural Engineering, Edinburgh 17-19 August 1993, pp159-166.
C	7	1991	'A knowledge representation scheme for the design of hybrid structural steelwork connections' (with Z Nouas), Artificial Intelligence and Structural Engineering (Ed B V Topping) Civil Comp Press, Edinburgh, pp199-203.
J	6	1991	'Knowledge based system for steel fabrication' (with Z Nouas and A Muhammed), Structural Engineering Review, Vol 3, pp 255-264.
C	5	1989	'Spectral fitting procedures for double peaked wave spectra' Dock and Harbour Engineering Conference, KREC, Surathkal, India, 6-9 December, 1989.
C	4	1989	'An experimental expert system for the design of column base plates' (with Z Nouas) in Artificial Intelligence Techniques and Applications for Civil and Structural Engineers (Ed B.V Topping), Civil-Comp Press, Edinburgh, pp 217-220
C	3	1989	'An intercomparison of measured wave grouping parameters during a storm' Paper OTC5967, Offshore Technology Conference, Houston, Texas, 1-4 May, 1989. Vol 2 pp 99-106
Phd	2	1989	'Analysis of wave groups for the determination of low frequency drift forces on floating offshore structures' PhD thesis, Department of Civil Engineering, University College Cork.
MSc	1	1983	'Dynamic analysis of suspended T.L.P. tethers during installation' MSc thesis, Cranfield Institute of Technology, Bedford, UK.

Other contributions by T J McCarthy

#	Year	Nature of output
8	2003	Interactive Web based Flow charts for Steel Element Design to Eurocode 3 – Steel Construction Institute, Ascot, UK
7	2003	Mohr Circle – Web based CAL program with T Sims
6	2003	Shear – Web based CAL program with FS Abdul Rahman
5	2002	Limit Analysis Web Base CAL program with Student Seng Wee Pang
4	2002	Dynamic Equilibrium Web based CAL program with Student Jiten Davdra
3	2001	Member of Technical Editorial Board of SCI Publication P281 Design of Curved Steel, ISBN 1 85942 126 1
2	2000	UMIST -Plastic CAL Package with Tony Teo
1	2000	SSA- Web based CAL Software with UG Student Tony Teo

Commissioned Publications by T J McCarthy

No	Year of Publication	Reference Details
26	2004	'Learning resources for schools and colleges on Cold bending of Steel' – series of Powerpoint presentations - Barnshaws Steel Bending Group, Anchor Lane, Coseley, West Mids W14 9NE
25	2004	'Software for the design of Porthole beams' - Barnshaws Steel Bending Group, Anchor Lane, Coseley, West Mids W14 9NE
24	2002	'Porthole Beams' Publ Barnshaws Steel Bending Group, Anchor Lane, Coseley, West Mids W14 9NE
23	2002	'Porthole beams - Technical Information & Section Properties' Publ Barnshaws Steel Bending Group, Anchor Lane, Coseley, West Mids W14 9NE
22	1999	'AutoCAD Express NT', Springer Verlag, London 1999 (ISBN 3540761551) 293 pages
21	1994	'AutoCAD for Windows Express' Springer Verlag, London, Heidelberg and New York, 314 pages.
20	1993	'AutoCAD Tips - 7, Making curves' CAD/CAM, Vol 12, No 2, pp 73-77
19	1992	'Fired up' CAD User, Vol 5, No 3, pp 52-54
18	1992	'AutoCAD Tips - 6, Making libraries' CAD/CAM, Vol 11, No 11, pp 47-48
17	1992	'AutoCAD Express II, 2nd Edition' published by Springer Verlag, Heidelberg, 333 pages
16	1992	'AutoCAD Tips - 5, Icon menus' CAD/CAM, Vol 11, No 10, pp 53-54

15	1992	'AutoCAD Tips - 4, Successful slides and scripts' CAD/CAM, Vol 11, No 6, pp 49-50
14	1991	'ETEXT Text editor for AutoCAD' CAD/CAM, Vol 10, No 11, p14
13	1991	'AutoCAD Tips - 2, Easy text replacement with Release 11' CAD/CAM, Vol 10, No 10, p26
12	1991	'AutoCAD Tips - 1, Easier text editing' CAD/CAM, Vol 10, No 8, p22
11	1991	'A Complete AutoCAD Databook' book review, Int J Mech Engng Education
10	1991	'AutoCAD Express (Third-world edition)' published by The Narosa Publishing House, New Delhi, India.
9	1991	'AutoCAD Express (Revised reprint)' published by Springer Verlag, Heidelberg, 312 pages.
8	1991	'Fast-Track Rail Link' CAD User, Vol 4, No 1 CAD in Building Supplement, pp xxv-xxviii.
7	1991	'AutoCAD Firepower' CAD User, Vol 4 No 1, pp 22-24.
6	1990	'Put a BUG in your system - voice recognition technology' CAD User, Vol 3, No 10, pp 32-36.
5	1990	'AutoCAD Express' Book Published by Springer Verlag, Heidelberg, 312 pages.
4	1989	'CAD Standards', CAD User, Vol 2, No 8, pp 26-31.
3	1989	'AutoView' software review, CAD User, Vol 2, No 8, pp 37-41
2	1989	'ParaCAD: powerful new AutoCAD add-on' software review, CAD User, Vol 2, No 3, pp 53-57.
1	1988	'AutoCAD methods and Macros - Not for Beginners' Book Review for Flexible Manufacturing Systems Magazine, Vol 6, No 3.