

## Robert B. Mellor: Publication List (h-Index: Scholar = 24, Research gate = 31)

### Full double-reviewed scientific publications

1. Mellor, R.B., L. Bowden and J.M. Lord: Glycoproteins of the glyoxysomal matrix. FEBS Lett. 90, 275-278 (1978).
2. Mellor, R.B. and J.M. Lord: Incorporation of D (<sup>14</sup>C) galactose into organelle glycoprotein in castor bean endosperm. Planta, 141, 329-332 (1978).
3. Mellor, R.B. and J.M. Lord: Formation of lipid-linked mono- and oligosaccharides from GDP-mannose by castor bean endosperm homogenates. Planta, 146, 91-99 (1979).
4. Mellor, R.B. and J.M. Lord: Subcellular localization of mannosyltransferase and glycoprotein biosynthesis in castor bean endosperm. Planta, 146, 147-153 (1979)
5. Mellor, R.B., L.M. Roberts and J.M. Lord: Glycosylation of exogenous protein by endoplasmic reticulum membranes from castor bean endosperm. Biochem. J, 182, 629-631 (1979).
6. Mellor, R.B. and J.M. Lord: Involvement of a lipid-linked intermediate in the transfer of galactose from UDP (<sup>14</sup>C) galactose to exogenous protein in castor bean endosperm homogenates. Planta 147, 89-96 (1979).
7. Mellor, R.B.: Glycoprotein biosynthesis in castor bean endosperm. MPhil thesis, 126p. University of Bradford (1979).
8. Mellor, R.B., T. Krusius and J.M. Lord: Analysis of glycoconjugate saccharides in organelles isolated from castor bean endosperm. Plant Physiol., 65, 1073-1075 (1980).
9. Roberts, L.M., R.B. Mellor and J.M. Lord: Glycoprotein fucosyltransferase in the endoplasmic reticulum of castor bean endosperm cells. FEBS Lett., 113, 90-94 (1980).
10. Mellor, R.B., L.M. Roberts and J.M. Lord: N-acetyl glucosamine transfer reactions and glycoprotein biosynthesis in castor bean endosperm. J Exp. Bot., 31, 993-1003 (1980).
11. Mellor, R.B., G.M. Gadd, P. Rowell and W.D.P. Stewart: A phytohaemagglutinin from the *Azolla-Anabaena* symbiosis. Biochem. Biophys. Res. Commun., 99, 1348-1353 (1981).
12. Mellor, R.B., P. Rowell and W.D.P. Stewart: Non-random distribution of the lectin in the *Azolla-Anabaena* symbiosis. In; Lectins, Biology, Biochemistry and Clinical Biochemistry 2, ed. T.C. Bøg-Hansen, W. de Gruyter, Berlin. p105-112 (1982).
13. Mellor, R.B., S. Bassarab, W. Dittrich and D. Werner: EPS and LPS from Nod+Nif+ and Nod+Fix- *Rhizobium japonicum* and bacteroids. FEMS Microbiol.Lett., 19, 239-242 (1983).
14. Mellor, R.B., E. Mörschel and D. Werner: Legume root response to symbiotic infection: Enzymes of the peribacteroid space. Z. Naturforsch., 39, 123-125 (1984).
15. Bassarab, S., W. Dittrich, R.B. Mellor and D. Werner: Soybean root response to infection by *Rhizobium japonicum*: Saccharidases in root and nodule tissue. Physiol. Plant Pathol., 24, 9-16 (1984).
16. Mellor, R.B., W. Dittrich and D. Werner: Soybean root response to infection by *Rhizobium japonicum*: Mannoconjugate turnover in effective and ineffective nodules. Physiol. Plant Pathol., 24, 61-76 (1984).

17. Mellor, R.B., T.M.I.E. Christensen, S. Bassarab and D. Werner: Phospholipid transfer from the ER to the peribacteroid membrane in soybean nodules. *Z. Naturforsch.*, 40, 73-79 (1985).
18. Werner, D., E. Mörschel, R.B. Mellor and S. Bassarab: The host cell nucleus orientated lysis of bacteroids in an ineffective (Fix-) type of *Glycine max* nodule. *Planta* 162, 8-16 (1984).
19. Werner, D., T.M.I.E. Christensen, R.B. Mellor and E. Mörschel: Glycosyltransferases and the peribacteroid membrane in soybean nodules. In; Analysis of plant genes involved in the legume-Rhizobium interaction. OECD Paris. (1984).
20. Werner, D., R.B. Mellor, S. Bassarab and W. Dittrich: *Glycine max* root response to symbiotic infection. *Endocytobiology* 2, 585-586 (1985).
21. Mellor, R.B. and D. Werner: Glycoconjugate interactions in soybean root nodules. In; Lectins, Biology, Biochemistry and Clinical Biochemistry 4, ed, T.C. Bøgg-Hansen, W. de Gruyter, Berlin, p 267-276 (1985).
22. Werner, D., R.B. Mellor, M.G. Hahn and H. Grisebach: Soybean root response to symbiotic infection: Glyceollin accumulation in an ineffective type of nodule with an early loss of the peribacteroid membrane. *Z. Naturforsch.*, 40, 171-181 (1985).
23. Mellor, R.B., T.M.I.E. Christensen and D. Werner: Choline kinase II is present only in nodules that synthesize stable peribacteroid membranes. *Proc. Natl. Acad. Sci. USA* 83, 659-663 (1986).
24. Ostrowski, E.D., R.B. Mellor and D. Werner: Colloid gold induced density shift as a plasma membrane marker in symbiotic and non-symbiotic *Glycine max* root cells. *Physiol. Plant*, 66, 270-276 (1986).
25. Bassarab, S., R.B. Mellor and D. Werner: Initial studies on a novel lectin affinity method for the purification of plasma membrane from soybeans. In; Lectins, Biology, Biochemistry and Clinical Biochemistry 5, ed, T.C. Bøgg-Hansen, W de Gruyter, Berlin, p 565-572 (1986).
26. Bassarab, S., R.B. Mellor and D. Werner: Evidence for two types of Mg<sup>++</sup> ATPase in the peribacteroid membrane from *Glycine max* root nodules. *Endocyt. C. Res.* 3, 189-196, (1986).
27. Mellor, R.B. and D. Werner: The fractionation of *Glycine max* root nodule cells: A methodological overview. *Endocyt. C. Res.*, 3, 317-336 (1986).
28. Kinnback, A., R.B. Mellor and D. Werner: Alpha-mannosidase isoenzyme II in the peribacteroid space of *Glycine max* root nodules. *J Exp. Bot.*, 38, 1373-1377 (1987).
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30. Mellor, R.B., H. Thierfelder, G. Pausch and D. Werner: Occurance of choline kinase II in the cytoplasm of soybean root nodules infected with various strains of *Bradyrhizobium japonicum*. *J Plant Physiol.*, 128, 169-172 (1987).
31. Mellor, R.B. and D. Werner: Peribacteroid membrane biogenesis in mature legume root nodules. *Symbiosis*, 3, 75-100 (1987).
32. Werner, D., E. Mörschel, C. Garbers, S. Bassarab and R.B. Mellor: Particle density and protein composition of the peribacteroid membrane from soybean root nodules is affected by mutations in the microsymbiont *Bradyrhizobium japonicum*. *Planta*, 174, 263-270 (1988).

33. Garbers, C., R. Meckbach, R.B. Mellor and D. Werner: Protease (thermolysin) inhibition activity in the peribacteroid space of *Glycine max* root nodules. *J Plant Physiol.*, 132, 442-445 (1988).
34. Wolff, A., E. Mörschel, C. Zimmermann, M. Parniske, S. Bassarab, R.B. Mellor and D. Werner: Peribacteroid membrane stability and phytoalexin production in legume root nodules. In: *Physiological limitations and the genetic improvement of symbiotic nitrogen fixation*. ed, F. O'Gara, S. Manian and J.J. Devron. Kluwer, Dordrecht, p 65-74 (1988).
35. Mellor, R.B. and D. Werner: Legume nodule biochemistry and function. In, *Molecular Biology of Symbiotic Nitrogen Fixation*. ed, P.M. Gresshoff, CRC Press, Boca Raton. p 111-130 (1990).
36. Werner, D., S. Bassarab, C. Humbeck, R. Kape, A. Kinnback, R.B. Mellor, E. Mörschel, M. Parniske, G. Pausch, M. Röhm, S. Schenk, H. Thierfelder, M. Thynn, A. Wetzel, and A. Wolff: Nodule proteins and compartments. In; *Nitrogen Fixation, Hundred Years After*. eds H. Bothe, F. de Bruijn and W.E. Newton. Fischer, Stuttgart. p 507-516 (1988).
37. Mellor, R.B.: Distribution of trehalase in soybean root nodule cells: Implications for trehalose metabolism. *J Plant Physiol.*, 133, 173-177 (1988).
38. Mellor, R.B., C. Garbers and D. Werner: Peribacteroid membrane nodulin gene induction by *Bradyrhizobium japonicum* mutants. *Plant Molec. Biol.*, 12, 307-315 (1989).
39. Mellor, R.B.: Bacteroids in the Rhizobium-legume symbiosis inhabit a plant internal lytic compartment: Implications for other microbial endosymbioses. *J Exp. Bot.*, 40, 831-839 (1989).
40. Wyss, P., R.B. Mellor and A. Wiemken: Vesicular-arbuscular mycorrhizas of wildtype soybean and non-nodulating mutants with *Glomus mosseae* contain symbiosis-specific polypeptides (mycorrhizins), immunologically cross reactive with nodulins. *Planta*, 182, 22-26 (1990).
41. Wyss, P., R.B. Mellor and A. Wiemken: Mutants of soybean (*Glycine max*) unable to suppress nodulation in the presence of nitrate, retain the ability to suppress mycorrhization in the presence of phosphate. *J Plant Physiol.*, 136, 507-509 (1990).
42. Mellor, R.B.: Kontrollierter Proteinverdau an der Zelloberfläche. *BioTec* 6, 36-40 (1991). (in German)
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44. Mellor, R.B.: Is trehalose a symbiotic determinant in symbioses between higher plants and microorganisms? *Symbiosis*, 12, 113-129 (1992).
45. Mellor, R.B., J. Ronnenberg, W.H. Campbell and S. Diekmann: Reduction of nitrate and nitrite in water by immobilized enzymes. *Nature*, 355, 717-719 (1992).
46. Staehelin, C., J. Müller, R.B. Mellor, A. Wiemken and T. Boller: Chitinase and peroxidase in effective (Fix<sup>+</sup>) and ineffective (Fix<sup>-</sup>) soybean nodules. *Planta* 187, 295-300 (1992).
47. Müller, J., C. Staehelin, R.B. Mellor, T. Boller and A. Wiemken: Partial purification and characterization of trehalase from soybean nodules. *J Plant Physiol.*, 140, 8-13 (1992).

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49. Meyer, A.D. and R.B. Mellor: Nod-active compounds in soya nodules. *J. Plant Physiol.*, 142, 57-60 (1993).
50. Staehelin, C., J. Granado, J. Müller, A. Wiemken, R.B. Mellor, G. Felix, M. Regenass, W.J. Broughton, and T. Boller: Perception of *Rhizobium* nodulation factors by tomato cells and inactivation by root chitinases. *Proc. Natl. Acad. Sci. USA*, 91, 2196-2200 (1994).
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52. Staehelin, C., M. Schultze, E. Kondorosi, R.B. Mellor, T. Boller and A. Kondorosi: Structural modifications of *Rhizobium meliloti* nod-factors determining host specificity influence their stability against hydrolysis by chitinases. *Plant Journal*, 5, 319-330 (1994).
53. Müller, J., Z-P. Xie, C. Staehelin, R.B. Mellor, T. Boller and A. Wiemken: Trehalose and trehalase in root nodules from various legumes. *Physiol. Plant.*, 90, 86-92 (1994).
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57. Nørskov, A.M. and R.B. Mellor: Electron-transferring dyes in the nitrate reductase reaction; non-toxic alternatives to methyl viologen. *W J microbiol. biotechnol.*, 12, 273-274. (1996).
58. Allaria, P.P., A.M. Nørskov, D.B. Collinge, R.B. Mellor and A. Schubert: The growth and utilization of various *Sesbania* spp., fast-growing legume trees, in northern Italy and Denmark. (1997). *Jordbrug Forlag*, Copenhagen
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60. Mellor, R. B.: Sources and spread of innovation in small e-commerce companies. 158p. *Globe*, Copenhagen. (2005).
61. Mellor, R.B: *Achieving Enterprise: Teaching Entrepreneurship and Innovation in Business and Academia*. 145p. *Eul Verlag*, Köln (2006)
62. Mellor, R. B. The correlation between visits and product sales on three business-to-consumer Internet web sites. *KURIR*, 1, 17-30. (2006) [available at <http://kurir.kingston.ac.uk/mellor2005a.xml>]
63. Mellor, R. B. Receiving spam depends on provider, the occurrence of the e-mail address in hyper text and on the nature of the URL containing the email address. *KURIR*, 1, 31-39 (2006) [available at <http://kurir.kingston.ac.uk/mellor2005b.xml>]
64. McLean, J.E. & R. B. Mellor. The identification of XML-related skills gaps in the aerospace & defence industry in the West Focus region. *KURIR-2006-W1*

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65. Mellor, R.B. Innovation nuclei in small companies involved in Internet B2C ecommerce. PhD thesis. 167 pages (2006) [available on <http://kurir.kingston.ac.uk/mellor2007.pdf>]
  66. Mellor, R.B. The use of statistics in determining socio-legal policies in a UK government agency. *KURIR*, 7, 1-4 (2011). [available at <http://kurir.kingston.ac.uk/mellor2011.pdf>]
  67. Mellor, R.B. (2011): Knowledge Management and Information Systems Strategy for Growing Organizations. 170p. Palgrave, Basingstoke.
  68. Mellor, R.B. Knowledge Valley Theory explains the evolution of SMEs, in *Managing Services in the Knowledge Economy* (2011), Universidade Lusíada de Vila Nova de Famalicão, pp. 18-24. ISBN 9789896401030.
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  71. Mellor, R. B. (2015): Modelling the value of external networks for knowledge realisation, innovation, organisational development and efficiency in SMEs. *International Journal of Knowledge-Based Development*, 6 (1), 3-14.
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  74. Mellor, R.B. (2016): Big Data modelling of the knowledge economy. In: *TAKE 2016: Proceedings of the International Conference Theory and Application in the Knowledge Economy* (Aveiro, Portugal). pp 30-43. ISBN (print) 9789892068060.
  75. Will, M.G, Kfairy, M.A.I. and Mellor, R.B. (2017): Innovative behaviour, organizational structures and corporate performance, in: *Proceedings of the Academy of Management 11303*; doi:10.5465/AMBPP.2017.11303 (abstract)
  76. Al-kfairy, M. A.I., Khaddaj, S. and Mellor, R.B. (2017): Determination of the optimal topology of business clusters using computer modelling. In *12th European Conference on Innovation and Entrepreneurship ECIE 2017* [[https://www.dropbox.com/sh/i2f7yhp2n4rg2ze/AAB\\_epspXU4zoKFdhvo7F5Zla?dl=0&preview=ECIE+abstract+booklet.pdf](https://www.dropbox.com/sh/i2f7yhp2n4rg2ze/AAB_epspXU4zoKFdhvo7F5Zla?dl=0&preview=ECIE+abstract+booklet.pdf)]
  77. Al-kfairy, M.A.I, Khaddaj, S. and Mellor, R. B. (2017): Variables affecting High-Tech cluster innovation: A statistical approach. In: *7th International Conference on Law, Business, Marketing and Corporate Social Responsibilities*. [online] London: HEAIG. Available at: [http://heaig.org/images/proceedings\\_pdf/H12175121.pdf](http://heaig.org/images/proceedings_pdf/H12175121.pdf).
  78. Mellor, R.B. (2018): Big Data modelling the knowledge economy. *International Journal of Knowledge-Based Development*, 9 (3) 206–220.
  79. Will, M.G, Al-Kfairy, M. and Mellor, R.B. (2018): Computer modelling shows the effect of different organizational structures on corporate

- performance in positive and negative innovation environments. *Organization Science* (accepted).
80. Al-Kfairy, M., Khaddaj, S. and Mellor, R.B. (2018): Mjärdevi Science Park: Modelling differences in high-tech firms on-cluster and off-cluster. *Regional Studies* (submitted).
  81. Will, M.G. and Mellor, R.B. (2018): Differences in creating product innovations versus process innovations across European SMEs. *Research Policy* (submitted).
  82. Al-Kfairy, M., Khaddaj, S. and Mellor, R.B. (2018): Computer modelling shows the optimal development of the organisational structure for business clusters. *International Journal of Knowledge-Based Development* (submitted).
  83. Al-Kfairy, M., Khaddaj, S. and Mellor, R.B. (2018): Computer modelling shows that for young firms in a business cluster, networking has the largest effect on innovation output. *International Journal of Knowledge-Based Development* (submitted).
  84. Mellor, R.B., Al-Kfairy, M. and Will, M.G. (2018): Modelling innovative behaviour, organizational structures and corporate performance. *Academy of Management Annual Meeting Proceedings 2018(1):14204* · April 2018 DOI: 10.5465/AMBPP.2018.14204abstract
  85. Will, M.G., Al-Kfairy, M. and Mellor, R.B. (2018): Hierarchies, Polyarchies and Hybrids, Computer modelling how organizational structures determine economic performance in a risky environment. Discussion paper at the AOM 2018 Conference in Chicago (accepted).
  86. Al-Kfairy, M., Khaddaj, S and Mellor, R.B. (2018): A longitudinal study of corporate benefits accrued by firms inhabiting a mature science park. *Proceedings of the 19th European Conference on Knowledge Management*. P43-51. E-Book: 978-1-911218-95. Book: 978-1-911218-94-4
  87. Mellor, R.B. (2019): *Entrepreneurship*. In Mellor, R.B. (ed) *Management for Scientists*. Emerald

## Patents

88. Mellor, R.B., J. Ronnenberg and S. Diekmann (1992): Verfahren zur Wasserreinigung. Europäisches Patent Nr 91914767.8 (in German).
89. Mellor, R.B. and D.B. Collinge (1994): Fyldematerial til emballage og/eller udfyldnings og/eller isoleringsmateriale fra Sesbanias, nye "non-food" bælgplanter. Patent DK/0531/94. (in Danish).

## Textbooks (\* = Amazon.com top 10 bestselling computing book)

90. Mellor, R.B. (2001): *Innovation Management*. 94p. Globe, Copenhagen.
91. Mellor, R.B. (2002): *ASP - Learning by Example*. 119p. Franklin Beedle, Wilsonville \*
92. Mellor, R.B. (2002): *DHTML - Learning by Example*. 116p. Franklin Beedle, Wilsonville \*
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94. Mellor, R. B. (2003): *The Web Managers Handbook*. 295p. Globe, Copenhagen.

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96. Mellor, R.B. (2008): Entrepreneurship for Everyone. 242p. Sage, London.
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