

## CURRICULUM VITAE FOR THOMAS KIØRBOE

17 December, 2010

**Address:** Oceanography Section, National Institute for Aquatic Resources, Technical University of Denmark, Kavalergården 6, DK-2920 Charlottenlund, Denmark.  
Tel: +45 33963401; FAX: +45 33963434; email: [tk@aqu.dtu.dk](mailto:tk@aqu.dtu.dk)  
Web site: [http://www.dfu.dtu.dk/english/cv/hoek/Thomas\\_Kioerboe/cv.aspx](http://www.dfu.dtu.dk/english/cv/hoek/Thomas_Kioerboe/cv.aspx)

**Borne:** 130751

### Education:

- M.Sc. (Biology), University of Copenhagen, 1977
- Ph.D., University of Copenhagen, 1982
- Dr. Sc., University of Copenhagen, 1988

### Employments:

- 2008-present: Professor, National Institute of Aquatic Resources, Oceanography Section
- 2009-2010 Visiting Professor, MIT, Massachusetts, USA
- 2008-present: Head of The Ocean Ecology and Climate section at DTU-Aqua
- 2006-2010: Adjunct Professor at University of Southern Denmark
- 2005-2006: Sabbatical stay at CSIC, Barcelona
- 1994-2008: Professor at Danish Institute for Fisheries Research / National Institute for aquatic Resources (DTU-Aqua).
- 1983-1994: Research Scientist and from 1992 Senior Research scientist at Danish Institute for Fisheries Research
- 1990-1991: DANIDA advisor at Phuket Marine Biology Center, Thailand
- 1982-1983: Associate Professor, Institute of Life Science and Chemistry, Roskilde University Center
- 1979-1982: Research Scientist, Marine Biological Laboratory, University of Copenhagen
- 1979-1982: Teaching assistant, Institute of Life Science and Chemistry, Roskilde University Center
- 1978-1979: Various soft money positions, scholarships and teaching positions
- 1977-1978: Mandatory civil service
- 1973-1977: Student instructor at Institute of Biochemistry and

Zoological Laboratory, University of Copenhagen

### Teaching experience:

- 20 years of formal teaching at Universities, most of the time as external lecturer. Since 2008 teaching Oceanography at DTU
- Organizing and teaching post graduate courses, both nationally and internationally (Scandinavia, USA, Thailand, Spain, Tunisia) under the auspices of EU, Nordic authorities, DANIDA, or other bodies
- Supervision of Masters (20) and Ph.D. students (11) and post-docs (19).

### Research leadership:

In addition to leading my own research group I have continuously headed Research Council supported, multi-institutional Research programmes during the past 20+ years, and has participated in several major international projects, often as work package leader.

### Research Interests :

- Biological oceanography
- Small-scale biological-physical interactions in the plankton
- Behavioural ecology and physiology of plankton (copepods, fish larvae, phytoplankton)

### Cruise experience:

Participated or cruise leader on more than 20 sea-going cruises with Danish and foreign research vessels to the North Sea, Baltic Sea, Benguela Upwelling current, Andaman Sea, South Atlantic, North Pacific

### Community services:

Co-editor or member of the editorial board of the following international journals:

- Marine Ecology Progress Series (1988-2005)
- Limnology and Oceanography (2000-present)
- Journal of Plankton Research (1994-present)
- Scientia Marina (1993-present)
- Dana (1988-1996)
- Phuket Marine Biological Center Research Bulletin (1991 – present)

### Honors and Awards:

- Elected Fellow The Royal Danish Society of Science and Letters (since 1996)
- Elected Fellow The Danish Academy of Natural Sciences (since 1994)
- Elected Fellow of The Danish Academy for Technical Sciences (since 2009)
- Awarded Danish 'Researcher of the year' (2005)
- Listed as "[Highly Cited Author](#)" by ISI.
- Recipient of the [A.G. Huntsman award 2007](#)

**Refereed publications:**

(Web of Science, December 2010: H-index: 52; Total number of citations 7111)

1. **Kjørboe, T.**, 1978. Laboratory measurements of digestion rate in O-group flounder (*Platichthys flesus* L.) at two temperatures. *Ophelia* 17: 155-161.
2. **Kjørboe, T.**, 1978. Feeding rate in juvenile flounder (*Platichthys flesus*) in relation to prey density. *Kieler Meeresforsch.S.H.* 4: 275-281.
3. **Kjørboe, T.**, 1979. The distribution of benthic invertebrates in Holbæk Fjord (Denmark) in relation to environmental factors. *Ophelia* 18: 61-81.
4. **Kjørboe, T.**, 1980. Distribution and production of submerged macrophytes in Tipper Grund (Ringkøbing Fjord, Denmark), and the impact of waterfowl grazing. *J. Appl. Ecol.* 17: 675-687.
5. **Kjørboe, T.**, 1980. Production of *Ruppia cirrhosa* (petagne) grande in mixed beds in Ringkøbing Fjord (Denmark). *Aquat. Bot.* 9: 135-143.
6. **Kjørboe, T.**, F. Møhlenberg & O. Nøhr, 1980. Feeding, particle selection and carbon absorption in *Mytilus edulis* in different mixtures of algae and resuspended bottom material. *Ophelia* 19: 193-205.
7. **Kjørboe, T.**, F. Møhlenberg & O. Nøhr, 1981. Effect of suspended bottom material on growth and energetics in *Mytilus edulis*. *Mar. Biol.* 61: 283-288.
8. **Kjørboe, T.** & F. Møhlenberg, 1981. Particle selection in suspension-feeding bivalves. *Mar. Ecol. Prog. Ser.* 5: 291-296.
9. Møhlenberg, F. & **T. Kjørboe**, 1981. Growth and energetics in *Spisula subtruncata* (Da Costa) and the effect of suspended bottom material. *Ophelia* 20: 79-90.
10. **Kjørboe, T.**, E. Frantsen, C. Jensen & G. Sørensen, 1981. Effects of suspended sediment on the development and hatching of herring (*Clupea harengus*) eggs. *Estuar. Coast Shelf Sci.* 13: 107-111.
11. **Kjørboe, T.** & F. Møhlenberg, 1981. Dispersion of suspended material from an operating sand suction dredge in the Øresund (Denmark). *Vatten* 4.81: 303-309.
12. **Kjørboe, T.**, F. Møhlenberg & H. Nicolajsen, 1982. Grazing rate and gut clearance in the planktonic copepod *Centropages hamatus* (Lilljeborg) in relation to food concentration and temperature. *Ophelia* 21(2): 181-194.
13. **Kjørboe, T.**, F. Møhlenberg & H.U. Riisgård, 1983. Mercury levels in fish, invertebrates and sediment in a recently recorded polluted area (Nissum Broad, Western Limfjord, Denmark). *Mar. Pollut. Bull.* 14: 21-24.
14. Møhlenberg, F. & **T. Kjørboe**, 1983. Burrowing and avoidance behaviour in marine

- organisms exposed to pesticide-contaminated sediment. Mar. Pollut. Bull. 14: 57-60.
15. Nicolaisen, H., F. Møhlenberg & **T. Kiørboe**, 1983. Algal grazing by the planktonic copepods *Centropages hamatus* and *Pseudocalanus* sp.: Diurnal and seasonal variation during the spring phytoplankton bloom in the Øresund. Ophelia 22: 15-31.
  16. Jørgensen, C.B., **T. Kiørboe**, F. Møhlenberg & H.U. Riisgård, 1984. Ciliary and mucus-net filter feeding, with special reference to fluid mechanical characteristics. Mar. Ecol. Prog. Ser. 15: 283-292.
  17. **Kiørboe, T.**, P. Munk & J.G. Støttrup, 1985. First feeding of larval herring. DANA 5: 95-107.
  18. **Kiørboe, T.**, F. Møhlenberg & H.U. Riisgård, 1985. *In situ* feeding rates of planktonic copepods: A comparison of four methods. J. exp. mar. Biol. Ecol. 88: 67-81.
  19. Munk, P., **T. Kiørboe**, 1985. Feeding behaviour and swimming activity of larval herring (*Clupea harengus* L.) in relation to density of copepod nauplii. Mar. Ecol. Prog. Ser. 24: 15-21.
  20. Riisgård, H.U., **T. Kiørboe**, F. Møhlenberg, I. Drabæk & P.P. Madsen, 1985. Accumulation, elimination and chemical speciation of mercury in the bivalves *Mytilus edulis* and *Macoma Baltica*. Mar. Biol. 86: 55-62.
  21. **Kiørboe, T.**, F. Møhlenberg & K. Hamburger, 1985. Bioenergetics of the planktonic copepod *Acartia tonsa*: relation between feeding, egg production and respiration, and the composition of specific dynamic action. Mar. Ecol. Prog. Ser. 26: 85-95.
  22. **Kiørboe, T.** & P. Munk, 1986. Feeding and growth of larval herring, *Clupea harengus*, in relation to density of copepod nauplii. Env. Biol. Fish, 17: 133-139.
  23. **Kiørboe, T.** & K. Johansen, 1986. Studies of a herring larvae patch in the Aberdeen Bank area. III. Zooplankton distribution and productivity in relation to hydrographic features. Dana 6: 37-51.
  24. **Kiørboe, T.** & P. Tiselius, 1987. Gut clearance and pigment destruction in a herbivorous copepod, *Acartia tonsa*, and the determination of *in situ* grazing rates. J. Plank Res. 19: 525-534.
  25. **Kiørboe, T.** & F. Møhlenberg, 1987. Partitioning of oxygen consumption between "maintenance" and "growth" in developing herring *Clupea harengus* (L.) embryos. J. exp. mar. Biol. Ecol. 111: 99-108.
  26. **Kiørboe, T.**, P. Munk & K. Richardson, 1987. Respiration and growth of larval herring *Clupea harengus*: Relation between specific dynamic action and growth efficiency. Mar. Ecol. Prog. Ser. 40: 1-10.
  27. **Kiørboe, T.**, F. Møhlenberg & P. Tiselius, 1988. Propagation in marine planktonic

copepods: production and mortality of eggs. In: Boxshall, G.A. & H.K. Schminke (eds.): Biology of copepods, Kluwer Academic Publishers, Dordrecht, pp. 219-225.

28. **Kjørboe, T.**, P. Munk, K. Richardson, V. Christensen & H. Paulsen, 1988. Plankton dynamics and herring larval growth, drift and survival in a frontal area. *Mar. Ecol. Prog. Ser.* 44: 205-219.
29. Berggren, U., B. Hansen & **T. Kjørboe**, 1988. Food size spectra, ingestion and growth of the copepod *Acartia tonsa*: implications for the determination of copepod production. *Mar. Biol.* 99: 341-352.
30. Munk, P., **T. Kjørboe** & V. Christensen, 1989. Vertical migrations of larval herring, *Clupea harengus*, in relation to light and prey distribution. *Env. Biol. Fish.* 26: 87-96.
31. **Kjørboe, T.**, 1989. Phytoplankton growth rate and nitrogen content: Implications for feeding and fecundity in a herbivorous copepod. *Mar. Ecol. Prog. Ser.* 55: 229-234.
32. **Kjørboe, T.**, 1989. Growth in fish larvae: are they particularly efficient? *Rapp. p-v. Réun. Cons. int. Explor. Mer.* 191: 383-389.
33. **Kjørboe, T.**, H. Kaas, B. Kruse, F. Møhlenberg, P. Tiselius & G. Ærtebjerg, 1990. The structure of the pelagic food web in relation to water column structure in the Skagerrak. *Mar. Ecol. Prog. Ser.* 59: 19-32.
34. Heath, M.R., K. Richardson & **T. Kjørboe**, 1990. Optical assessment of phytoplankton nutrient depletion. *J. Plank. Res.* 12: 381-396.
35. **Kjørboe, T.** & T.G. Nielsen, 1990. Effects of wind stress on vertical water column structure, phytoplankton growth, and fecundity of planktonic copepods. In: Barnes, M. & R.N. Gibson (eds.): *Trophic relationships in the marine environment*, Aberdeen University Press, Aberdeen, pp. 28-40.
36. Nielsen, T.G., **T. Kjørboe** & P.K. Bjørnsen, 1990. Effects of a *Chrysochromulina polylepis* surface bloom on the plankton community. *Mar. Ecol. Prog. Ser.* 62: 21-35.
37. **Kjørboe, T.**, K.P. Andersen & H. Dam, 1990. Coagulation efficiency and aggregate formation in marine phytoplankton. *Mar. Biol.* 107: 235-245.
38. **Kjørboe, T.**, 1991: Pelagic fisheries and spatio-temporal variability in zooplankton productivity. *Bull. Plankton Soc. Japan, Spec. vol.* 229-249.
39. Nielsen, T.G. & **T. Kjørboe**, 1991. Effects of a storm event on the structure of the pelagic food web with special emphasis on planktonic ciliates. *J. Plank. Res.* 13: 35-51.
40. Peterson, W.T., P. Tiselius & **T. Kjørboe**, 1991. Copepod egg production, moulting and growth rates and secondary production in the Skagerrak in August 1988. *J. Plank. Res.* 13: 131-154.

41. Hay, S.J., **T. Kiørboe** & A. Matthews, 1991. Zooplankton biomass and production in the North Sea during the autumn circulation experiment, October 1987 - March 1988. *Cont. Shelf. Res.* 11: 1453-1476.
42. **Kiørboe, T.**, V. Janekarn, S. Pong-In & S. Sawangraruks, 1991. New Fisheries resources in the Andaman Shelf Sea. Indirect Oceanographical evidence. *Thai Fisheries Gazette* 44: 261-270.
43. **Kiørboe, T.**, Janekarn, V., Boonruang, P., Pong-In, S. & Sawangraruks, S., 1991. Proceedings of the first PMBC/DANIDA training course and workshop on marine fish larvae and plankton ecology. *Phuket Mar. Biol. Cent. Spec. Publ.* 8: 1-30.
44. Janekarn, V. & **T. Kiørboe**, 1991. Temporal and spatial distribution of fish larvae and their environmental biology in Phang-Nga Bay, Thailand. *Phuket mar. biol. Cent. Res. Bull.* 56: 23-40.
45. Janekarn, V. & **T. Kiørboe**, 1991. The distribution of fish larvae along the Andaman coast of Thailand. *Phuket mar. biol. Cent. Res. Bull.* 56: 41-61.
46. **Kiørboe, T.**, 1993. Turbulence, phytoplankton cell size and the structure of pelagic food webs. *Adv. Mar. Biol.* 29: 1-72
47. **Kiørboe, T.** & J.L.S. Hansen, 1993. Phytoplankton aggregate formation: observations of patterns and mechanisms of cell sticking and the significance of exopolymeric material. *J. Plank. Res.* 15: 993-1018.
48. **Kiørboe, T.** & T.G. Nielsen, 1994. Regulation of zooplankton biomass and production in a temperate, coastal ecosystem. I. Copepods. *Limnol. Oceanogr.*, 39: 493-507.
49. Nielsen, T.G. & **T. Kiørboe**, 1994. Regulation of zooplankton biomass and production in a temperate, coastal ecosystem. II. Ciliates. *Limnol. Oceanogr.*, 39: 508-519.
50. **Kiørboe, T.**, C. Lundsgaard, M. Olesen & J. Hansen, 1994. Aggregation and sedimentation processes during a spring phytoplankton bloom: A field experiment to test coagulation theory. *J. Mar. Res.* 52: 1-27.
51. Sabatini, M. & **T. Kiørboe**, 1994. Egg production, growth and development of the cyclopoid copepod *Oithona similis*. *J. Plankton Res.*, 16(10): 1329-1351.
52. **Kiørboe, T.** & M. Sabatini, 1994. Reproductive and life cycle strategies in egg-carrying cyclopoid and free-spawning calanoid copepods. *J. Plankton Res.*, 16(10): 1353-1366.
53. **Kiørboe, T.** & E. Saiz, 1995. Planktivorous feeding in calm and turbulent environments with emphasis on copepods. *Mar. Ecol. Prog. Ser.*, 122: 135-145.
54. Saiz, E. & **T. Kiørboe**, 1995. Suspension and predatory feeding of the copepod *Acartia tonsa* in turbulent environments. *Mar. Ecol. Prog. Ser.*, 122: 147-158.

55. **Kjørboe, T.** & M. Sabatini, 1995. The scaling of fecundity, growth and development in planktonic copepods. *Mar. Ecol. Prog. Ser.*, 120: 285-298.
56. Hansen, J., U. Timm & **T. Kjørboe**, 1995. Adaptive significance of phytoplankton stickiness with emphasis on the diatom *Skeletonema costatum*. *Mar. Biol.*, 123: 667-676.
57. MacKenzie, B.R. & **T. Kjørboe**, 1995. Encounter rates and swimming behaviour of pause-travel and cruise larval fish predators in calm and turbulent environments. *Limnol. Oceanogr.*, 40: 1278-1289.
58. Tiselius, P., B. Hansen, P. Jonsson, **T. Kjørboe**, T.G. Nielsen, S. Pientkowsky & E. Saiz, 1995. Can we use laboratory reared copepods for experiments? A comparison between a field and a laboratory population of *Acartia tonsa*. *ICES J. Mar. Sci.*, 52: 369-376.
59. **Kjørboe, T.** & B.R. MacKenzie, 1995. Turbulence-enhanced prey encounter rates in larval fish: effects of spatial scale, Larval behaviour and size. *J. Plankton Res.*, 16: 2319-2331.
60. **Kjørboe, T.**, 1996. Material Flux in the water column. In Jørgensen, B.B. and Rischardsen, K. (eds.) *Eutrophication in coastal marine Ecosystems*, Coastal and Estuarine Studies, American Geophysical Union, 52: 67-94.
61. Jónasdóttir, S.H. & **T. Kjørboe**, 1996. Copepod recruitment and food composition: do diatoms affect hatching success? *Mar. Biol.*, 125: 743-750
62. Mari, X. & **T. Kjørboe**, 1996. Abundance, size distribution and bacterial colonization of transparent exopolymeric particles (TEP) during spring in the Kattegat. *J. Plankton Res.* 18: 969-986.
63. Hansen, J.L.S., **T. Kjørboe** & A.L. Alldredge, 1996. Marine snow derived from abandoned larvacean houses: sinking rates, particle content and mechanisms of aggregate formation. *Mar. Ecol. Prog. Ser.*, 141: 205-215.
64. **Kjørboe, T.**, E. Saiz & M. Viitasalo, 1996. Prey switching in the planktonic copepod *Acartia tonsa*. *Mar. Ecol. Prog. Ser.*, 143: 65-75.
65. **Kjørboe, T.** J.L.S. Hansen, A.L. Allderdege, G.A. Jackson, U. Passow, H.G. Dam, D.T. Drapeau, A. Waite & C.M. Garcia, 1996. Sedimentation of phytoplankton during a spring bloom: rates and mechanisms. *J. Mar. Res.*, 54: 1123-1148.
66. **Kjørboe, T.**, 1997. Small-scale turbulence, marine snow formation, and planktivorous feeding. *In: Lecture Notes on Turbulence and Plankton. Scientia Marina*, 61(supl. 1):141-158.
67. Hansen, J.L.S. & **T. Kjørboe**, 1997. Quantifying interspecific coagulation efficiency of phytoplankton. *Mar. Ecol. Prog. Ser.*, 159:75-79.

68. Tiselius, P. & **T. Kiørboe**, 1998. Colonization of diatom aggregates by the dinoflagellate *Noctiluca scintillans*. *Limnol. Oceanogr.*, 43: 154-159.
69. **Kiørboe, T.**, P. Tiselius, B. Mitchell-Innes, J.L.S. Hansen, A.W. Visser & X. Mari, 1998. Intensive aggregate formation but low vertical flux during an upwelling induced diatom bloom. *Limnol. Oceanogr.*, 43:104-116.
70. **Kiørboe, T.**, 1998. Population regulation and role of mesozooplankton in shaping marine pelagic food webs. *Hydrobiologia*, **363**: 13-27.
71. **Kiørboe, T.** & J. Titelman, 1998. Feeding, prey selection and prey encounter mechanisms in the heterotrophic dinoflagellate *Noctiluca scintillans*. *J. Plankton Res.*, 20: 1615-1636
72. Jónasdóttir, S.H., **T. Kiørboe**, K.W. Tang, M. St. John, A.W. Visser, E. Saiz & H.G. Dam, 1998. The role of diatoms in copepod production: good, harmless or toxic? *Mar. Ecol. Prog. Ser.*, 172: 305-308.
73. Viitasalo, M., **T. Kiørboe**, J. Flinkman, L.W. Pedersen, & A.W. Visser, 1998. Predation vulnerability of planktonic copepods: consequences of predator foraging strategies and prey sensory abilities. *Mar. Ecol. Prog. Ser.*, 175: 129-142
74. **Kiørboe, T.** & A. W. Visser, 1999. Predator and prey perception in copepods due to hydromechanical signals. *Mar. Ecol. Prog. Ser.*, 179: 81-95
75. **Kiørboe, T.**, E. Saiz & A.W. Visser, 1999. Hydrodynamic signal perception in the copepod *Acartia tonsa*. *Mar. Ecol. Prog. Ser.*, 179: 97-111.
76. MacKenzie, B.R. & **T. Kiørboe**, 2000. Larval fish feeding in turbulence: a case for the downside. *Limnol. Oceanogr.*, 45: 1-10.
77. Svensen, C. & **T. Kiørboe**, 2000. Remote prey detection in *Oithona similis*: hydromechanical vs. chemical cues. *J. Plankton Res.*, 22: 1155-1166.
78. **Kiørboe, T.**, 2000. Colonisation of marine snow aggregates by invertebrate zooplankton: abundance, scaling, and possible role. *Limnol. Oceanogr.*, 45: 479-484.
79. **Kiørboe, T.**, H. Plough & U.H. Thygesen. 2001. Fluid motion and solute distribution around sinking aggregates. I. Small-scale fluxes and heterogeneity of nutrients in the pelagic environment. *Mar. Ecol. Prog. Ser.*, 211: 1-13.
80. **Kiørboe, T.** & U.H. Thygesen. 2001. Fluid motion and solute distribution around sinking aggregates. II. Implications for remote detection by colonizing zooplankters. *Mar. Ecol. Prog. Ser.*, 211: 15-25.
81. **Kiørboe, T.** 2001. Food webs and fish production in the North Sea. *Hist. Fil. Medd. Dan. Vid. Selsk.*, 82: 191-210.



82. Visser, A.W., H. Saito, E. Saiz & **T. Kiørboe**, 2001. Observations of copepod feeding and vertical distribution under natural turbulent conditions in the North Sea. *Mar. Biol.*, 138: 1011-1019.
83. **Kiørboe, T.**, 2001. Formation and fate of marine snow: small-scale processes with large-scale implications. *Scientia Marina*, 65 (Suppl 2): 57-71
84. **Kiørboe, T.** & G.A. Jackson, 2001. Marine snow, organic solute plumes, and optimal chemosensory behavior of bacteria. *Limnol. Oceanogr.*, 46: 1309-1318
85. Saito, H. & **T. Kiørboe**, 2001. Feeding rates in the chaetognath *Sagitta elegans*: effects of prey size, prey swimming behaviour and small-scale turbulence. *J. Plankton Res.*, 23: 1385-1398.
86. Thygesen, U.H. & **T. Kiørboe**, 2002. A Matlab environment for analysis of fluid flow and transport around a translating sphere. *Marine Models Online*; 2: 35-56.
87. Hirst, A. G. & **T. Kiørboe**, 2002. Mortality of marine planktonic copepods: global rates and patterns. *Mar. Ecol. Prog. Ser.*, 230: 195-209.
88. Gram, L., H.-P. Grossart, A. Schlingloff & **T. Kiørboe**. 2002. Quorum sensing in marine snow bacteria? –production of acylated homoserine lactones by *Roseobacter* strains isolated from marine snow. *Appl. Environ. Microbiol.*, 68: 4111-4116.
89. **Kiørboe, T.**, H.-P. Grossart, H. Ploug & K. Tang, 2002. Bacterial colonization of sinking aggregates: mechanisms and rates. *Appl. Environ. Microbiol.*, 68: 3996-4006.
90. Titelman, J. & **T. Kiørboe**, 2003. Motility of copepod nauplii and implications for food encounter. *Mar. Ecol. Prog. Ser.*, 247: 123-135.
91. Titelman, J. & **T. Kiørboe**, 2003. Predator avoidance by nauplii. *Mar. Ecol. Prog. Ser.*, 247: 137-149.
92. Green, S., A.W. Visser, J. Titelman & **T. Kiørboe**, 2003. Escape responses of copepod nauplii in the flow field of the blue mussel, *Mytilus edulis*. *Mar. Biol.*, 142: 727-733.
93. **Kiørboe, T.**, K. Tang, H.-P. Grossart & H. Ploug, 2003. Dynamics of microbial communities on marine snow aggregates: colonization, growth, detachment and grazing mortality of attached bacteria. *Appl. Environ. Microbiol.* 69: 3036-3047
94. Grossart, H.-P., **T. Kiørboe**, K. Tang & H. Ploug. 2003. Bacterial Colonization of Particles: Growth and Inter-Specific Interactions. *Appl. Environ. Microbiol.* 69: 3500-3509
95. **Kiørboe, T.** 2003. Marine snow microbial communities: scaling of abundances with aggregate size. *Aquat. Microb. Ecol.* 33:67-75
96. **Kiørboe, T.** 2003. High turnover rates of copepod fecal pellets due to *Noctiluca*

- scintillans* grazing. Mar. Ecol. Prog. Ser. **258**: 181-188
97. Jackson, G.A., & **T. Kiørboe**. 2004. Finding a particle to eat by a chemosensitive zooplankton. Mar. Ecol. Prog. Ser., 269:153-162.
  98. **Kiørboe, T.**, H.-P. Grossart, H., Ploug, K., Tang, & B. Auer. 2004. Particle associated flagellates: swimming patterns, colonization rates, and grazing on attached bacteria. Aquat. Microb. Ecol. 35: 141-152
  99. Koski, M, **T. Kiørboe** and K. Takahashi (2005). Benthic life in the pelagic: aggregate encounter and degradation rates by harpacticoid copepods. Limnol. Oceanogr. 50:1254-1263
  100. Bagøien, E. and **T. Kiørboe** (2005). Blind dating – mate finding in planktonic copepods. I. Tracking the pheromone trail of *Centropages typicus*. Mar. Ecol. Prog. Ser. 300: 105-115
  101. **Kiørboe, T.**, E. Bagøien and U.H. Thygesen (2005). Blind dating – mate finding in planktonic copepods. II. The pheromone cloud of *Pseudocalanus elongatus*. Mar. Ecol. Prog. ser. 300: 117-128
  102. Bagøien, E. and **T. Kiørboe** (2005). Blind dating – mate finding in planktonic copepods. III. Hydromechanica communication in *Acartia tonsa*. Mar. Ecol. Prog. Ser. 300: 129-133
  103. **Kiørboe, T.** and E. Bagøien (2005). Motility patterns and mate encounter rates in planktonic copepods. Limnol. Oceanogr. 50: 1999-2007
  104. Poulsen, L. K. and **T. Kiørboe** (2005). Coprophagy and coprohexy in the copepods *Acartia tonsa* and *Temora longicornis*: clearance rates and feeding behavior. Mar. Ecol. Prog. Ser. 299: 217-227
  105. Hansson, L. J., O. Moeslund, **T. Kiørboe** and H. U. Riisgård (2005). Jellyfish clearance rates and potential predation impact on zooplankton and fish larvae in a neritic ecosystem (Limfjorden, Denmark). Mar. Ecol. Prog. 304: 117-131
  106. Grossart, H.P., **T. Kiørboe**, K. W. Tang, M. Allgaier, E. M. Yam and, H. Ploug (2006) Interactions between marine snow and heterotrophic bacteria: aggregate formation and microbial dynamics. Aquat. Microb. Ecol. 42: 19–26,
  107. Hanson, L.J. and **T. Kiørboe** (2006). Prey-specific encounter rates and handling efficiencies as causes of prey selectivity in ambush feeding hydromedusae. Limnol. Oceanogr. 51: 1849-1858
  108. Thygesen, U.H and **T. Kiørboe** (2006). The diffusive transport in a Stokeslet and its application to plankton ecology. J. Math Biol. 53: 1–14 (2006)
  109. **Kiørboe, T.** (2006). Sex, sex-ratios, and the dynamics of pelagic copepod

- populations. *Oecologia* 148:40-50
110. Poulsen, L. K. and **T. Kiørboe** (2006). Vertical flux and degradation rates of copepod fecal pellets in a zooplankton community dominated by small copepods. *Mar. Ecol. Prog. Ser.* 323: 195–204.
  111. Sommer, F, C. Agurto, P. Henriksen and **T. Kiørboe** (2006) Astaxanthin in the calanoid copepod *Calanus helgolandicus*: Dynamics of esterification and vertical distribution in the German Bight, North Sea. *Mar. Ecol. Prog. Ser.* 319: 167–173
  112. Visser, A.W and **T. Kiørboe** (2006). Plankton motility patterns and encounter rates. *Oecologia* 148: 538–546
  113. Tang, KW, Grossart, HP, Yam, EM, Jackson GA, Ducklow, HW, and **T. Kiørboe** (2006). Mesocosm study of particle dynamics and control of particle-associated bacteria by flagellate grazing. *Mar. Ecol. Prog. Ser.* 325: 15–27.
  114. Hansson, L.J. and **T. Kiørboe** (2006) Effects of large gut volume in gelatinous zooplankton: Ingestion rate, bolus production, and food patch utilization by the jellyfish *Sarsia tubulosa*. *J. Plankton Res.* 28: 1-6.
  115. Grossart, H-P, Tang, K, **Kiørboe, T** and Ploug, H (2007) Comparison of cell-specific activity between free-living and attached bacteria using isolates and natural assemblages. *FEMS Microbiol. Lett.* 266: 194-200
  116. **Kiørboe, T.** (2007) Mate finding, mating, and population dynamics in a planktonic copepod *Oithona davisae*: There are too few males. *Limnol. Oceanogr.* 52: 1511-1522.
  117. **Kiørboe, T.** (2007) The Sea Core Sampler: a simple water sampler that allows direct observations of undisturbed plankton *J. Plankton Res.* 29: 547-554.
  118. **Kiørboe, T.** (2008) Optimal swimming strategies in mate searching pelagic copepods. *Oecologia*, 155:179–192
  119. Jackson, G. A. J., **Kiørboe, T.** (2008) Maximum phytoplankton concentrations in the sea. *Limnol. Oceanogr.*, 53: 395–399.
  120. **Kiørboe, T.** and A. Hirst (2008) Optimal development time in marine copepods. *Mar. Ecol. Prog. Ser.*, 367: 15-23.
  121. Goetze, E. and **Kiørboe, T.** (2008) Heterospecific mating and species recognition in the planktonic marine copepods *Temora stylifera* and *T. longicornis*. *Mar Ecol. Prog. Ser.*, 370: 185-198
  122. Langlois, V., Andersen, A., Bohr, T., Visser, A. and **Kiørboe, T.** (2009) Significance of swimming and feeding currents for nutrient uptake in osmotrophic and interception feeding flagellates. *Aquat. Microbiol.*, 54: 35-44

123. Schultz, M. and **Kjørboe, T.** (2009). Active prey selection in two pelagic copepods feeding on potentially toxic and non-toxic dinoflagellates. *J. Plankton Res.*, 31: 553-561.
124. **Kjørboe, T.** (2009). A mechanistic approach to plankton ecology. Visualizing the invisible. ASLO Web Lecture Series. DOI. 10:4319/wl.2009.kiorboe.2
125. **Kjørboe, T.**, Andersen, A., Langlois, V., Jakobsen, H. H., and Bohr, T. (2009). Mechanisms and feasibility of prey capture in ambush feeding zooplankton. *Proc. Natl. Acad. Sci.*, 106: 12394-12399
126. Harris, P. R., Buckley, L.J., Campbell, R. G., Chiba, S., Costa, D. P., Dickey, T. D., Irigoien, X., **Kjørboe, T.**, Möllmann, C., Ohman, M. O., Runge, J. A., Saiz, E., and Wiebe, P. H. (2010). Dynamics of marine ecosystems: observations and experimentation. In: Barange, M., Field, J. G., Harris, R. P., Hofman, E. H., Perry, R. I., and Werner, F. *Marine Ecosystems and Global Change*, Oxford University Press, pp. 129-178.
127. **Kjørboe, T.**, Andersen, A. Langlois, V., and Jakobsen, H. H. (2010). Unsteady motion: Escape jumps in copepods, their kinematics and energetics. *J. Roy. Soc. Interface*, 7: 1591-1602, doi:10.1098/rsif.2010.0176
128. **Kjørboe, T.**, Jiang, H., and Colin, S. P. (2010). Danger of zooplankton feeding: The fluid signal generated by ambush feeding copepods. *Proc. Roy. Soc. B.*, 277:3229-3237, doi:10.1098/rspb.2010.0629
129. Lombard, F. and **Kjørboe, T.** (2010) Marine snow originating from appendicularian houses: age-dependent settling characteristics. *Deep-Sea Research Part I.* 57: 1304-1313.
130. Hirst, A. G., Bonnet, D., Conway, D. V. P., and **Kjørboe, T.** (2010) Does predation control adult sex ratios and longevities in marine pelagic copepods? *Limnol. Oceanogr.* 55: 2193–2206
131. Ceballos, S. and **Kjørboe, T.** (2010). First evidence of sexual selection by mate choice in marine zooplankton. *Oecologia* 164:627–635. DOI 10.1007/s00442-010-1755-5
132. **Kjørboe, T.** (2011). How zooplankton feed: Mechanisms, traits and tradeoffs. *Biol. Rev.*, *in press*. Doi:10.1111/j.1469-185X.2010.00148.x
133. Jiang, H. and **Kjørboe, T.** (2011). Propulsion efficiency and imposed flow fields of a copepod. *J. Exp. Biol.* In press.
134. Jiang, H. and **Kjørboe, T.** (2011). The fluid dynamics of swimming by jumps in copepods. *J. Roy. Soc. interface*, in press, doi:10.1098/rsif.2010.0481
135. **Kjørboe, T.** (2011). What makes pelagic copepods so successful? *J. Plankton Res.*, *in press*, 10.1093/plankt/fbq159

### Books:

**Kjørboe, T.** (2008) *A Mechanistic Approach to Plankton Ecology*. Princeton: Princeton University Press, 209 pp

