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Education

- 1971 Master in Oceanography, University of Aix-Marseille II
- 1974 PhD in Biological Oceanography, University of Aix-Marseille II
- 1982 Habilitation in Sciences, University of Aix-Marseille II

Present position

Emeritus Research Director, CNRS, Institute of Ecology and Environment

Past positions

- 2008-2013 Research Director CNRS, LIENSs, UMR 6250 CNRS-Univ. La Rochelle
- 2006-2007 Research Director CNRS, CRELA, UMR 6217 CNRS-Ifremer-Univ. La Rochelle
- 2005-2006 Research Director CNRS, UMR 10 CREMA L'Houmeau
- 1985 NATO Fellow, Stable Isotope Laboratory, Columbia University, South Carolina (USA)
- 1984-2004 Senior Research Scientist, CNRS, UMR 10 CNRS-Ifremer CREMA L'Houmeau
- 1979-1983 Research Scientist, CNRS, Station Marine d'Endoume (Marseilles)
- 1973-1978 Research Scientist, CNEXO, Station Marine d'Endoume (Marseilles)

Management activities

- 2011-2013 Director, LIENSs UMR 6250 CNRS-Univ. La Rochelle
- 2008-2013 Head of the Stable Isotope Facility of LIENSs
- 2008-2010 Deputy Director, LIENSs, UMR 6250 CNRS-Univ. La Rochelle
- 2006-2007 Deputy Director, CRELA, UMR 6217 CNRS-Ifremer-Univ. La Rochelle
- 2001-2005 Head of the scientific team "Benthic-pelagic coupling and coastal ecosystems functioning", UMR 10 CREMA L'Houmeau
- 1999-2000 Head of the scientific team "Benthic productivity and food webs at air-water-sediment interfaces in littoral areas", UMR 10 CREMA L'Houmeau
- 1996-2007 Head of the Stable Isotope Facility of the CREMA L'Houmeau

1989-1993 Head of a Research Group on Ecological Tracers, UMR 10 CREMA
L'Houmeau

Main scientific fields

1973-1982 Crustacean ecophysiology, osmoregulation, amino-acid and proteic metabolism,
1982-1985 Fish nutrition
1985-present Stable Isotope ecology : sources and fate of organic matter in coastal ecosystems, food web analysis, relationships between biodiversity and food web functioning, trophic ecology of high predators, biogeochemical fluxes, present and past land-sea interactions, anthropogenic impacts on coastal areas

Teaching

University of La Rochelle

Undergraduate students : General Ecology 1994-1995

Master students : Introduction to isotope ecology 2000-2009

University of Gdansk (Poland)

BALTDER courses "Stable Isotopes in Ecology" 2005

Seminars 1999, 2004, 2008

Alfred Wegener Institute, Sylt (Germany)

Summer school MARBEF 2007 : stable isotope ecology

University of Pusan (South Korea)

Seminars 2007 "Stable Isotope Ecology" and "On-going research on mudflat ecology"

Supervising experience

Graduate students

- 1985 C. Beaudru, University of Poitiers "Lipid variations in *Solea vulgaris* during vitellogenesis"
- 1991 L. Anras, University of Marseille II "Use of detrital organic matter by oysters"
- 2000 C. Fonseca, Ecole Polytechnique, "Photosynthetic behavior of microphytobenthos on intertidal mudflats"
- 2001 X. Fizzala, University of La Rochelle "Mullet grazing on microphytobenthos on the intertidal mudflats in Marennes-Oléron Bay"
- 2001 A. Carbonnière, University of Bordeaux I "Microphytobenthos photobiology"
- 2004 E. Treuil, University of La Rochelle "Use of sulfur isotopes to identify mussel food sources in Aiguillon Bay"
- 2004 H. Legrand, University of La Rochelle "Herbicide impact on microphytobenthos photosynthetic activity"
- 2005 B. Lebreton, University of La Rochelle "Mullet feeding in vegetated shores in Aiguillon Bay"
- 2006 M. Raimonet, University of La Rochelle "N isotope ratios as indicators of anthropogenic inputs from the Charente river"
- 2007 M. Monin, University of La Rochelle "Use of isotope ratios to define the trophic ecology of some marine birds of Seychelles Archipelago"
- 2007 V. Estrade, University of La Rochelle, "Isotope signature variations in small marine mammals"
- 2007 T. Chouvelon, University of La Rochelle "Stable isotope as indicators of the social structure in dolphin communities"
- 2009 C. André, University of La Rochelle "Trophic use of microbial compartments in bare and vegetated mudflats"

- 2009 L. Martinez, University of La Rochelle "Discrimination of trophic habitats of Mayotte dolphin communities by stable isotope ratios"

PhD theses

- 1991 M. Boulhic, University of Western Britany "Starvation indices in *Solea solea* larvae"
- 1995 P. Riera, University of Bordeaux I "Source and fate of organic matter in an estuarine and shellfish ecosystem : use of natural isotope tracing"
- 2000 F. Vouvé, University of Perpignan "Benthic nutrient regeneration in the intertidal mudflats of Marennes-Oléron Bay"
- 2003 A.-G. Haubois, University of La Rochelle "Trophodynamics between benthic diatoms and *Hydrobia ulvae* in an intertidal mudflat in Marennes-Oléron Bay"
- 2008 P.-Y. Pascal, University of La Rochelle "Trophic fate of bacteria in intertidal mudflats"
- 2009 B. Lebreton, University of La Rochelle "Food web structure and functioning in a seagrass bed : a multitracer approach"
- 2009 A. Jaeger, University of Paris 6 "An isotope study of seasonal and long-term variations of seabird trophic ecology of in the southern ocean"
- F. Pniewski, University of Gdansk / University of La Rochelle "Benthic diatom physiology : influence of environmental factors"

Post-docs fellows and invited scientists

- 1997 M. Laima, University of Aarhus (Denmark) "Nitrogen cycling in Marennes-Oléron Bay" (Poitou-Charentes Région grant, 3 months)
- 1998 M. Laima, University of Aarhus (Denmark) "Benthic regeneration in Marennes-Oléron Bay" (CNRS grant, 3 months)
- 1999 P.Y. Kim, University of Pusan (South Korea) "Isotope study of cockle food sources" (French Foreign Affairs grant), 6 months)
- 1999 M. Laima, University of Aarhus (Denmark) "Nitrogen cycling in the coastal zone : effect of the succession of emersion and immersion periods on nitrification" (CNRS grant, 6 months)
- 2000 M. Laima, University of Aarhus (Denmark) "Nitrogen cycling in the coastal zone : biogeochemical processes in fluff on intertidal mudflats" (CNRS grant, 3 months)
- 2000 D. Maksymowska, University of Gdansk (Poland) "Benthic regeneration in intertidal mudflats : nitrification processes" (French Foreign Affairs grant, 12 months)
- 2001 A. Sokolowski, University of Gdansk (Poland) "Role of benthic diatoms in organic matter and heavy metal transfers within food webs" (NATO grant, 12 months)
- 2002 B. Bogaczewicz-Adamczak, University of Gdansk (Poland) "Diatom taxonomic composition as indicator of environmental quality" (Région Poitou-Charentes grant, 6 months)
- 2002 M. Laima, University of Aarhus (Denmark) "Biogeochemical processes in intertidal biofilms" (CNRS grant, 3 months)
- 2003 M. Laima, University of Aarhus (Denmark) "Fluff evolution on intertidal mudflats : interaction between nutrients fluxes and biofilm growth" (Ifremer grant, 6 months)
- 2010 S. Kiyashko, Russian Academy of Science, Vladivostok (Russie) "Enregistrements sédimentaires des changements environnementaux dans la Baie de Marennes-Oléron" (Région Poitou-Charentes grant, 4 months)
- 2010 Y. Wang, Yantai Institute of Coastal Research, Academie des Sciences de Chine) : formation to isotope ecology and analysis of sedimentary records of the continental inouts in Bohai sea (NFSC grant, 3 months)

Participation in research projects

- 1983-1987 Biological Basis of Aquaculture (CNEXO) "Temperature and starvation effects on gross composition of *Solea solea*" (PI)
- 1987-1989 National Programme of Recruitment Determinism (Research Ministry) "Starvation indices in *Solea solea* larvae"
- 1990-1992 International Programme on Lake Baikal (James F. Byrnes International Foundation) "Present food web in lake Baikal"
- 1993-1995 GIS Marennes-Oléron (Ministry of Environment) "Role of detrital organic matter in the shellfish ecosystem of Marennes-Oléron Bay" (PI)
- 1991-1994 TROPHEE – FAR (EC programme) "Trophic capacity of an estuarine ecosystem. Determination of biological criteria for the management of cultivated populations of oysters and their socio-economic consequences"
- 1994-1996 National Research Programme of Wetlands (Ministry of Environment) "Saltmarsh inputs in the littoral zone of Marennes-Oléron Bay"
- 1995-1997 GIP Hydrosystems ((Ministry of Environment, Water Management Agencies) "Impact of continental waters on Marennes-Oléron food webs" (PI)
- 1996-1999 INTRMUD-MAST 3 (EC programme) "The geomorphological development of intertidal mudflats".
- 1995-1999 ROBUST (EC programme) "The role of buffering capacities in stabilizing coastal lagoon ecosystems".
- 1996-1997 French-Polish join action #76628 (Ministry of Foreign Affairs) "Sources and fate of organic matter in 2 estuarine bays : Marennes-Oléron Bay and Gdansk Bay" (PI)
- 1997-2002 POLONIUM programme (Ministry of Foreign Affairs) "Comparison of anthropogenic impacts on two littoral bays : Marennes-Oléron Bay and Gdansk Bay"
- 1998-2000 FEOGA (Region/EC programme) "Shellfish capacity in Aiguillon Bay : tracing food sources by stable isotope ratio analysis" (PI)
- 1999 CPER (Poitou-Charentes Region/Ministry of Research) "Microphytobenthos dynamics in a shellfish ecosystem"
- 2000-2006 CPER (Poitou-Charentes Region/Ministry of Research) "Impact of Charente river on the littoral zone"
- 2001-2004 Biscaye Gulf Challenge (Ifremer) "Anthropogenic impacts on the interactions environment/ressources"
- 2002-2005 PEVS (CNRS programme) "Pollutant (heavy metals and herbicides) impact on the mudflat ecosystem functioning" (PI)
- 2002-2005 REPER, Observatory of the Research on Environment (Ministry of Environment) "Food webs"
- 2004-2008 National Programme on Coastal Ecology, Atlantic Zone Project (Ifremer-CNRS) "Comparison of ecosystem functioning in lagoons and semi-enclosed bays " (Co-coord.)
- 2005-2009 Foodwebio (REX MARBEF RMP) "Food web functioning through ecosystems of diverse biodiversity levels"
- 2007-2010 VASIREMI (French National Research Agency) "Trophic significance of microbial biofilms in tidal flats"
- 2008-2010 LAGUNEX (French National Research Agency) "Fish trophic resources in Mediterranean lagoons"
- 2008-2011 DISCOBIOL (French National Research Agency) "Impact of fuel dispersal agent on biological activity"
- 2009-2010 POLONIUM programme (Ministry of Foreign Affairs) "Food web functioning in littoral bays"
- 2010-2011 MIMCOPOL programme (CNRS-NFS China) "Application of molecular and isotopic markers to track the pollution sources in coastal sediments" (PI)

Participation in academic juries

1985 : Ph.D. thesis H. Yagi (University of Aix-Marseille II)
1995 : Ph.D. thesis V. Créach (University of Rennes I) (reviewer)
1995 : Ph.D. thesis P. Riera (University of Bordeaux I)
2000 : Ph.D. thesis F. Vouvé (University of Perpignan)
2003 : Ph.D. thesis A.-G. Haubois (University of La Rochelle)
2003 : Ph.D. thesis M. A. Franco Nava (ENSA Rennes)
2004 : HDR J.-M. Guarini (University of La Rochelle)
2004 : Ph.D. thesis J. Rzeźnik-Orignac (University of La Rochelle – University of Gdańsk, Pologne) (reviewer)
2005 : Ph.D. thesis C. Struski (University of La Rochelle)
2005 : HDR P. Riera (University of Paris 6)
2005 : HDR N. Niquil-Zeller (University of La Rochelle)
2005 : PhD thesis J. Richard, (University of Genève - University of Western Brittany) (reviewer)
2005 : DES N. Mignot (University of Paris 6)
2005 : PhD thesis O. Herlory (University of La Rochelle)
2006 : PhD thesis E. Parlier (University of La Rochelle)
2006 : PhD thesis P. Decottignies (University of Nantes) (reviewer)
2007 : PhD thesis A. Carlier (University of Paris 6) (reviewer)
2007 : PhD thesis E.J. Choy (University of Busan, South Korea)
2008 : PhD thesis P.Y. Pascal (University of La Rochelle)
2008 : PhD thesis C. Golléty (University of Paris 6) (reviewer)
2009 : PhD thesis B. Lebreton (University of La Rochelle)
2010 : PhD thesis F. Pniewski (University of Gdansk, Poland)
2010 : PhD thesis A. Baeta (University of Coimbra, Portugal)
2010 : Habilitation A. Sokolowski (University of Gdansk, Poland) (reviewer)
2011 : Habilitation H. Asmus (Alfred Wegener Institute and University of Kiel, Germany) (reviewer)
2011 : PhD thesis T. Chouvelon (University of La Rochelle) (President)
2011 : PhD thesis C. Nérot (University of Western Brittany) (reviewer)
2012 : PhD thesis T. Gouriou (University of La Rochelle) (President)
2012 : PhD thesis S. Dubois (University of Bordeaux 1) (reviewer)
2012 : PhD thesis A. Bargain (University of Nantes) (reviewer)
2013 : PhD thesis C. Dromard (University of Antilles-Guyane) (reviewer)
2013 : PhD thesis C. Mabouklé (University of La Réunion) (reviewer)
2013 : PhD thesis F. Toublanc (University of La Rochelle)
2015 : PhD thesis J. Daeden (University of La Rochelle) (President)

Scientific production

Over 250 publications, including 116 articles in high ranking international journals, 8 articles in reviewed conference proceedings, 69 contributions in international conferences (3 as invited lectures)

2490 citations ; h-index = 26 ; g-index = 45

Publications in international peer-reviewed periodicals

1. **Richard P.**, 1977. Influence de la température sur les acides aminés libres de *Palaemon serratus* et *P. squilla*. *Biochem. System. Ecol.*, 5, 297-300.
2. **Richard P.**, 1978. Influence de la température sur la croissance et la mue de *Palaemon serratus*, en fonction de leur taille. *Aquaculture*, 14, 13-22.

3. **Richard P.**, 1978. Tolérance aux températures extrêmes de *Palaemon serratus* (Pennant) : influence de la taille et de l'acclimatation. *J. Exp. Mar. Biol. Ecol.*, 35, 137-146.
4. **Richard P.**, Van Wormhoudt A., Ceccaldi H.J., 1979. Variations circadiennes des acides aminés libres du muscle de *Penaeus kerathurus*. *Biochem. System. Ecol.*, 7, 65-67.
5. **Richard P.**, 1980. Le métabolisme amino-acide de *Palaemon serratus* : Variations des acides aminés libres du muscle et de l'hépatopancréas au cours du cycle de mue. *Comp. Biochem. Physiol.*, 67A, 553-560.
6. Vivarès C.P., Cuq J.-L., **Richard P.**, Ceccaldi H.J., 1980. Influence d'une microsporidiose sur les acides aminés libres de *Carcinus mediterraneus* Czerniavsky, 1884 soumis à diverses salinités et à des valeurs extrêmes de température. *J. Exp. Mar. Biol. Ecol.*, 43, 207-220.
7. Vivarès C.P., **Richard P.**, Ceccaldi H.J., 1980. Acides aminés de Microsporidies parasites de Crustacés Décapodes marins. *Biochem. System. Ecol.*, 8, 205-209.
8. Spaargaren D.H., **Richard P.**, Ceccaldi H.J., 1982. Excretion of nitrogenous products by *Penaeus japonicus* Bate in relation to environmental osmotic conditions. *Comp. Biochem. Physiol.*, 72A, 673-678.
9. Spaargaren D.H., **Richard P.**, H.J. Ceccaldi, 1982. The effects of temperature and salinity on phosphate levels in two euryhaline crustacean species. *Neth. J. Sea Res.*, 15, 284-292.
10. **Richard P.J.**, Albertini-Berhaut J., Ceccaldi H.J., 1982. Evolution of some digestive enzymes of the young *Mugil capito* at different stages of its growth. *Biochem. System. Ecol.*, 10, 185-189.
11. **Richard P.**, D.F. Williams, 1987. Utilisation des rapports isotopiques naturels dans l'étude des réseaux trophiques estuariens. *Océanis*, 13, 461-477.
12. Gouletquer Ph., Héral M., Bechemin C., **Richard P.**, 1989. Anomalies de calcification chez la palourde japonaise *Ruditapes philippinarum* : caractérisation et comparaison des compositions en acides aminés de différentes parties de la coquille analysées par HPLC. *Aquaculture*, 81, 169-183.
13. **Richard P.**, Bergeron J.-P., Boulhic M., Galois R., Person-Le Ruyet J., 1991. Effect of starvation on RNA, DNA and protein content of laboratory-reared larvae and juveniles of *Solea solea*. *Mar. Ecol. Prog. Ser.*, 72, 69-77.
14. Blanchard G.F., Guarini J.-M., **Richard P.**, Gros Ph., Mornet F., 1996. Quantifying the short-term temperature effect on light-saturated photosynthesis of intertidal microphytobenthos. *Mar. Ecol. Prog. Ser.*, 134, 309-313.
15. Galois R., **Richard P.**, Fricourt B., 1996. Seasonal variations in suspended particulate matter in the Marennes-Oléron Bay, France, using lipids as biomarkers. *Estuar. Coast. Shelf Sci.*, 43, 335-357.
16. Riera P., **Richard P.**, 1996. Isotopic determination of food sources of *Crassostrea gigas* along a trophic gradient in the estuarine Bay of Marennes-Oléron. *Estuar. Coast. Shelf Sci.*, 42, 347-360.
17. Riera P., **Richard P.**, Grémare A., Blanchard G., 1996. Food source of intertidal nematodes in the Bay of Marennes-Oléron (France), as determined by dual stable isotope analysis. *Mar. Ecol. Prog. Ser.*, 142, 303-309.
18. Blanchard G.F., Guarini J.-M., Gros Ph., **Richard P.**, 1997. Seasonal effect on the relationship between the photosynthetic capacity of intertidal microphytobenthos and temperature. *J. Phycol.*, 33, 723-728.
19. **Richard P.**, Riera P., Galois R., 1997. Temporal variations in the chemical and carbon isotope compositions of marine and terrestrial organic inputs in the Bay of Marennes-Oléron (France). *J. Coast. Res.*, 13, 879-889.

20. Riera P., **Richard P.**, 1997. Temporal variations of $\delta^{13}\text{C}$ of particulate organic matter and oysters (*Crassostrea gigas*) in Marennes-Oléron Bay (France): effect of freshwater inflow. *Mar. Ecol. Prog. Ser.*, 147, 105-115.
21. Guarini J.-M., Blanchard G. F., Bacher C., Gros Ph., Riera P., **Richard P.**, Gouleau D., Galois R., Prou J., Sauriau P.-G., 1998. Dynamics of spatial patterns of microphytobenthic biomass: inferences from a geostatistical analysis of two comprehensive surveys in Marennes-Oléron Bay (France). *Mar. Ecol. Prog. Ser.*, 166, 131-141
22. Kiyashko S.I., **Richard P.**, Chandler T., Kozlova T., Williams D.F., 1998. Stable carbon isotope ratios differentiate autotrophs supporting animal diversity in Lake Baikal = Discrimination isotopique des sources primaires du carbone soutenant la diversité animale du lac Baïkal. *C.R. Acad. Sci. Paris, Sci. Vie/Life Sci.*, 321, 509-516.
23. Kang C.K., Sauriau P.-G., **Richard P.**, Blanchard G.F., 1999. Food sources of an infaunal suspension-feeding bivalve *Cerastoderma edule* (L.) in a muddy sandflat of Marennes-Oléron Bay, as determined by analyses of carbon and nitrogen stable isotopes. *Mar. Ecol. Prog. Ser.*, 187, 147-158.
24. Laima M.J.C., Girard M.F., Vouvé F., Blanchard G.F., Gouleau D., Galois R., **Richard P.**, 1999. Distribution of adsorbed ammonium pools in two intertidal sedimentary structures, Marennes-Oléron Bay, France. *Mar. Ecol. Prog. Ser.*, 182, 29-35.
25. Laima M.J.C., Girard M.F., Vouvé F., **Richard P.**, Blanchard G.F., Gouleau D., 1999. Nitrification rates related to sedimentary structures in an Atlantic intertidal mudflat, Marennes-Oléron Bay, France. *Mar. Ecol. Prog. Ser.*, 191, 33-41.
26. Riera P., Stal L.J., Nieuwenhuize J., **Richard P.**, Blanchard G., Gentil F., 1999. Determination of food sources for benthic invertebrates in a salt marsh (Aiguillon Bay, France) by carbon and nitrogen stable isotopes: importance of locally produced sources. *Mar. Ecol. Prog. Ser.*, 187, 301-307.
27. Blanchard G.F., Guarini J.M., Provot L., **Richard P.**, Sauriau P.-G., 2000. Measurement of ingestion rate of *Hydrobia ulvae* : the effect of mud snail density. *J. Exp. Mar. Biol. Ecol.*, 255, 247-260.
28. **Richard P.**, Blanchard G., Gouletquer Ph., 2000. Mise en évidence par traçage isotopique naturel de ressources trophiques des moules dans la Baie de l'Aiguillon (France). *J. Res. Oceanogr.*, 26, 125-128.
29. Blanchard G.F., Paterson D.M., Stal L., **Richard P.**, Galois R., Huet V., Kelly J., Honeywill C., de Brouwer J., K. Dyer, Christie M., Seguignes M., 2000. The effect of geomorphological structures on potential biostabilization by microphytobenthos on intertidal mudflats. *Cont. Shelf Res.*, 20, 1253-1256.
30. Maksymowska D., **Richard P.**, Piekarek-Jankowska H., Riera P., 2000. Chemical and isotopic composition of the organic matter sources in the Gulf of Gdańsk (Southern Baltic Sea). *Estuar. Coast. Shelf Sci.*, 51, 586-598.
31. Riera P., Montagna P.A., Kalke R.D., **Richard P.**, 2000. Utilization of estuarine organic matter during growth and migration by juvenile brown shrimp *Penaeus aztecus* in a South Texas estuary. *Mar. Ecol. Prog. Ser.*, 199, 205-216.
32. Vouvé F., Guiraud G., Marol C., Girard M., **Richard P.**, Laima M.J.C., 2000. Titre : NH_4^+ turnover in intertidal sediments of Marennes-Oléron Bay (France): effect of sediment temperature. *Oceanol. Acta*, 23, 575-584.
33. Christensen J.T., Sauriau P.-G., **Richard P.**, Jensen P.D., 2001. Diet in mangrove smails: preliminary data on gut contents and stable isotope analysis. *J. Shellfish Res.*, 20, 423-426.
34. Haubois A.-G., Guarini J.-M., **Richard P.**, Blanchard G., Sauriau P.-G., 2002. Spatio-temporal differentiation in the population structure of *Hydrobia ulvae* on an intertidal mudflat (Marennes-Oléron Bay, France). *J. Mar. Biol. Ass. UK*, 82, 605-614.

35. Laima M.J.C., D. Brossard, P.-G. Sauriau, **Richard P.**, M. Girard, D. Gouleau, L. Joassard, 2002. The influence of long emersion on biota, ammonium fluxes and nitrification in intertidal sediments of Marennes-Oléron Bay, France. *Mar. Environ. Res.*, 53, 381-402.
36. Laima M.J.C., Maksymowska-Brossard D., Sauriau P.-G., **Richard P.**, Girard M., Gouleau D., Joassard L., 2002. Fluff deposition on intertidal sediments : effects on benthic biota, ammonium fluxes and nitrification rates. *Biogeochemistry*, 61, 115-133.
37. Sokolowski A., **Richard P.**, Fichet D., Radenac G., Guyot T., 2003. Application of trichloroacetic acid (TCA) to extraction of soft body for the determination of tissue Cd, Cu, Pb and Zn in the prosobranch *Hydrobia ulvae* (Pennant). *Mar. Pollut. Bull.*, 46, 1326-1333.
38. Haubois A.-G., Guarini J.-M., **Richard P.**, Hemon A., Arotcharen E., Blanchard G.F., 2004. Difference in spatial structures between juveniles and adults of the gastropod *Hydrobia ulvae* on an intertidal mudflat (Marennes-Oléron Bay, France), potentially affect estimates of local demographic processes . *J. Sea Res.*, 51, 63-68.
39. Blanchard G.F., Guarini J.-M., Dang C., **Richard P.**, 2004. Characterizing and quantifying photoinhibition in intertidal microphytobenthos. *J. Phycol.* 40, 692-696.
40. Guarini J.-M., Gros Ph., Blanchard G.F., **Richard P.**, Fillon A., 2004. Benthic contribution to pelagic microalgal communities in two semi-enclosed, european-type littoral ecosystems (Marennes-Oléron Bay and Aiguillon Bay, France). *J. Sea Res.*, 52 : 241-258.
41. Herlory O., Guarini J.-M., **Richard P.**, Blanchard G.F., 2004. Microstructure of microphytobenthic biofilm and its spatio-temporal dynamics in an intertidal mudflat (Aiguillon Bay, France). *Mar. Ecol. Prog. Ser.*, 282: 33-44
42. Haubois A.-G., Guarini J.-M., **Richard P.**, Fichet D., Radenac G., Blanchard G.F., 2005. Ingestion rate of the deposit-feeder *Hydrobia ulvae* (Gastropoda) on epipellic diatoms: effect of algal biomass and cell size. *J. Exp. Mar. Biol. Ecol.*, 317 : 1-12.
43. Sokolowski A., **Richard P.**, Fichet D., Radenac G., 2005. Cd transfer in the deposit-feeder Prosobranch *Hydrobia ulvae* (Pennant) from benthic diatoms; the kinetics of short-time Cd assimilation and efflux under unlimited food conditions. *J. Exp. Mar. Biol. Ecol.*, 317 : 159-174.
44. Haubois A.-G., Sylvestre F., Guarini J.-M., **Richard P.**, Blanchard G.F., 2005. Spatio-temporal structure of the epipellic diatom assemblage from an intertidal mudflat in Marennes-Oléron Bay, France. *Estuar. Coast. Shelf Sci.*, 64 : 385-394.
45. Herlory O., Blanchard G. F., Planche S., Huet V., **Richard P.**, 2005. Does the size of the microphytobenthic biofilm on intertidal mudflats depend on the available photosynthetic biomass? *Mar. Ecol. Prog. Ser.*, 298, 95-100
46. Legrand H., Herlory O., Guarini J.-M., Blanchard G.F., **Richard P.**, 2006. Inhibition of microphytobenthic photosynthesis by the herbicides atrazine and diuron. *Cah. Biol. Mar.*, 47, 39-45.
47. Niquil N., Kerleguer G., Leguerrier D., **Richard P.**, Legrand H., Dupuy C., Pascal P.-Y., Bacher C., 2006. How would the loss of production due to an herbicide have repercussions in the food web on an intertidal mudflat ? Sensitivity analysis of an inverse model for Brouage mudflat, Marennes-Oléron Bay, France. *Cah. Biol. Mar.*, 47, 63-71.
48. Herlory O., **Richard P.**, Blanchard G. F., 2007. Methodology of light reponse curves: application of chlorophyll fluorescence to microphytobenthic biofilms. *Mar. Biol.*, 153, 91-101.
49. Pascal P.Y., Dupuy C., Mallet C., **Richard P.**, Niquil N., 2008. Bacterivory by benthic organism in sediment: quantification using ¹⁵N enriched bacteria. *J. Exp. Mar. Biol. Ecol.*, 355, 18-26.

50. Pascal P.Y., Dupuy C., **Richard P.**, Niquil N., 2008. Bacterivory in the common foraminifer *Ammonia tepida*: Isotope tracer experiment and the controlling factors. *J. Exp. Mar. Biol. Ecol.*, 359, 55-61.
51. Rzeznik-Orignac J., **Richard P.**, Fichet D., Boucher G., 2008. Stable analysis position of intertidal nematodes and copepods. *Mar. Ecol. Prog. Ser.*, 359, 145-150.
52. Pascal P.Y., Dupuy C., **Richard P.**, Rzeznik-Orignac J., Niquil N., 2008. Bacterivory of a mudflat nematode community under different environmental conditions. *Mar. Biol.*, 154, 671-682
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