

Family name, First name: **DEMARCHI**, Beatrice

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● **EDUCATION**

- 2012-14 **PGCAP: Postgraduate Certificate of Academic Practice**; Qualification in Teaching in Higher Education; University of York, UK.
- 2006-10 **PhD in Archaeology**, University of York, UK.
Thesis: *Geochronology of coastal prehistoric environments: a new closed system approach using amino acid racemisation*. Supervisor: K. Penkman.
- 2004-06 **Master in Science and Technology for Cultural Heritage**. University of Turin, Italy. Awarded 110/110 *cum laude* and “Dignity of Press” (only to outstanding dissertations).
- 2001-04 **Bachelor in Science and Technology for Cultural Heritage**. University of Turin, Italy. Awarded 110/110 *cum laude*.

● **CURRENT POSITION**

- 2020-present **Associate Professor in Archaeology (Archaeological Methods)**
Department of Life Sciences and Systems Biology, University of Turin, Italy.
- 2017-present **Director, Palaeoproteomics Laboratory**
Department of Life Sciences and Systems Biology, University of Turin, Italy.

● **PREVIOUS POSITIONS**

- 2017-20 **Researcher** (Type “B”, i.e. tenure-track according to the Italian Law Number 240/2010, *brain-gain* programme “**Young Researchers - Rita Levi Montalcini**” of the Italian Government). Department of Life Sciences and Systems Biology, University of Turin, Italy.
- 2013-16 Postdoctoral researcher. *Eggshell proteomics and biomineralization*. Department of Archaeology, University of York, UK. Funding: EPSRC (UK).
- 2012-13 **Research group leader** (maternity cover). Department of Chemistry, University of York, UK.
- 2009-13 Postdoctoral researcher. *AAR geochronology of ostrich eggshell*. Department of Chemistry, University of York, UK. Funding: NERC (UK).

● **FELLOWSHIPS AND AWARDS (selection)**

- 2018 Awarded research funding “SPOTS - Shell Palaeoproteomics” from the **Italo-French University (Galilèe programme): € 8,000**
- 2016 Awarded “**Young Researchers – Rita Levi Montalcini**”, Italian Ministry of Universities and Research. Fellowship & tenure-track position at the University of Turin: **€ 217,000**
- 2016 Awarded **Associate Professorship** (co-author of the application for Niels Bohr Chair to M. Collins). Turned down due to the Montalcini award: **€ 5,200,000**
- 2016 Awarded **MSCA Individual Fellowship**. Turned down due to the Montalcini award. **€ 180,000**
- 2015-16 Awarded **pilot research funding**, University of York: **€ 2000**
- 2016 **GSIS Best Geoscience Reference Work Award** to the *Encyclopedia of Scientific Dating Methods* (authored the main reference article for AAR dating)
- 2010-13 Awarded **Re(In)tegration Grant** (*mAARiTIME*, PERG-GA-2010-268429): **€ 45000**
- 2008 Awarded **Best talk prize** (British Organic Geochemistry Society, Newcastle)
- 2006-09 Awarded **MSCA Early Stage Researcher (FP6) fellowship**, PALAEO, University of York, UK.

● **SUPERVISION OF STUDENTS & STAFF**

- 2017-present University of Turin - **1 PhD completion (Sakalauskaite) & 1 current (Monticone)**
- 2013-16 University of York - **4 PhDs co-supervised to completion** (Crisp, High, Simpson, Stewart)
- 2011-16 **Masters: 9** (5 current, University of Turin; 4 University of York).
- 2007-17 **Staff: 2** technical staff, **> 25** visiting researchers and students.
Undergraduates: 17 (4 University of Turin, 13 University of York).

My ability to **foster junior researchers and nurture their route to independence** evidenced by: **Dr Sakalauskaite's impressive early-career record** (five **publications**; **PDRA** position at U. Copenhagen; **Assemble+** & **Malacological Society of London research funding**; prestigious BGF **Scholarship** and Eiffel **Fellowship**; three **conference grants** and two **poster/talk prizes**); **Dr Presslee's awards** (former MSc student, PhD York, now senior ZooMS technician, York - 3 dissertation prizes from Department of Archaeology, Yorkshire Philosophical Society, UK Environmental Archaeology association); **Dr Pierini's early-career record** (former MSc student, PhD Max Plank, postdoc Paris-Saclay).

● **TEACHING ACTIVITIES**

- 2017-present **Module leader:** Ancient Biomolecules (MSc), Bioarchaeology (MSc), Cultural Heritage (*Scuola di Studi Superiori*), Archaeological Methods and Theory (*Scuola di Specializzazione*), Palaeoproteomics (doctoral school). University of Turin, Italy.
- 2017-present **Lecturer** (modules): Biochemistry for Cultural Heritage (MSc); Anthropology (MSc); Zoology (BSc), Innovative teaching for the Natural Sciences (MSc). University of Turin, Italy.
- 2008-16 **Lecturer** (sessions): Cultural Heritage Science, Archaeological Science; Environmental Archaeology (Centre for Lifelong Learning; 2013); Skills in Biomolecular Archaeology (2011); AAR Geochronology (intensive 2-week annual course; 2008-13). University of York, UK.

● **ORGANISATION OF SCIENTIFIC MEETINGS**

- 2018 **Member of the organising committee** of the Italian Association of Archaeometrists' 10th meeting (Turin, Italy). ~200 participants.
- 2017 **Member of the scientific committee and the organiser committee, Round table coordinator**, Société Zoologique de France/Unione Zoologica Italiana (Turin, Italy). ~200 participants.
- 2014 **Main organiser** of an EPSRC biomineralisation workshop (York, UK). ~ 25 participants.
- 2013 **Session organiser and chair of plenary discussion** of the 19th Meeting of the European Association of Archaeologists (Pilsen, Czech Republic). ~100 participants.
- 2008 **Member of the organising committee** of the International Symposium on Biomolecular Archaeology (York, UK). ~200 participants.

● **INSTITUTIONAL RESPONSIBILITIES (selection)**

- 2021-present Departmental coordinator, International project "UNITA" - Universitas Montium (**European Universities Alliance**, Erasmus+)
- 2021-present Member of **Board** of Professors, **PhD** programme in "**Sustainable development and cooperation**" (international), University of Turin, Italy.
Member of **Board** of Tutors, **PhD** programme in "**Technology for Cultural Heritage**" (international), University of Turin, Italy.
- 2018-present Member of Departmental **Teaching committee**, University of Turin, Italy.
- 2017-20 Member of Board of Tutors, **PhD** programme in "**Biology & Applied Biotechnology**", University of Turin, Italy.
- 2013-17 Member of **Thesis Advisory Panel** for 7 PhD students, University of York, UK.

● **REVIEWING ACTIVITIES**

Reviewer for Science, Science Advances, Scientific Reports, Journal of Anthropological Archaeology, Journal of Archaeological Science, Journal of Arch Science Reports, Archaeometry, Quaternary Science Reviews, Journal of Quaternary Science, Quaternary Geochronology, Geo-Marine Letters, Journal of Sedimentary Research, Quaternary Research, Zoology, Comptes Rendus Geoscience, Chemistry - A, Analytical Chemistry, Zoological Journal of the Linnean Society, Proteomics.

Editorial activities: Recommender for **PCI:Archaeology** (archaeo.peercommunityin.org) & Member of Scientific Committee: *ArcheoLogica Data* (mappalab.eu/en/archeologica-data/)

● **MEMBERSHIPS OF SCIENTIFIC SOCIETIES & AFFILIATIONS**

- 2019 - present **AIAZ** - Associazione Italiana di Archeozoologia. Regular Member.
- 2018 - present **IIPP** - Istituto Italiano di Preistoria e Protostoria. Regular member.

- 2018 - present **AIAr** - Associazione Italiana di Archeometria. Regular member.
 2018 - present **ICAZ** - International Council for Archaeozoology. Regular member.
 2016 - present **Associate Research Fellow, Department of Archaeology, University of York (UK)**.
 2015 - present Fellow of the **Higher Education Academy (UK)**.
 2013 - present **EAA**- European Association of Archaeologists. Regular member.

- **CAREER BREAKS:** 12/06/2016 - 29/02/2017: MATERNITY LEAVE

Current grants

<i>Project Title</i>	<i>Funding source</i>	<i>Amount (Euros)</i>	<i>Period</i>	<i>Role of the PI</i>
“FIDO: Following Dog Domestication Origin and dynamics from Late Pleistocene in Italy”	National Geographic Society	30,000	2020-22	Co-I, co-author
Investigation of dairying in Mediterranean Iberian Prehistory (iDIP)	Ministerio de Asuntos Económicos y Transformación Digital (Spain)	87,700	2020-23	Co-I, co-author
Wisdom Teeth - Refining our understanding of mammalian evolution through dating dental enamel	UK Natural Environment Research Council	890,000	2019-22	Collaborator, co-author
Birds as a key line of evidence for human vulnerability and resilience to environmental shifts in a pre-agricultural context	Independent Research Fund Denmark	777,734	2021-24	Co-I, co-author

Publications

Books

- 1) **Demarchi, B.** Amino acids in biominerals. Wiley-Blackwell, New Analytical Methods in Earth and Environmental Science, pp. 124. **ISBN: 978-1-119-08944-5**

Published in International Journals

- 2) Ramsøe, A., Crospin, M., Mackie, M., McGrath, K., Fischer, R., Demarchi, B., Collins, M.J.C., Hendy, J., Speller, C. 2021. Assessing the degradation of ancient milk proteins through site-specific deamidation patterns. **Scientific Reports** 11, 1-14.
- 3) Sakalauskaite, J., Marin, F., Pergolizzi, B., **Demarchi, B.*** (2020). Shell palaeoproteomics: First application of peptide mass fingerprinting for the rapid identification of mollusc shells in archaeology. **Journal of Proteomics**, 227,103920.
- 4) Sakalauskaite, J., Plasseraud, L., Thomas, J., Albéric, M., Thoury, M., Perrin, J., Jamme, F., Broussard, C., **Demarchi, B.**, Marin, F. (2020). The shell matrix of the european thorny oyster, *Spondylus gaederopus*: microstructural and molecular characterization. **Journal of Structural Biology**, 211, 107497.
- 5) **Demarchi, B.***, Boano, R., Ceron, A., Dal Bello, F., Favero-Longo, S., Fiddymont, S., Fiore Marochetti, E., Mangiapane, G., Mattonai, M., Pennacini, C., Ribechini, E., Woolley, J., Zilberstein, G., Righetti, P.G.

- (2020). Never boring: Non-invasive palaeoproteomics of mummified human skin. **Journal of Archaeological Science** 119, 105145.
- 6) **Demarchi, B.***, Presslee, S., Sakalauskaite, J., Fischer, R., Best, J. (2020). The role of birds at Çatalhöyük revealed by the analysis of eggshell. *Quaternary International*, 543, 50-60.
- 7) Preece, R.C., Meijer, T., Penkman, K.E.H., **Demarchi, B.**, Mayhew, D.F., Parfitt, S.A. (2020). The palaeontology and dating of the ‘Weybourne Crag’, an important marker horizon in the Early Pleistocene of the southern North Sea basin. **Quaternary Science Reviews** 236,106177.
- 8) Sakalauskaite, J., Andersen, S., Biagi, P., Borrello, M.A., Cocquerez, T., Colonese, A.C., Dal Bello, F., Girod, A., Heumüller, M., Koon, H., Mandili, G., Medana, C., Penkman, K.E.H., Plasseraud, L., Schlichtherle, H., Taylor, S., Tokarski, C., Thomas, J., Wilson, J., Marin, F., **Demarchi, B.*** (2019). “Palaeoshellomics” reveals the use of freshwater mother-of-pearl in prehistory. *eLife* 8. doi:10.7554/eLife.45644
- 9) **Demarchi, B.***, Presslee, S., Gutiérrez-Zugasti, I., González-Morales, M., Marín-Arroyo A.B., Straus, L.G., Fischer, R. (2019). Birds of prey and humans in prehistoric Europe: A view from El Mirón Cave, Cantabria (Spain). **Journal of Archaeological Science: Reports**, 24, 244-252. DOI: /10.1016/j.jasrep.2019.01.010.
- 10) Sichert, B.M., Rentzel, P., **Demarchi, B.**, Best, J., Negri, A., Deschler-Erb, S. (2019). Incubated eggs in a Roman burial? A preliminary investigation on how to distinguish between the effects of incubation and taphonomy on avian eggshell from archaeological sites. **Journal of Archaeological Science: Reports** 26, 101845. DOI: /10.1016/j.jasrep.2019.05.010
- 11) Mark Maltby, Martyn Allen, Julia Best, B. Tyr Fothergill, Beatrice **Demarchi**. Counting Roman Chickens: Multidisciplinary Approaches to Human-Chicken Interactions in Roman Britain (2018). **Journal of Archaeological Science: Reports**, 19, 1003-1015. DOI:10.1016/j.jasrep.2017.09.013
- 12) André Carlo Colonese, Walter Landini, Fabio Martini, Zelia Di Giuseppe, Niklas Hausmann, Beatrice **Demarchi**, Chiara D'Angelo, Melanie Leng, Alessandro Incarbona, Domenico Lo Vetro (2018). Late Pleistocene-Holocene coastal exploitation and intensification of marine resources in central Mediterranean: snapshots from Grotta d’Oriente (NW Sicily). **Quaternary International**. DOI: 10.1016/j.quaint.2018.06.018
- 13) Jessica Hendy, Frido Welker, Beatrice **Demarchi**, Camilla Speller, Christina Warinner, Matthew J. Collins (2018). A guide to ancient protein studies. **Nature Ecology Evolution**. 2, 791–799. DOI:10.1038/s41559-018-0510-x
- 14) Samantha Presslee, Julie Wilson, Jos Woolley, Julia Best, Anita Radini, Douglas Russell, Rosa Boano, Matthew Collins, Beatrice **Demarchi***. The identification of archaeological eggshell using peptide markers (2018). **Science and Technology for Archaeological Research**. 4 (1), 13-23. DOI: <https://doi.org/10.1080/20548923.2018.1424300>.
- 15) Rebecca Briant, Fiona Brock, Beatrice **Demarchi**, Harold E. Langford, Kirsty E.H. Penkman, Danielle C. Schreve, Jean-Luc Schwenninger, Sheila Taylor. Improved chronological control for environmental sequences from the last glacial period (2018). **Quaternary Geochronology** 43, 40-49.
- 16) Jonuks, T., Oras, E., Best, J., **Demarchi, B.**, Mänd, R., Presslee, S., Vahur, S. (2017). Multi method Analysis of Avian Eggs as Grave Goods: Revealing Symbolism in Conversion Period Burials at Kukruse, NE Estonia (2018) **Environmental Archaeology** 23 (2), 109-122.
- 17) Tyr Fothergyll, Julia Best, Alison Foster, Beatrice **Demarchi**. Hens, Health and Husbandry: Integrated Approaches to Past Poultry-keeping in England (2017). **Open Quaternary**. 3(1), p.5.

- 18) **Demarchi, B.***, Hall, S., Roncal-Herrero, T., Freeman, C.L., Woolley, J., Crisp, M.K., Wilson, J., Fotakis, A., Fischer, R., Kessler, B.M., Jersie-Christensen, R.R., Olsen, J.V., Haile, J., Thomas, J., Marean, C.W., Parkington, J., Presslee, S., Lee-Thorp, J., Ditchfield, P., Hamilton, J.F., Ward, M.W., Wang, C.M., Shaw, M.D., Harrison, T., Domínguez-Rodrigo, M., Macphee, R.D.E., Kwekason, A., Ecker, M., Horwitz, L.K., Chazan, M., Kroger, R., Thomas-Oates, J., Harding, J.H., Cappellini, E., Penkman, K., Collins, M.J. Protein sequences bound to mineral surfaces persist into deep time (2016) **eLife**, 5 (September), art. no. e17092. DOI: 10.7554/eLife.17092.
- 19) High, K., Milner, N., Panter, I., **Demarchi, B.**, Penkman, K.E.H. Lessons from Star Carr on the vulnerability of organic archaeological remains to environmental change (2016) **Proceedings of the National Academy of Sciences of the United States of America**, 113 (46), pp. 12957- 12962. DOI: 10.1073/pnas.1609222113
- 20) Solazzo, C., Courel, B., Connan, J., Van Dongen, B.E., Barden, H., Penkman, K., Taylor, S., **Demarchi, B.**, Adam, P., Schaeffer, P., Nissenbaum, A., Bar-Yosef, O., Buckley, M. Identification of the earliest collagen- and plant-based coatings from Neolithic artefacts (Nahal Hemar cave, Israel) (2016) **Nature: Scientific Reports**, 6, art. no. 31053, DOI: 10.1038/srep31053
- 21) Kim, Y.-Y., Carloni, J.D., **Demarchi, B.**, Sparks, D., Reid, D.G., Kunitake, M.E., Tang, C.C., Duer, M.J., Freeman, C.L., Pokroy, B., Penkman, K., Harding, J.H., Estroff, L.A., Baker, S.P., Meldrum, F.C. Tuning hardness in calcite by incorporation of amino acids (2016) **Nature Materials**, 15 (8), pp. 903-910. DOI: 10.1038/nmat4631.
- 22) Simpson, J.P., Penkman, K.E.H., **Demarchi, B.**, Koon, H., Collins, M.J., Thomas-Oates, J., Shapiro, B., Stark, M., Wilson, J. The effects of demineralisation and sampling point variability on the measurement of glutamine deamidation in type I collagen extracted from bone (2016) **Journal of Archaeological Science**, 69, pp. 29-38. DOI: 10.1016/j.jas.2016.02.002
- 23) Pierini, F., **Demarchi, B.***, Turner, J., Penkman, K. Pecten as a new substrate for IcPD dating: The quaternary raised beaches in the Gulf of Corinth, Greece. (2016) **Quaternary Geochronology**, 31, pp. 40-52. DOI: 10.1016/j.quageo.2015.10.006.
- 24) Hodson, M.E., Benning, L.G., **Demarchi, B.**, Penkman, K.E.H., Rodriguez-Blanco, J.D., Schofield, P.F., Versteegh, E.A.A. Biomineralisation by earthworms - An investigation into the stability and distribution of amorphous calcium carbonate (2015) **Geochemical Transactions**, 16 (1), art. no. 4. DOI: 10.1186/s12932-015-0019-z.
- 25) Bosch, M.D., Mannino, M.A., Prendergast, A.L., O'Connell, T.C., **Demarchi, B.**, Taylor, S.M., Niven, L., Van Der Plicht, J., Hublin, J.-J. Reply to Douka et al.: Critical evaluation of the Ksâr 'Akil chronologies (2015) **Proceedings of the National Academy of Sciences of the United States of America**, 112 (51), p. E7035. DOI: 10.1073/pnas.1520412112
- 26) Bosch, M.D., Mannino, M.A., Prendergast, A.L., O'Connell, T.C., **Demarchi, B.**, Taylor, S.M., Niven, L., Van Der Plicht, J., Hublin, J.-J. New chronology for Ksâr 'Akil (Lebanon) supports Levantine route of modern human dispersal into Europe (2015) **Proceedings of the National Academy of Sciences of the United States of America**, 112 (25), pp. 7683-7688. DOI: 10.1073/pnas.1501529112.
- 27) **Demarchi, B.***, Clements, E., Coltorti, M., van de Locht, R., Kröger, R., Penkman, K., Rose, J. Testing the effect of bleaching on the bivalve *Glycymeris*: A case study of amino acid geochronology on key Mediterranean raised beach deposits (2015) **Quaternary Geochronology**, 25, pp. 49-65. DOI: 10.1016/j.quageo.2014.09.003.
- 28) **Demarchi, B.***, O'Connor, S., De Lima Ponzoni, A., De Almeida Rocha Ponzoni, R., Sheridan, A., Penkman, K., Hancock, Y., Wilson, J. An integrated approach to the taxonomic identification of prehistoric shell ornaments (2014) **PLoS ONE**, 9 (6), art. no. e99839. DOI: 10.1371/journal.pone.0099839

- 29) Stewart, J.R.M., Allen, R.B., Jones, A.K.G., Kendall, T., Penkman, K.E.H., **Demarchi, B.**, O'Connor, T., Collins, M.J. Walking on Eggshells: A Study of Egg Use in Anglo-Scandinavian York Based on Eggshell Identification Using ZooMS (2014) **International Journal of Osteoarchaeology**, 24 (3), pp. 247-255. DOI: 10.1002/oa.2362
- 30) **Demarchi, B.***, Collins, M., Bergström, E., Dowle, A., Penkman, K., Thomas-Oates, J., Wilson, J. New experimental evidence for in-chain amino acid racemization of serine in a model peptide (2013) **Analytical Chemistry**, 85 (12), pp. 5835-5842. DOI: 10.1021/ac4005869
- 31) Tomiak, P.J., Penkman, K.E.H., Hendy, E.J., **Demarchi, B.**, Murrells, S., Davis, S.A., McCullagh, P., Collins, M.J. Testing the limitations of artificial protein degradation kinetics using known-age massive *Porites* coral skeletons (2013) **Quaternary Geochronology**, 16, pp. 87-109. DOI: 10.1016/j.quageo.2012.07.001.
- 32) **Demarchi, B.***, Collins, M.J., Tomiak, P.J., Davies, B.J., Penkman, K.E.H. Intra-crystalline protein diagenesis (IcPD) in *Patella vulgata*. Part II: Breakdown and temperature sensitivity (2013) **Quaternary Geochronology**, 16, pp. 158-172. DOI: 10.1016/j.quageo.2012.08.001.
- 33) **Demarchi, B.***, Rogers, K., Fa, D.A., Finlayson, C.J., Milner, N., Penkman, K.E.H. Intra crystalline protein diagenesis (IcPD) in *Patella vulgata*. Part I: Isolation and testing of the closed system (2013) **Quaternary Geochronology**, 16, pp. 144-157. DOI: 10.1016/j.quageo.2012.03.016.
- 34) Crisp, M., **Demarchi, B.**, Collins, M., Morgan-Williams, M., Pilgrim, E., Penkman, K. Isolation of the intra-crystalline proteins and kinetic studies in *Struthio camelus* (ostrich) eggshell for amino acid geochronology (2013) **Quaternary Geochronology**, 16, pp. 110-128. DOI: 10.1016/j.quageo.2012.09.002.
- 35) Davies, B.J., Roberts, D.H., Bridgland, D.R., Ó Cofaigh, C., Riding, J.B., **Demarchi, B.**, Penkman, K.E.H., Pawley, S.M. Timing and depositional environments of a Middle Pleistocene glaciation of northeast England: New evidence from Warren House Gill, County Durham (2012) **Quaternary Science Reviews**, 44, pp. 180-212. DOI: 10.1016/j.quascirev.2010.02.003
- 36) **Demarchi, B.***, Williams, M.G., Milner, N., Russell, N., Bailey, G., Penkman, K. Amino acid racemization dating of marine shells: A mound of possibilities (2011) **Quaternary International**, 239 (1-2), pp. 114-124. DOI: 10.1016/j.quaint.2010.05.029.
- 37) Davies, B.J., Bridgland, D.R., Roberts, D.H., Cofaigh, C.O., Pawley, S.M., Candy, I., **Demarchi, B.**, Penkman, K.E.H., Austin, W.E.N. The age and stratigraphic context of the Easington Raised Beach, County Durham, UK (2009) **Proceedings of the Geologists' Association**, 120 (4), pp. 183-198. DOI: 10.1016/j.pgeola.2009.04.001

Chapters, Proceedings

- 38) Best, J., **Demarchi, B.**, Presslee, S. 2021. The Avian remains. In *PEOPLING THE LANDSCAPE OF ÇATALHÖYÜK. REPORTS FROM THE 2009–2017 SEASONS*. Edited by Ian Hodder. BRITISH INSTITUTE AT ANKARA Monograph 54, p 251-262.
- 39) Best, J., Presslee, S., **Demarchi, B.**, 2015. Avian Eggshell. In S. D. Haddow (Ed.), *Çatalhöyük 2015 Archive Report*. (pp. 111-115). Çatalhöyük Research Project.
- 40) **Demarchi, B.*** and Collins, M.J.C. Amino Acid Racemization, Dating, 2014. In Rink, W.J., Thompson, J.W. (Eds.) *Encyclopaedia of Scientific Dating Methods*, Springer-Verlag, Berlin Heidelberg, p. 13-36. **INVITED.**
- 41) **Demarchi, B.** and Collins, M.J.C. Amino Acid Racemization, Paleoclimate, 2014. In Rink, W.J., Thompson, J.W. (Eds.) *Encyclopaedia of Scientific Dating Methods*, Springer-Verlag, Berlin-Heidelberg, p. 47-48. **INVITED.**

- 42) **Demarchi, B. 2008.** Amino acid clockwork in: Van Asperen, Becker, Demarchi, Gröning & Panagiotopoulou: PALAEO, Interdisciplinary approaches to reconstructing the past, York.
- 43) **Demarchi, B. 2012.** mAARiTIME: Marine Amino Acid Racemisation Investigation of The Mediterranean. *Quaternary International*, 279, 114.
- 44) **Demarchi, B. 2012.** Multi-disciplinary approaches to understanding the life and death of amino acids in biominerals. *Quaternary International*, 279, 114.
- 45) **Demarchi, B. 2012.** A chain of peptides: a new mass spectrometric tool for modelling protein diagenesis. *Quaternary International*, 279, 114. **INVITED.**