8th IBC
Milan, Italy, 2018

8th INTERNATIONAL BRACHIOPOD CONGRESS

Brachiopods in a changing planet: from the past to the future

Third Circular

Milano, 11-14 September 2018

www.8brachiopodcongress.com

Milano, 09 July 2018

Dear Participants of the 8th Brachiopod Congress,

The event is fast approaching and we are ready to host you in Milano and to offer you a stimulating and vibrant program in which you will present your latest results, discuss at length and be deeply involved in the brachiopod world.

As in most previous brachiopod congresses, we have avoided parallel sessions to enhance multi- and interdisciplinary exchange of ideas between researchers involved in different aspects of brachiopod research.

Three plenary talks, eleven keynotes, 64 oral presentations and 46 poster presentations are scheduled. The posters will be available for view throughout the three days of conference.

In addition to scientific oral and poster sessions the Congress will be preceded and followed by wonderful field excursions (Sicily, Italy; UK; Spain). A pleasant interlude will be offered by two Mid-Congress excursions only a short distance from Milano.

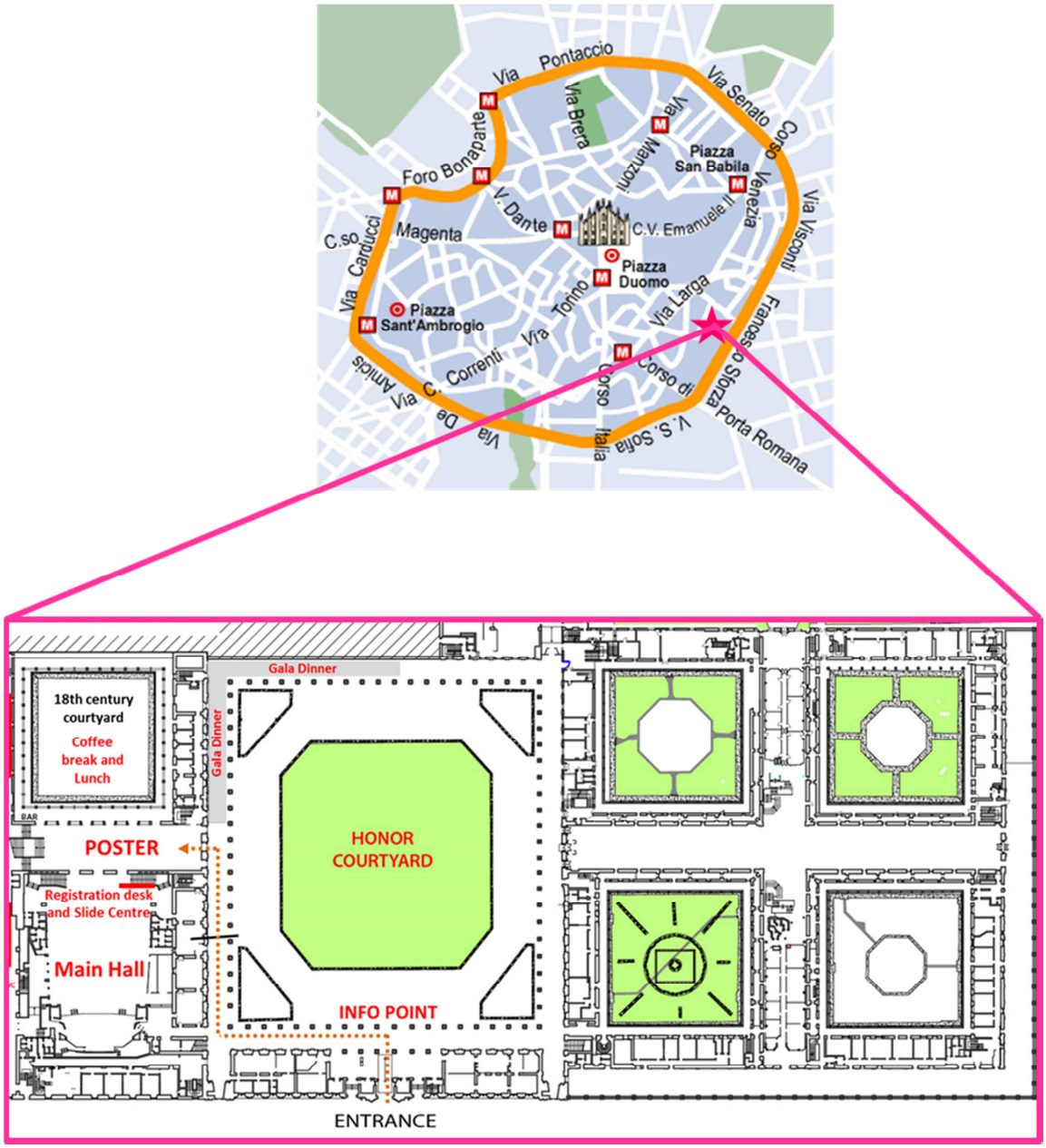
The General Chairs of the Congress
Lucia Angiolini and Renato Posenato

VENUE

The venue for the Congress is the Università degli Studi di Milano (www.unimi.it/ENG/), Via Festa del Perdono 7, located in the old "Ca' Granda" (literally "the Big House"). It is a striking historical complex in the heart of the city, just a few steps from the famous Piazza del Duomo, and easily reached by public transportation. The nearest metro stations (underground/subway) are MISSORI (Line M3-yellow, 450 meters to the venue) and DUOMO (Line M2-red, Line M3-yellow, 650 meters to the venue).

The University's main campus, designed in the 15th century by Tuscan architect Filarete consists of historically and artistically the most significant buildings in the City of Milano.

Wi-Fi will be available during the Congress.



Map of the Congress headquarter's at the Università degli Studi di Milano. The entrance is on Via Festa del Perdono. Congress exhibits and meetings will be held in the Main Hall and in the 18th century courtyard.

GENERAL CHAIRS

Lucia Angiolini, *Università di Milano, Italy*

Renato Posenato, *Università di Ferrara, Italy*

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Alberto Pérez-Huerta, *University of Alabama, United States*

Renato Posenato, *Università di Ferrara, Italy*

Shuzhong Shen, *Nanjing Institute of Geology and Palaeontology, China*

Congress website: http://www.8brachiopodcongress.com/index.html

E-mail: 8brachcongress@unimi.it

REGISTRATION

The registration desk is located at the entrance of the Main Hall (see the map above)

10 September: 16.30-19.00

11 September: 8.00-18.00

The staff will be present at the registration desk throughout the congress.

We remind those participants that have to pay a balance for the congress fees that they will have to do it at the moment of registration. This payment can be made by cash or by debit card.

CONGRESS MAIN PROGRAM

	am			LUNCH	pm			
	I	Coffee Break	II		III	Coffee break	IV	V
Sept 6-9th	Pre-Congress excursion							
Monday Sept 10th							Ice Breaker Party	
Tuesday Sept 11th	Opening Cerimony Plenary Lars Holmer		Scientific sessions S1		Scientific sessions S1		Scientific sessions S6	Poster Wine and Cheese
Wednesday Sept 12th	Plenary Uwe Brand Scientific sessions S5		Scientific sessions S5		Scientific sessions S5-S4		Scientific sessions S4	Group photo Concert Gala dinner
Thursday Sept 13th	Free day or Mid-Congress excursions							
Friday Sept 14th	Plenary Elizabeth Harper Scientific sessions S3		Scientific sessions S3		Scientific sessions S3-S2		Scientific sessions S2	
Sept 15-18th	Post-Congress excursions							

The Ice Breaker Party, Poster Wine and Cheese, lunches and coffee-breaks will take place in the 18th Century Courtyard. Please note that coffee and beverages are offered continuously in the 18th Century Courtyard in the morning and afternoon.

The evergreen Jazz and Swing concert will be held in Aula Magna.

The Gala Dinner will take place in the Honor Courtyard.

PROGRAM

Tuesday 11th September 2018

08:30-08:50 **OPENING CERIMONY**

08:50-09:40 **PLENARY LECTURE**
Holmer L. E., Zhang Z., Zhang Z., Brock G. A., Popov L. E.
Brachiopod phylogeny in the Cambrian

09:40-10:00 **COFFEE-BREAK**

SESSION 1 ***Systematics and evolution***
Convenors: **Carlson S.**, **Alvarez F.** and **Jin J.**

10:00-10:25 Keynote lecture
Butler A. D., Eitel M., Wörheide G., Carlson S. J., Sperling E. A.
Phylogenomic analysis of Brachiopoda: revealing the evolutionary history of biomineralization with an integrated palaeontological and molecular approach

10:25-10:40 Kuzmina T. V., Malakhov V. V., Temereva E. N.
Support of the "brachiopod fold hypothesis" in Recent rhynchonelliformeans: a new view on the evolution of brachiopod life cycles

10:40-10:55 Madison A., Kuzmina T.
Fossil records of the evolution of brachiopod life cycles

10:55-11:10 Zhang Z., Popov L. E., Holmer L. E., Chen F., Zhang Z.
Earliest ontogeny of Early Cambrian acrotretoid brachiopods — first evidence for metamorphosis and its implications

11:10-11:25 Chen Y., Zhang Z., Zhang Z.
Geometric morphometric analysis reveals the ontogeny of Early Cambrian (Series 2) brachiopods *Eohadrotreta zhenbaensis* from Cigui, Hubei Province, South China

11:25-11:40 Garbelli C.
Modelling the shape of brachiopod valves

11:40-11:55 Liang Y., Zhang Z.
New data on shell structure in *Heliomedusa orienta*: taxonomic and phylogenetic implications

11:55-12:10 Chen F., Zhang Z., Betts M. J., Zhang Z., Liu F.
First report on Guanshan Biota (Cambrian Stage 4) at the stratotype area of Wulongqing Formation in Malong County, eastern Yunnan

12:10-12:25 Skovsted C. B., Liu F., Topper T. P., Zhang Z., Shu D.
Are hyoliths brachiopods?

12:25-12:40 Lavié F., Serra F., Feltes N.
Microbrachiopods from the Las Aguaditas and Las Chacritas Formations (Middle Ordovician), Precordillera terrane of western Argentina: a preliminary taxonomic analysis

12:40-13:50 **LUNCH**

13:50-14:15 Keynote lecture
Stigall A. L.
Brachiopods as key to evolutionary theory: from foundational systematics and phylogenetics to speciation and biogeography

14:15-14:30 Jin J.
Morphological plasticity in the early diversification of the post-extinction Silurian pentameride fauna

14:30-14:45 Zhou H., Huang B.
Population analysis of the Silurian brachiopod *Atrypoidea foxi* Jones from Qujing, Yunnan Province

14:45-15:00 Lü D., Ma X.
Small-sized brachiopods from the Upper Frasnian (Devonian) of central Hunan, China

15:00-15:15 Qiao L.
Devonian brachiopod fauna from the Baoshan block in western Yunnan, China

15:15-15:30 Wu H., Shi G. R., He W.
A quantitative taxonomic review of *Fusichonetes* and *Tethyochonetes* (Chonetidina, Brachiopoda)

15:30-15:50 **COFFEE-BREAK**

SESSION 6 ***Modern brachiopods***
Convenors: **Bitner A.**, **Cusack M.** and **Lüter C.**

15:50-16:15 Keynote lecture
Temereva E., Kuzmina T.
Organization of the lophophore in linguliform *Pelagodiscus atlanticus* (King) and the evolution of the lophophore in brachiopods

16:15-16:30 Lüter C., Furchheim N.
Light sensation in adult brachiopods

16:30-16:45 Simonet-Roda M., Milner S., Müller T., Griesshaber E., Jurikova H., Rollion-Bard C., Angiolini L., Ye F., Bitner M. A., Henkel D., Tomašových A., Eisenhauer A., Harper D., Jansen U., Schmahl W. W.
The evolution of thecideide brachiopod shell microstructure from Triassic to modern times

16:45-17:00 Simon E., Motchurova-Dekova N., Mottequin B.
Diving into the morphology and ontogeny of the micromorphic rhynchonellide genus *Tethyrhynchia* Logan, 1994 in an attempt to elucidate a conflict between morphological and molecular phylogenies

17:00-17:15 López Carranza N., Carlson S. J.
Quantifying variability and understanding species delimitation: a case study integrating morphological and genetic datasets in terebratulide brachiopods

17:15-17:30 Carlson S. J., López Carranza N., Butler A. D., Sperling E. A.
Extant terebratellidina phylogeny and homology of the long loop

17:30-17:45 Gaspard D.
Recent brachiopods of the French Insular Caribbean Region

17:45-18:00 Pakhnevich A. V., Galkin S. V.
New data on brachiopods at the underwater Piip Volcano (Bering Sea)

18:00-18.15 Bitner M. A.
Recent brachiopods from the Tonga islands, SW Pacific: taxonomy and biogeography

18:15-18.30 Williams U. M., Robinson J., Lee D., Lamare M.
Investigating the ecology and environmental tolerance to sedimentation of the brachiopod *Calloria inconspicua* in Otago Harbour, New Zealand

18:30-20:30 **POSTER WINE AND CHEESE**

Wednesday 12th September 2018

8:45-9.35 **PLENARY LECTURE**
Brand U.
Modern brachiopods: superheroes of archives

SESSION 5 ***Biologic mineralization of natural functional materials and archives of geochemical proxies***
Convenors: **Griesshaber E.** and **Eisenhauer A.**

09:35-10:00 Keynote lecture
Ziegler A., Simonet-Roda M., Griesshaber E., Henkel D., Häusermann V., Eisenhauer A., Laudin J., Schmahl W. W.
Mechanisms of calcite fibre formation in *Magellania venosa*

10:00-10:15 Takayanagi H., Nishio T., Fujioka H., Yamamoto K., Endo K., Iryu Y.
A generalized monthly growth curve of modern brachiopod shells

10:15-10:30 Robinson J. H.
Drill-hole repair in Cenozoic and Recent brachiopods

10:30-10:45 Ye F., Angiolini L., Garbelli C., Shen S.
Evolution and fabric differentiation of Palaeozoic rhynchonelliformean brachiopod shells

10:45-11:05 **COFFEE-BREAK**

11:05-11:20 Mages V., Casella L., Simonet-Roda M., Ye F., Crippa G., E. Griesshaber, Angiolini L., Schmahl W. W.
The intermediate stages of diagenetic overprint deduced from hydrothermally altered and fossil brachiopod shells

11:20-11:35 Romanin M., Bitner M.A., Angiolini L., Gatta D. G., Brand U.
Cement-filled fossil brachiopod punctae and potential analytical bias in paleoenvironmental reconstructions

11:35-12:00 Keynote lecture
Rollion-Bard C., Milner S., Saulnier S., Burckel P., Vigier N., Angiolini L., Tomašových A., Henkel D., Jurikova H., Lécuyer C.
What can geochemical proxies tell about the biomineralization processes of brachiopods?

12:00-12:15 Bajnai D., Fiebig J., Tomašových A., Milner Garcia S., Rollion-Bard C., Raddatz J., Löffler N., Primo-Ramos C., Angiolini L., Henkel D., Brand U.
Assessing kinetic fractionation in brachiopod calcite using clumped isotopes

12:15-12:30 Smajgl D., Mandic M., Böhm F., Eisenhauer A.
New approach in stable isotope analysis of carbonates: isotope ratio infrared spectrometry

12:30-12:45 Jurikova H., Liebetrau V., Gutjahr M., Krause S., Büsse S., Gorb S. N., Henkel D., Hiebenthal C., Schmidt M., Leipe T., Laudien J., Eisenhauer A.
Major and trace element composition and microstructure of cultured brachiopods – new proxies?

12:45-13:00 Nishio T., Takayanagi H., Asami R., Shinjo R., Yamamoto K., Iryu Y.
Variations in trace element concentrations of modern brachiopod shells

13:00-14:10 **LUNCH**

14:10-14:25 Müller T., Tomašových A., Mikuš T.
Variation of Mg/Ca in brachiopod shell: expression of growth rate rather than temperature seasonality

14:25-14:40 Fuchs R., Lazar B., Angiolini L., Crippa G., Felletti F., Fruchter N., Eisenhauer A., Stein M.
Reconstructing $^{87}Sr/^{86}Sr$ and $\delta^{88/86}Sr$ in Pliocene-Pleistocene seawater by fossil brachiopods, bivalves, gastropods and foraminifera

14:40-14:55 Wang W., Garbelli C., Shen S.
Permian strontium isotope stratigraphy based on brachiopod shells from South China

SESSION 4 ***Mass extinctions and recovery***
Convenors: **Shen S.**, **Baliński A.** and **García Joral F.**

14:55-15:20 Keynote lecture
Vörös A.
Mass extinctions and fatal extinctions in the history of brachiopods: review and post-Paleozoic cases

15:20-15:35 Hughes Z. E., Belben R. A., Johnson K. G, Twitchett R. J., Hughes C.
Brachiomatic: utilising new museum collections digitisation protocols to examine brachiopod size across extinction boundaries cases

15:35-15:50 Chen D., Rong J.
The linguliform and craniiform brachiopods from the latest Ordovician *Hirnantia* fauna of South China and Myanmar

15:50-16:10 **COFFEE-BREAK**

16:10-16:25 Huang B., Jin J., Rong J.
Diversification patterns of brachiopods after the end Ordovician mass extinction and its palaeobiogeographic significance

16:25-16:40 Mottequin B., Bartzsch K., Simon E., Weyer D.
Evolution of the brachiopod assemblages at the Devonian–Carboniferous boundary (Hangenberg Crisis) in basinal facies from SE Thuringia (Germany)

16:40-16:55 Jurikova H., Gutjahr M., Wallmann K., Flögel S., Liebetrau V., Posenato R., Angiolini L., Garbelli C., Brand U., Eisenhauer A.
Major marine carbon cycle perturbations during the Permian-Triassic mass extinction

16:55-17:20 Keynote lecture
Shen S., Ramezani J., Chen J., Cao C., Erwin D. H., Zhang H., Xiang L., Schoepfer S. D., Henderson C. M., Zheng Q., Bowring S. A., Wang Y., Li X., Wang X., Yuan D., Zhang Y., Mu L., Wang J., Wu Y.
A sudden end-Permian mass extinction in South China

17:20-17:35 Wang F., Chen J., Dai X., Song H.
A new Induan (Early Triassic) brachiopod fauna from South China and implications for biotic recovery after the Permian-Triassic extinction

17:35-17:50 MacFarlan D. A. B.
Early Jurassic terebratulide brachiopods from Zealandia

17:50-18:05 Piazza V., Aberhan M.
Selectivity of temperature-related stresses towards brachiopods across the Early Toarcian (Early Jurassic) extinction event in Neo-Tethys

18:05-19:00 **POSTERS**

19:00-20:00 **CONCERT**

20:00-23:00 **GALA DINNER**

Friday, 14th September 2018

08:30-09.20 **PLENARY LECTURE**
Harper E. M.
Living brachiopods: hanging on or fit for a modern world?

SESSION 3 ***Ecosystems in time and space***
Convenor: **Harper D.A.T.**

09:20-09:45 Keynote lecture
Zhang Z., Holmer L. E., Brock G. A., Topper T. P.
Paleoecological complexities during Cambrian explosion: evidence from brachiopods

09:45-10:00 Topper T. P., Harper D. A. T.
Back to the beginning: the life and times of Cambrian brachiopods

10:00-10:15 Liu F., Zhang Z., Chen Y., Chen F.
A diverse fossil assemblage from a new section through the Shipai Formation (Cambrian Series 2, Stage 4) in western Hubei Province, South China

10:15-10:30 Pan B., Skovsted C. B., Li L., Li G.
The Cambrian Epoch 2 brachiopod fauna from the Xinji Formation, Shuiyu section of North China

10:30-10:50 **COFFEE-BREAK**

10:50-11:15 Keynote lecture
Harper D. A. T.
The rise of the rhynchonelliform brachiopods: the role of the great Ordovician biodiversification event

11:15-11:30 Candela Y., Harper D. A. T., Mergl M.
Early Ordovician (Late Tremadocian – Early Floian) brachiopods from the Fezouata Shale, Anti-Atlas, SE Morocco

11:30-11:45 Cocks L. R. M., Torsvik T. H.
Useful and useless – brachiopods and palaeogeogeography

11:45-12:00 Jansen U.
Evolution, stratigraphy and palaeobiogeography of Late Pridolian–Early Eifelian brachiopods from the Rhenish Massif (Germany)

12:00-12:15 Guo W., Sun Y., Nie T.
Facies control on the Lower Emsian (Lower Devonian) brachiopod faunas in South China

12:15-12:30 Balinski A., Halamski A. T., Racki G.
A diverse Early Frasnian brachiopod fauna from central Poland and its palaeoecological characteristics

12:30-12:45 Halamski A. T.
Palaeobiogeography and evolutionary affinities of the Early Frasnian brachiopod fauna from central Poland

12:45-13:00 Xu H., Zhang Y., Qiao F., Shen S.
A new Changhsingian (Late Permian) brachiopod fauna from the Xiala Formation at Coqen in the central Lhasa Block and its palaeogeographical implications

13:00-14:10 **LUNCH**

14:10-14:35 Keynote lecture
Twitchett R. J.
Brachiopods in post-Permian hothouse worlds

14:35-14:50 Kiel S., Peckmann J.
The ecology of brachiopods in ancient methane-seep environments

14:50-15:05 Dulai A., Özcan E., Less G.
Eocene brachiopods of the Thrace Basin (NW Turkey)

15:05-15:20 García-Ramos D. A., Zuschin M.
Cyclicity of *Terebratula* pavements in a mixed carbonate-siliciclastic prograding wedge: Early Pliocene of SE Spain

15:20-15:35 Buono G.
Brachiopods in Italy: a very long record and a new database

SESSION 2 ***Taphonomy and Palaeoecology***
Convenors: **Pérez-Huerta A.** and **Tomašových A.**

15:35-16:00 Keynote lecture
Shiino Y.
Form and function of fossil brachiopods: insights into evolutionary morphology

16:00-16:15 Tomašových A., Kidwell S. M., Müller T.
Time averaging of brachiopods in the southern California bight: implications for paleoecology, taphonomy, and conservation paleobiology

16:15-16:35 **COFFEE-BREAK**

16:35-16:50 Cisterna G. A., Sterren A. F., Shi G.R.
Carboniferous-Permian glacial-deglacial events and their effects on the brachiopod faunas from Argentina and Australia

16:50-17:05 Yuan Z., Sun Y., Shen B.
An *in situ* preserved late early Carboniferous brachiopod fauna in southern Guizhou, China

17:05-17:20 Bahrammanesh M., Rezaee H., Mossadegh H.
Tournaisian (Mississippian) brachiopods from the Mobarak Formation, eastern Alborz (north Iran)

17:20-17:35 Sun Y., Li T., Nie T., Shen B., Guo W.
***Dzieduszyckia* in southern China: morphological variation and population dynamics**

17:35-17:50 Sproat C. D., Zhan R.
A Late Katian (Late Ordovician) low diversity and high dominance brachiopod fauna from the Tarim Basin in Northwest China

17:50-18:05 Chen J., Song H., Wang F.
Size evolution of brachiopods from the Late Permian through the Middle Triassic in South China

POSTERS

SESSION 1 ***Systematics and evolution***

1 Bahrammanesh M., Zahabizadeh B., Alaeddini K.
Carboniferous brachiopods from NW Havir Lake (Damavand, N Iran)

2 Berrocal-Casero M., Barroso-Barcenilla F., García Joral F.
Microornamentation and other external features as distinctive criteria for the Coniacian (Upper Cretaceous) terebratulides from Northern Spain

3 Buono G.
Famous brachiopods, part 1: brachiopods in lapidary stones

4 Buono G.
Famous brachiopods, part 3 – brachiopods in philately

5 Legrand-Blain M.
Gigantoproductid and allied brachiopods from "L'ardoisiere" (Visean), northern Massif Central, France

6 Leone M. F., Benedetto J. L.
Phylogenetic relationships of the Silurian Afro-South American Realm rhynchonellide brachiopods *Anabaia*, *Harringtonina* and *Clarkeia*: new insights from their ontogeny

7 Mottequin B., Lefèvre U., Cisterna G. A.
A review of the brachiopod subfamily Septosyringothyridinae (Spiriferinida) from the Carboniferous of Laurussia and Gondwana

8 Taddei Ruggiero E., Raia P.
The old, misnamed, misunderstood *Terebratula sinuosa*

SESSION 2 ***Taphonomy and Palaeoecology***

9 Angiolini L., Banks V., Carniti A., Della Porta G., Stephenson M.
How mud mounds controlled brachiopod population growth and life-style in the Carboniferous: an example from the Viséan of Derbyshire, UK

10 Baliński A., Skompski S., Szulczewski M., Zawadzka I.
The origin of the Middle–Late Devonian brachiopod shell concentration within intrashelf basinal carbonates in the Holy Cross Mountains (central Poland)

11 Madison A., Kuzmina T.
The tube-like structures on the juvenile shells of strophomenids and billingsellids as evidence of their life cycles

12 Pakhnevich A. V.
Preservation of brachiopod soft tissues outside the Lagerstätte conditions

13 Pálfy J., Price G. D., Vörös A., Kovács Z., Johannson G. G.
Cold seep-related occurrence of the Early Jurassic rhynchonellid brachiopod *Anarhynchia* from the Canadian Cordillera

14 Paredes R., Comas-Rengifo M. J., García Joral F., Duarte L. V., Goy A.
Disparity and diversity in Early Jurassic first colonizing brachiopods of the Lusitanian Basin (Portugal)

15 Shiino Y., Tsuchida T.
A hydrodynamic approach to orthid brachiopod *Vinlandostrophia ponderosa*: reevaluation of zig-zag function

16 Sklenář J.
Brachiopods of the Late Turonian hemipelagic strata of the Saxo-Bohemian Cretaceous Basin (central Europe)

17 Stadtmauer D., Butts S.
Skeletal ultrastructure, ecology, and functional morphology of the Permian lyttoniid brachiopod, *Pirgulia*

18 Viaretti M., Angiolini L., Heward A.
Lower to Middle Permian brachiopods from the Qarari Unit, Oman

19 Zhang Y., Zhan R., Huang B.
Late Ordovician brachiopods from Xichuan, southwestern Henan, central China and their implications

20 Zhang Z., Holmer L. E., Zhang Z., Chen F., Liang Y.
Brachiopods with soft parts from the Early Cambrian Wulongqing Formation (Series 2, Stage 4) of Yunnan, southern China

SESSION 3 *Ecosystems in time and space*

21 Baeza-Carratalá J. F., Dulai A., Giannetti A., Soria J. M., Tent-Manclús J. E.
A new Late Tortonian brachiopod assemblage from the Mediterranean-Atlantic seaway (Guadix Basin, SE Spain)

22 Vörös A., Escarguel G.
Brachiopod paleobiogeography in the western Tethys during the Early Jurassic taxonomic diversity maximum: identification of a new Pontic province

SESSION 4 *Mass extinctions and recovery*

23 Baeza-Carratalá J. F., Dulai A., Sandoval J.
First brachiopod diversification in the Early Jurassic of the Subbetic platform (South-Iberian Paleomargin, Spain)

24 Baeza-Carratalá J. F., García Joral F.
Adaptive response of brachiopod fauna to the environmental changes related to the Early Toarcian mass extinction event

25 Serobyan V., Grigoryan A., Crônier C., Mottequin B., Taniel D.
The brachiopod record around the Devonian–Carboniferous boundary: insights from the sedimentary sequences of Armenia

26 Vörös A., Dulai A., Főzy I.
Brachiopods and the Early Cretaceous Weissert event (Bakony Mountains, Hungary)

27 Zhang Y., Wu H.
Early warning signals of marine benthic ecosystem prior to the Permian–Triassic boundary mass extinction event in South China

SESSION 5 ***Biologic mineralization of natural functional materials and archives of geochemical proxies***

28 Bruggmann S., Klaebe R., Frei R.
Chromium isotopes in brachiopods as a redox proxy

29 Füger A., Kuessner M., Rollion-Bard C., Leis A., Dietzel M., Mavromatis V.
The effect of pH and precipitation rate on $\delta^{7}Li_{solid\text{-}fluid}$ during the growth of calcite - an experimental approach

30 Fujioka H., Takayanagi H., Yamamoto K., Iryu Y.
Quantitative study of geochemically diagenetic impact on fossil brachiopod shells from northeastern Japan

31 Gaspard D.
Disorder introduced in the hierarchical architecture of selected fossil rhynchonelliform brachiopod shells

32 Gaspers N., Magna T., Tomašových A., Henkel D., Jurikova H.
Lithium in brachiopods – proxy for seawater evolution?

33 Isowa Y., Kito K., Endo K.
An immunological study of the shell matrix protein ICP-1 in brachiopods

34 Jurikova H., Liebetrau V., Gutjahr M., Rollion-Bard C., Hu M. Y., Krause S., Henkel D., Hiebenthal C., Schmidt M., Laudien J., Eisenhauer A.
Geochemical and physiological responses of brachiopods to ocean acidification – new insights from boron isotopes

35 Kocsis L., Dulai A., Yunsi M., Cipriani A.
Geochemical study of *Megathiris detruncata*, a brachiopod species known since the Eocene in Europe

36 Legett S. A., Rasbury E. T., Grossman E. L., Hemming N. G., Wright C. C.
Shelled archives: using brachiopods to reconstruct the seawater $\delta^{11}B$ record across the Late Paleozoic Climate Shift

37 Milner Garcia S. A., Rollion-Bard C., Burckel P., Müller T., Jurikova H., Tomašových A., Angiolini L., Henkel D.
Fossil brachiopod shell calcite: how well is the oxygen isotope composition and minor element ratios preserved within the shell microstructure?

38 Romanin M., Crippa G., Ye F., Bitner M. A., Gaspard D., Häussermann V., Laudien J., Brand U.
Trace elements, stable isotope composition and shell microstructure, defining the optimal sampling shell segment for geochemical analyses in five modern brachiopod species

39 Simonet-Roda M., X. Yin, Cross E., Harper L., Ziegler A., Schmahl W. W., Peck L., Griesshaber E.
Microstructure formation in the shell of the Antarctic brachiopod *Liothyrella uva* (Broderip 1833): transition from larval to juvenile stages

40 Twitchett R. J., Paulus C., Hughes Z., Brownscombe W.
Giants in the hot tub? Sclerochronology of Pliocene brachiopods of southeast UK

41 Ye F., Jurikova H., Angiolini L., Brand U., Crippa G., Henkel D., Laudien J., Hiebenthal C., Šmajgl D.
Variation in brachiopod microstructure and isotope geochemistry under low pH - ocean acidification – conditions

SESSION 6 *Modern brachiopods*

42 Bitner M. A., Romanin M.
Recent brachiopods from the South China Sea, NW Pacific

43 Bitner M. A.
The first recent record of the genus *Neobouchardia* (Brachiopoda: Bouchardiidae) from the Coral Sea, SW Pacific

44 Buono G., Davidde B., Sacco Perasso C., Ricci S.
"Famous brachiopods", part 2 – brachiopods on archeological remains

45 Endo K., Motchurova-Dekova N., Suzuki N., Maekawa Y., Takayanagi H., Hirose M.
A new locality of a living platidiid in northern Japan observed by a remotely operated vehicle

46 Temereva E., Kuzmina T.
Spermatogenesis in the deep-sea brachiopod *Pelagodiscus atlanticus* (Brachiopoda: Linguliformea)

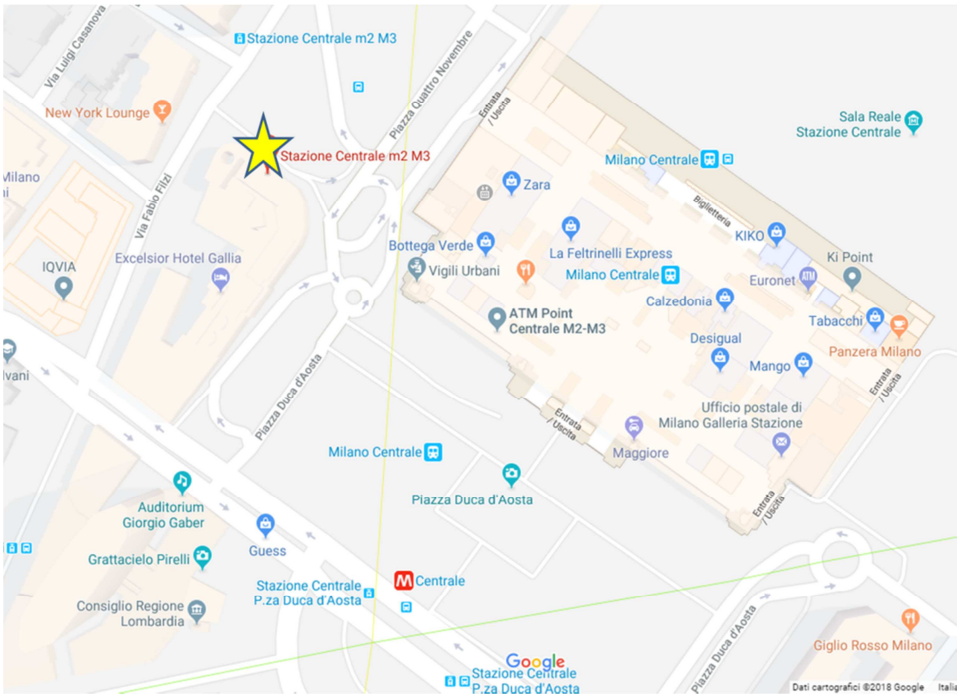
EXCURSIONS

Detailed information about the excursions are available at http://www.8brachiopodcongress.com/field-trips.html. Please visit the website and the "read more" sections.

E1	Spain	6-9 September
ME2	Arda River Section	13 September
ME3	Grigna Mountain	13 September
E3	UK	15-18 September
E4	Sicily	15-18 September

Field guides will be provided to all participants in the excursions**.**

ME2 and ME3 excursions will leave at 7.30 from Piazza Quattro Novembre, near Central Train Station (Metro Lines M2 and M3) (see the map below).



IMPORTANT RULES TO FOLLOW

- The badge will be requested on all congress sites (sessions, coffee-breaks, lunches, cheese & wine, concert, dinner); please bring it always with you.
- The debates should be respectful.
- Talks or posters should not be photographed or video recorded without the authors' permission.
- No images or video should be posted without the authors' permission.

GUIDELINES FOR ORAL AND POSTER PRESENTATIONS

English will be the official language of the meeting and excursions.

Presentations should be created in MS Power Point (.ppt, .pptx). Presentations created in Apple's Keynote should be converted into or saved in pdf format. Speakers are kindly asked to test their presentation during the uploading.

Speakers must upload their presentation file to the PC at the slide centre at the entrance of the Main Hall, according to the following plan:

- those presenting in the morning, must upload their file by 18:00 of the previous day;
- those presenting in the afternoon must upload their file by 12:00 AM on the day of their presentation.

Poster boards are in portrait format (236 cm [height] x 95 cm [width]). No larger posters will be exposed. Each poster have a specific number in the scientific program (see list of the posters in the program above) and must be placed in the corresponding board space.

Further instructions for talks and posters are given in the Congress website (http://www.8brachiopodcongress.com/guidelines.html).

VERY IMPORTANT

The time allocated for the talks is as follows:

- Plenary talk: 40 minutes of talk + 10 minutes of discussion
- Key-note talk: 20 minutes of talk + 5 minutes of discussion
- Oral presentations: 12 minutes of talk + 3 minutes of discussion

As we have many talks, the allocated time should be strictly respected.

CONGRESS PROCEEDINGS

We plan to publish the Congress proceedings in the open access ISI journal *Rivista Italiana di Paleontologia e Stratigrafia* (http://riviste.unimi.it/index.php/RIPS/index).

Deadline for manuscript submission to the proceedings volume is 31 January 2019.

ACCOMMODATION

Information about how to find accommodation in Milano is available on the Congress website at http://www.8brachiopodcongress.com/accommodation.html. If you need help in booking a hotel, please contact sales@eravelservice.com.

INSURANCE

The conference organizers cannot accept liability for personal accidents or loss of, or damage to private property of participants, either during or indirectly arising from the 8th International Brachiopod Congress. Participants are advised to take out their own personal health and travel insurance for their trip and for their participation at excursions and field trips.

Personal health and travel insurance can also be obtained through sales@eravelservice.com.

EXPERIENCE BRACHIOPODS AND DISCOVER ITALY

Travel packages to explore Milano and the natural beauty and history of Italy are available at http://www.eravelservice.com/ and hereafter. To book a package please write to sales@eravelservice.com

Italy is a safe country known for its beautiful seas, sublime Alps, solemn monuments and immortal memories: a country of glory and beauty, and yours to discover.

MILAN 1 DAY

Full day in the city of Milan. Guided tours of the monuments and of the historical and artistic sites.

Program:

- Guided tour of Milan (historical city center)
- Guided tour of “Duomo”, the main cathedral (ticket for the Church and roof).
- Guided tour of “Castello Sforzesco”, Sforza’s castle (courtyards visit).
- Guided tour of Parco Sempione and visit of “Arco della Pace”
- Guided tour of Brera district, Corso Montenapoleone, Via della Spiga and the shopping center (afternoon)
- Boat Tour on the Naviglio River (on request and availability), instead of the afternoon shopping

All of Milan’s museums, churches, palaces and archeological sites are available only on request, here a list of some of the most requested museums and sites.

- Visit of the Brera Picture gallery
- Visit of the Museum of the Sforza’s Castle
- Visit of the Cenacolo of Leonardo, in Santa Maria delle Grazie’s church
- Visit of the Poldi Pezzoli Museum
- Visit of the Pinacoteca Ambrosiana

Costs:

Starting from 150€ per person (min. 6 people)
(All inclusive) with lunch, tickets and english speaking guide.
REGISTRATION UP TO THE 10th of AUGUST!

VENICE 1 DAY

Full day in the city of Venice. Guided tours of its monuments and of its historical and artistic locations. Discover one of the most characteristic city in the whole world.

Program:

- Guided tour of Venice (San Marco Square).
- Guided tour of “Duomo San Marco”, the main cathedral (ticket for the Church and roof)
- Two Boat taxi tour around Venice (from the Station to San Marco Square and back)
- In the afternoon, shopping around Venice’s typical streets called: “Calli” or one guided tour around the city

Costs:

Starting from 330€ per person (min. 10 people) with train tickets included.
(All inclusive) with lunch, tickets and english speaking guide.

REGISTRATION UP TO THE 10th of AUGUST!

FLORENCE 1 DAY

Full day in the city of Florence. Guided tours of the monuments and of the historical and artistic sites of one of the Italian most beautiful city, the heart of the Italian Renaissance.

Program:

- Guided tour of Florence (city center)
- Visit of the Santa Maria del Fiore Cathedral, the main cathedral (inside and roof tickets)
- Visit of Ponte Vecchio and Piazza della Signoria
- In the afternoon, Uffizi Gallery tour or Boboli's Garden tour (Only on request and on availability)
- A shopping tour in the city center may be also arranged

Costs:

Starting from 300€ per person (min. 10 people) with train tickets included. (All inclusive) with lunch, tickets and english speaking guide.

REGISTRATION UP TO THE 10th of AUGUST!

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