

## 1. TITLE OF CONSTITUENT BODY and NAME OF REPORTER

Subcommission on Cretaceous Stratigraphy (SCS)

Maria Rose Petrizzo, Chair; Michael Wagreich and James Haggart, Vice-chairs; Francesca Falzoni, Secretary  
15 November, 2019

## 2. OVERALL OBJECTIVES AND FIT WITHIN IUGS SCIENCE POLICY

- To establish a standard global stratigraphic subdivision and nomenclature for the Cretaceous, as part of the ICS standard global stratigraphic scale.
- To produce a stratigraphic table displaying agreed subdivisions to stage and substage level, marking boundaries that are defined by a GSSP.

## 3. ORGANISATION - interface with other international projects / groups

SCS has always been linked to important international Projects such as IODP, IGCP, Mesozoic Planktonic Foraminiferal Working Group, and ICDP (International Continental Scientific Drilling Project).

### 3a. Current Officers:

Chair: Maria Rose Petrizzo; Vice-Chairs: Michael Wagreich and James Haggart; Secretary: Francesca Falzoni.

### Nominated Officers for 2020-2024 period:

Chair: Maria Rose Petrizzo; Vice-Chair: Michael Wagreich; Secretary: Francesca Falzoni.

Voting Members are 19, from most continents. Over 150 Cretaceous scientists from all over the world and in many different disciplines belong to one or more of the Stage Working Groups and to the Kilian Group. The Stage Working Groups of the SCS are: Berriasian, Valanginian, Hauterivian, Barremian, Aptian, Coniacian and Campanian. All WG leaders (chairs) and members are treated as Corresponding Members of the SCS.

## 4. EXTENT OF NATIONAL/REGIONAL/GLOBAL SUPPORT FROM SOURCES OTHER THAN IUGS

The SCS has strong links with IGCP projects.

IGCP 609 has ended (OET-On Extended Terms in 2018), proceedings will be published as a Special Publication book in the Geological Society of London series (SP497 Cretaceous Climate Events and Short-Term Sea-Level Changes).

IGCP 632 Continental Crises of the Jurassic: Major Extinction Events and Environmental Changes within Lacustrine Ecosystems (leader: J. Sha). Subproject Late Mesozoic lacustrine systems in Tunisia and their global correlation (leader: B. Sames).

IGCP 679-Cretaceous Earth Dynamics and Climate in Asia (new in 2019, Project Leader Prof. Gang Li, China)

## 5. CHIEF ACCOMPLISHMENTS IN 2019

### • WORKING GROUPS ACTIVITIES TOWARDS THE DEFINITION OF THE GSSPs

Chairs and updated memberships of each WG are available at <http://cretaceous.stratigraphy.org/working-groups/>. Memberships are updated continuously by inviting active scientists who are willing to collaborate in the WG activities.

#### Campanian GSSP

The Bottaccione section (Italy) will be proposed as candidate stratotype section. The WG agreed on proposing the base of the magnetostratigraphic 33r as primary criterion for the base of the Campanian. Secondary criteria include planktonic foraminifera and calcareous nannofossil events. Carbon isotope excursions will be used to better constrain the S/C boundary and to trace high resolution correlations with boreal sections. Auxiliary sections, possibly containing the macrofossils record, include Seaford Head (UK), Postalm (Austria), Waxahachie Dam Spillway (Texas), and other sections in the Western Interior Basin of North America. The Bottaccione section was sampled for magneto-bio-chemostratigraphy in September 2018, and results are now available for discussion within the WG and integration toward the preparation of the GSSP proposal.

#### Coniacian GSSP

The Salzgitter-Salder (Germany) will be proposed as candidate stratotype section. The section was re-studied for planktonic and benthic foraminifera and dinoflagellate cysts. Primary criterion is the appearance of the inoceramid *Cremonocerasmus deformis erectus*. Secondary criteria include a minimum in the  $\delta^{13}\text{C}$  values (Navigation Event) useful for correlation among sections. Possible auxiliary sections include El Rosario (NE Mexico), Strelec Quarry railroad cut (Bohemia, Czech Republic), Hot Spring (Big Bend National Park, SW Texas), and sections in the Cauvery Basin (SE India). Jarvis and Pearce are studying dinocysts from the Salzgitter-Salder section (preliminary report presented during STRATI 2019); additional samples will be treated and the entire report will be published soon. Cech and Uličný are working on the auxiliary candidate section from Bohemia. The section is an expanded siliciclastic succession that improves the understanding of the boundary (manuscript in prep.). The candidate section was also presented during the SCS meeting at STRATI 2019. Foraminifera and dinocysts are studied from the Opole Cretaceous, southern Poland (1 manuscript submitted and 1 in preparation by Peryt, Dubicka and Walaszczyk that should be submitted to Newsletters on Stratigraphy by early 2020). Further works were continued in the Pueblo section, Colorado, USA (Walaszczyk, Sept. 2019) needed to compile the chemostratigraphy and biostratigraphy for the entire Coniacian of the section (by Walaszczyk, Sageman and Todes).

*Čech, S., Uličný, D. (in prep.). The Turonian-Coniacian stage boundary in an expanded siliciclastic succession: integrated stratigraphy in deltaic through offshore facies, Bohemian Cretaceous Basin. – Cretaceous Research.*

*Strozyk, K. (submitted). Dinoflagellate cysts in the Turonian-Coniacian (Upper Cretaceous) boundary interval of the Opole Trough (SW Poland); biostratigraphic, palaeoenvironmental and biogeographic implications—Acta Geologica Polonica.*

#### **Albian GSSP**

Officers of the SCS contacted the local authorities of the Commune of Arnayon (Département of Drôme) on the official steps to follow for the establishment of a geopark for the protection of the site.

#### **Aptian GSSP**

The WG met in Milan at STRATI 2019 and discussed the best primary criterion for the definition of the base of the Aptian Stage. Together with the paper on the Gorgo a Cerbara section by Frau et al. (2018), the work by Coccioni (2019, in press) forms a new baseline for discussion on the use of the base of M0 for definition of the base of the Aptian. According to the revisions of the stratigraphy at Gorgo a Cerbara the base of M0r falls into the Barremian. The WG has to consider now other possible markers for defining the base of the Aptian, including the  $\delta^{13}\text{C}$  negative anomaly (segment C3 *sensu* Menegatti et al. 1998) at the onset of Oceanic Anoxic Event (OAE) 1a. Shifting the Barremian/Aptian boundary to the C3 negative spike, would change the age of some ammonite species from Aptian to Barremian. Any change to the previous definition (base of M0) might have a significant impact on the stratigraphy of many known outcrops and subsurface sections, as well as on the definition of the Bedoulian substage.

*Coccioni, 2019 (online version). Revised upper Barremian–upper Aptian planktonic foraminiferal biostratigraphy of the Gorgo a Cerbara section (central Italy) - Newsletters on Stratigraphy — Schweizerbart science publishers, DOI: 10.1127/nos/2019/0539*

#### **Barremian GSSP**

The Rio Argos section (Caravaca, SE Spain) will be proposed as candidate stratotype section for the Barremian Stage. Foraminiferal and calcareous nannofossil, stable-isotope and cyclostratigraphic analyses are concluded. The primary criterion is the lowest occurrence of the ammonite *Taveraidiscus hugii*. Secondary criteria are ammonite, calcareous nannofossil and foraminiferal events. Auxiliary sections are identified in the Subbetic zone, the Arroyo Gilico section near Caravaca and other two sections nearby Rio Argos. Correlation between Rio Argos and the Gorgo a Cerbara and Fiume Bosso sections (central Italy) can be performed by using ammonite and isotope stratigraphy within the upper part of magnetochron M5n.

*Premoli Silva, I., Soldan, D.M., Petrizzo, M.R. (2018). Upper Hauterivian–upper Barremian planktonic foraminiferal assemblages from the Arroyo Gilico section (southern Spain). Journal of Foraminiferal Research, 48, 314–355.*

*Melliti, S., Reboulet, S., Ben Haj Ali, N., Arfaoui, M.S., Zargouni, F., Memmi, L. (2019). Ammonoid and foraminiferal biostratigraphy from uppermost Valanginian to lowermost Barremian of the Jebel Boulahouajeb section (northern Tunisia). Journal of African Earth Sciences, 151, 438–460.*

#### **Hauterivian GSSP**

The proposal to formalize the base of the Hauterivian Stage at the FO of the ammonite genus *Acanthodiscus* at the La Charche section (SE France) was voted on in August 2019 within the SCS and approved by a majority of 91% of delivered votes. The proposal is currently under voting within ICS.

#### **Valanginian GSSP**

Possible GSSP candidates for the base of the Valanginian are the Cañada Luenga section (SE Spain) and the Vergol section (SE France). The proposed primary criterion for the base of the Valanginian is the lowest occurrence of *Calpionellites darderi*, which correlates with the lowermost part of magnetochron M14. Integrated analysis of ammonites, calpionellids and calcareous nannofossils correlated with magnetostratigraphic and chemostratigraphic data are nearly completed for the Cañada Luenga section. Cyclostratigraphy is available for the Vergol section; calpionellid, ammonite and calcareous nannofossil biostratigraphies are in progress; unfortunately, no magnetostratigraphic analysis is possible. The WG has carried out new sampling to prepare thin sections for the calpionellid study.

*Aguirre-Urreta, B., Martinez, M., Schmitz, M., Lescano, M., Omarini, J., Tunik, M., Kuhnert, H., Concheyro, A., Rawson, P.F., Ramos, V.A., Reboulet, S., Noclin, N., Frederichs, T., Nickl, A.-L., Pälike, H. (2019). Interhemispheric radio-astrochronological calibration of the time scales from the Andean and the Tethyan areas in the Valanginian–Hauterivian (Early Cretaceous). Gondwana Research, 70, 104–132.*

*Melliti, S., Reboulet, S., Ben Haj Ali, N., Arfaoui, M.S., Zargouni, F., Memmi, L. (2019). Ammonoid and foraminiferal biostratigraphy from uppermost Valanginian to lowermost Barremian of the Jebel Boulahouajeb section (northern Tunisia). Journal of African Earth Sciences, 151, 438–460.*

#### **Berriasian (J/K boundary) GSSP**

In Spring 2019, the WG held a consultation and formal vote on selecting a GSSP for the base of the Berriasian Stage. By this vote the group selected the profile of Tre Maroua in the Vocontian Basin (France) with a 73% majority. Moreover, the WG held a conference jointly with the Jurassica Group on 10-14 June 2019 at Comenius University, Bratislava, superbly organised by a team led by Kamil Fekete. The GSSP proposal is currently under discussion within the WG.

*Fekete, K., Michalik, J., Rehakova, D. (2019). 14<sup>th</sup> Jurassica Conference and Workshop of the ICS Berriasian Group. Earth Science Institute, Slovak Academy of Sciences.*

#### **KILIAN Group**

The WG was inactive in 2019.

- ADDITIONAL ACTIVITIES

- STRATI 2019, Milan (Italy): scientific session “ST 3.8 Cretaceous integrated stratigraphy, greenhouse climate change and events” chaired by SCS Officers. The session hosted 32 oral presentations and 9 posters.
- 4 July 2019, Milan (Italy): Business Meeting of the Cretaceous Subcommission (STRATI 2019). Members of the Subcommission met to discuss the progresses made toward the definition of the missing GSSP stratotypes. The meeting minutes are available at <http://cretaceous.stratigraphy.org/archives/>.
- JK2018 was held in Geneva (Switzerland, 05-07/12/2018). In numbers: 15 partners, 176 (co-)authors, 74 registrants, 25 countries, 6 keynotes, 33 presentations, 25 posters. Abstract volume at [http://paleopolis.rediris.es/cg/CG2019\\_B01/CG2019\\_B01.pdf](http://paleopolis.rediris.es/cg/CG2019_B01/CG2019_B01.pdf). Reports in *Vol. Jur.* <https://voluminajurassica.org/resources/html/article/details?id=188910> and *TMS News*. <https://www.tmsoc.org/download/newsletter-99-march-2019/?wpdmdl=8403&refresh=5dc1b16fa9af61572974959> Special Issue of *Cret. Res.* should comprise some 15 papers, including <https://authors.elsevier.com/c/1ZzjYiVLD8~8C> (free until 17/12/2019).
- October 2019: IX All-Russian Lithological Conference (with international participation) “LITHOLOGY OF SEDIMENTAL COMPLEXES OF EURASIA AND OFFSHORE REGIONS” (Section 6 "Problems of the formation of hydrocarbon deposits" Conveners V.S. Vishnevskaya, L. M. Zhuravleva) - Institute of Geology and Oil and Gas Technologies KFU, Kasan, Russia.
- Vishnevskaya V.S. (2019). Revision of the Early Cretaceous radiolarian species *Williriedellum salymicum* Kozlova. Paleontological Journal, Vol. 53, pp. 334–340. Since the holotype of this species is within a petrographic thin-section, and thus lacks a complete set of characters, we suggest addressing the International Commission on Zoological Nomenclature with a proposal to distinguish the neotype.
- Vishnevskaya V.S., Gatovsky Y.A., Kozlova V.A. (2019). The *Parvingula khabakovi–Williriedellum salymicum* Radiolarian Biohorizon in the West Siberian Bazhenovo Formation (Berriasian–Valanginian). Paleontological Journal, Vol. 53, 42–45. The use of CT and SEM methods in addition to optical microscopy have enabled us to confirm the validity of *Williriedellum salymicum* Kozlova, 1983 and to propose the inclusion of the *Parvingula khabakovi–Williriedellum salymicum* Biohorizon into the regional stratigraphic scheme of the Lower Cretaceous of Western Siberia.

## 6. SUMMARY OF EXPENDITURE IN 2019:

Contribution towards cost of maintenance of the website	400 Euro
Contribution to the WG chairs (Hauterivian, Aptian, Coniacian, Campanian) to attend STRATI 2019	2200.00 Euro
Contribution to the WG chairs (Berriasian, Barremian, Valanginian, Campanian) for fieldworks +analysis	1714.20 Euro
Contribution to the SCS officers (Falzoni, Petrizzo) to attend STRATI 2019 (registration)	760.00 Euro
Contribution for secretarial work	400 Euro
Bank fees for bank transfer	9 Euro
	TOTAL expenditure in 2019 = 5483.20 Euro

## 7. SUMMARY OF INCOME IN 2019:

ICS Subvention for 2019	US dollars 4500.00 = 3997.72 Euro
<u>Carried forward from 2018 and used for STRATI 2019</u>	1485.48 Euro

## 8. BUDGET REQUESTED FROM ICS IN 2020

Contribution towards cost of website maintenance	400 Euro
Contribution to fieldworks/Working Group activities (all Stage WGs)	2500 Euro
Contribution for secretarial work	400 Euro
Albian and Hauterivian GSSP meetings with local authorities and official ceremony	1150 Euro

TOTAL budget request from ICS in 2020= 4450 Euro

## 9. WORK PLAN, CRITICAL MILESTONES, ANTICIPATED RESULTS AND COMMUNICATIONS TO BE ACHIEVED NEXT YEAR (2020):

- STUDIES, FIELD WORK TO FINALIZE THE GSSP PROPOSALS  
Campanian GSSP

The GSSP proposal, including the Bottaccione section and the auxiliary sections, will likely be discussed and voted within the WG in 2020.

#### [Coniacian GSSP](#)

The GSSP proposal, including the auxiliary sections, is in preparation and will be discussed and voted within the WG by the end of 2019.

#### [Albian GSSP](#)

Finalization of the official steps required for the protection and easy accessibility of the GSSP site.

#### [Aptian GSSP](#)

The WG is waiting for magnetostratigraphies from two French locations. As soon as the results are available the discussion on the selection of a physical marker and on the location will be restarted in the WG. The proposal, including the auxiliary sections, is planned to be discussed and voted within the WG by the end of 2020.

#### [Barremian GSSP](#)

The WG is completing the study of the ammonite distribution in the Rio Argo section. The GSSP proposal, including the auxiliary sections, is planned to be discussed and voted within the WG during 2020.

#### [Hauterivian GSSP](#)

A publication of the relevant data regarding La Charche as GSSP section is planned. The protection of the La Charche section is ensured by an Espace Naturel Sensible (ENS), considering the major geological interest of the site. The department and the municipality of La Charche cooperated and established an exceptional and world-renowned geological interpretation circuit for the public. An official ceremony will be held after the ratification of the GSSP by IUGS.

#### [Valanginian GSSP](#)

The WG is now completing the analysis of the ammonite and calcareous nannofossil distribution in both GSSP candidate sections. Therefore, the selection of the candidate stratotype section will be discussed and voted within the WG by 2021.

#### [Berriasian \(J/K boundary\) GSSP](#)

The proposal document for the selected GSSP will be sent to ISCS in earlier 2020 and, if approved, to ICS for voting.

#### [Kilian Group](#)

The upper Aptian, lower-middle Albian zonal schemes will be in focus at the forthcoming Kilian meeting. The Kilian meetings are usually held every 3 years (2002; 2005; 2008; 2010; 2013; 2017). The next meeting will be associated with the next Cretaceous Symposium (Poland, 2021). The local organization will be made by Izabela Ploch.

### **• ADDITIONAL ACTIVITIES**

Publication of a Cretaceous Research Virtual Special Issue titled “*Cretaceous integrated stratigraphy, greenhouse climate change and events*” edited by SCS Officers in 2020. The Special Issue collects papers presented in the Cretaceous Subcommission scientific session held at STRATI 2019.

### **• FUTURE MEETINGS**

-2020 September, the X All-Russian meeting “The Cretaceous System of Russia and neighbouring countries: problems of stratigraphy and paleogeography” is planned in Magadan City.

-2020 - 36<sup>th</sup> International Geological Congress (Delhi, India, 2-8 March 2020).

-2021 - 11<sup>th</sup> International Symposium on the Cretaceous (Poland, 2021).

#### [Potential funding sources external to IUGS](#)

The SCS does not envisage being able, as an organization, to obtain significant funding from outside IUGS/ICS sources. Some additional financial support beyond what is already committed could perhaps be obtained by individual members from their host institutions and/or their personal research funds.

## **10. KEY OBJECTIVES AND WORK PLAN FOR THE PERIOD 2020-2024**

2020: Submission of the Berriasian GSSP to SCS for vote and if approved to ICS for vote and then to IUGS for ratification.

2020-2021: Inauguration of the Albian GSSP, and of the Hauterivian GSSP if approved by ICS and ratified by IUGS.

2020-2021: Finalization of the proposals by the Working Groups for the base Barremian, base Aptian, base Coniacian, base Campanian. Voting by members of the Working Groups to select a single GSSP candidate section.

2020-2021: Continue preparation of proposals for the definition of substages for discussions at the forthcoming meeting: 11<sup>th</sup> International Symposium on the Cretaceous (Poland, 2021).

2020-2022: Finalization of the proposals by the Working Groups for the base Valanginian.

2020-2024: Submission of the proposals for the GSSP candidate sections approved by the Working Groups to the Cretaceous Subcommission Voting Members.

## APPENDIX [Names and Addresses of Current Officers and Voting Members]

### Nominated officers

Chair: Maria Rose Petrizzo, mrose.petrizzo@unimi.it - Dip. Scienze della Terra "A. Desio", Università degli Studi di Milano, via Mangiagalli 34, 20133 Milano, Phone: +39-0250315531

Vice-Chair: Michael Wagreich, michael.wagreich@univie.ac.at, - Department of Geodynamics and Sedimentology, University of Vienna, Althanstrasse 14, Vienna, A-1090, Austria, Phone: 0043-1-4277-53465

Vice-Chair: James Haggart, jhaggart@nrcan.gc.ca - Geological Survey of Canada, 1500-605 Robson Street, Vancouver, British Columbia V6B 5J3, Canada, Phone: 1-604-666-8460

Secretary: Francesca Falzoni, francesca.falzoni1@gmail.com - Dip. Scienze della Terra "A. Desio", Università degli Studi di Milano, via Mangiagalli 34, 20133 Milano, Phone: +39-0250315563.

### List of Voting Members

Baraboshkin Evgenij, ejBaraboshkin@mail.ru - Dept. Regional Geology and Earth History, Geological Faculty, Moscow State University, Vorobjovy Gory, Moscow, 119991 Russia. Phone: +7(495)939-49-32.

Bown Paul, p.bown@ucl.ac.uk - University College London, Gower Street, London, WC1E 6BT, UK, Phone: +44(0)20-7485-3257.

de Souza Carvalho Ismar, ismar@geologia.ufsj.br - Universidade Federal do Rio de Janeiro, CCMN – Igeo Av. Athos da Silveira Ramos 274, Cidade Universitária - Ilha do Fundão 21.941-916 Rio de Janeiro, RJ, Brasil, Phone: 21-3938-9405.

Galbrun Bruno, bruno.galbrun@upmc.fr - Université Pierre et Marie Curie, ISTeP, Institut des Sciences de la Terre-Paris, UMR-CNRS 7193, 4 place Jussieu, 75252 Paris CEDEX 5, France.

Granier Bruno, bgranier@univ-brest.fr - Département des Sciences de la Terre et de L'Univers, UFR Sciences et Techniques, Université de Bretagne Occidentale, 6 avenue, Le Gorgeu – CS 93837, F – 29238 Brest cedex 3, France.

Hasegawa Takashi, jh7ujr@staff.kanazawa-u.ac.jp - Department of Earth Sciences, Faculty of Science, Kanazawa University, Kakuma, Kanazawa, 920-1192 Japan. Phone: 076-264-6508.

Huber Brian T., HUBERB@si.edu - Department of Paleobiology, PO Box 37012, MRC-121, Smithsonian Institution, Washington, DC 20013-7012, Phone: 1-202-633-1328.

Jagt-Yazykova Elena, elenajagt@gmail.com - Opole University, Laboratory of Palaeobiology and evolution, Oleska str. 22, 45-052 Opole, Poland. Phone: +48 (77) 4527312.

Jarvis Ian, I.Jarvis@kingston.ac.uk - Department of Geography and Geology, Kingston University, London Penrhyn Road, Kingston upon Thames, London KT1 2EE, UK, Phone: +44 20 8417 2526.

Kawabe Fumihsisa, fkawabe@aoni.waseda.jp - Ministry of Education, Culture, Sports, Science and Technology, Tokyo 100-8959, Japan.

Sageman Bradley, brad@earth.northwestern.edu - Department of Earth and Planetary Sciences, Northwestern University, 2145 Sheridan Road, Evanston, Illinois 60208-3130, U.S.A., Phone: +1-847-467-2257.

Sari Bilal, bilal.sari@deu.edu.tr - Dokuz Eylul University, Faculty of Engineering, Department of Geological Engineering, Tinaztepe Campus, 35160 Buca-Izmir, Turkey, Phone: +90.232.4127342.

Schioler Poul, poul.schioler@mfpalaeo.com.au 12 Summit Road, Fairfield, Lower Hutt 5011, New Zealand, Phone: +61 (0)8 9249 4628.

Vishnevskaya Valentina, valentina.vishnaa@mail.ru - Geological Institute of the Russian Academy of Sciences, Pyzhevsky per., 7, Moscow 119017, Russia, Phone: 7(495)959-0174.

Voigt Silke, s.voigt@em.uni-frankfurt.de - Institute of Geosciences, Goethe-University Frankfurt, Altenhöferallee 1, 60438 Frankfurt am Main, Phone: +49 (0)69798 40190.

Walaszczyk Irek, i.walaszczyk@uw.edu.pl - Faculty of Geology, University of Warsaw, Al. Zwirki i Wigury 93, 02-089 Warszawa, Poland, Phone: +48 22 5540482.

Watkins David K., dwatkins1@unl.edu - Department of Earth & Atmospheric Sciences, University of Nebraska, Lincoln, NE 68588-0340, USA Phone: 1-402-472-2177

Wilmsen Markus, Markus.Wilmsen@senckenberg.de - Senckenberg Naturhistorische Sammlungen, Dresden, Museum für Mineralogie und Geologie Königsbrücker Landstrasse 159, 01109 Dresden, Germany. Phone: +49 +351-795841-4273.

Wimbledon William A.P., mishenka1@yahoo.co.uk School of Earth Sciences, University of Bristol, Wills Memorial Building, Queens Road, Bristol BS8 1RJ, United Kingdom. Home address: 19 Hazel Walk, Croesyceiliog, Cwmbran, NP44 2NW, United Kingdom. Phone: 44 (0) 1633 483836.

### Working group leaders and corresponding members

#### CAMPANIAN WG

Chair: Gale Andy, Andy.Gale@port.ac.uk - School of Earth & Environmental Sciences University of Portsmouth Burnaby Building Burnaby Road Portsmouth PO1 3QL, Phone: +44-02392846127.

WG Members:

Batenburg Sietske, sietske.batenburg@earth.ox.ac.uk - Department of Earth Sciences, University of Oxford, Oxford, UK.

Chenot Elise, elise.chenot@u-bourgogne.fr - Biogéosciences, UMR 6282, CNRS, University of Bourgogne Franche-Comté, 6 boulevard Gabriel, Dijon F-21000, France.

Coccioni Rodolfo, rodolfo.coccioni@uniurb.it Dipartimento di Scienze della Terra, della Vita e dell'Ambiente, Università degli Studi di Urbino "Carlo Bo", Campus Scientifico "E. Mattei", 61029 Urbino, Italy.

Erba Elisabetta, elisabetta.erba@unimi.it - Dipartimento di Scienze della Terra "A. Desio", Università degli Studi di Milano, via Mangiagalli 34, 20133 Milano, Italy

Falzoni Francesca, francesca.falzoni1@gmail.com - Dipartimento di Scienze della Terra "A. Desio", Università degli Studi di Milano, via Mangiagalli 34, 20133 Milano, Italy.

Hasegawa Takashi, jh7ujr@staff.kanazawa-u.ac.jp - Faculty of Natural System, Institute of Science and Engineering, Kanazawa University, Kakuma, Kanazawa, 920-1192, Japan.

Ifrim Christina, Christina.Ifrim@geow.uni-heidelberg.de - Institut für Geowissenschaften, Ruprecht-Karls-Universität Heidelberg, Im Neuenheimer Feld 234, D-69120 Heidelberg, Germany.

Jarvis Ian, I.Jarvis@kingston.ac.uk - Department of Geography and Geology, School of Natural and Built Environments, Kingston University London, Penrhyn Road, Kingston upon Thames, London KT1 2EE, UK.

Hugh C. Jenkyns, hugh.jenkyns@earth.ox.ac.uk Department of Earth Sciences, University of Oxford, South Parks Road, Oxford OX1 3AN, UK.

Jim Kennedy, Jim.Kennedy@oum.ox.ac.uk - Oxford University Museum of Natural History, Parks Road, Oxford OX1 3PW, UK.

Muttoni Giovanni, giovanni.muttoni1@unimi.it - Dipartimento di Scienze della Terra "A. Desio", Università degli Studi di Milano, via Mangiagalli 34, 20133 Milano, Italy.

Petrizzo Maria Rose, mrose.petrizzo@unimi.it - Dip. Scienze della Terra "A. Desio", Università degli Studi di Milano, via Mangiagalli 34, 20133 Milano, Phone: +39-0250315531.

Premoli Silva Isabella, isabella.premoli@unimi.it - Dipartimento di Scienze della Terra "A. Desio", Università degli Studi di Milano, via Mangiagalli 34, 20133 Milano, Italy.

Sprovieri Mario, mario.sprovieri@iamc.cnr.it - Istituto per l'Ambiente Marino Costiero, Consiglio Nazionale delle Ricerche (IAMC-CNR), Capo Granitola, Campobello di Mazara (TP), Italy.

Thibault Nicolas, nt@geo.ku.dk - Department of Geography and Geology, University of Copenhagen, Øster Voldgade 10, 1350 Copenhagen C., Denmark.

Voigt Silke, s.voigt@em.uni-frankfurt.de - Institute of Geosciences, Goethe-University Frankfurt, Altenhöferallee 1, 60438 Frankfurt am Main, Germany.

Wagreich Michael, michael.wagreich@univie.ac.at - Department of Geodynamics and Sedimentology, University of Vienna, Althanstrasse 14, Vienna, A-1090, Austria.

Walaszczyk Irek, i.walaszczyk@uw.edu.pl - Faculty of Geology, University of Warsaw, Al. Zwirki i Wigury 93, 02-089 Warszawa, Poland.

#### CONIACIAN WG

Chair: Walaszczyk Irek, i.walaszczyk@uw.edu.pl - Faculty of Geology, University of Warsaw, Al. Zwirki i Wigury 93, 02-089 Warszawa, Poland, Phone: +48 22 5540482.

#### WG Members:

Čech Stanislav, stanislav.cech@geology.cz - Czech Geological Survey, Klárov 3/131, 118 21 Praha 1, Czech Republic.

Crampton James, J.Crampton@gns.cri.nz - GNS Science, Post Office Box 30368, Lower Hutt, New Zealand.

Dubicka Zofia, Faculty of Geology, University of Warsaw, Al Zwirki i Wigury 93, Pl-02-089 Warszawa, Poland.

Gale Andy S., School of Earth and Environmental Sciences, University of Portsmouth, Portsmouth PO1 3QL, United Kingdom

Ifrim Christina, Christina.Ifrim@geow.uni-heidelberg.de - Institut für Geowissenschaften, Ruprecht-Karls-Universität Im Neuenheimer Feld 234, 69120 Heidelberg, Germany.

Jagt-Yazykova Elena A., eyazykova@uni.opole.pl - Zakład Paleobiologii, Katedra Biosystematyki, Uniwersytet Opolski, ul. Oleska 22, PL-45-052 Opole, Poland.

Jarvis Ian, I.Jarvis@kingston.ac.uk - Kingston University London, Department of Geography and Geology, Kingston upon Thames, KT1 2EE, UK.

Kennedy William J., Oxford University Museum of Natural History, Parks Road, Oxford OX1 3PW and Department of Earth Sciences, South Parks Road, Oxford OX1 3AN, United Kingdom

Lees Jackie, j.lees@ucl.ac.uk - Department of Earth Sciences, University College London, Gower Street, London WC1E 6BT, UK.

Niebuhr Brigit, birgit.niebuhr@senckenberg.de - Senckenberg Naturhistorische Sammlungen Dresden, Museum für Mineralogie und Geologie Königsbrücker Landstr. 159, D - 01109 Dresden, Germany.

Peryt Danuta, d.peryt@twarda.pan.pl - Instytut Paleobiologii PAN, ul. Twarda 51/55, PL-00-818 Warszawa, Poland.

Schioler Poul, poul.schioler@mgpalaeo.com.au - Morgan Goodall Palaeo Pty Ltd, 12 Summit Road, Fairfield, Lower Hutt 5011, New Zealand.

Toshimitsu Seiichi, Geological Survey of Japan, AIST, Tsukuba, Japan.

Tröger Karl-Armin, troeger@geo.tu-freiberg.de - Technische Universität Bergakademie Freiberg, Geologisches Institut Zeunerstraße 12 – Meißer-Bau, Germany.

Ulicny David, ulicny@ig.cas.cz - Institute of Geophysics, Academy of Sciences of the Czech Republic, 141 31 Prague, Czech Republic.

Voigt Silke, s.voigt@em.uni-frankfurt.de - Institute of Geosciences, Goethe-Universität Frankfurt, Altenhöferallee 1, D-60438 Frankfurt am Main, Germany.

Wiese Frank, frwiese@snafu.de - Georg-August-Universität Göttingen, Courant Research Centre Geobiology, Goldschmidtstr. 3, D-37077 Göttingen.

Wilmsen Markus, markus.wilmsen@senckenberg.de - Sektionsleiter Paläozoologie, Senckenberg Naturhistorische Sammlungen Dresden, Museum für Mineralogie und Geologie, Königsbrücker Landstr. 159, D - 01109 Dresden, Germany.

#### APTIAN WG

Chair: Weissert Helmut, weissert@erdw.ethz.ch - Department of Earth Science, ETH-Z CH-8092 Zürich, Switzerland, Phone: +41 44 632 37 15.

Chair: Erba Elisabetta, elisabetta.erba@unimi.it - Dip. Scienze della Terra “A. Desio”, Università degli Studi di Milano, via Mangiagalli 34, 20133 Milano, Phone: +39-0250315530.

#### WG Members:

Amodio Sabrina, sabrina.amodio@uniparthenope.it - Department of Science and Technology, Parthenope University of Naples, Napoli, Italy.

Baraboshkin Evgenij, ejBaraboshkin@mail.ru - Department of Regional Geology and Earth History, Geological Faculty M. V. Lomonosov Moscow State University, Moscow, Russian Federation.

Bodin Stéphane, stephane.bodin@geo.au.dk - Department of Geoscience, Aarhus University, Århus, Denmark.

Castro Jiménez José Manuel, secform@ujaen.es - Department of Geology, University of Jaén, Jaén, Spain.

Coccioni Rodolfo, rodolfo.coccioni@uniurb.it - Dipartimento di Scienze della Terra, della Vita e dell’Ambiente, Università degli Studi di Urbino “Carlo Bo”, Urbino, Italy.

Company Miguel, mcompany@ugr.es - Departamento de Estratigrafía y Paleontología, Universidad de Granada, Granada, Spain.

Frau Camille, Camille\_FRAU@hotmail.fr - Groupement d’Intérêt Paléontologique, Science et Exposition, 60 bd Georges Richard, 83000 Toulon, France.

Granier Bruno, bgranier@univ-brest.fr - Dépt. STU, Fac. Sci. Tech., UBO, CS 93837, F-29238 Brest, France, and Department of Ecology and Evolutionary Biology, The University of Kansas, 1200 Sunnyside Avenue, Lawrence, Kansas 66045, USA.

Kuhnt Wolfgang, wk@gpi.uni-kiel.de - Institute of Geosciences, Christian-Albrechts-University, 24118 Kiel, Germany.

Moreno-Bedmar Josep Anton, josepamb@geologia.unam.mx - Instituto de Geología, Universidad Nacional Autónoma de México, Ciudad Universitaria, Coyoacán, México, Ciudad de México, C.P. 04510.

Moullade Michel, Michel.Moullade@unice.fr, Centre de Recherches Micropaléontologiques, Musée d’Histoire Naturelle, Nice, France.

Olierook Hugo, hugo.olierook@curtin.edu.au - Department of Applied Geology, Curtin University, GPO Box U1987, Perth, WA 6845, Australia.

Patruno Stefano, stefano.patruno@gmail.com - Petroleum Geo-Services (PGS), Weybridge, Surrey, UK.

Parente Mariano, maparent@unina.it - Dipartimento di Scienze della Terra, dell’Ambiente e delle Risorse, Università di Napoli Federico II, Napoli, Italy.

Premoli Silva Isabella, isabella.premoli@unimi.it - Dipartimento di Scienze della Terra “A. Desio”, Università degli Studi di Milano, Milano, Italy.

Ruiz Ortiz Pedro Alejandro, ceactierra@ujaen.es - Department of Geology, University of Jaén, Jaén, Spain.

Skelton Peter, p.w.skelton@open.ac.uk - Department of Environment, Earth and Ecosystems, The Open University, Milton Keynes, UK.

Triantaphyllou Maria, mtriant@geol.uoa.gr - University of Athens, Department of Historical Geology-Paleontology, Panepistimiopolis 15784, Athens, Greece

Vahrenkamp Volker, volker.vahrenkamp@kaust.edu.sa - Ali Naimi Petroleum Engineering Research Center, Saudi Arabia.

#### BARREMIAN WG

Chair: Company Miguel, mcompany@ugr.es - Departamento de Estratigrafía y Paleontología, Facultad de Ciencias, Universidad de Granada, E-18002 Granada, SPAIN, Phone: +34-958242729.

#### WG Members:

Aguirre-Urreta, María Beatriz; aguirre@gl.fcen.uba.ar - Instituto de Estudios Andinos (UBA-CONICET), Universidad de Buenos Aires, Ciudad Universitaria, pabellón 2, 1428 Buenos Aires, Argentina.

Baraboshkin, Evgenij J.; Barabosh@geol.msu.ru - Geological Faculty, Moscow State University, 119992 Leninskie Gory, Moscow, Russia.

Bown, Paul R.: p.bown@ucl.ac.uk - Department of Earth Sciences, University College London, Gower Street, London WC1E 6BT, UK.

Erba, Elisabetta; elisabetta.erba@unimi.it - Dipartimento di Scienze della Terra, Università degli Studi di Milano, Via Mangiagalli 34, 20133 Milano, Italia.

Kakabadze, Mikheil V.; mishakakab@gmail.com - Djanelidze Institute of Geology, Polytkovskaja St. 5, 0186 Tbilisi, Georgia.

Melinte-Dobrinescu, Mihaela Carmen; melinte@geoecomar.ro - National Institut of Marine Geology and Geoecology, 23-25 Dimitrie Onciu Street, PO Box 34-51, 70318 Bucharest, Romania.

Mutterlose, Jörg; joerg.mutterlose@ruhr-uni-bochum.de - Institute for Geology, Mineralogy and Geophysics, Ruhr-Universität Bochum, Universitätsstr. 150, 44801 Bochum, Germany.

Premoli Silva, Isabella; isabella.premoli@unimi.it - Dipartimento di Scienze della Terra "A. Desio", Università degli Studi di Milano, Via Mangiagalli 34, 20133 Milano, Italia.

Sandoval, José; sandoval@ugr.es - Departamento de Estratigrafía y Paleontología, Facultad de Ciencias, Universidad de Granada, E-18002, Granada, Spain.

Tavera, José M; jtavera@ugr.es - Departamento de Estratigrafía y Paleontología, Facultad de Ciencias, Universidad de Granada, E-18002, Granada, Spain.

Vašíček, Zdeněk; zdenek.vasicek@ugn.cas.cz - Institute of Geonics of Academy of Sciences of the Czech Republic, Studentská 1768, CZ-70800 Ostrava-Poruba, Czech Republic.

Weissert, Helmut J.; helmi@erdw.ethz.ch - ETH Zürich, Dep. Earth Sciences, Sonneggstrasse 5, 8092 Zürich, Switzerland.

**HAUTERIVIAN WG**

Chair: Mutterlose Jörg, joerg.mutterlose@rub.de - Institute for Geology, Mineralogy and Geophysics, Ruhr-University Bochum, Universitätstr. 150, 44801 Bochum, Germany, Phone: +49 234 32 23249.

**WG Members:**

Aguirre-Urreta, Beatriz, aguirre@gl.fcen.uba.ar - Instituto de Estudios Andinos "Don Pablo Groeber" – Department of Geological Sciences, University of Buenos Aires and CONICET, Argentina.

Alsen Peter, pal@geus.dk - Geological Survey of Denmark and Greenland.

Baraboshkin Evgenij, ejbaraboshkin@mail.ru - Dept. Regional Geology and Earth History, Geological Faculty M. V. Lomonosov Moscow State University, Moscow, Russian Federation.

Bown Paul, p.bown@ucl.ac.uk - Department of Earth Sciences, University College London, London, UK.

Bulot Luc, bulot@cerege.fr - CEREGE UM34, CNRS (UMR 7330), IRD (UMR 161), Collège de France, USC INRA, OSU-Institut PYTHEAS, Aix-Marseille Université, Centre Saint-Charles, Marseille, France and NARG, School of Earth, Atmospheric and Environmental Sciences, University of Manchester, UK.

Erba Elisabetta, elisabetta.erba@unimi.it - Dipartimento di Scienze della Terra "A. Desio", Università degli Studi di Milano, Milano, Italy.

Gardin Silvia, silvia.gardin@upmc.fr - Centre de recherche sur la Paléobiodiversité et les Paléoenvironnements, Université Pierre et Marie Curie, Paris, France.

Kakabadze Mikhail, mishakakab@gmail.com - Geological Institute, Academy of Sciences, Rukhadze str. 1/9, Tbilisi 380093, Republic of Georgia.

Kelly Simon, simon.kelly@casp.cam.ac.uk - CASP, West Building, 181a Huntingdon Road, Cambridge CB3 ODH, UK.

Klein Jaap, jaap.klein@zonnet.nl, Naturalis Biodiversity Center, the Netherlands.

Martinez Mathieu, mmartinez@marum.de - Universität Bremen – MARUM – Center for Marine Environmental Sciences, Bremen, Germany.

Premoli Silva Isabella, isabella.premoli@unimi.it - Dipartimento di Scienze della Terra "A. Desio", Università degli Studi di Milano, Milano, Italy.

Rawson Peter, peter.rawson1@btinternet.com - Department of Earth Sciences, University College London, UK, and Centre for Marine and Environmental Sciences, University of Hull, Scarborough, UK.

Reboulet Stéphane, stephane.reboulet@wanadoo.fr - CNRS-UMR 5276, Laboratoire de Géologie de Lyon, Terre, Planètes, Environnement, Observatoire de Lyon, Université Claude Bernard Lyon 1, Villeurbanne, France.

#### **VALANGINIAN WG**

Chair: Company Miguel, mcompany@ugr.es - Departamento de Estratigrafía y Paleontología, Facultad de Ciencias, Universidad de Granada, E-18002 Granada, SPAIN, Phone: +34-958242729.

Chair: Reboulet Stéphane, stephane.reboulet@univ-lyon1.fr - Laboratoire de Géologie de Lyon, CNRS-UMR 5276, Observatoire de Lyon, 2 rue Raphaël Dubois, Bâtiment Géode, Université Claude Bernard Lyon 1, 69622 Villeurbanne,

FRANCE, Phone: +33(0)472446244.

WG Members:

Aguirre-Urreta María Beatriz, aguirre@gl.fcen.uba.ar - Instituto de Estudios Andinos (UBA-CONICET), Universidad de Buenos Aires, Argentina.

Aguado Roque, raguado@ujaen.es - Departamento de Geología, Universidad de Jaén, Spain.

Baraboshkin Evgenij J., ejbaraboshkin@mail.ru - Geological Faculty, Moscow State University, Russia.

Bown Paul R., p.bown@ucl.ac.uk - Department of Earth Sciences, University College London, UK.

Erba Elisabetta, elisabetta.erba@unimi.it - Dipartimento di Scienze della Terra, Università degli Studio di Milano, Italia.

Ettachfini Mohssine, ettachfini @uca.ma - Département de Géologie, Université Cadi Ayyad, Marrakech, Morocco.

Galbrun Bruno, bruno.galbrun@upmc.fr - Institut des Sciences de la Terre Paris (ISTeP), UPMC Univ Paris 06, France.

González-Arreola Celestina, arreola@unam.mx - Instituto de Geología, Universidad Nacional Autónoma de México, México.

Kakabadze Mikheil V., mishakakab@gmail.com - Djanelidze Institute of Geology, Tbilisi, Georgia.

Klein Jaap, jaap.klein@zonnet.nl - Vinkeveen, The Netherlands.

Melinte-Dobrinescu Mihaela Carmen, melinte@geoecomar.ro - National Institut of Marine Geology and Geoecology, Bucharest, Romania.

Mutterlose Jörg, joerg.mutterlose@gmail.com - Institute for Geology, Mineralogy and Geophysics, Ruhr-Universität Bochum, Germany.

Premoli Silva Isabella, isabella.premoli@unimi.it - Dipartimento di Scienze della Terra, Università degli Studio di Milano, Italia.

Rawson Peter F., peter.rawson1@btinternet.com - Centre for Marine and Environmental Sciences, University of Hull, UK.

Tavera José M., jtavera@ugr.es - Departamento de Estratigrafía y Paleontología, Universidad de Granada Spain.

Vašíček Zdeněk, zdnek.vasicek@vsb.cz - Institute of Geonics of the Academy of Sciences, Ostrava-Poruba, Czech Republic.

Weissert Helmut, helmut.weissert@erdw.ethz.ch - Department of Earth Sciences, ETH Zürich, Switzerland.

#### BERRIASIAN (J/K BOUNDARY) WG

Chair: Wimbledon William A.P., mishenka1@yahoo.co.uk, School of Earth Sciences, University of Bristol, Wills Memorial Building, Queens Road, Bristol BS8 1RJ, United Kingdom. Home address: 19 Hazel Walk, Croesyceiliog, Cwmbran, NP44 2NW, United Kingdom, Phone: 44 (0) 1633 483836.

WG Members:

Aguirre-Uretta Beatriz, Dep. de Ciencias Geologicas, Univ. de Buenos Aires, CONICET, Argentina

Alsen Peter, GEUS, Voldgade 10, Copenhagen 1350, Denmark

Andreini Gloria, Dip. di Scienze della Terra, Università degli Studi di Perugia, 06123 Perugia, Italy

Arnaud Vanneau Annie M., Maison des Géosciences, LGCA 1381, Grenoble, France

Bakhmutov Vladimir, Institute of Geophysics, NAS Ukraine, 03680 Kyiv, Ukraine

Bardhan Subhendu, Department of Geological Sciences Jadavpur University, Kolkata 70002, India

Benzaggagh Mohamed, Univ. Moulay Ismail, Dépt de Géologie, BP 11201, Zitoune, Meknès, Morocco

Bugdaeva Eugenia, Fed. Inst. of Biol. and Soil Science, Russian Acad. Sci., Vladivostok, Russia

Bulot Luc G., Univ. de Provence Aix-Marseille 1, Centre de Séđ.- Pal., 13331 Marseille, France

Cizková Kristýna, Palaeomagnetic Laboratory, Inst. of Geology ASCR vvi, Praha 6, Czech Republic

Copestake Philip, Merlin Energy Resources Ltd., New Street, Ledbury, Herefordshire, HR8 2EJ, UK

Dzuba Oksana, Trofimuk Inst. of Geology & Geophysics, RAS, 630090 Novosibirsk, Russia

Elbra Tiiu, Institute of Geology of the Czech Academy of Sciences, Rozvojová 269, 165 00 Prague 6, Czech Republic

Erba Elisabetta, Dipartimento di Scienze della Terra, Univ. Milano, 34 20133 Milano, Italy

Főzy István, Hungarian Natural History Museum, Dept of Palaeontology, 1431 Budapest, Hungary

Frau Camille, Biogéosciences, UMR-CNRS 5561, Université de Bourgogne, 21000 Dijon, France

Galbrun Bruno, University Pierre and Marie Curie, ISTEPI, UMR 7193, Paris

Galloway Jennifer, Geological Survey of Canada, Calgary, Alberta, T2L 2A1, Canada

Gang Li, Nanjing Institute of Palaeontology and Geology, Nanjing 210008, China

Gardin Silvia, University Pierre and Marie Curie, ISTEPI, UMR 7193, Paris 05, France

Grabowski Jacek, Institute of Geology, Ul. Rakowiecka 4, 00-975 Warsaw, Poland

Guzhikov Andrey, Chernyshevsky Saratov State University, 410012 Saratov, Russia

Halasova Eva, Dept Geology & Palaeontology, Comenius University, 84215 Bratislava, Slovakia

Hunt Christopher, School of Geography, Queen's University Belfast, Belfast, BT7 1NN, UK

Ivanova Daria, Geological Institute BAS, Acad. G. Bonchev St., 1113 Sofia, Bulgaria

Jianguo Li, Nanjing Institute of Palaeontology and Geology, Nanjing 210008, China

Jingeng Sha, Nanjing Institute of Palaeontology and Geology, Nanjing 210008, China

Kietzmann Diego, Departamento de Ciencias Geológicas, Facultad de Ciencias Exactas y Naturales, Universidad de Buenos Aires, Buenos Aires, Argentina  
Kostak Martin, Institute of Geology and Palaeontology, Charles University, Prague 2, 128 43, Czech Republic  
Lakova Iskra, Geological Institute BAS, Acad. G. Bonchev St., 1113 Sofia, Bulgaria  
Leanza Hector, Fac. de Ciencias Naturales y Museo, Univ. Nac. de La Plata, 1900 La Plata, Argentina  
Lintnerova Otilia, Dept of Economic Geology, Comenius University, 84215 Bratislava, Slovakia  
Lopez-Martinez Rafael, Inst. de Geología, Univ. Nac. Aut. de México, Coyoacán 04510, Mexico  
Lucas-Clark Joyce, San Francisco State University, San Francisco, California 94132, USA  
Markevich Valentina, Fed. Inst. of Biol. and Soil Science, Russian Acad. Sci., Vladivostok, Russia  
Meizhen Cao, Nanjing Institute of Palaeontology and Geology, Nanjing 210008, China  
Michalik Jozef, Geological Institute, Slovak Academy of Sciences, 84005 Bratislava, Slovakia  
Mohialdeen Ibrahim Jaza, Dept of Geology, Univ. of Sulaimani, P.O.Box 334, Sulaimani, Iraq  
Munsterman Dirk, TNO – Geol. Surv. of Netherlands, P.O. Box 80015, NL-3508 TA, Utrecht, Netherlands  
Ogg James, Earth and Atmospheric Science, Purdue University, West Lafayette, IN 47907, USA  
Olivier Mojon Pierre, Rue de l'Industrie 11, 2316 Les Ponts-de-Martel, Switzerland  
Poulton Terry P., Geological Survey of Canada, Calgary, Alberta, T2L 2A1, Canada  
Pruner Petr, Palaeomagnetic Laboratory, Inst. of Geology ASCR vvi, Praha 6, Czech Republic  
Pszczółkowski Andrzej, Inst. of Geol. Sci., Polish Acad. of Sc., Twarda 51/55, 00-818 Warsaw, Poland  
Rehakova Daniela, Dept Geology & Palaeontology, Comenius University, 84215 Bratislava, Slovakia  
Riccardi Alberto, Fac. de Ciencias Naturales y Museo, Univ. Nac. de La Plata, 1900 La Plata, Argentina  
Riding James, British Geological Survey, Keyworth, Nottingham, NG12 5GG, UK  
Satolli Sara, Dip. di Ing. e Geologia, Università “G. D’Annunzio” di Chieti-Pescara, Chieti, Italy  
Schnabl Petr, Palaeomagnetic Laboratory, Inst. of Geology ASCR vvi, Praha 6, Czech Republic  
Stoykova Kristalina, Geological Institute BAS, Acad. G. Bonchev St., 1113 Sofia, Bulgaria  
Svobodova Andrea, Institute of Geology and Pal., Charles University, Prague 2, 128 43, Czech Republic  
Vajda Vivi, Department of Geology, Lund University, 223 62 Lund, Sweden  
Vennari Veronica, Dep. de Ciencias Geologicas, Universidad de Buenos Aires, CONICET, Argentina  
Verreussel Roel, TNO – Geol. Survey of Netherlands, P.O. Box 80015, NL-3508 TA, Utrecht, Netherlands  
Vuks Valery, All-Russian Geological Res. Institute (VSEGEI), 199106 St Petersburg, Russia  
Wierzbowski Andrzej, Institute of Geology, Ul. Rakowiecka 4, 00-975 Warsaw, Poland  
Xiaoqiao Wan, China University of Geosciences, Xueyuan Lu 29, Beijing 100083, China

#### E-mail addresses

pal@geus.dk; ibrahimjaza@yahoo.com; C.O.Hunt@lmu.ac.uk; pszczołkowski@yahoo.com; jgra@pgi.gov.pl;  
awwierzb@uw.edu.pl; jlclark@comcast.net; geolmich@savba.sk; lintnerova@fns.uniba.sk; halasova@fns.uniba.sk;  
rehakova@fns.uniba.sk; pruner@gli.cas.cz; schnabl@gli.cas.cz; kostys@centrum.cz; cizkovak@gli.cas.cz;  
asvobodova@gli.cas.cz; lakova@geology.bas.bg; platon@lark.tu-sofia.bg; stoykova@geology.bas.bg;  
dariaiv@yahoo.com; bakhmutovvg@gmail.com; gloriaandreini@yahoo.it; s.satolli@unich.it; bulot@cerege.fr;  
camille\_frau@hotmail.fr; bruno.galbrun@upmc.fr; silvia.gardin@upmc.fr; jogg@purdue.edu;  
academicagl@geologia.unam.mx; rafaellopez83@hotmail.com; vvennari@gl.fcen.uba.ar; hectorleanza@gmail.com;  
riccardi@fcnym.unlp.edu.ar; aguirre@gl.fcen.uba.ar; terry.poulton@canada.ca; gangli@nigpas.ac.cn;  
mzcao@nigpas.ac.cn; jgli@nigpas.ac.cn; jgsha@nigpas.ac.cn; wanxq@cugb.edu.cn; jennifer.galloway@canada.ca;  
bugdaeva@ibss.dvo.ru; markevich@ibss.dvo.ru; benzaggagh@yahoo.fr; semiformiceras@gmail.com;  
vivi.vajda@geol.lu.se; pierreoliviermojon@bluewin.ch; annie.arnaud@orange.fr; s\_bardhan01@yahoo.co.uk;  
sbardhan12@gmail.com; dirk.munsterman@tno.nl; Phil\_Copestake@merlinenergy.co.uk; DzyubaOS@ipgg.nsc.ru;  
Valery\_Vuks@vsegei.ru; aguzhikov@yandex.ru; roel.verreussel@tno.nl; jbri@bgs.ac.uk; elisabetta.erba@unimi.it;  
elbra@gli.cas.cz

#### KILIAN WG

Chair: Reboulet Stéphane, stephane.reboulet@univ-lyon1.fr - Laboratoire de Géologie de Lyon, CNRS-UMR 5276, Observatoire de Lyon, 2 rue Raphaël Dubois, Bâtiment Géode, Université Claude Bernard Lyon 1, 69622 Villeurbanne, FRANCE, Phone: +33(0)472446244.

Vice-chair: Jaap Klein, jaap.klein@zonnet.nl - Demmerik 12, 3645 EC Vinkeveen, The Netherlands.

Vice-chair: Josep A. Moreno-Bedmar, josepamb@geologia.unam.mx - Departamento de Paleontología, Instituto de Geología, Universidad Nacional Autónoma de México, Ciudad Universitaria, Delegación Coyoacán, CP 04510, México, D.F., Mexico.

Vice-chair: Peter Rawson, peter.rawson1@btinternet.com - Department of Earth Sciences, University College London, Gower Street, London WC1E 6BT, UK, Centre for Marine and Environmental Sciences, University of Hull, Scarborough

Campus, Filey Road, Scarborough YO11 3AZ, United Kingdom.

Vice-chair: Ottília Szives: [sziveso@nhmus.hu](mailto:sziveso@nhmus.hu) - Hungarian Natural History Museum, Department of Paleontology, 1088 Ludovika ter 2, H-1431 Budapest, Hungary.

Vice-chair: Josep A. Moreno-Bedmar: [josepamb@geologia.unam.mx](mailto:josepamb@geologia.unam.mx) - Departamento de Paleontología, Instituto de Geología, Universidad Nacional Autónoma de México, Ciudad Universitaria, Delegación Coyoacán, CP 04510, Ciudad de México, México.

WG Members:

Aguirre-Urreta Beatriz, [aguirre@gl.fcen.uba.ar](mailto:aguirre@gl.fcen.uba.ar) - Instituto de Estudios Andinos Don Pablo Groeber (UBA-CONICET), Universidad de Buenos Aires, Ciudad Universitaria, pabellón 2, 1428 Buenos Aires, Argentina.

Alsen Peter, [pal@geus.dk](mailto:pal@geus.dk) GEUS, Voldgade 10, Copenhagen 1350, Denmark

Baraboshkin Evgenij J., [ejbaraboshkin@mail.ru](mailto:ejbaraboshkin@mail.ru) - Dept. Regional Geology and Earth History, Geological Faculty, Moscow State University, Vorobjovy Gory, Moscow, 119991 Russia. Phone: +7(495)939-49-32.

Barragán Ricardo, [ricardor@geologia.unam.mx](mailto:ricardor@geologia.unam.mx) - Departamento de Paleontología, Instituto de Geología, Universidad Nacional Autónoma de México, Ciudad Universitaria, Delegación Coyoacán, CP 04510, México, D.F., Mexico

Bert Didier, [paleo-db@orange.fr](mailto:paleo-db@orange.fr) - [Didier.BERT@le04.fr](mailto:Didier.BERT@le04.fr) - Laboratoire du Groupe de recherche en paléobiologie et biostratigraphie des Ammonites, Bois-Mésanges, quartier Saint-Joseph, 04170 La Mure-Argens, France.

Bogdanova Tamara N., [tmbogdanova@list.ru](mailto:tmbogdanova@list.ru) - Federal State Unitary Enterprise, "A. P. Karpinsky Russian Geological Research Institute", (FGUP "VSEGEI"), 74, Sredny prospect, 199106 St. Petersburg, Russia.

Bogomolov Yuri, [1957iori@mail.ru](mailto:1957iori@mail.ru) - Rustaveli, 13/12, 104, Moscow 127254, Russia.

Bulot Luc G., [bulot@cerege.fr](mailto:bulot@cerege.fr) - [lucgbulot@aol.com](mailto:lucgbulot@aol.com) - Géologie des Systèmes Carbonatés, EA 4234, Université de Provence Aix-Marseille 1, Centre de Sédimentologie-Paléontologie, case 67, 3 place Victor Hugo, 13331 Marseille, France.

Company Miguel, [mcompany@ugr.es](mailto:mcompany@ugr.es) - Departamento de Estratigrafía y Paleontología, Facultad de Ciencias, Universidad de Granada, Campus de Fuentenueva s/n, 18002 Granada, Spain.

Főzy István, [fozy@nhmus.hu](mailto:fozy@nhmus.hu), [semiformiceras@gmail.com](mailto:semiformiceras@gmail.com) - Hungarian Natural History Museum, Department of Paleontology, 1088 Ludovika ter 2, H-1431 Budapest, Hungary.

Frau Camille, Groupement d'Intérêt Paléontologique, Science et Exposition, 60 bd Georges Richard, 83000 Toulon, France González-Arreola Celestina, [arreola@unam.mx](mailto:arreola@unam.mx) - Departamento de Paleontología, Instituto de Geología, Universidad Nacional Autónoma de México, Ciudad Universitaria, Delegación Coyoacán, CP 04510, México, D.F., Mexico.

Hoedemaeker Philip, [flip.hoedemaeker@naturalis.nl](mailto:flip.hoedemaeker@naturalis.nl), National Museum of Natural History, P.O.Box 9517, 2300 RA Leiden, Netherlands

Idakieva Vyara, [idakieva@gea.uni-sofia.bg](mailto:idakieva@gea.uni-sofia.bg) - [v\\_idakieva@mail.bg](mailto:v_idakieva@mail.bg) - Sofia University St Kliment Ohridski, Faculty of Geology and Geography, Department of Geology, Paleontology and Fossil Fuels, 15 Tzar Osvoboditel Bd, 1504 Sofia, Bulgaria.

Ivanov Marin, [mivanov@gea.uni-sofia.bg](mailto:mivanov@gea.uni-sofia.bg) - Sofia University St Kliment Ohridski, Faculty of Geology and Geography, Department of Geology, Paleontology and Fossil Fuels, 15 Tzar Osvoboditel Bd, 1504 Sofia, Bulgaria.

Kakabadze Mikheil V., [mishakakab@hotmail.com](mailto:mishakakab@hotmail.com) - Djanelidze Institute of Geology, Polytkovskaja St. 5, 0186 Tbilisi, Georgia.

Latil Jean-Louis, [g.r.e.g.b@wanadoo.fr](mailto:g.r.e.g.b@wanadoo.fr) - Le Maupas, 05300 Lazer par Laragne, France.

Lukeneder Alexander, [alexander.lukeneder@NHM-WIEN.AC.AT](mailto:alexander.lukeneder@NHM-WIEN.AC.AT) - Geological-Palaeontological Department, Natural History Museum, Burggring 7, A-1010 Vienna, Austria.

Matrion Bertrand, [bertrand.matrion@sfr.fr](mailto:bertrand.matrion@sfr.fr) - 26 avenue Jules Guesde, 10150 Pont Sainte Marie, France.

Mikhailova Irina A.; Department of Paleontology, Geological Faculty, Moscow State University, Vorobjovy Gory, 119899 Moscow, Russia.

Mitta Vasily, [mitta@paleo.ru](mailto:mitta@paleo.ru) - Paleontological Institute of RAS, Profsoyuznaya 123, Moscow 117997, Russia.

Pictet Antoine, Chemin du Battoir 7, 1337 Vallorbe, Suisse.

Ploch Izabela, [iplo@pgi.gov.pl](mailto:iplo@pgi.gov.pl) - Polish Geological Institute, Geological Museum, Rakowiecka Str 4, PL-00-975 Warszawa, Poland

Raisossadat Seyed N., [snaser\\_rais@yahoo.co.uk](mailto:snaser_rais@yahoo.co.uk) - Geology Department, Faculty of Science, Birjand University, PO Box 97175/615, Birjand, Iran.

Sandoval José, [sandoval@ugr.es](mailto:sandoval@ugr.es) - Dpto Estratigrafía y Paleontología, Universidad de Granada, 18002 Granada, Spain.

Tavera José M., [jtavera@ugr.es](mailto:jtavera@ugr.es) - Departamento de Estratigrafía y Paleontología, Facultad de Ciencias, Universidad de Granada, Campus de Fuentenueva s/n, 18002 Granada, Spain.

Vašíček Zdenek, [zdenek.vasicek@vsb.cz](mailto:zdenek.vasicek@vsb.cz) - [zdenvas@email.cz](mailto:zdenvas@email.cz) - Institute of Geonics, Academy of Sciences of the Czech Republic, Studentská 1768, 708 00, Ostrava-Poruba, Czech Republic.

Vermeulen Jean, [jean-vermeulen@hotmail.fr](mailto:jean-vermeulen@hotmail.fr) - Grand rue, 04330 Barrême, France.