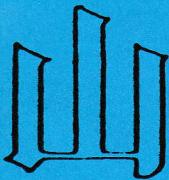


INTERNATIONAL SUBCOMMISSION ON JURASSIC STRATIGRAPHY

Newsletter No. 13

Copenhagen, April 1986

Jim



A SUBCOMMISSION OF THE INTERNATIONAL UNION OF GEOLOGICAL SCIENCES (IUGS)

INTERNATIONAL SUBCOMMISSION ON JURASSIC STRATIGRAPHY

February 1986

NEWSLETTER No. 13

The symposium volumes I-III, from the Erlangen Meeting, have been mailed to the persons who attended the symposium. Further copies of the volumes are now available for sale at the Geological Survey of Denmark, - price 388 Danish Crs. (corresponding to 48 US\$) for all 3 volumes. An order form is enclosed by this newsletter.

An ad hoc field workshop with members of the Bajocian, Bathonian and Callovian working groups were organized ultimo September and took place in Sengenthal. It was organized to clarify the correlation between the subboreal and submediterranean faunas. A report will be given by Dr. Dietl (next newsletter).

The third field conference of the Circum Pacific Jurassic working group took place in October 1985 in Japan (see enclosure 4).

The planned meeting in Hungary of the Bajocian and Bathonian working groups had to be postponed to June 1986 of organisational reasons. Colleagues interested in the meeting can write to

Dr. A. Galáez
Institutum Paleontologicum
Univ. Sci. Budapestinensis
de Lorando Eötvös Nm.
Kun Béla Tér 2
H-1083 Budapest

The Oxfordian working group intend to arrange a meeting at the University of Krakow, Poland. Further information may be obtained by asking

Dr. G. Meléndez
Dep. de Paleontología
Fac. Ciencias (Geol.)
Edif. Interfacultades
Zaragoza 9
Spain

The preparation of the next meeting of the subcommission and the second Jurassic symposium is in progress. The first circular is expected to be sent out within short time. This symposium will be organized by Dr. R. de Rocha in cooperation with the subcommission (September 1987).

Contact address:

Dr. R. de Rocha
Universidada de Lisboa
Quinta da Torre
2825 Monte da Caparica
Portugal

A meeting on French Liassic will take place in Lyons, 27th to 31st May.

Contact address:

Dr. R. Mouterde
Facultes Catholiques de Lyon
Laboratorie de Geologie
25, rue du Plat
69288 Lyon Cedex 1
France

Enclosed with the newsletter you will find:

- 1) Memberlist
- 2) Faunas and stratigraphy of marine Jurassic in Vietnam, by D. Vu Khuc
- 3) Report on the state of progress of Jurassic research in Spain, by L. Sequeiros & G. Meléndez
- 4) Report No. 3 from the Circum-Pacific Jurassic Project, by G.E.G. Westermann

Arnold Zeiss
Institut für Paläontologie
Universität Erlangen-Nürnberg
Loewenichstrasse 28
8520 Erlangen
BRD

Olaf Michelsen
Geological Survey of Denmark
31, Thoravej
2400 Copenhagen NV
Denmark

Chairman

Zeiss, A.
Institut für Palaeontologie
Universität Erlangen-Nürnberg
Loewenichstrasse 28
8520 Erlangen
BRD

Honorary members

Imlay, R.W.
U.S. Geological Survey
Room E-501
U.S. National Museum
Washington D.C. 20560
USA

Secretary

Michelsen, O.
Geological survey of Denmark
Thoravej 31
2400 Copenhagen NV
Denmark

Tintant, H.
Institut des Sciences
de la Terre
Université de Dijon
6 Bd. Gabriel
21100 Dijon
France

Vakhrameev, V.A.
Akademie der Wissenschaften
Geologisches Institut
Pyzhewsky per 7
109017 Moscow
USSR

Members

Callomon, J.H.
Department of Chemistry
University College
20 Gordon Street
London WC1H 0AJ
England

Poulton, T.P.
Institute of Sedimentology and
Petroleum Geology
Geological Survey of Canada
3303-3 rd St. NW
Calgary, Alberta, T2L 2A7
Canada

Cope, C.W.
Department of Geology
University of Swansea
Singleton Park
Swansea SA2 8PP
England

Riccardi, A.C.
Museo de Ciencias Naturales
Div. de Paleozool. Invertebr.
Paseo de Bosque
1900 La Plata
Argentina

Enay, R.
Department des Sciences
de la Terre
Universite Claude Bernard
15-43 Bd. du 11 Novembre
69621 Villeurbanne
France

Rostovtsev, K.O.
VSEGEI
Sredny prosp. 74
Leningrad 199026
USSR

Liu, B.
Beijing Graduate School
Wuhan College of Geology
Chengfu Road
Beijing
China

Sapunov, I.G.
Bulgaria Academy of Sciences
Geological Institute
"Strasimir Dimitrov"
Akad. G.-Bontschev-Str. 24
1113 Sofia
Bulgaria

Lord, A.
Department of Geology
(Micropalaeontology)
University College London
Gower Street
London WC1E 6BT
England

Sarjeant, W.A.S.
Room 108.3 (Geol. Sciences)
University of Saskatchewan
Saskatoon, Saskatchewan S7N 0W0
Canada

Mouterde, R.
Facultes Catholiques de Lyon
Laboratorie de Geologie
25, rue du Plat
69288 Lyon Cedex 1
France

Sato, T.
Institute of Geoscience
University of Tsukuba
Sakura-mura,
Ibaraki 305
Japan

Pessagno, E.
Dept. of Geoscience
University of Texas at Dallas
Box 830688
Richardson, Texas 75083-0688
USA

Smith, P.L.
University of British Columbia
Department of Geol. Sciences
6399 Stores Road
Vancouver V6T 2B4
Canada

Correspondents

Stevens, G.R.
New Zealand's Geological Survey
P.O. Box 30368
Lower Hutt
New Zealand

Ager, D.V.
Department of Geology
University of Swansea
Singleton Park
Swansea SA2 8PP
England

Taylor, D.G.
Department of Earth Sciences
Portland State University
Portland, OR 97207
USA

Atrops, F.
Department des Sciences
de la Terre
Universite Claude Bernard
15-43 Bd. du 11 Novembre
69621 Villeurbanne
France

Volkheimer, W.
Museo di ciencias Naturales
"Bernardino Rivadavia"
Avda. Angel Gallardo 470
1405 Buenos Aires
Argentina

Avram, E.
Institutul de Geologie
si Geofizica
Str. Caransebes 1
78344 Bucuresti
Romania

Westermann, G.E.G.
Department of Geology
McMaster University
Hamilton
Ontario L8S 4M1
Canada

Beauvais, L.
Universite Pierre et Marie
Curie
Tour 25-3 e Etage
4, Place Jussieu
75230 Paris Cedex 05
France

Zakharov, V.A.
Institute of Geology and Geo-
physics
Academy of Science USSR
Sib. Branch
690090 Novosibirsk
USSR

Bloos, G.
Staatliches Museum für Natur-
kunde Stuttgart
Arsenalplatz 3
7140 Ludwigsburg
BRD

Cariou, E.
Laboratoire de Geologie
Stratigraphique et Structurale
Universite de Poitiers
40 Avenue de Recteur Pineau
86022 - Poitiers
France

Comas-Rengifo, M.J.
Departamento de Paleontologia
Facultad de Ciencias Geol.
Ciudad Universitaria
28040 Madrid
Spain

Contini, D.
Laboratoire de Géologie
Historique et Paléontologie
Institut des Sciences
Naturelles
Place Leclerc
25030 Besançon Cedex, France

Copesteak, P.
Britoil Plc.
Stratigraphic Laboratory
150 Vincent Street
Glasgow G2 5LJ
England

Damborenca, S.E.
Div. Paleozoologia
Invertebrados
Museo de Ciencias Naturales
de la Plata
Pasco del Bosque
1900 La Plata, Argentina

Delance, J.-H.
Institut des Sciences
de la Terre
de l'Université de Dijon
6, Bd. Gabriel
21100 Dijon
France

Dietl, G.
Staatliches Museum für
Naturkunde
Rosenstein 1
7000 Stuttgart
BRD

Dresnay, R. du
Service de la Carte Géol.
Ministère de l'Energie
et des Mines
B.P. 6208
Rabat - Institut
Maroc

Elias, M.
V.V.G.
Hradebni 9
11000 Praha
Zchechoslovakia

Fatmi, A.N.
Deputy Director General
Geological Survey of Pakistan
Quetta Baluchistan
Pakistan

Fischer, R.
Institut für Geologie und
Palaontologie
der Technischen Universität
Callinstrasse 30
3000 Hannover 1
BRD

Geczy, B.
Kun Bela ter. 2
Inst. Palaeontologicum
University of Science
1083 Budapest
Hungary

Grigelis, A.A.
Lithuanian Geol. Institute
232600 Vilnius
Sevcenkos 13
Lithuanian
USSR

Gu, Z.-W.
Nanjing Institute of Geology
and Palaeontology
Academia Sinica
Chi-Ming-Ssu
Nanjing
China

Guy-Olsson, D.
Naturhistoriska Riksmuseet
Roslagvagen 120
104 05 Stockholm
Sweden

Hall, R.L.
University of Calgary
2500 University Drive N.W.
Calgary
Alberta T2N 1N4
Canada

Herngreen, G.F.W.
Rijks Geologische Dienst
Spaarne 17
Postbus 157
2011 CD Haarlem
Holland

Mangold, Ch.
Universite de Nancy 1
Faculte des Sciences
Laboratoire de Paleontologie
et de Paleobiogeographie, BP239
54506 Vandoeuvre Les Nancy C.
France

Hillebrandt, A. von
Institut für Geologie und
Palaontologie
Hardenbergstrasse 42
1000 Berlin 12
BRD

Melendez, G.
Dep. de Paleontologia
Fac. Ciencias (Geol.)
Edif. Interfacultades
piso 3e, Universidad
Zaragoza - 9
Spain

Kapilima, S.
University of Dar es Salaam
Department of Geology
P.O. Box 35052
Dar es Salaam
Tanzania

Mizutani, S..
Dept. of Earth Science
Faculty of Science
Nagoya Univ., Nagoya 464
Japan

Khuc, W.
Vién Dia chat va khoang san
Dóng da Hanoi
Soc. Rep. Vietnam

Mojica, J.
Dept. Geoscience
University Nac.
Apt. 14490
Bogota
Columbia

Krishna, J.
Department of Geology
Banaras Hindu University
Varanasi 221005
P 3/II, Ravindra Puri
India

McRton, N.
Birkbeck College
Department of Geology
7/15, Gresse Street
London W1P 1PA
England

Kutek, J.
Institute of Geology
Warzaw University
92, Zwirki i Wigury
02-089 Warszawa
Poland

Ogg, J.G.
University of California
Institute of Oceanography
La Jolla
California 92093
USA

Longoria, J.
Dept. of Geosciences
The University of Texas at
Dallas
P.O. Box 830688
Richardson, Texas 75083-0688
USA

Pavia, G.
Instituto di Geologia
Cattedra di Paleontologia
Palazzo Carignano
10123 Torino
Italy

Rocha, R. da
Universidade de Lisboa
Quinta da Torre
2825 Monte da Caparica
Portugal

Tsagareli, A.L.
Akad. der Wissenschaften
Geologisches Institut
ul. Zoia Rukhadze 1
Tbilisi, 380093
USSR

Schlatter, R.
Museum zu Allerheiligen
8200 Schaffhausen
Switzerland

Wang, Y.-G.
Nanjing Institute of Geology
and Palaeontology
Academia Sinica
Chi-Ming-Ssu
Nanjing
China

Sequeiros, L.
Seccion de Geologia
La Rabida
Palos de la Frontera
Huelva
Spain

Wen, S.-X.
Nanjing Institute of Geology
and Palaeontology
Academia Sinica
Chi-Ming-Ssu
Nanjing
China

Seyed-Emami, K.
University of Tehran
Faculty of Engineering
P.O. Box 1558
Tehran
Iran

Wimbledon, W.A.
Nature Conservancy Council
Geological Conservation
Review Unit, Pearl House
Bartholomew Street
Newberry, Berkshire RH14 5LS
England

Thomson, M.R.A.
British Antarctic Survey
High Cross Madingley Rd.
Cambridge CB3 OET
England

Zhang, Z.-L.
Yichang Institute of Geology
and Mineral Resources
Chinese Academy of Geological
Science
Yichang Hubei Province
China

Tipper, H.E.
Geological Survey of Canada
100 West Pender Street
Vancouver, B.C. V6B 1RB
Canada

Torrens, H.S.
University of Keele
Department of Geology
Keele,
Staffordshire, ST14 5BG
England

FAUNAS AND STRATIGRAPHY OF MARINE JURASSIC IN VIETNAM.

D. Vu Khuc

In Vietnam, the presence of marine Jurassic faunas, formerly, was announced from three parts of the country. In the North, H. Mansuy (1919, 6) informed of the presence of Early Jurassic Cardinia at Nacham (Fig.1-1). In the Central, H.Counillon (1908, 2) and Hayami I. (1964, 3) described a Hettangian faunule with the key fossil "*Psiloceras longipontinum*" from Huu-niên area (Fig.1-2). And in the South, H.Mansuy (1914, 5), Ta Trần Tân (1968, 11) and T.Sato (1972, 8) described a lot of Ammonites and Bivalves from two stratigraphical levels: Sinemurian in Chau-thoi (Fig.1-3), Bandon (Fig.1-4), and Toarcian in Trian and Loduc (Fig.1-5,6).

According to the results of new investigations, the Cardinia faunule from Nacham was attributed to Upper Triassic (Norian-Rhaetian). Therefore, marine Jurassic in Vietnam, in fact, is distributed only in Central and Southern part of the country.

New data let us know of the presence of following marine Jurassic fauna assemblage in Central and Southern Vietnam:

1) *Psiloceras* Assemblage, newly described (12) from Nongson basin (Fig.1-2); in the basal beds of Kheren formation, Upper Hettangian. Assemblage composition: *Psiloceras* sp. (formerly described as *Laqueoceras* sp.), *Saxoceras* sp., *Protocardia philippianum* Dunk., *Goniomya fontainei* Hayami, *Modiolus saurini* Hay., *Cultricopsis counilloni* Hay., "Exogyra" *vietnamensis* Hay., *Thracia* sp., *Nicanella* sp.

2) *Xipheroceras dudressieri* Assemblage. The index Ammonite of this assemblage formerly was described as "*Psiloceras longipontinum*" (2). In his work, W.J.Arkell expressed one's doubt on the generic determination and supposedly attributed this Ammonite to *Waehneroceras* (1). Recent collections with a lot of well preserved specimens helped us to defined it as *Xipheroceras dudressieri* (d'Orb.) (12). Locality: Nongson basin (Fig.1-2); lower part of Kheren formation, Lower Sinemurian. Assemblage composition: *Xipheroceras dudressieri* d'Orb., X. sp., *Goniomya fontainei* Hay., *Grammatodon kherensis* Hay., *Cultricopsis counilloni* Hay., *Cardinia indochinensis* Hay., *Chlamys ex gr. textoria* (Schloth.), *Entolium* sp.

3) *Coroniceras rotiforme* Assemblage, described (11) from Chauthoi hill (Fig.1-3); Lower part of Draylinh formation, Upper Sinemurian. Assemblage composition: *Coroniceras rotiforme* (Sow.), *Asteroceras stellare* (Sow.), *Oxynoticeras cf. oxynotum* (Quenst.), *Arnioceras* sp., *Arietites* sp., *Cardinia copides* Ryckh., *Pseudasteroceras* sp., *Otapi-*

ria cf. limaeformis Tuchk.

4) Paltarpites Assemblage, newly described (7, 13) from Bandon area (Fig.1-4); middle part of Draylinh formation, Upper Fliensbachian. Assemblage composition: Paltarpites sp., Arieticeras sp.. Hoahuynh Bivalve fauna described from Hoahuynh railway station as Norian one (10) is now attributed to this Assemblage. It comprises: Grammatodon? brevis (Saurin), G. intermedius (Saur.), G.? minimus (Saurin), Bakevellia angusta (Saur.), B. annamitica (Saur.), B. aff. cassianelloides Kob. et Hay., Cardinia astartoides (Saur.), Burmesia japonica Hay., Pleuromya? concentrica Saur., Solenomya hoahuynhensis Saur., Cuspidaria annamitica Saur., C. latecuspidata Saur.

5) Ovaticeras Assemblage, newly described (13) from Draylinh falls (Fig.1-7), upper part of Draylinh formation, Lower Toarcian. Assemblage composition: Ovaticeras sp., Peronoceras sp., Palaeonucula sp., Ostrea sp.

6) Dumortieria lantenoisi Assemblage, described (5,4,8) from Trian (Fig.1-5), Loduc (Fig.1-6) and newly found in Draylinh falls (Fig.1-7), uppermost beds of Draylinh formation, Upper Toarcian. Assemblage composition: Dumortieria lantenoisi (Mans.), Grammoceras loducensis Sato, Pseudammatoceras molukkanum (Cloos), Dumortieria cf. metita Buckm., Hammatoceras sp., Palaeonucula saigonensis Hay., Grammatodon tenuis Hay., Parvamussium donaiense (Mans.), Camptonectes fromageti Hay., Entolium aff. partitum (Sow.), Pseudomytiloides cf. dubius (Sow.), Myophorella saurini Hay., Integricardium globosum Hay., Tancredia latoniformis Hay., Goniomya knorri Ag., Pholadomya fontainei Hay., Myopholas minor Hay., Modiolus sestiniae Hay., Thracia loducensis Hay., Osteomya cf. dilata (Phill.), Pinna sp., Nanonavis sp.

7) Planammatoceras Assemblage, newly described (7,13) from Talai (Fig.1-8), Langa (Fig.1-9), Krong Ana (Fig.1-10); lower part of Langa formation, Lower-Mid Aalenian. Assemblage composition: Planammatoceras sp., Tmetoceras sp., Polyplectus sp., Posidonia bronni Volz

Recent researches into stratigraphy of marine Jurassic in Vietnam help us to establish following scheme of stratigraphic division and correlation of Vietnamese Jurassic.

ria cf. limaeformis Tuchk.

4) Paltarpites Assemblage, newly described (7, 13) from Bandon area (Fig.1-4); middle part of Draylinh formation, Upper Pliensbachian. Assemblage composition: Paltarpites sp., Arieticeras sp.. Hoahuynh Bivalve fauna described from Hoahuynh railway station as Norian one (10) is now attributed to this Assemblage. It comprises: Grammatodon? brevis (Saurin), G. intermedius (Saur.), G.? minimus (Saurin), Bakevellia angusta (Saur.), B. annamitica (Saur.), B. aff. cassianelloides Kob. et Hay., Cardinia astartoides (Saur.), Burmesia japonica Hay., Pleuromya? concentrica Saur., Solenomya hoahuynhensis Saur., Cuspidaria annamitica Saur., C. latecusvidata Saur.

5) Ovaticeras Assemblage, newly described (13) from Draylinh falls (Fig.1-7), upper part of Draylinh formation, Lower Toarcian. Assemblage composition: Ovaticeras sp., Peronoceras sp., Palaeonucula sp., Ostrea sp.

6) Dumortieria lantenoisi Assemblage, described (5,4,8) from Trian (Fig.1-5), Loduc (Fig.1-6) and newly found in Draylinh falls (Fig.1-7), uppermost beds of Draylinh formation, Upper Toarcian. Assemblage composition: Dumortieria lantenoisi (Mans.), Grammoceras lducensis Sato, Pseudamatoceras molukkanum (Cloos), Dumortieria cf. metita Buckm., Hammatoceras sp., Palaeonucula saigonensis Hay., Grammatodon tenuis Hay., Parvamussium donaiense (Mans.), Camptonectes fromageti Hay., Entolium aff. partitum (Sow.), Pseudomytiloides cf. dubius (Sow.), Myophorella saurini Hay., Integricardium globosum Hay., Tancredia latoniformis Hay., Goniomya knorri Ag., Pholadomya fontainei Hay., Myopholas minor Hay., Modiolus sestiniae Hay., Thracia lducensis Hay., Osteomya cf. dilata (Phill.), Pinna sp., Nanonavis sp.

7) Planamatoceras Assemblage, newly described (7,13) from Talai (Fig.1-8), Langa (Fig.1-9), Krong Ana (Fig.1-10); lower part of Langa formation, Lower-Mid Aalenian. Assemblage composition: Planamatoceras sp., Tmetoceras sp., Polyplectus sp., Posidonia bronni Volz

Recent researches into stratigraphy of marine Jurassic in Vietnam help us to establish following scheme of stratigraphic division and correlation of Vietnamese Jurassic.

Series	Stages	Nongson Basin	South Vietnam
J ₂	Bajocian	Red continental Huu-chanh formation. Protophyllocladoxylon thylloides Serra, Phyllocladoxylon vietnamense Serra 400m	Langa formation: Upper part: intercalation of gray sandstone, silstone and clayish shale. No fossils. Lower part: mainly banded clayish shale, silstone with interbeds of sandstone. Planammato-ceras Assemblage 700m
	Aalenian		
J ₁	Toarcian	Kheren formation. gray sandstone, silstone, clayish shale marl. Two assemblages: - Xipheroceras dudressieri - Psiloceras sp. 150m	Draylinh formation. basal conglomerate, calcareous sandstone, marl, calcareous silstone, interbeds of clayish shale Three assemblages: - Dumortieria lantenoisi - Paltarpites sp. - Coroniceras rotiforme 700m
	Pliensbach.		
	Sinemurian		
	Hettangian	Banco formation. white quartzous conglomerate, gravelite sandstone. Conioptetris sp., Classopollis sp. 800-1200m	
		T ₃	

References

1. Arkell W.J. 1956. Jurassic geology of the world. Edinburgh
2. Counillon H. 1908. Sur le gisement liasique de Huu-niên, province de Quang-nam. Bull.Soc.géol.France, 4^e sér., VIII, 7-8
3. Hayami I. 1964. Some Lower Jurassic Pelecypods from South Vietnam collected by Dr H.Fontaine. Jap.Journ.Geol.Geogr., XXXV, 2-4
4. Hayami I. 1972. Lower Jurassic Bivalves from the environs of Saigon. Geol.Pal.S-E Asia, 10
5. Mansuy H. 1914. Gisement liasique des schistes de Trian (Cochinchine). Mém.Serv.géol.Indochine, III, 2
6. Mansuy H. 1919. Faunes triasiques et liasiques de Nacham (Tonkin). Mém.Serv.Géol.Indochine, VI, 1
7. Nguyễn Dinh Hữu, 1982. Some Early Jurassic Ammonites recently discovered in Southern Vietnam. Contr.Pal.Vietnam, 1 (vietnamese)
8. Sato T. 1972. Ammonites du Toarcian au Nord de Saigon, Sud Vietnam. Geol.Pal.S-E Asia, 10

9. Saurin E. 1935. Études géologiques sur l'Indochine du Sud-Est.
Bull.Serv.géol.Indochine, XXII, 1
10. Saurin E. 1941. Lamellibranches du Trias supérieur de Hoa-huynh
(Sud Annam). Bull.Serv.géol.Indochine, XXVI, 3
11. Ta Trần Tân, 1968. Ammonites sinémuriennes à Châu-thoi (Biên-hoa)
Arch.géol.Vietnam, 11
12. Vu Khuc, Nguyễn Dinh Hữu, 1981. On the presence of Hettangian
faunas in Tholam - Songbung area (Quangnam - Danang). Journ. Earth
sci., III, 4 (in vietnamese)
13. Vu Khuc, 1984. Characteristic fossils in the South of Vietnam.
Science and technics Publishing House, Hanoi

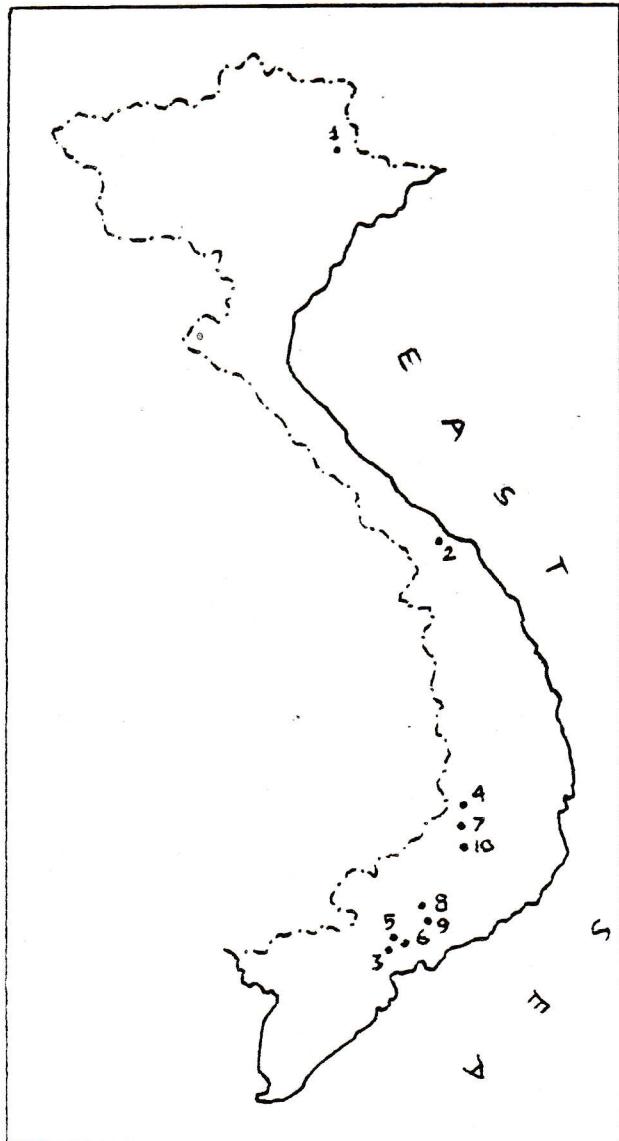


Fig.1. Locality map: 1) Nacham,
2) Nongson (Huuniên), 3) Chauthoi,
4) Bandon, 5) Trian, 6) Loduc,
7) Draylinh, 8) Talai, 9) Langa,
10) Krong Ana.

REPORT ON THE STATE OF PROGRESS OF JURASSIC
RESEARCH IN SPAIN (1970-1985)

0. INTRODUCTION

The aim of this Report is to outline the main aspects and the ~~current~~ state of progress of Jurassic research in Spain.

Research on Jurassic Stratigraphy and Paleontology carried out by Spanish workers has undergone an important growth during the last 15 years. Before 1970 only some scarce regional monographs on jurassic stratigraphy and paleontology are known: Bataller (1920-1963), Riba (1959), Vera (1966), etc.

From 1970 onwards, a group of young geologists that shape today a set of highly active research teams have started their doctoral Thesis within the Departments of Stratigraphy and Paleontology in the Universities of Granada and Madrid (Complutense University). The direction of these works have been carried out by Professors Asunción Linares and Juan A.Vera (Granada) and Bermudo Meléndez (Madrid) and also Professors René Mouterde (Lyon) and H.Tintant (Dijon), among others.

Two main research lines have been developped:
the Jurassic sedimentology and paleogeography and
the study of biostratigraphy by means of ammonites
and brachiopods.

1. MEMBERS

Some 50 Spanish geologists study today the
Jurassic stratigraphy in Spain, distributed among
several centers:

Granada University	18 members
Madrid Univ. (Complutense U.).	13 "
Oviedo University	4 "
Barcelona University	2 "
Zaragoza University	2 "
Sevilla University	1 "
Others (Geological Comp.). . .	7 "

2. MONOGRAPHS

The scientific production of this group can be
measured by the presently published monographs.

These correspond, most of all, to the doctoral The
sis submitted by Spanish workers since 1970.

2.1 Granada University: The main subject of research
are the Jurassic materials and Faunal groups in Be-
tic Range (S.Spain). The Paleogeographic and Biostra-
tigraphic aspects have been the subject of attention,
largely on the basis of the paleontologic, systema-
tic study of ammonite fauna. Professors Dr. Asunción
Linares and Juan A.Vera have mostly carried on with
the direction of these works:

LOPEZ GARRIDO,A.C.(1971) Geología de la Zona Prebética al norte de Jaen. Fac.Ciencias.

RIVAS,P. (1972) Estudio paleontológico y estratigráfico del Lías en el sector Central de las Cordilleras Béticas.(inéd.). 2 vol.

DABRIO,C.J. (1972) Geología del Sector del alto Segura. Tesis Doct.Univ.Granada,nº 28.

SANZ DE GALDEANO,C. (1973) Geología de la transversal Jaen-Frailes (prov.Jaen). Tesis Doct.Univ.Granada, nº 83.

SEQUEIROS,L. (1974) Paleobiogeografía del Calloviano y Oxfordense en el Sector Central de la Zona Subbética. Tesis Doct.Univ.Granada, nº 65, 2 vol.

OLORIZ,F. (1976) Kimmeridgiense-Titónico inferior en el Sector Central de las Cordilleras Béticas (Zona Subbética).Paleontología, Estratigrafía. Tesis Doct.Univ.Granada,nº184.

GARCIA HERNANDEZ,M. (1978) El Jurásico terminal y el Cretácico inferior en las Sierras de Cazorla y del Segura (Zona Prebética). Tesis Doct.Univ.Granada, nº 190.

RUIZ ORTIZ,P.A. (1980) Análisis de facies del Mesozoico de las Unidades Intermedias (entre Castril y Jaen). Tesis Doct.Univ.Granada.

MARTIN,J. (1980) Las dolomías de las Cordilleras Béticas. Tesis Doct.Univ.Granada, nº 265.

SANDOVAL,J. (1982) Bioestratigrafía y Paleontología (Stephanocerataceae y Perisphinctaceae) del Bajocense y Bathonense de las Cordilleras Béticas. Tesis Doct.Univ.Granada.

BRAGA,J.C. (1982) Ammonites del Domerense de la Zona Subbética. Tesis Doct.Univ.Granada.

TAVERA,J.M. (1984) Los Ammonites del Tithonico superior -Berriasense de la Zona Subbética. (Tesis Doct.Univ.Granada.

CHECA,A. (1984) Los Aspidoceratiformes en Europa (Ammonitina, Aspidoceratidae). Tesis Doct.Univ.Granada.

2.2 Madrid (Complutense) University: The monographs published by the Jurassic workers in Madrid University are preferably related to the study of the Jurassic materials of Iberian (E.Spain) and Cantabrian (N.Spain) ranges. The main fields of attention are Stratigraphy, Sedimentology, and Paleontology and Biostratigraphy, specially on the basis of ammonites and brachiopods fauna. The different monographs have been directed by Prof.Dr.Carmina Virgili (Stratigraphy Dept.) and Prof.Dr. Bermudo Meléndez and Antonio Goy (Dep.of Paleontology).

MELENDEZ,F. (1971) Estudio Geológico de la Serranía de Cuenca en relación a sus posibilidades petrolíferas. Publ.Dep.Paleont.,Madrid.

SUAREZ VEGA,L.C. (1972) El Lías de Asturias. Cuad.Geol.Ibérica, nº 3, 2 vol. (1974).

GOY,A. (1974) El Lías de la mitad norte de la rama castellana de la Cordillera Ibérica. Dep.de Paleont.,Madrid.

GARCIA QUINTANA,A. (1975) Jurásico terminal y Cretácico inferior en la región central de la provincia de Valencia y nor-este de Albacete. Semin. Estratigr.,nº 1, Madrid (1977).

ARIAS,C. (1977) Estratigrafía y Paleogeografía del Jurásico superior y Cretácico inferior del NE de la provincia de Albacete. Semin.Estratigr., nº 3, Madrid (1978).

- GOMEZ,J.J. (1978) El Jurásico en facies carbonatadas del Sector Levantino de la Cordillera Ibérica. Semin.Estratigrafía, nº 4, Madrid(1979)
- COMAS,M.J. (1982) El Pliensbachiano de la Cordillera Ibérica. Tesis Doct.Dep.Paleont.,Madrid.
- URETA,S. (1983) Bioestratigrafía y paleontología (Ammonitina) del Aaleniano en el Sector Septentrional de la Cordillera Ibérica. Tesis Doct. Dep.Paleontología, Madrid.
- MELENDEZ,G. (1984) El Oxfordiano en el Sector Central de la Cordillera Ibérica. Tesis Doct. Univ.Complutense.
- FERNANDEZ LOPEZ,S. (1985) El Bajociano en la Cordillera Ibérica. Tesis Doct.Univ.Complutense.

3. ACTIVITIES

Some activities related with Jurassic in the Spanish Jurassic Group are:

- 1970 I Coloquio de Estratigrafía y Paleogeografía del Jurásico de España. Vitoria (Actas: Cuad. Geol.Ibérica, nº 1, 1974).
- 1979 II Coloquio de Estratigrafía y Paleogeografía del Jurásico de España. Granada (Actas:Cuad. Geolog.Univ.Granada, vol.19, 1979).
- 1972 Field Meeting of Mesozoic Spanish Group.Betic Jurassic.
- 1978 Field Meeting of Mesozoic Spanish Group. Iberian Chain.
- 1981 Field Meeting of Spanish Mesozoic Group: Upper Jurassic and Lower Cretaceous of Cantabrian Range (Reinosa).

- 1985 Field Meeting of Jurassic French Group in Spain, Iberian Chain (coord.A.Goy)
1983 The biostratigraphy of Subbetic Zone. Conferences in the Royal Academy of Sciences Phyo-Chem. and Natural of Spain, Madrid.

4. RESEARCH PROJECTS

Several research projects have been finished or are still in progress:

- 1980-81 Project about Jurassic Biostratigraphy and Paleontology in Northwestern Spain, between Demandia and Cameros Mts. (Direct.:B.Meléndez).
1982-1984 The upper Series in the Central Jurassic Sector (Iberian Chain). (CAICYT project, Direct: A.Goy).
1985-1988 Sedimentation during two early fracturations stages and posterior subsidence in a intracontinental Basin: the Permo-Triassic and Lower Jurassic and the Cretaceous in the Iberian Chain. (CAICYT project, direct.: A. Sopeña).
1983 An International Research Group ("Equipo Mixto") is constituted between Spain and France for the Study of Biostratigraphy and Paleontology (ammonite and brachiopods) of Pliensbachian, Toarcian, Callovian, Oxfordian and Kimmeridgian in Central France and Iberian Chain.
1985-87 Project "Ammonite populations in the Callovian and Oxfordian in the Iberian Chain and Central Western region in France". Integrated Action between Poitiers, Dijon, Zaragoza and Sevilla Universities. (Direct. L.Sequeiros and J.Thierry).
1980-83 "The Mesozoic in the Betic Chain" (CAICYT Project, direct. J.A.Vera).

McMaster University
Department of Geology
1280 Main Street West
Hamilton, Ontario
Canada L8S 4M1
PHONE (416) 525-9140
TELEX: 061-8347



CIRCUM-PACIFIC JURASSIC
PROJECT # 171

Leader:

GERD E. G. WESTERMANN

TO: All Members
FROM: G. E. G. Westermann
RE.: Report No. 3 (for 1985)

January 28th, 1986

My enclosed report is kept brief and without illustrations, so that printing and mailing costs (to all members) could be kept within the budget.

Note that, after 5 years our project will be "prolonged" with the usual limited IUGS/UNESCO funding (unless I will be informed otherwise and let you know immediately).

1986-1987 are therefore our last 2 years to finish with our main work, i.e.

- (1) Continue and complete the "Taxa Range-Charts" project.
- (2) Write a book with atlas for fossils on "The Circum-Pacific Jurassic".

As you can see from the layout proposal for the book-with-atlas (Appendix B on p. 6), the chapters on the regional distribution of the Jurassic require the participation of members in Topics A to D. The previous relative inactivity within Project 171 of these members, therefore, has to turn into active cooperation and positive contribution.

Unfortunately, we cannot afford to continue with the circulation of newsletters etc. to all of the c. 135 present members, some active -- but most inactive for several years. I therefore request that you return to me a statement about your future active interest in our work.

All future circulars, letters etc. will go only to those returning the attached form. I trust you understand my predicament.

GEGW:aa
Encl.

G. E. G. Westermann
Professor of Geology

- 1984-85 Project "Macro and micropaleontological study of Jurassic and Cretaceous in Betic Chains" (CAICYT project, Dir. A.Linares)
- 1975-1979 Project "Jurassic and Cretaceous Microfacies in External Zona of Betic Chain"
Atlas of Microfacies published by Granada University, Direct. J.A.Vera.
- 1986-87 A sharing research project between Zaragoza University and Torino (Italia):
"Upper Jurassic Stratigraphy and Ammonite fauna of Iberian Chain and N.Eastern Italy".
(Proj.coord.:G.Pavia,Torino and G.Meléndez)

Leandro Sequeiros (Sevilla)
Guillermo Meléndez(Zaragoza)

I FIELD MEETING III, JAPAN 1985

The meeting was held in Japan, October 13-20, 1985, and organized by Dr. T. Sato of Tsukuba University. The 2 days of conference at the University were followed by 5 days field trip to the Yamizo and South Kitakami Mountains in northeastern Honshu. Organization was exemplary!

There were 18 foreign and 13 Japanese participants totalling 11 countries:

Argentina:	A.C. Riccardi
Canada:	R. Hall W.A.S. Sarjeant, G.E.G. Westermann (Leader)
China:	B. Liu, H. Liu, Y. Wang S. Wang
France:	L. Beauvais
Germany:	A.v. Hillebrandt U. Rosenfeld A. Zeiss (Subcomm. Jur. Strat.)
India:	Jai Krishna
Indonesia:	R. Sukamto
Thailand:	C. Chonglakmani, R. Ingavat
U.S.S.R.:	V. Zakharov
Vietnam:	Dang Vu Kluc
Japan:	H. Ando, I. Hayami H. Hirano K. Ichikawa Y. Isozaki T. Kimura H. Masuyama S. Mizutani K. Sashida T. Sato (Organizer of Meeting) S. Takisawa A. Yao

Many of the foreign representatives received partial and, a few, complete financial support from IUGS/UNESCO, while much of the excursion and printing expenses were financed by private Japanese sources. We thank all of them.

A. REPORTS BY MEMBERS

At the 2 day conference in Tsukuba, the following presentations were made:

W.A.S. Sarjeant: Jurassic polynomorphs of the Circum-Pacific.
R. Hall: Recent work on Jurassic in Canada and U.S.A.
G.E.G. Westermann: Middle Jurassic of Mexico and Venezuela.
A.v. Hillebrandt: Lower Jurassic of Circum-Pacific
A.C. Riccardi: Jurassic invertebrates of South America.
U. Rosenfeld: Neuquen Basin, Argentina.
G.E.G. Westermann: Jurassic invertebrates of southwestern Pacific margin.
Jai Krishna: Jurassic of Indian Subcontinent.
L. Beauvais: Jurassic Corals of Sumatra.
H. Hirano: Lower Jurassic plants of Japan.
R. Ingavat: Vertebrates of Vietnam.
V.K. Dang: Marine Jurassic of Vietnam.
C. Chonglakmani: Marine Jurassic of Thailand.
L. Beauvais: Jurassic Corals of Thailand and Burma.
R. Sukamto: Mapping, Structure and Jurassic of Indonesia.
Y. Wang, S. Wang & B. Liu: Jurassic of China.
V. Zakharov: Jurassic biogeography of North-east U.S.S.R.
A. Zeiss: Comment to Jurassic-Cretaceous boundary.
T. Sato, K. Sashida, T. Kimura, S. Mizutani, K. Ichikawa: Outline-of the geology and paleontology of Japan.

B. EXCURSION

The excursion by bus lead to the radiolarian facies of the Yamizo Mountains (Oct. 16) and Kuzuu areas of the Ashio Mountains (Oct. 17), and to the molluscan facies in the Soma area of the Abukuma (Oct. 18) and South Kitakami Mountains (Oct. 19-20). The geology and outcrops, often picturesque at the seashore, were well described in the "Guidebook" (a few extra copies available from T. Sato). The trips were excellently led and the traditionally Japanese hotels admirable -- although fossils were often few.

C. GENERAL MEETING

The General Meeting was held in the evening of October 18 in Sadaham, Kitakami.

1. Prolongation of Project

The official 5 years IGCP tenure of our Project will finish at the end of this year. I have requested a 2 year prolongation with IUGS/UNESCO financial support (this substitutes for the previous "extension on extended term", without financing).

2. 1985 Activities and Publications

A.C. Riccardi and G.E.G. Westermann reported on the project on taxa range-charts. The manuscripts on China and U.S.S.R. No. 1 are ready for submission to Newsletters on Stratigraphy, to be published together in a single issue. We also published eight Special Papers (Nos. 8-15) with 15 articles, and 2 papers in regular journals (Appendix A).

3. Future Activities

- a) 1986-7: Taxa Range-charts: - This project will continue with the 2nd issue in Newsletter on Stratigraphy containing papers on South America, followed by issues with papers on Japan, S.E. Asia, U.S.S.R., North America and (?) Australia.
- b) 1986-8: Book and Atlas: - The intention is to publish a summary of our activities and of previous work in a book and atlas entitled "Circum-Pacific Jurassic", with various authors and edited by G.E.G. Westermann. The layout proposal (Appendix B) will be submitted to Oxford University press (att. M.R.A. Thomson, co-editor and project 171 member), Schweitzerbarth, and Elsevier.
- c) Field Meeting IV: - If my request for a 2 year prolongation of the project will be granted (as expected by the Canadian National Committee), Field Meeting IV can be planned for 1987. Possible sites would be New Zealand or Oregon. Comments from the possible organizers (?G. Stevens, ?D. Taylor) and of the membership are invited.

1985 PUBLICATIONS

- Special Paper No. 8 J.G. Ogg and M.B. Steiner:
Jurassic Magnetic Polarity Time Scale Current
Status and Compilation
- " " No. 9 J.H. Callomon:
Biostratigraphy, Chronostratigraphy and All
That -- Again!
- " " No. 10 G.E.G. Westermann, editor:
Jurassic Biogeography and Stratigraphy of
East U.S.S.R.
1. K.H. Khudoley and E.L. Provorovskaya:
Seaways Between the Western Part of the
Pacific and Adjacent Oceans.
2. E.M. Markovich:
Early Jurassic Flora of the Eastern
Regions of the U.S.S.R.
3. I.I. Sey and E.D. Kalacheva:
Invasions of Tethyan Ammonites into the
Late Jurassic Boreal Basins of East
U.S.S.R.
4. L.B. Tikhomirova:
Jurassic Radiolarians of the Far East
U.S.S.R.
5. V.V. Pavlova, A.G. Rublev, E.K. Trussova,
Yu P. Shergina and L.N. Yakobson:
Upper Mesozoic Stratigraphy of eastern
Translated paper.

6. K.K. Khudoley:
The Jurassic-Cretaceous Boundary in the Far East.
7. G.E.G. Westermann (ed.):
Comments on the Biogeography Papers.

- " " No.11 G.E.G. Westermann:
Durations of Jurasic Stages Based on Averaged and Scaled Subzones.

- " " No.12 Henri Fontaine, Pacita David, Ricardo Parded and Nana Suwarna:
Marine Jurassic in Southeast Asia.

- " " No.13 O. Palacios M.:
Jurassic Paleogeography and Stratigraphy of Peru.

- " " No.14 C. Chonglakmani, A. Meesook and V. Suteetorn:
Jurassic Stratigraphy of Thailand.

- " " No.15 Jurassic Climate of Western Pacific Area:
 1. Vakhrameev & Lebedev:
Floras and Climate of Pacific U.S.S.R.
 2. Beauvais:
Climatic Significance of Corals.

Journal Publications

WESTERMANN, G.E.G. and A.C. RICCARDI. Middle Jurassic Ammonite Evolution in the Andean Province and Emigration to Tethys. In: Bayer and Seilacher, eds.: Sedimentary and evolutionary cycles, p. 6-34, Lecture Notes and Earth Sci., 7 (Springer) 1985.

HILLEBRAND, A.v. and G.E.G. WESTERMANN. Aalenian (Jurassic) ammonite fauna and zones of the Southern Andes. Zitteliana 12: 3-55 (1985).

II RESEARCH TOPICS

Coordinators of Topics and Organizer of Subtopics are Underlined if accepted and with dashes if proposed.

TOPIC A: Geodynamics

- | | |
|-----------------------------|---|
| 1. Ocean Floor | Hilde, Larson, <u>Ogg</u> |
| 2. North America | Campa, <u>Monger</u> , Silberling,
Steiner |
| 3. Ctr. America & Caribbean | Dengo, Schubert |
| 4. South America | Frutos, Oyarzun, <u>Vicente</u> |
| 5. Scotia Arc & Antarctica | <u>Elliot</u> , Frutos, Quilty,
Thomson |
| 6. Australasia | Sato, Stevens |
| 7. Asia & Japan | Sato, Stauffer, <u>Zakharov</u> |

TOPIC B: Physical Geochronology

- | | |
|-----------------------|------------------------------------|
| 1. Radiochronology | Mizutani, <u>Odin</u> |
| 2. Eustatic Events | <u>Hallam</u> , Hillebrandt, Janza |
| 3. Manetostратigraphy | Ogg, Steiner |

TOPIC C: Ocean Currents and Climate (Volkheimer)

- | | |
|-------------------|---|
| 1. Ocean Currents | Khudoley, Winterer, Larson,
<u>Kennett</u> , Seidov |
| 2. Climate | Elliot, Samylina, Schmidt-
Effing, Stevens, <u>Volkheimer</u> ,
Zakharov, Bausch, Liu |

- TOPIC D: Basin Analysis and Stratigraphy (Sato, Vicente)**
1. North America Campa, Carrasco, Detterman, Poulton, Tipper
 2. Ctr. America & Caribbean Meyerhoff, Schmidt-Effing
 3. South America Chong, Davidson, Gulisano, E.Gonzalez, Hillebrandt, Leanza, Mojica, Palacios, Riccardi, Rosenfeld, Uliana, Vicente
 4. Scotia Arc & Antarctica Quilty, Thomson
 5. Australasia Grant-Mackie, Stevens, Sukamoto
 6. Asia & Japan Chonglakmani, Kuzmin, Sato, Shurygin, Sun, Vu Kluc, Wang, Zakharov, Yu, Liu

¹

TOPIC D : Strato-Bound Ore Deposits (Frutos)

TOPIC E: Microflora (Sargeant)

1. North America Davies, Fensome, Sargeant, Silva, Zhang
2. Ctr. & South America Erve, Furrazola-Bermudaz, Quatrocchio, Volkheimer, Jersey, McKellar
3. Australia
4. Asia & Japan Zhang

TOPIC F: Macroflora

Askin, Kimura, Kirichkova, Lebedev, Samylina

TOPIC G: Microfauna (Pessaqno)

1. North America Braun, Longoria, Pessaqno, DeWever, Blome
2. Ctr. America & Caribbean Schmidt-Effing
3. South America Ballent, Musacchio, DeWever
4. Scotia Arc & Antarctica Quilty
5. Australasia Haig
6. Asia & Japan Mizutani, Tichomirova, DeWever

TOPIC H: Invertebrata (Hillebrandt)

1. North America Alencaster, Buitron, Callomon, C.Gonzalez, Guex, Hall, Jeletzky, Oloriz, Poulton, Sandoval, Smith, Taylor, Westermann
2. Ctr. America & Caribbean Fischer, Schmidt-Effing, Wierzbowsky
3. South America Biro-Bajoczky, Covacevich, Damborenea, Hillebrandt, Leanza, Mancenido, Perez, Rangel, Riccardi, Westermann
4. Scotia Arc & Antarctica Crame, Quilty, Thomson
5. Australasia Challinor, Grant-Mackie, Mancenido, Sato, Skwarko, Stevens, Westermann, Zeiss

6. Asia & Japan

Chen, Khudoley, Kalacheva,
Konovalov, Jai Krishna,
Kuzmin, Liu, Paraketzov,
Polubotko, Repin, Sato, Sey,
Shurygin, Sun, Wang Y.,
Westermann, Zakharov, Yu,
Wang Si-en

TOPIC I: Vertebrata

Aratia, Bonaparte, Cione, Clemens,
Colbert, Gasparini

TOPIC J: Chronostratigraphy and Standard Zones

1. Lower Jurassic

Guex, Hillebrandt, Hirano,
Kuzmin, Polubotko, Repin,
Sato, Schmidt-Effing, Sey,
Smith, Wang Y.

2. Middle Jurassic

Callomon, Hillebrandt, Kuzmin,
Kalacheva, Riccardi, Sandoval,
Sato, Sey, Taylor, Westermann
Callomon, Kalacheva, Lanza,
Oloriz, Paraketzov, Stevens,
Thomson, Zakharov

3. Upper Jurassic

Fensom, McKellar, Volkheimer
Kimura, Samylina, Silva

TOPIC K: Floral Biogeography

1. Palynomorphs

2. Macroflora

TOPIC L: Faunal Biogeography and Seaways (Hallam)

1. Microfauna

Braun, Musacchio, Pessagno,
Quilty, Silva, Bassoulet
Beauvais, Fontaine, Liao
Ager, Mancenido, Sun
Alencaster, Chen, Damborenea,
Hallam, Hillebrandt,
Konovalova, Kuzmin,
Paraketzov, Perez, Polubotko,
Sey, Shurygin, Skwarko,
Taylor, Zakharov

5. Ammonoidea

Callomon, Hillebrandt,
Kalacheva, Khudoley, Riccardi,
Schmidt-Effing, Smith,
Stevens, Taylor, Thomson,
Wang, Westermann, Wiedmann,
Zeiss

6. Belemnoidea

Challinor, Jeletzky, Stevens

7. Echinodermata

Buitron

8. Pisces

Arratia, Cione

9. Reptilia

Colbert, Gasparini, Goni

10. Mammalia

Clements

