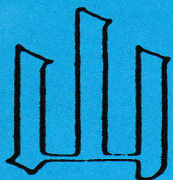


INTERNATIONAL SUBCOMMISSION ON JURASSIC STRATIGRAPHY

Newsletter No. 13

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Fin



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

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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
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de Lorando Eötvös Nom.
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
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Zaragosa 9
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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
 Universidade 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
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 25, rue du Plat
 69288 Lyon Cedex 1
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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

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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 Trân 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., *Cultrioopsis counillonni* Hay., "*Exogyra*" *vietnamensis* Hay., *Thracia* sp., *Nicaniella* 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., *Cultrioopsis counillonni* 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* Tuckk.

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 Morian one (10) is now attributed to this Assemblage. It comprises: *Grammatodon? brevis* (Saurin), *G. intermedius* (Saur.), *G.? minimus* (Saurin), *Bakevella 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 sestinae* 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* Tuck.

4) Paltarpites Assemblage, newly described (7, 13) from Bandon area (Fig.1-4); middle part of Draylinh formation, Upper Eocene. Assemblage composition: Paltarpites sp., *Arietoceras* sp.. Hoahuynh Bivalve fauna described from Hoahuynh railway station as Eocene one (10) is now attributed to this Assemblage. It comprises: *Grammatodon?* *brevis* (Saurin), *G. intermedius* (Saur.), *G.?* *minimus* (Saurin), *Bakevella 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), Lodu (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, *Pseudammoceras 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 sestinae* Hay., *Thracia loducensis* Hay., *Osteomya* cf. *dilata* (Phill.), *Pinna* sp., *Nanonavis* sp.

7) *Planammoceras* 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 Eocene. Assemblage composition: *Planammoceras* 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	Nongsong Basin	South Vietnam
J ₂	Bajocian	Red continental Huu-chanh formation. <i>Protophylocladoxylon thylloides</i> Serra, <i>Phylocladoxylon vietnamense</i> 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. <i>Planammatoceras</i> Assemblage 700m
	Aalenian		
J ₁	Toarcian	Kheren formation. gray sandstone, silstone, clayish shale marl. Two assemblages: - <i>Xipheroceras dudressieri</i> - <i>Psiloceras</i> sp. 150m	Draylinh formation. basal conglomerate, calcareous sandstone, marl, calcareous silstone, interbeds of clayish shale Three assemblages: - <i>Dumortieria lante-noisi</i> - <i>Paltarpites</i> sp. - <i>Coroniceras rotiforme</i> 700m
	Pliensbach.		
	Sinemurian		
	Hettangian	Banco formation. white quartzous conglomerate, gravelite sandstone. <i>Coniopteris</i> sp., <i>Classopollis</i> sp. 800-1200m	
		T ₃	

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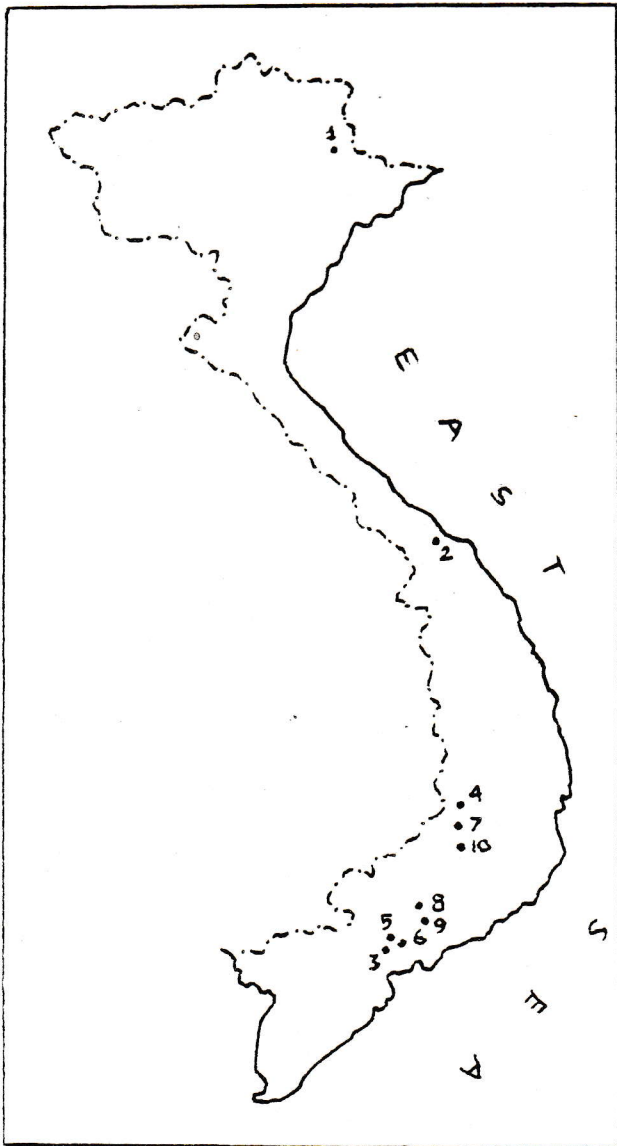


Fig.1. Locality map: 1) Nacham, 2) Nongson (Huuniên), 3) Chauthoi, 4) Bandon, 5) Trian, 6) Loduc, 7) Draylinh, 8) Talai, 9) Langa, 10) Krong Ana.

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 developed: 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 Thesis submitted by Spanish workers since 1970.

2.1 Granada University: The main subject of research are the Jurassic materials and Faunal groups in Betic Range (S.Spain). The Paleogeographic and Biostratigraphic aspects have been the subject of attention, largely on the basis of the paleontologic, systematic 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 Calloviense 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, nº 184.

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 preferently 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).

MELÉNDEZ, 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 Pliensbachiense de la Cordillera Ibérica. Tesis Doct.Dep.Paleont., Madrid.

URETA, S. (1983) Bioestratigrafía y paleontología (Ammonitina) del Aaleniense en el Sector Septentrional de la Cordillera Ibérica. Tesis Doct. Dep.Paleontología, Madrid.

MELENDEZ, G. (1984) El Oxfordiense en el Sector Central de la Cordillera Ibérica. Tesis Doct. Univ.Complutense.

FERNANDEZ LOPEZ, S. (1985) El Bajociense 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 Physico-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 Demanda 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).

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**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.

G. E. G. Westermann
 Professor of Geology

GEGW:aa
 Encl.

- 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. Sukanto
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. Sukanto: 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. Prosorovskaya:
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 Jurassic Stages Based on Averaged and Scaled Subzones.
 - " " No.12 Henri Fontaine, Pacita David, Ricardo Parded and Nana Suwana:
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 | <u>Sato</u> , 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. Manetostratigraphy | <u>Ogg</u> , 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, Sukanto
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, Furrázola-Bermudaz, Quatrocchio, Volkheimer, Jersey, McKellar
3. Australia
4. Asia & Japan Zhang

TOPIC F: Macroflora Askin, Kimura, Kirichkova, Lebedev, Samylina

TOPIC G: Microfauna (Pessagno)

1. North America Braun, Longoria, Pessagno, 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,
Kalcheva, Riccardi, Sandoval,
Sato, Sey, Taylor, Westermann
Callomon, Kalacheva, Leanza,
Oloriz, Paraketzov, Stevens,
Thomson, Zakharov

3. Upper Jurassic

TOPIC K: Floral Biogeography

1. Palymormorphs

Fensom, McKellar, Volkheimer

2. Macroflora

Kimura, Samylina, Silva

TOPIC L: Faunal Biogeography and Seaways (Hallam)

1. Microfauna

Braun, Musacchio, Pessagno,
Quilty, Silva, Bassoulet

2. Corals

Beauvais, Fontaine, Liao

3. Brachiopoda

Ager, Mancenido, Sun

4. Lamellibranchia & Gastropoda

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. Belemnoida

Challinor, Jeletzky, Stevens
Buitron

7. Echinodermata

8. Pisces

Arratia, Cione

9. Reptilia

Colbert, Gasparini, Goni

10. Mamalia

Clements

