

INTERNATIONAL SUBCOMMISSION ON JURASSIC STRATIGRAPHY

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NEWSLETTER No. 5

As announced earlier meetings of the working groups and of the Subcommission will be held during the congress in Paris:

- 1) Meetings of the three working groups will be held in:
Universite Pierre et Marie Curie (Paris VI), Laboratoire de Paläontologie des Invertebres, Tour 23, 3^e etage, 4, Place Jussieu, 75230 Paris - Cedex 05.

at the dates and time:

- 8th July, 16.00-(18.00), - Lower Jurassic Working Group
- 9th July, 16.00-(18.00), - Middle Jurassic Working Group
- 10th July, 16.00-(18.00), - Upper Jurassic Working Group

Please inform the members of your working group about the meetings, which can be attended without being a subcommission member and without attending the congress.

- 2) Business meeting of the Subcommission will be held in:
Room No. 305 in the center of the 26th International Geological Congress, Centre International de Paris, Palais des Congres, - Porte Maillot,

at the date and time:

11th July 15.00-17.30

For the working group meetings the following agenda are proposed

Lower Jurassic Working Group

- 1) Open discussion of the proposal for a research Programme,
- 2) Organization of the research work.

Middle Jurassic Working Group

- 1) Choice of major problems and their geographical localization,
- 2) Constitution of working-teams and leader designation,
- 3) üiscussion of a detailed research Programme.

Upper Jurassic Working Group

- 1) Account of the situation in the Upper Jurassic Working Group
- 2) Examination and discussion of proposal for a research programme.
 - a) the two proposals (1st and 2nd project) prepared for the Subcommittee project can be used as basis for the discussion,
 - b) other proposals.
- 3) Conclusions and decisions.

For the coming work in the research Programme are as many as possible welcome to attend the meetings and contribute to the discussion.

Preliminary agenda for the business meeting of the Subcommittee:

- 1) Election of members,
- 2) Report on the activities in the first period,
- 3) Presentation of the research programme,
- 4) Report from the Working Group meetings,
- 5) Discussion of activities in the next period,
- 6) Conclusion.

Arnold Zeiss

Olaf Michelsen

Report No. 5

From: V.A. Vakhrameev, G.Ya. Krymholz, K.I. Kuznetsova - Study of the Jurassic System in the USSR (1976-1979)

The study of the Jurassic System in the USSR is carried out in the following directions: 1) working out the zonal stratigraphy; 2) paleontological investigations of various groups of fossil organisms; 3) correlation of Jurassic deposits of different

palaeobiochorias. Besides, great attention is paid to problems of stratigraphic terminology and nomenclature, as well as to the general principles of establishing the geological boundaries and distinguishing the strata of various ranges.

These studies are carried out by stratigraphers and palaeontologists of Institutes of the USSR Academy of Sciences and the Academies of the Union Republics, Geological Surveys and research Institutes of the USSR Ministry of Geology, high educational institutions and some other bodies. The studies are co-ordinated by the Commission on the Jurassic System of the Interdepartmental Stratigraphic Committee. Generalization of the results of these studies is accomplished at Interdepartmental regional stratigraphic meetings. During the last years such meetings were held: in 1971 on Middle Asia territory (5), in 1975 on the North-East of the USSR (6), in 1976 on the Baltic region (7), in 1976 on West Siberia (4), in 1977 on the Urals (4), in 1977 on the Caucasus (4), in 1978 on the Far East (4), in 1978 on Middle Siberia (4).

The stratigraphical schemes of Jurassic deposits proposed at the meetings are discussed and approved by the Commission on

the Jurassic System. General problems of Jurassic stratigraphy are discussed at meetings of the Commission. The results (just as those on other Systems) are regularly published in volumes "Decisions of the Interdepartmental Stratigraphic Committee and its Permanent Commissions".

The International Symposium held in Novosibirsk in 1977 was devoted to the Upper Jurassic Stratigraphy and the Jurassic-Cretaceous boundary in the Boreal area, Proceedings of this Symposium was published (17) under the title "The Upper Jurassic and its boundary with the Cretaceous System".

In addition to, the Commission organizes colloquia on some groups of Jurassic organisms. Along with problems of stratigraphy, the participants of the colloquia get acquainted with collections of organic remains, discuss their systematics, etc. Such was the Symposium on Biostratigraphy of Upper Jurassic deposits in the USSE on foraminifers (in Vilnius, 1979). Below is the list of the most important papers on stratigraphy and palaeontology of the Jurassic system published during the last years (1976- 1979). They include all monographs and some papers dealing with general problems of subdivision of the Jurassic system. Worth attention among them is the comprehensive work by V.N.Saks, S.V.Meledina, M. S. Mesezhnikov et al. (15) devoted to Jurassic stratigraphy of the North of the USSE, as well as the Mesozoic volume of the Stratigraphic Glossary of the USSR. The latter contains descriptions of 1026 Stratigraphic units recognized in Jurassic deposits of various regions of our country (18). The list also includes some decisions of Interdepartmental stratigraphical meetings mentioned above. These decisions contain schemes of correlation of Jurassic deposits in larger re-

gions of the Soviet Union.

1. Andreeva T.F., 1977. Bivalve mollusks of Jurassic deposits of the South-East Pamirs. Dushanbe, 187 pp. (in Russian).
2. Beznosov, N.V. 1978. On boundaries of the middle series of the Jurassic System. In: Problemy stratigrafii i istoricheskoi geologii, Moscow, pp.38-43 (in Russian)..
3. Dain L.G., Kuznetsova, K.I. 1976. Foraminifers of the Volgian stage stratotype. Trudy Geol. Inst. Akad. Nauk SSSR, v.290 (in Russian).
4. Decisions of the Interdepartmental Stratigraphic Committee and its Permanent Commissions. Leningrad, 1978, v. 18, 111 pp. (in Russian).
5. Decisions of the Interdepartmental Stratigraphic Meeting on Mesozoic of Middle Asia. Leningrad, 1977, 47 pp. (in Russian).
6. Decisions of the 2-nd Interdepartmental regional Stratigraphic Conference on Precambrian and Phanerozoic of the USSR North-East. Magadan, 1978, 192 pp. (in Russian).
7. Decisions of the Interdepartmental regional Stratigraphic meeting on elaboration of unified Stratigraphic schemes of the Baltic region. Leningrad, 1978 (in Russian).
8. Doludenko M.P., Orlovskaya, E.R. 1976. Jurassic flora of Karatau. Trudy Geol. Inst. Akad. Nauk SSSR, v.284, 260 pp. (in Russian).
9. Kaplan M.E., Meledina S.V., Shurygin, B.N. 1979. Callovian seas of North Siberia. Trudy Inst. Geol. i geofiz. SO Akad. Nauk SSSR, v.384, 79pp. (in Russian).
10. Khimshiashvili, N.G. 1976. Ammonoidea of Tithonian and Berriasian of the Caucasus. Tbilisi, 180 pp. (in Russian).
11. Krymholz, G.Ya. 1979. The Bajocian stage. "Voprosy stratigrafii", v.2 (in Russian).

12. Kuznetsova, K.I. 1979« Late Jurassic stratigraphy and palaeogeography of the Boreal "belt by means of foraminifers. Trudy Geol. Inst. Akad. Nauk SSSR, v.332, 124 pp. (in Russian).
13. Meledina, S.V. 1977. Zonal stratigraphy of the Callovian of Siberia. Trudy Inst. Geol. i geofiz. SO Akad. Nauk SSSE, v.365, 290 pp. (in Russian).
14. Saks, Y.N. 1976. Zones of the Boreal Jurassic in areas adjacent to the Pacific Oceans. In: Doklady Sovetskikh geologov k XXV Sessii Mezhdunarodnogo Geol. Congr. Moscow, pp.2-43 (in Russian).
- 15« Saks, V.N. (ed.) 1976. Stratigraphy of the Jurassic system of the North of the USSR. Moscow, "TCauka", 436 pp. (in Russian).
16. Stratigraphic Glossary of the USSR (Triassic, Jurassic, Cretaceous). 1979» Leningrad, "Nedra", 592 pp. (in Russian).
17. The Upper Jurassic and its boundary with the Cretaceous System. 1979. Novosibirsk, „Nauka", 216 pp. (in Russian).
18. Vakhrameev V.A., Doludenko, M.P. 1976. The Middle/Late Jurassic boundary as an important changeover in the history of development of climate and Vegetation of the Northern Hemisphere. "Sovetskaya Geologiya", N 4, pp.12-25 (in Russian).
19. Zinoviev, M.S. 1976. Late Jurassic bivalve mollusks of the Elton lake region. Kharkov, 92 pp. (in Russian).

Report No. 6

From: I.G. Sapunov - Bulgaria (first report)

This report includes the activities of the Bulgarian specialists of the Jurassic System in the field of stratigraphy and palaeontology (1) for the last 2-3 years and (2) their plans for the near future.

Organization. In 1979 in Bulgaria was differentiated a National Stratigraphic Commission. In the framework of this commission was organized a Jurassic working group. Information about the composition of the Bulgarian Jurassic working group and the interests of the separate specialists was given to the International Subcommittee on Jurassic Stratigraphy on November, 21, 1979.

General Activities

During the last 2-3 years the main attention of the Bulgarian Jurassic working group was directed to the investigation of the Jurassic rocks in the boreholes of Central North Bulgaria. The biostratigraphic results were based on the coordinate research of different fossil groups: ammonites, belemnites, bivalves, brachiopods, foraminifera, calpionellids, algae, dinoflagellate cysts, spores and pollen. The results are satisfactory for the regional stratigraphy, as well as for the knowledge of the taxonomic contents and the local ranges of the different fossil groups. The general result is given in a report. Some special results will be published in the next years.

From the beginning of 1980 the Bulgarian Jurassic working group will continue the researches of the Jurassic rocks in boreholes in North-eastern Bulgaria. Beside this a much remarkable programme will be realized. It will be connected with complex stratigraphic and palaeontologic researches in a series of instruc-

tive sections in outcrops in the Balkanids, the Kraishtids and in the Srednogorie region. The results of this new researches will be published in the framework of a special monograph on the stratigraphy of Bulgaria. Probably the monograph will be printed in 1984. The publication of this monograph is connected with the celebration of 1300 years of the establishing of the Bulgarian State (681-1981)

Special Researches

Ammonites (I. Sapunov and T. Nikolov). In 1979 was published the monograph:

Sapunov, I.G. 1979. Les fossiles de Bulgarie. III.3. Jurassique superieur, Ammonoidea. Bulg. Acad. Sei. Publ. House, Sofia; 263 p., 59 pl., 16 text-fig. (Bulgarian with French summary).

This monograph is connected with 4 special papers:

Sapunov, I.G. 1976a. Ammonite stratigraphy of the Upper Jurassic in Bulgaria. I. Rock and ammonite successions.- *Geologica Balcanica*, 6, 3; 17-40, 2 text-fig. (English)

Sapunov, I.G. 1976b. Ammonite stratigraphy of the Upper Jurassic in Bulgaria. II. Oxfordian: substages, zones and subzones.- *Geologica Balcanica*, 6, 4; 19-36, pl. 1-7, 2 text-fig., 2 tabl. (English).

Sapunov, I.G. 1977a. Ammonite stratigraphy of the Upper Jurassic in Bulgaria. III. Kimmeridgian: substages, zones and subzones.- *Geologica Balcanica*, 7, 1; 63-30, pl. 1-6, 2 text-fig., 2 tabl. (English),

Sapunov, I.G. 1977b. Ammonite stratigraphy of the Upper Jurassic in Bulgaria. IV. Tithonian: substages, zones and subzones.- *Geologica Balcanica*, [7, 2; 43-64, pl.1-6, 3 text_fig., 2 tabl. (English).

in which if given Information about the lithostratigraphy of the Upper Jurassic rocks in Bulgaria, the Upper Jurassic ammonite successions in the sections and data about the Bulgarian Upper Jurassic stages, substages and the ammonite zones and subzones. Correlations with other countries are made.

T. Nikolov prepared a monograph concerning the Late Tithonian and Berriasian representatives of the family Berriasellidae. The monograph will be published in French probably in 1981.

Belemnites (K. Stoyanova-Vergilova). The Bulgarian Jurassic belemnites were studied very active during the last several years from taxonomic and stratigraphic point of view. The most important publication in this respect are:

Vergilova-Soyanova, M. 1979. An attempt for belemnite zonal subdivision of the Lower Jurassic Sediments of Bulgaria.- Ann. Univ. Sofia, Fac. Géol., Geogr., 70, 1, 1977/ 78; 161-192, pl. 1, 2 (Bulgarian with English punmary).

Vergilova-Stoyanova, M. 1979. Bathonian belemnites from Bulgaria.- Geologica Balcanica, 9, 4; 47-58, pl. 1-3.
Bivalves, In 1974 V. Shopov, who was for a long period inte-rested in Jurassic bivalves, began active researches of Quaternary molluscs. The study of the Bulgarian Jurassic bivalves was partly apsuraded by Sapunov. But the results in this respect are inessential.

Brachiopods (P. Tchoumatchenco). His studies were concentrate on the Bulgarian Middle- and Upper Jurassic brachiopods (Saxonomy, stratigraphy, palaeoecology). The most important publications are:

Tchoumatchenco, P. 1976. An analysis of Simpson's species diversity in the Early Jurassic brachiopods from Central and Western Bulgaria.- Geologica Balcanica, 6, 4; 95-103 (English).

Tchoumatchenco, P. 1977. Les biozones de Brachiopodes du Jurassique moyen en Bulgarie.- *Geologica Balcanica*, 7, 1; 97-108 (French).

Tchoumatchenco, P. 1978. Brachiopodes du Jurassique moyen des environs du village de Dolni Lom, district de Vidin (Bulgarie du Nord-Ouest).- *Arm. Univ. Sofia, Fac. Geol., Geogr.*, 69, 1, 1976/77; 193-232, pl. 1, 2 (Bulgarian with French summary).

Tchoumatchenco, P. 1973. Brachiopodes du Callovien et du Jurassique supérieur d'une partie du Prébalkan occidental, "Bulgarie du Nord-Ouest.- *Palaeont., Stratigr., Lithol.*, 8; 3-54, pl. 1-5 (Bulgarian with French summary).

Thoumatchenco, P. 1973. Brachiopodes du Jurassique moyen de la Formation de Polatène près du village de Jalaljano, arrondissement de Radomir (Bulgarie occidentale).- *Palaeont., Stratigr., Lithol.*, 9; 27-56, pl. 1, 2 (Bulgarian with French summary).

Foraminifera (E. Trifonova). Active researches have been made concerning the taxonomic contents and the local ranges of the Bulgarian Jurassic foraminifera mainly from boreholes.

Unfortunately insignificant part from the results is given for publication. For the 10th Congress of the Carpatho-Balkan Geol. Association, Kiev (USSR), 1978 was prepared a report:

Trifonova, K. 1973. An attempt for comparison of the Bathonian Foraminifera assemblages from North Bulgaria and some regions of Europe and USSR. The report is not yet published.

Calpionellids. D. Bakalova). In connection with the International Symposium on the Jurassic/Cretaceous boundary, Sofia, 1977,

were made special researches of the Bulgarian calpionellids from taxonomic and stratigraphic point of view. The results were published:

Bakalova, D. 1977. Les Calpionelles du Prébalkan Central et Occidental.- Palaeont., Stratigr., Lithol., 6; 65-30, pl. 1 (Bulgarien with French summary).

Bakalova, D. 1977. La succession a Calpionelles de la coupe pres du village de Ginci, Bulgarie du North-Ouest.-C.R. Acad. bulg. Sci., 30, 3; 423-426 (French).

Algae (D. Bakalova). The taxonomic composition of the algae, derived from shallow watter platformic Upper Jurassic and Lower Cretaceous limestones was studied:

Bakalova, D. 1973. Algues calcaires de la Formation de Brest-nica (Tithonique supérieur - Barremien supérieur).- Rev. "Bulg. geol. Soc.", 39, 1; 3-16, pl. 1-4 (Bulgarian with French summary).

Dinoflagellate cysts (L. Dodekova). Active investigations concerning the taxonomic composition and the local ranges of the Bulgarian Bathonian, Callovian and Upper Jurassic dinoflagellate cysts were made. At present, the new results are still not in condition for publication.

Spores and pollen (S. Cernjavaska). Remarkable results in the knowledge of the Lower and Middle Jurassic spores and pollen are reached. The most of the results are not yet published. In 1979 was prepared a report for the 5th International Palynological Conference in Cambridge, 1980, in which is given information for the new established sporomorphic assemblages connected with the Triassic/Jurassic boundary in Bulgaria.