

**Том I, 2008**



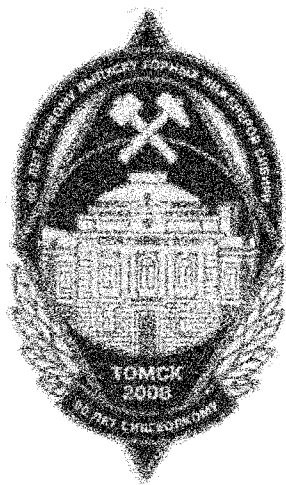
**Международный  
научно-практический форум**

**МИНЕРАЛЬНО-СЫРЬЕВАЯ  
БАЗА СИБИРИ:  
ИСТОРИЯ СТАНОВЛЕНИЯ  
И ПЕРСПЕКТИВЫ,**

**посвященный 100-летию  
первого выпуска  
горных инженеров в Сибири  
и 90-летию Сибгеолкома**

**Материалы  
научно-практической конференции**

**ПОЛЕЗНЫЕ  
ИСКОПАЕМЫЕ**



Администрация Томской области  
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Tomsk Polytechnic University

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Материалы научно-практической конференции

Том I  
**ПОЛЕЗНЫЕ ИСКОПАЕМЫЕ**

International Scientific Forum  
**SIBERIAN MINERAL RESOURCES:  
HISTORY DEVELOPMENT AND FUTURE TRENDS**  
90<sup>th</sup> anniversary of Siberian Geology Committee  
100<sup>th</sup> anniversary of the first mining engineer  
graduates in Siberia

Volume 1  
**MINERAL RESOURCES**

Томск 2008  
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**Международный научно-практический форум Минерально-сырьевая база Сибири: история становления и перспективы, посвященный 100-летию первого выпуска горных инженеров в Сибири и 90-летию Сибгеолкома. Материалы научно-практической конференции. Том I. – Полезные ископаемые. – Томск: Изд-во Томского политехнического университета. – 2008. – 573 с.**

Сборник содержит материалы международного научно-практического форума, посвященного 100-летию первого выпуска горных инженеров в Сибири и 90-летию Сибгеолкома, в которых рассматриваются вопросы изучения и освоения минерально-сырьевой базы Сибири, проблемы геологии месторождений нефти, газа, урана, золота, железных руд и других полезных ископаемых. Освещены правовые, экономические, организационные аспекты и предложения по инновационным разработкам в геологоразведочном деле, добычном производстве, транспорте минерального сырья. Представлена история Сибирской геологии и литературно-художественные произведения различных жанров, написанные геологами.

Статьи даны в авторской редакции.

**International Scientific Forum Siberian Mineral Resources: History development and future trends, dedicated to the 90<sup>th</sup> anniversary of Siberian Geology Committee and 100<sup>th</sup> anniversary of the first mining engineer graduates in Siberia. Materials of International Scientific Forum. Volume 1 – Mineral resources. – Tomsk: Publishing House, TPU, 2008. – 573 p.**

This volume includes materials of the International Scientific Forum, dedicated to the 100<sup>th</sup> anniversary of the first mining engineer graduates in Siberia and 90<sup>th</sup> anniversary of Siberian Geology Committee. The following main topics are discussed: the study and exploration of mineral resources in Siberia and problems connected with oil & gas, uranium, gold, ferrum ore and other mineral resource fields. Legal, economical, organizational aspects in innovation development of geology mining engineering, mining production and mineral resource transportation are highlighted. The history of Siberian geology and fiction of different genres, written by Tomsk Polytechnic University geologist – graduates are also introduced.

Articles autographed by authors.

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**STUDIES ON THE FOSSIL RHINOCEROS  
STEPHANORHINUS KIRCHBERGENSIS (JÄGER, 1839)  
(MAMMALIA, RHINOCEROTIDAE)  
("NOSOROG MERKA") BASED ON THE SIBERIAN MATERIAL**

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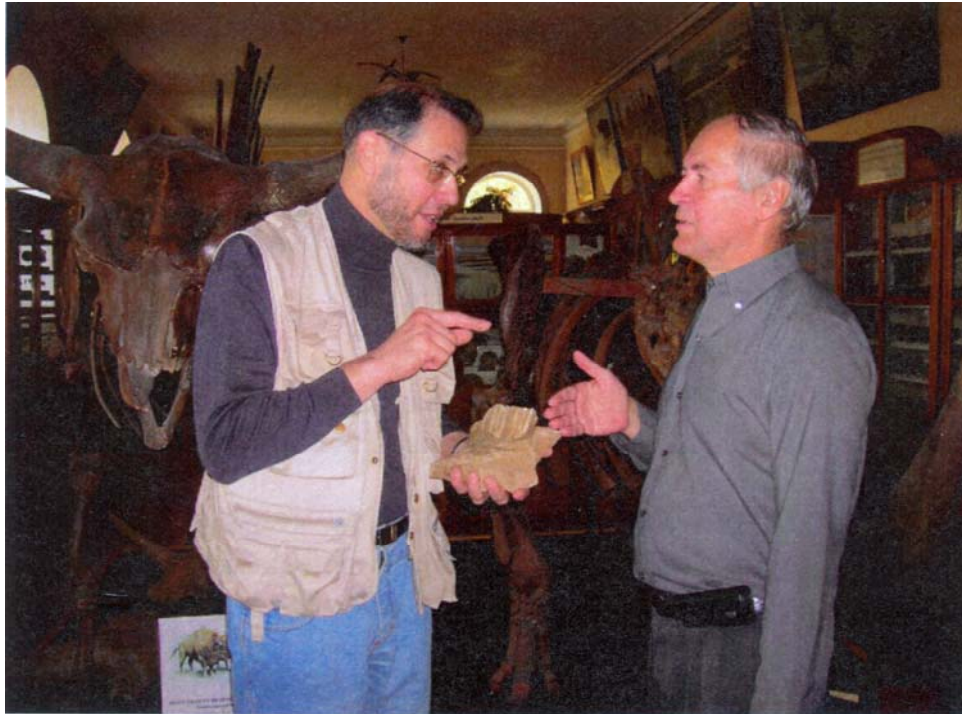
**ИЗУЧЕНИЕ ИСКОПАЕМОГО НОСОРОГА  
STEPHANORHINUS KIRCHBERGENSIS (JÄGER, 1839) (MAMMALIA,  
RHINOCEROTIDAE)  
«НОСОРОГ МЕРКА» НА СИБИРСКОМ МАТЕРИАЛЕ  
ЭММАНУЭЛЬ М.Е. БИЛЛИА**

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Автор проделал большую работу по ревизии ископаемых остатков носорога Мерка в России. В данной публикации коротко описаны остатки этого вида по сибирским материалам. Интерес представляет встреченная у одной особи генетическая аномалия зубной системы.

In recent time, the author devoted himself to the revision of the odonto-osteological fossil material ascribed to the Pleistocene "tandem-horned" Eurasian interglacial rhinoceros *Stephanorhinus kirchbergensis* (Jäger, 1839) – better known in Russia, and in all the ex Soviet Union, as "nosorog Merka" – found on Russian Federation territory.

A warm-adapted animal mostly depending on forest, characterized by a predominantly solitary life-style, member of the "Palaeoloxodon antiquus interglacial faunal assemblage" in Western Europe during the late Middle Pleistocene, *S. kirchbergensis* supposedly inhabited Eurasia in the time span from MIS 15 up to the Eemian Interglacial (substage 5e).



Hall of the Palaeontological Museum of the Tomsk State University, Tomsk, Western Siberia; Emmanuel M.E. Billia (left) and Sergey A. Rodygin (right)

In the present brief paper, only the material – studied using morphological and non-metric characters – recovered within Siberia will be taken into consideration.

At least at present, on the basis of the fossil evidence, *S. kirchbergensis* – though widely spread throughout Eurasia – seems to be decidedly rare on Siberian territory as well as in the rest of the Eurasian area being elsewhere reported from a relatively limited number of localities only.

As far as Siberia is concerned, in literature only four localities in which remains ascribed to *S. kirchbergensis* were found are reported: Krasny Yar–1 (Tomsk region), Mokhovo (Kemerovo region), Vilyuy river (Yakutya), and “Irkustk region”.

The two isolated molars found by I.V. Foronova (OGGM SO RAN, Novosibirsk) at Mokhovo (Kuznetsk basin) have previously been attributed to *Dicerorhinus* sp. by Foronova and later to *Dicerorhinus mercki* (recte *S. kirchbergensis*) by the same Author. On one of the two molars, the author found a genetic anomaly (Billia, 2007, 2008b, and in press) which may absolutely be considered as unique in its kind.

The ZIN 10718 “Irkustk skull” previously described both by Chersky and by Brandt as *Rhinoceros Merckii* Jaeger (sic) (recte *S. kirchbergensis* [Jäger]) – formerly housed in the museum collections of the Sibirskoe Otdelenie Russkogo Geograficheskogo Obshchestva in Irkutsk – had not been traceable for a long time. Recently, the author found it in a vault of the ZIN RAN Museum in St-Petersburg provided with the wrong identification label “10817”.

Being never measured by anyone, representing the sole skull come to light and existing on Russian territory and one of the six assigned to this species discovered until to-day in the whole of Eurasia, the rare specimen has once more been studied and measured by the author (Billia, 2006, 2008a, and 2008b). Furthermore, it has also been compared with the other five *S. kirchbergensis* Eurasian skulls (Billia, 2008c, and in press).

At present, *S. kirchbergensis* material is available from six localities, because from four of them the diagnoses have been confirmed by the author; for two other localities the specimens have ex nihilo been assigned to *S. kirchbergensis* by the author: Krasny Yar–2 (Krivosheino district, Tomsk region) and Inya river (Kemerovo region).

From Krasny Yar–2, come odonto-osteological remains collected – in recent years – during excavations carried out by A.V. Shpansky [TGU] on the right bank of the Ob’ in front of the Sargulin island and referred by the same to the Tobol’sky gorizont (MIS 11) (Billia & Shpansky, 2005; Billia, 2008b and in press; Billia & Shpansky, in press). The whole material is housed at the “V.A. Khakhlov” Palaeontological Museum of the Tomsk State University [TGU].

A *S. kirchbergensis* isolated molar [KKM-PU 82] was recovered in 1964 on the right bank of the Inya river near “Promyshlennaya Stanzya”, about 58 km south-west of Kemerovo (preservation: Kemerovo Regional Ethnographic Museum [KKM]) (Billia, 2007, 2008b, and in press).

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