



Eesti Geoloogiakeskuse ingliskeelse ajakirja “*Estonian Geological Sections*” neljas number annab ülevaate 12 aastat kestnud töödest Kärkla meteoriidikraatrisse puuritud 815.2 m pikkuse Soovälja (K-1) puursüdamikuga. Ameerika (Cincinnati Ülikool, Ohio Riiklik Ülikool, Illinoisi Geoloogiakeskus) ja Eesti (Eesti Geoloogiakeskus, Tartu Ülikooli Geoloogia Instituut, Tallinna Tehnikaülikooli Geoloogia Instituut) spetsialistide (Warren D. Huff, Stig M. Bergström, Dennis R. Kolata, Kalle Suuroja, Mati Niin, Tarmo Kiipli, Toivo Kallaste, Anne Põldvere, Väino Puura, Juho Kirss, Kalle Kirsimäe, Jüri Plado, Argo Jõelett, Jaak Nõlvak ja Alla Shogenova) koostöös kirjeldatakse purustusest mõjutatud ja plahvatusjärgsel ajal settinud

meteoriidikraatri kivimeid, analüüsitakse settekeskkonnas toimunud protsesse ja mikrofauna leviku alusel hinnatakse plahvatuse toimumise aega ning katastroofi mõju mere organismidele. Puurläbilõike kirjeldust täiendavad geoloogiline tulp, fotod ja laboratoorsete analüüside andmed.

Toimetaja Anne Põldvere, väljaandja Eesti Geoloogiakeskus, Tallinn 2002, 61 lk.
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Informatsioon ja rohkem lugemist: <http://www.egk.ee>
More details at: <http://www.egk.ee>



ESTONIAN GEOLOGICAL SECTIONS
GEOLOGICAL SURVEY OF ESTONIA

Detailed restudy of high-quality drill cores has been carried out at the Geological Survey of Estonia since 1995. The cores are photographed and thoroughly described. For the problematic parts of the sections, additional micropalaeontological analyses are performed. Clastic sediments, carbonate and crystalline basement rocks are examined using different methods. The lithological descriptions of the cores are supplemented by profiles, photo-logs and generally accepted legends, providing information on the mineral composition and other characteristics of the rock.

In 1998 the journal *Estonian Geological Sections* was started in order to disseminate the findings. The first three issues give an overview of the lithology and stratigraphy of the **Tartu (453)**, **Taga-Roostoja (25A)** and **Valga (10) drill cores** (see Table). The source materials for these studies are available in unpublished reports, stored in the Depository of Manuscript Reports of the Geological Survey of Estonia, Kadaka tee 82, Tallinn.

The most recent issue deals with the **Soovälja (K-1) core** from the deepest drill hole (815.2 m) in Estonia, made in the Kärddla meteorite crater in the course of geological deep mapping of Hiiumaa Island in 1990.

At present we are working on the Ruhnu (500) core section (depth 787.4 m) from Ruhnu Island (southwestern Estonia). Mainly chitinozoan, conodont, ostracode, graptolite and vertebrate samples are collected to support the stratigraphy of the section. Core description is verified in part by mineralogical, chemical and grain-size analyses, thin section studies, etc.

Some examples where references to our bulletin can be found:

Brenchley, P. J., Carden, G. A., Hints, L., Kaljo, D., Marshall, J. D., Martma, T., Meidla, T. & Nölvak, J. 2003. High-resolution stable isotope stratigraphy of Upper Ordovician sequences: Constraints on the timing of bioevents and environmental changes associated with mass extinction and glaciation. *Geological Society of America Bulletin*, **115**, 1, 89–104.

Samuelsson, J., Vecoli, M., Bednarczyk, W. S. & Verniers, J. 2002. Timing of the Avalonia-Baltica plate convergence as inferred from palaeogeographic and stratigraphic data of chitinozoan assemblages in west Pomerania, northern Poland. In: Winchester, J. A., Pharaoh, T. C. & Verniers J. (eds). *Palaeozoic Amalgamation of Central Europe*. Geol. Soc., London, Spec Publ., **201**, 95–113.

Modlinski, Z., Nolvak, J. & Szymanski, B. 2002a. Chitinozoan biozonation of the Ordovician succession in the borehole Proniewiczze IG-1 (NE Poland). *Przegląd Geologiczny*, 50, 1, 67–74.

Modlinski, Z., Nolvak, J. & Szymanski, B. 2002b. Chitinozoan biozonation of the Ordovician succession in the borehole Ketrzyn IG-1 (NE Poland). *Przegląd Geologiczny*, 50, 12, 1149–1158.

**Generalized stratigraphy of the core sections described
in different issues of the bulletin *Estonian Geological Sections***

Standard units		TARTU (453)	TAGA-ROOSTOJA (25A)	VALGA (10)	SOOVÄLJA (K-1)	RUHNU (500) (forthcoming)
Quaternary		+	+	+	+	+
Devonian	Middle	+		+		+
	Lower	+		+		+
Silurian	Pridoli					+
	Ludlow					+
	Wenlock					+
	Llandovery	+		+		+
Ordovician	Upper	+	+	+	+	+
	Middle	+	+	+	(+)	+
	Lower	+	+			+
Cambrian	Upper	+				
	Middle	+				+
	Lower		+		(+)	+
<i>Neoproterozoic</i>	(Vendian)		+			
<i>Palaeo- to Mesoproterozoic</i>			+		+	+

(+) impact-related sediments, mainly fragments of breccia.

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