strike of bedding and in fault tectonics comparing them with the Lower Miocene structural sublevel.

The Cunín structure resulted from the paleogeographic evolution in Pre-Neogene as well as Neogene period. In Pre-Neogene time, after the emplacement of the flysch nappes and their surficial denudation, the main surficial forms of the basement developed. The Cunín area was part of the southern slope of a depression into which the Eggenburgian and Ottnangian sea transgreded (Jiříček, 1975, 1978). In this part of the depression, the Eggenburgian and Ottnangian marine sediments (Cibicidae — Elphidiae and Solicoplacentina zones) occur in the facies of basal conglomerate and higher clay with sand intercalations. Regression occurred at the end of Ottnangian followed by slight denudation of Ottnangian surface. After subsidence movements, the denudated Ottnangian surface became inundated by Lower Karpatian sea. Karpatian sedimentation terminated by the Late Styrian orogenic movements (between the Karpatian and Badenian) causing inversion of the relief and subsequent denudation of the Karpatian surface. The presumed amount of 180 m eroded sediment pile is deduced from compared fossil pressures in Eggenburgian and Ottnangian sediments with the hydrostatic ones.

The Lower Badenian time was still a period of denudation in the Cunín structure. Only onsetting from the Middle Badenian, the structure became again covered by sediments of Upper Miocene age in reduced thickness.

Oil and gas collector properties in the structure are represented by basal conglomerate and sand layers as well as by sand intercalations in the bedded clay (schlier). The oil-bearing intercalated sequence attains about 100 m thickness within the pool and displays uneven oil/water contacts within single tectonic block structures (Bílek, Okénka, 1971). It represents a pool of block type with the except of the sand bed at the Eggenburgian — Ottnangian boundary (the so called "twins", figs. 2 to 4) displaying the nature of structural pool segmented by faults. A peculiar feature in the Cunín block pool is the small interference between single exploitation wells. This feature is caused by faults sealed by the oil/water contact in single blocks and in various structural depths. The result of such conditions is the low exploitability of oil from the pool (up to 20 %).

Recently, the generation of the pool has frequently been deduced setting out from analytical data of Šimánek (1976) which have had to prove the hydrocarbon productivity of the Eggenburgian and Ottnangian clay in this part of the Vienna basin. Modern data of geochemical research supplied by Chmelík and Müller (1987) substantiate the probable generation of hydrocarbons from kerogene in the geological past and even in recent time in three and more kilometers depth. These interpretations are to be reassumed from the viewpoint of geological, paleogeographic and paleostructural evolution of the entire Moravian part of the Vienna basin. The result would be a deeper knowledge of the geological evolution in space and time together with causes leading to the productivity, or unproductivity, for hydrocarbons in single structures in relation with their geological history (generation of hydrocarbon traps and their destruction in the course of geological development) and with the periods of hydrocarbon migration together with the better knowledge of migration paths.

ZO ŽIVOTA SGS

Seminár Význam granátov pre genézu eruptívnych a metamorfovaných hornín

Seminár zorganizovala 20. 10. 1988 bratislavská pobočka Slovenskej geologickej spoločnosti pri SAV. Prinášame stručný výber z prednášok, ktoré na seminári odzneli.

J. Miklóš: **Granáty pararúl Malých Karpát**

Granáty si zachovávajú progresívnu zonálnosť. Dominuje v nich almandínová zložka. Použitím publikovaných termobarometrov sme vypočítali takéto teploty homogenizácie granátov: stred granátov 524—610 °C, okraje granátov 500—580 °C pri tlaku 380—490 MPa.

Ľ. Vilinovičová: **Granáty granitoidov Suchého a Malej Magury**

Granáty radu almandín — spessartín z granitoidov Suchého a Malej Magury sú pozoruhodné opačnou tendenciou obsahu spessartínového komponentu od tonalitov po granity (v Malej Magure obsah stúpa). Teploty kryštalizácie granátov granitoidov Malej Magury sú 780—670 °C pri znižujúcom sa tlaku 580—380 MPa, teploty kryštalizácie granátov tonalitov Suchého sú 670—630 °C za konštantného tlaku 420 MPa.

S. W. Faryad, I. Dianiška: **Granáty gemerických granitov**

V granitoidoch Spišsko-gemerského rudohoria bolo vyčlenených 5 typov granátov. Restitový granát (typ A) s obsahom pyropovej molekuly do 18,9 % umožňuje predpokladať vznik granitoidov tejto oblasti na úkor metasedimentov, regionálne metamorfovaných v podmienkach vrchnej časti amfibolitovej fácie. Z koexistencie ranomagmatického granátu (typ B) s magmatickým biotitom sa vypočítali teploty kryštalizácie magmy okolo 750—800 °C, ktoré však najpravdepodobnejšie odrážajú teploty dosiahnuté pri anatektickom tavení metasedimentov. Spessartínový granát (typ C), v zhode s výsledkami štúdia kontaktnotermických premien, dokumentuje úroveň tuhnutia magmy v hĺbke 5—7 km (200—150 MPa). Spessartínový granát (typ D) s relatívne vyšším obsahom grossulárovej zložky než v type C je najpravdepodobnejšie postmagmatického pôvodu. Najmladší granát (typ E s podielom grossulárovo-spessartínovo-almandínových zložiek približne 1/3 : 1/3 : 1/3) je podobný novovytvorenému alpínskemu granátu z granitoidov oblasti Álp a Západných Karpát.