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Francois Roure<sup>1</sup>, Tariq Jaswal<sup>2</sup>, Dominique Frizon de Lamotte<sup>3</sup>, William Sassi<sup>1</sup>, Sylvain Grelaud<sup>4</sup> (1) Institut Français du Pétrole, Rueil-malmaison, France (2) OGDC, Islamabad, Pakistan (3) University Of Cergy-Pontoise, (4) Institute of Earth Sciences "Jaume Almera", CSIC, 08028 Barcelona, Spain

**Tectonic Control of Precambrian Basement Architecture on the Localization and Timing of Neogene Thin-Skinned Productive Structures of the Potwar-Salt Range Petroleum Province (Pakistan)**

The Cambrian to Eocene platform sequences of the Potwar-Salt Range Province have been translated southward for up to 20 km along a ductile layer of Infracambrian salt, which is widely exposed in the vicinity of the frontal thrust in the Salt Range. In the Potwar Basin itself, major productive anticlines developed mostly after the deposition of the Siwalik molasse sequence, with little evidence for growth strata and unconformities within the synflexural-synkinematic Neogene series. For this reason, timing of the deformation has been considered as being very recent, all the shortening in the Salt Range-Potwar Basin being previously assumed to relate to the last 2 M.y.

In fact, high quality seismic profiles and petroleum modelling help to propose a new tectonic agenda, the thrust emplacement in the Salt Range being considered here as being quite older, and having lasted for at least 10 M.y.. Following early stages of southward propagation of the Salt Range allochthon, the basal décollement became locked in the Quaternary, accounting for the localization of more recent antiformal closures of the Potwar Basin above pre-existing basement-involving structures which have probably been slightly reactivated and inverted in a transpressional mode, thus accounting for thin-skinned and fish-tail structures in overlying, mostly allochthonous platform series.

Paleogene source rocks are still immature in the Potwar anticlines, but petroleum modelling help to reconstruct the timing of hydrocarbon generation in adjacent synclinal kitchens, which is coeval with the Plio-Quaternary development of structural traps.