### GEOLOGICAL, STRATIGRAPHICAL MODELLING OF MAKRAN OFFSHORE



By

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# **ACKNOWLEDGMENT**

In the name of Allah, The most Beneficent, The most Merciful, All praises to Almighty Allah, The creator of Universe. I bear witness that Holy Prophet Hazrat Muhammad (P.B.U.H) is the last Messenger, whose life is a perfect Model for the whole mankind till Earth, I am enabled to complete my work, without the blessing of Allah, I could not be able to complete my work as well as to be at such a place.

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# <u>ABSTRACT</u>

The Makran accretionary prism developed in the north-western part of the Indian Ocean as a consequence of the subduction of the Arabian Sea since Late Cretaceous times. we surveyed most of the accretionary complex of Pakistan with R/V Marion Dufresne . Th Makran accretionary prism results from the northward motion of the oceanic crust (White and Klitgord, 1976; White, 1983; Minshull et al., 1992), with an average speed of 3 cm/year at present. Large historic earthquakes, such as the magnitude 8.2 recorded in November 1945 (Pacheco and Sykes, 1992; Byrne et al., 1992), are clearly related to the shallow dipping inter-plate mega-thrust. The coseismicmotion might be related to the episodic uplift of small mud volcanoes rising up above the sea-level, confirming an overpressure regime imposed at depth.

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