

PERTEMUAN PERSATUAN (MEETINGS OF THE SOCIETY)

CERAMAH TEKNIK (TECHNICAL TALKS)

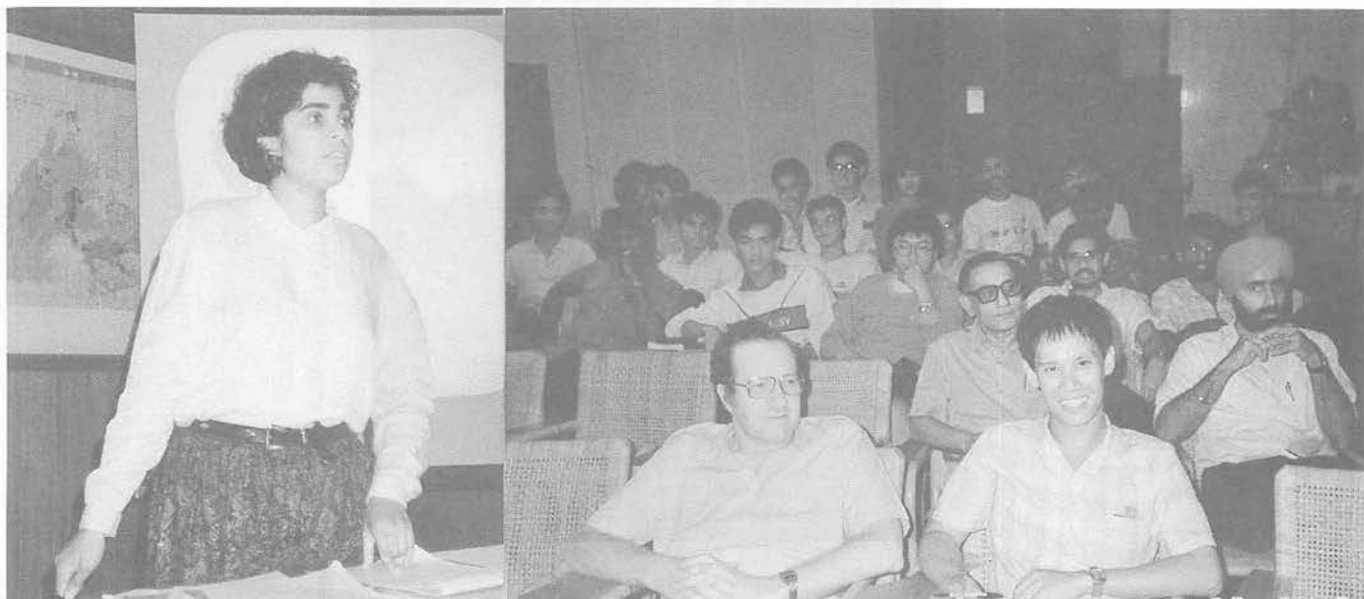
Sriyane de Silva: Diagenesis of the Old Red Sandstone - an example from the Orcadian Basin, SE Shetland Islands

Laporan (Report)

Sriyane de Silva gave the above talk on the 6 February 1990. The contents, results from her Ph.D. thesis, proved to be very interesting and informative.

Abstrak (Abstract)

The Givetian SE Shetland Basin, the youngest of the three Devonian continental molasse-type basins found in the Shetland Islands, formed as a result of anorogenic processes compensating for the thickened Caledonian crust. The clastic sediments, despite being deposited in different environments and by different processes, show that beyond the surficial features, the paragenetic sequence of authigenesis is the same for all clastic depositional facies; quartz and feldspar authigenesis followed by carbonate mineralization and culminating with mica authigenesis. The authigenic phases, especially that of the cogenetic and mesogenetic, define the palaeohydrology and provide compelling evidence that the palaeoclimate was tropical and humid. The high temperatures which produced and presumably accelerated, the last phases of authigenesis were not due to increased depths of burial but magmatic processes in the underlying basement.



SRIYANE DE SILVA

A section of the happy audience.