The Ph.D. project work ended up with three wonderful conclusions, those are:

(a) Boundedness of the dbar-Neumann operator from Sobolev (-1/2) space to Sobolev (1/2) space on domains in which are (i) strongly pseudoconvex with piecewise smooth boundary, (ii) strongly pseudoconvex with Lipschitz boundary. Moreover, the operators, N, dbar N and dbar star N are compact on the Sobolev (-1/2)-space.

(b)-existence theorems for the dbar-Neumann problem on a strongly -convex (Hartogs-pseudoconvex) domain in a Kähler manifold. q

(c) Solutions to the dbar-equation with exact support in a domain Ω in a complex manifold X which are (i) strongly -convex, (ii) domain with -smooth B-regular boundary. q1C

3. Concluding remakes

The methodology applied during this program have significant contribution and added more deep insights to the work done by Henkin, Iordan and Kohn, Michel and Shaw, Straube, and others. Similarly, the results in (2) and (3) extend earlier theorems due to Boas and Straube, Chen and Shaw, Derridj, Shaw and also of Cao-Shaw-Wang. In all cases, the techniques used here are fairly standard and well established in the area (exhaustion by smoothly bounded domains, Hörmander's -theory, etc), but the technical details are far from trivial and the results obtained certainly represent an important progress in the field