studies on the behaviour of some phthalazine derivatives to ward some elctrophiles and nucleophiles

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-!he pressent work deals w:l. th synthesis and. reactionsof 4-(p tolyl)-5,6,7,8-tetrabromo l{2H) phthalazinone withsome eleotrophiles e.g. ethyl bromoacetate and. methyliodide;and some nuoleophiles e.g._ carbon nucleophiles (Grigne.rdreagents), and oblorine nuolophiles (POC13/PC15). Thephthalazinone derivative reacts with ethyl bromoacetate indry acetone and anhydrous potassitllll carbonate as a catalystand giTes 1-0-carboetboxymetbylphthalazine derivative asa sole product~ On the other hand, when the reaction wascarried out in the presence of pyridiM as a catalyst2-etbo:rycarbo~lmetbyl derivative was obtained as a soleproduct (i.e N-alkyl derivative and no 0-alkyl derivativewas obtained). Similarly, metbyliodide reacted with thephthalaziDo!'le derivative by using pyridine as catalyst and.gave Z•llletbyl-4-p-(tolyl):..5,6,7,B-tetrabromophthaJJaz!l..ne.The latter compound having methyl group activated byheteroaromatio moiety, and its reactivity was tested b,ycondensation with aromatic aldehydes and phthalimide. Alsoin this work the author planed to investigate the reactivityot the titled phthe.lazinone which contains two reactionsite's for reaction with alkyl or aralkyl magnesium halideunder Gr:l.gnard reaction conditions (C=O and -C=N), theresults cited there in the texet.This. wark also deals with preparation ot thecblorophthslazine via the interaction ot tbe titledphthalazinone with P0013/P015 mixture, the cbloroderivativehaving chlorine atom activated b1 heterrl moietr,therefore~ nucleophilic substition reaction b.1 nitrogennucleophiles took place readil1 with the cbl~ro substrate.Structure ot all s1nthesised compounds had beenelucidated via chemical 'tools and ph1sical tools e.g. IRspectra and 1R-NMR spectra.