

5th Annual Congress on

CHEMISTRY IN DRUG DISCOVERY & DESIGNING

April 16-17, 2018 Dubai, UAE



Mohammad Salman Al-Ajely

Mosul University, Iraq

Polymer and heterocyclic compounds their utility and applications as drug

We know that most heterocyclic compounds are drugs or co- drugs . In our investigation furfural was used as a precursor for heterocyclic synthesis, either by ring opening of furfural going to pyrimidine derivative E3 then functionalizing this pyrimidine into its derivatives E8, E10 and cyclization into oxadiazole and thiadiazoles E8, 11. The second step involve the reaction of pyrimidine with dimedon derivatives to afford dimedono pyrimidine derivatives. The second pathway involve the synthesis of oxamyl derivative of pyrimidine E21-25 these compounds were cyclized into new oxadiazoles E24-26. The third pathway involve the synthesis of mucobromic esters E27-29 from MBA acid then these esters were converted into the correspondig lactones E30-32 and E32-36 while reacting MBA with amines affording N-alkyland N-amido lactams. The last pathway was the reaction MBA with methanol, sodium azide to give azido intermediate which was cyclized with alkene or alkynes into triazole derivatives E42-49. The synthesized compounds were characterized by IR and some ¹H NMR measurments.

Biography

Mohammad Salman Al-Ajely, He is working as a Prof. of Organic/Polymer Chemistry. He Completed his BSc, MSc. from Mosul University 1976, 1978, PhD. From Heriot- Watt university UK. and Mosul as joint research 1993, Post Doc. In La-Trobe University Australia 2008. Training at Sheffield University 2009. Training at Cal. University USA 2012 Lecturer at Chemistry Dept. Education College 1980 Assistant prof. at the same Dept. 1987 Prof. 1998 Topic Taught: Organic, Heterocyclic and polymer for undergraduate and post graduate students. More than 75 papers were published and more than 12 conference were attended in both fields, Iraqi patents 4 in both fields and more than 45 project for Iraqi ministry of higher Education and research.

mohamadalajelee@yahoo.com

Notes: