

عامر سعدى الجبوري

عنوان رساله الماجستير

## **Stratigraphical and Structural Investigation of Middle Triassic Rocks NE of Dead Sea**

اسم المشرف

ا.د، وليد سعد الدين

جامعه اليرموك – كلية العلوم – قسم علوم الأرض والبيئة

الأردن- ١٩٩٠

**Key wards: Stratigraphy, Middle Triassic, Microfacies,  
Hisban Formation ,Dead Sea**

### **Abstract**

Stratigraphical and structural studied of the rock sequence (Middle Triassic) cropping out in area NE of Dead Sea were carried out. These rocks were divided into two Formations: Hisban Formation and Siyala Formation. Hisban Formation is subdivided into four lithological members, they are from bottom upwards: Sandy member, massive limestone member, fossiliferous limestone member and dolomite member.

Dtail age determination were carried out in term of macrofossils (Cephalopoda and Brachiopoda) and Microfossils(Conodonts and Holothurian sclerites), which indicate that Hisban Formation was deposited during Anisian(Pelsonian-Illyrian), where Siyala Formation proved to be deposited during Lower Ladinian (Fassanian).

The Triassic rocks in the study area shows highly similarity in facies and fossils content with the German Triassic (Muschelkalk).

Five microfacies types were recognized in the carbonate rocks of the study area, as follow:

- Mudstone (micrite) microfacies
- Bivalvia –packstone (biomicrite) microfacies
- Mudstone-bioturbated (micrite) microfacies
- Dolomicrite microfacies

- Sandy-wackestone-packstone (biomicrite) microfacies.

Regarding to these microfacies types, depositional environments of carbonate rocks indicate inter to sublittoral, lagoon Env.

Structural elements (joints, faults and folds) were measured in the field, shows that the major trend of joints in the study area is 115, which is thought to be initiated by the formation of Dead Sea.

The direction of two main anticlines axis (Jadala and Siyala) are more or less N-S, which indicated E-W compressional stress