

**FUNCTIONALIZATION OF ORDERED MOLECULAR SIEVE
HOMOGENEOUS CATALYSTS IN BIOMIMETIC
CATALYSIS**

02H23
Ahmad Endud
Faculty of Science

PAMAM G0.5) was functionalized at the periphery with (1-yl)-5-aminobenzene-1,3-diamide, denoted as Hamilton-receptor-functionalized PAMAM G0.5 for nitrite ions in aqueous solutions. Fluorescence quenching method were used to estimate the binding constant towards specific monoanions and oxyanions. As was able to discriminate between the anions as binding constant measurements indicate that acetate anion but exhibited excellent selectivity for PAMAM G0.5 with their nitro groups (-NO₂)

**ANALYSIS OF EEG DURING EPILEPTIC SEIZURE ON NON-
STATIONARY EEG**

02H36
Bin Ahmad
Faculty of Science

are a set of observations and quantitative measures of individual income or years of education within which individual can be specified with respect to both space and time. Within this space is a quantitative measure of their income. However, in spatial analysis we are concerned with time, geo-spaces. A geo-space is one where the spatial measurement framework that captures their income is not strictly necessary. A spatial measurement framework, say, interstellar space or within a planet EEG and Generalized Flat EEG are the intended measures First Law of Geography: if the interrelation between the real world, then representation using a geo-spatial techniques are appropriate. The Euclidean distance measurement, although this is only one possibility. There are non-Euclidean that can support quantitative analysis. For example, where movement is restricted to paths parallel to Euclidean distances in urban settings. In addition to distance, such as quantity, connectivity and direction can also be used. In our case, an entity is a clustered signal or clustered

**NANOSTRUCTURED BIMETALLIC OXIDE MODIFIED SILICA AS OXIDATIVE-
ACIDIC BIFUNCTIONAL CATALYSTS FOR ALKENE EPOXIDATION**

Vote: 00H08
Lee Siew Ling
Faculty of Science

This project focuses on synthesis of nanostructured bimetallic oxide modified silica as bifunctional catalysts. Silica gel which possesses large surface area will be synthesized via sol-gel method. It will be used as support of the designed catalysts. Bimetallic oxides will be introduced into/onto silica via impregnation method. Ratio of the bimetallic oxides to silica will be varied in the synthesis process. All the synthesized materials will be characterized and their catalytic activity will be evaluated through epoxidation reaction. Lastly, the structural-catalytic activity relationship of the prepared materials will be investigated. The role of bimetallic oxides and their interaction with silica in formation of acidity in the catalyst will also be explored. It will contribute to the basic understanding of the effect physico-chemical properties such as particle size, functional groups, surface area, porosity, surface morphology to the response catalytic activity. The fundamental knowledge acquired will lead to novel nanostructured bifunctional catalyst in epoxidation reaction. With better understanding of physico-chemical interaction among niobium, phosphate, titanium and silica, the degree of control in response can be increased, which eventually leads to bifunctional catalyst of improved catalytic performance and subsequently contributes to the development of an excellent catalyst in fine chemical industry. Recently, high surface area nanostructured vanadium-phosphate modified silica-titania was reported as potential bifunctional catalyst in epoxidation. The interaction of vanadium-phosphate was crucial for the formation of Bronsted acidity, while both vanadium titanium species played important as oxidative sites, leading to an excellent bifunctional catalytic performance in alkene epoxidation reaction. Thus, it leads to an intensive research on synthesis of nanostructured bifunctional catalyst of bimetallic oxides modified silica. The resulted nanostructured materials could be excellent bifunctional catalysts in alkene epoxidation reaction.