

## Research & Development

Written by Hayder Abdulbari

Thursday, 19 January 2012 05:50 - Last Updated Tuesday, 31 January 2012 01:57

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In the past few years large numbers of internal and national research grants were secured and finished by the research group. Most of these grants are related to the center focus area. Below, list of the research grants:

- "Investigating The Effect of Changing The Suspended Solid Type on Truculence Suppressing Efficiency of Crude Oil Flowing In Turbulent Manner Through Pipelines"GRS070149, **RM 36,000.00**. Completed.

- "Effect On Cationic Surfactant Versus Fiber Additives In Drag Reduction"GRS090119, **RM 36,000.00**. Completed.

- "Effect On Cationic Surfactant Versus Fiber Additives In Drag Reduction"RDU 090327 , **RM20,000.00** - Complete.

- "Effect of Solid Particles Addition on Suppressing the Turbulence and Increasing the Flow Inside pipelines" , FRGS 07/01/10, **RM120,000.00**- Completed.

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- "Effects of Phase Injection on the Pressure Drop and Flow Behavior in Two Phase Pipe Flow System". FRGS 07/01/11, **RM100, 000.00**- Completed.

- "Formulation of Fume-Silica Designer Based Greases". UMP Short Grant RDU 07/03/73 , **RM20,000.00**- Complete.

- "Formulation of Organic Based Drag Reducing Agent", UMP Short Grant RDU 07/03/75 , **RM20,000.00**- Completed

- "Formulation of high performance greases using industrial wastes", UMP Short Grant RDU 09/03/21 , **RM40,000.00**- Completed.

- "Formulation of New Flow Improver Using HALBA Seeds" UMP Short Grant RDU 09/03/20 , **RM40,000.00**- in progress.

- "Investigating the Performance of Okra Mucilage Compound as Flow Improver in Pipelines Carrying Liquid-Solid solution",GRS090112, **RM 36,000.00**. Completed.

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- "Biosurfactant: Screening, Production and Characterization" GRS070153, RM **36,000.00**  
. Completed.

- "Production Of Caramel By Microwave Heating of Carbohydrates", RDU090327, RM **36,000.00**  
. Completed.

- "Hydrodynamics Study of Slurry Bubble Column Under Elevated Pressure" GRS090115, RM **36,000.00**. Completed.

- Development of New Solid Catalyst from Industrial Waste for Biodiesel Production from Forest Seed Oil in Tubular Reactor, RDU110304, **RM37,000.00**.

- Scale-up of gas-liquid stirred tank bioreactors – experimental and numerical studies, RDU0903110, **RM40,000.00**.

- Assessment of protein denaturation during the scale-up process of spray drying, RDU0903114, **RM40,000.00**.

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