

Tajuk Projek Penyelidikan	Tahun Lulus Geran	Tarikh Mula	Tarikh Tamat 1	Tempoh (Bln)	Sektor (FOR Category)	Research Alliance	Research Alliance/Niche Area Baru	Ketua Projek Utama	Kategori Projek	Jenis Projek	Penaja	Peruntukan Diluluskan (RM)
Environmental Friendly Bacterial Pigments-Large Scale Production Utilizing Agricultural Wastes and Its Application in Biodegradable Plastic	2011	01/02/2011	31/01/2013	24	Agriculture	BIOTECHNOLOGY	HEALTH AND WELLNESS	WAN AZLINA BT AHMAD	Technofund MOA	Technofund MOA	MOSTI-MOA	1,400,000.00
Enhanced H2 Production From Plasma Electrolysis Of Water Using Laser Ablation Technique	2011	01/01/2011	31/12/2012	24	Sains Tulen	NANOTECHNOLOGY	FRONTIER MATERIALS	NORIAH BT BIDIN	Fundamental	FRGS	MOHE	54,000.00
A Novel Carbon Nitride Composite Material As A Future Model Of Visible Light-Driven Photocatalyst	2011	01/01/2011	31/12/2012	24	Sains Tulen	NANOTECHNOLOGY	FRONTIER MATERIALS	LENY YULIATI	Fundamental	FRGS	MOHE	80,000.00
Near-Infrared Phosphorescent Hybrid Nanomaterials Using Mesoporous Silica Composites Fabricated By Sol-Gel Spin-Coating	2011	01/01/2011	31/12/2012	24	Sains Tulen	NANOTECHNOLOGY	FRONTIER MATERIALS	HENDRIK OKTENDY LINTANG	Fundamental	FRGS	MOHE	82,000.00
Modeling And Predictive Performance Of Survivorship In The Presence Of Varying Risks And Repeatedly Recorded Multiple	2011	01/01/2011	31/12/2012	24	Sains Tulen	NANOTECHNOLOGY	FRONTIER MATERIALS	ZARINA BINTI MOHD KHALID	Fundamental	FRGS	MOHE	61,000.00
Synthesis Of Luminescence Strontium Titanate Thin Films Prepared By Spray Pyrolysis	2011	01/01/2011	31/12/2012	24	Sains Tulen	NANOTECHNOLOGY	FRONTIER MATERIALS	KARIM BIN DERAMAN	Fundamental	FRGS	MOHE	95,000.00
Synthesis Of Amphiphilic Graft Copolymer	2011	01/01/2011	31/12/2012	24	Sains Tulen	NANOTECHNOLOGY	FRONTIER MATERIALS	AHMEDY BIN ABU NAIM	Fundamental	FRGS	MOHE	71,000.00
Generation Of Entangled Photons From The Spontaneous Parametric Down Conversion (Spdc) Process In A B-Barium Borate (Bbo) Crystal	2011	01/01/2011	31/12/2012	24	Sains Tulen	NANOTECHNOLOGY	FRONTIER MATERIALS	AMIRUDDIN BIN SHAARI	Fundamental	FRGS	MOHE	50,800.00
Synthesized And Characterization Of Low Temperature Nano-Particle Perovskite Structure Of Titanate Based Ceramics For Gas Sensor	2011	01/01/2011	31/12/2012	24	Sains Tulen	NANOTECHNOLOGY	FRONTIER MATERIALS	WAN NURULHUDA BT WAN SHAMSURI	Fundamental	FRGS	MOHE	85,000.00
Characterization And Graph Routing Of Stochastic Networks For Time-Dependent Events	2011	01/01/2011	31/12/2012	24	Sains Gunaan	NANOTECHNOLOGY	FRONTIER MATERIALS	SHAHARUDDIN BIN SALLEH	Fundamental	FRGS	MOHE	57,000.00
Thermoluminescence Response B2O3 Based Glass Doped Ge And Ca For Dose Measurement Subjected To Photon And Electron Irradiation	2011	01/01/2011	31/12/2012	24	Sains Gunaan	SUSTAINABILITY	RESOURCE SUSTAINABILITY	HUSIN BIN WAGIRAN	Fundamental	FRGS	MOHE	62,000.00
Robust Design Of Process Control In Manufacturing Industries	2011	01/01/2011	31/12/2012	24	Sains Gunaan	K-ECONOMY	SMART DIGITAL COMMUNITY	MAMAN ABDURACHMAN DJAUHARI	Fundamental	FRGS	MOHE	61,000.00

Tajuk Projek Penyelidikan	Tahun Lulus Geran	Tarikh Mula	Tarikh Tamat 1	Tempoh (Bln)	Sektor (FOR Category)	Research Alliance	Research Alliance/Niche Area Baru	Ketua Projek Utama	Kategori Projek	Jenis Projek	Penaja	Peruntukan Diluluskan (RM)
Designing Weights Of Forecasting Rules For In And Out Of Sample Data In Fuzzy Time Series (Fts)	2011	01/01/2011	31/12/2012	24	Sains Gunaan	K-ECONOMY	SMART DIGITAL COMMUNITY	ZUHAIMY BIN HAJI ISMAIL	Fundamental	FRGS	MOHE	63,000.00
Synthesis And Electric Properties Of Metal Oxide Carbon Nano Composite	2011	01/01/2011	31/12/2012	24	Sains Gunaan	MATERIAL AND MANUFACTURING	FRONTIER MATERIALS	MADZLAN BIN AZIZ	Fundamental	FRGS	MOHE	86,000.00
Mathematical Modeling Of Boundary Layer Flow And Heat Transfer From Exponentially Stretching Surface	2011	01/01/2011	31/12/2012	24	Sains Gunaan	NANOTECHNOLOGY	FRONTIER MATERIALS	SHARIDAN BIN SHAFIE	Fundamental	FRGS	MOHE	63,000.00
Characterization Of Drought Properties Using Copula	2011	01/01/2011	31/12/2012	24	Sains Gunaan	WATER	RESOURCE SUSTAINABILITY	FADHILAH BINTI YUSOF	Fundamental	FRGS	MOHE	51,000.00
Modelling Bivariate Mixed Distribution To The Rainfall Data Over Peninsular Malaysia	2011	01/01/2011	31/12/2012	24	Sains Gunaan	WATER	RESOURCE SUSTAINABILITY	SHARIFFAH SUHAILA BINTI SYED JAMALUDIN	Fundamental	FRGS	MOHE	28,000.00
Electrochemical Properties Of Boron Doped Diamond Towards Endocrine Disrupting Compounds	2011	01/01/2011	31/12/2012	24	Sains Gunaan	WATER	RESOURCE SUSTAINABILITY	ABDULL RAHIM BIN HJ MOHD YUSOFF	Fundamental	FRGS	MOHE	71,900.00
Design and Molecular Self-Assembly of Transition Metal Alkoxysilylimino Complexes for Synthesis of Ordered Nanostructure	2011	01/02/2011	31/01/2012	12	Sains Tulen	NANOTECHNOLOGY	FRONTIER MATERIALS	JON EFENDI	Institutional	Short Term Grant-FAVF	UTM	27,000.00
Investigation of Nonlinear Optical Behavior of Erbium Doped Tellurite Glasses	2011	01/02/2011	31/07/2012	18	Sains Tulen	MATERIAL AND MANUFACTURING	FRONTIER MATERIALS	SIB KRISHNA GHOSHAL	Institutional	Short Term Grant-FAVF	UTM	30,000.00
Kajian Kebolehlaksanaan Education Malaysia	2011	13/05/2011	15/04/2012	11	Sains Sosial dan Kemanusiaan	NANOTECHNOLOGY	FRONTIER MATERIALS	MOHD ISMAIL BIN ABD AZIZ	Others	Others	MOHE	13,100.00
The Thermoluminescence Characteristics of B2O3 : Al Ceramics For Ionizing Radiations Measurement	2011	01/02/2011	31/07/2012	18	Sains Tulen	SUSTAINABILITY	RESOURCE SUSTAINABILITY	MD. IMAM HOSSAIN	Institutional	Short Term Grant-FAVF	UTM	30,000.00
The Evolution in the Properties of 100 – 110 PD Isotopes	2011	01/02/2011	31/01/2012	12	Sains Tulen	SUSTAINABILITY	RESOURCE SUSTAINABILITY	HEWA YASEEN ABDULLAH	Institutional	Short Term Grant-FAVF	UTM	30,000.00
Free Vibration of Anti-Symmetric Angly-Ply Laminated Cylindrical and Conical Shells of Variable Thicknss Including Shear Deformation and	2011	01/03/2011	28/02/2012	12	Teknologi & Kejuruteraan	NANOTECHNOLOGY	FRONTIER MATERIALS	KODAKKAL KANNAN VISWANATHAN	Institutional	Short Term Grant-FAVF	UTM	30,000.00
On Solution of Rotating Flows of Non-Newtonian Fluids by Using Modified Darcy's Law	2011	01/03/2011	28/02/2012	12	Teknologi & Kejuruteraan	NANOTECHNOLOGY	FRONTIER MATERIALS	KAMRAN FAKHAR	Institutional	Short Term Grant-FAVF	UTM	30,000.00

Tajuk Projek Penyelidikan	Tahun Lulus Geran	Tarikh Mula	Tarikh Tamat 1	Tempoh (Bln)	Sektor (FOR Category)	Research Alliance	Research Alliance/Niche Area Baru	Ketua Projek Utama	Kategori Projek	Jenis Projek	Penaja	Peruntukan Diluluskan (RM)
Synthesis, Characterization and Photocatalytic Activity of Gallium Oxide Carbon Nitride Composite	2011	01/03/2011	28/02/2012	12	Sains Tulen	NANOTECHNOLOGY	FRONTIER MATERIALS	LENY YULIATI	Others	Others	NIPPON SHEET GLASS FOUNDATION (NSG)	21,175.00
Arithmetic Of Group Representations An Some Applications	2011	01/04/2011	30/09/2012	18	Sains Tulen	NANOTECHNOLOGY	FRONTIER MATERIALS	DMITRY MALININ	Institutional	Short Term Grant-FAVF	UTM	30,000.00
New Semiconductor Photonic Materials For Efficient Room Temperature Operation In The Near And Mid-Infrared	2011	01/04/2011	30/09/2012	18	Sains Gunaan	NANOTECHNOLOGY	FRONTIER MATERIALS	THOMAS JEFFREY COCKBURN HOSEA	Institutional	Short Term Grant-FAVF	UTM	30,000.00
Electrophoretic Deposition Of Hydroxyapatite and Starch Mixture onto Stainless Steel	2011	01/04/2011	30/09/2012	18	Sains Gunaan	NANOTECHNOLOGY	FRONTIER MATERIALS	RAFAQAT HUSSAIN	Institutional	Short Term Grant-FAVF	UTM	30,000.00
Ab Initio Study Of Arsenide Alloys By Special Quasirandom Structure Approach	2011	15/06/2011	30/09/2012	16	Sains Tulen	NANOTECHNOLOGY	FRONTIER MATERIALS	RASHID AHMED	Institutional	Short Term Grant-FAVF	UTM	30,000.00
Study Of Physical Properties (Structural, Electronic, Magnetic etc) Of BP,AlP,GaP,InP And BSb ,AlSb ,GaSB ,InSb By Principle	2011	15/06/2011	31/07/2012	14	Sains Tulen	NANOTECHNOLOGY	FRONTIER MATERIALS	MOHAMMAD ALAM SAEED	Institutional	Short Term Grant-FAVF	UTM	30,000.00
Investigation of the Factors Controlling The Conformational Preference in Several Chiral Deriyalizing Agents	2011	01/06/2011	31/05/2012	12	Sains Tulen	NANOTECHNOLOGY	FRONTIER MATERIALS	RIADH SAHNOUN	Institutional	Short Term Grant-FAVF	UTM	30,000.00
Spectroscopic Investigation Of Nanoparticles Embedded Rare Earth Doped Glasses	2011	01/07/2011	30/06/2013	24	Sains Gunaan	MATERIAL AND MANUFACTURING	FRONTIER MATERIALS	MD RAHIM BIN SAHAR	Fundamental	FRGS	MOHE	132,000.00
Regional Flood Frequency Analysis Using TL-Moments Method	2011	01/07/2011	30/06/2013	24	Sains Gunaan	WATER	RESOURCE SUSTAINABILITY	ANI BIN SHABRI	Fundamental	FRGS	MOHE	59,000.00
Hybrid Metal Oxide-Carbon Nitride Composite for Visible Light Driven Photocatalysts	2011	20/05/2011	20/11/2012	18	Materials Sciences including Nanotechnology	NANOTECHNOLOGY	FRONTIER MATERIALS	LENY YULIATI	Others	Others	The World Academy Of Sciences (TWAS)	30,044.40
Catalytic Oxidative Desulfurization of Diesel Utilizing Peroxides And Supported Transition Metals Doped Molybdenum Oxide And	2011	01/07/2011	31/05/2013	23	#N/A	SUSTAINABILITY	RESOURCE SUSTAINABILITY	WAN AZELEE BIN WAN ABU BAKAR	Sciencefund	SF	MOSTI	258,000.00
Kajian Rangka Kerja Pengurusan Pelajar Antarabangsa	2011	01/07/2011	30/06/2012	12	#N/A	NANOTECHNOLOGY	FRONTIER MATERIALS	MOHD ISMAIL BIN ABD AZIZ	Others	Others	MOHE	130,000.00
Functionalized Nanosilica-Based Chemosensor Materials	2011	01/08/2011	30/11/2013	28	#N/A	NANOTECHNOLOGY	FRONTIER MATERIALS	SALASIAH BT ENDUD	NanoFund	NF	MOSTI	306,000.00

Tajuk Projek Penyelidikan	Tahun Lulus Geran	Tarikh Mula	Tarikh Tamat 1	Tempoh (Bln)	Sektor (FOR Category)	Research Alliance	Research Alliance/Niche Area Baru	Ketua Projek Utama	Kategori Projek	Jenis Projek	Penaja	Peruntukan Diluluskan (RM)
Carbon-based Nanocomposite for Reinforcement of Cementitious Matrix	2011	01/08/2011	31/07/2013	24	Nanomaterial	WATER	RESOURCE SUSTAINABILITY	ZAITON BT ABDUL MAJID	NanoFund	NF	MOSTI	226,200.00
Math-Oriented Critical Thinking Skills For Civil Engineering Undergraduates	2011	19/05/2011	18/05/2012	12	Pembinaan bahan-bahan pengajaran yang kreatif dan inovatif	K-ECONOMY	SMART DIGITAL COMMUNITY	NAPISAH BTE MUHAMAD RADZI	Institutional	Instructional Development Grant - IDG	CTL	12,000.00
Nanostructured Herbs Delivery System	2011	01/12/2011	30/11/2013	24	#N/A	NANOTECHNOLOGY	FRONTIER MATERIALS	MOHD NAZLAN BIN MOHD MUHID	Sciencefund	SF	MOSTI	200,000.00
Corrosion Control of Bolts and Nuts in Underground Eater Supply pipers of SAJ Holding	2011	01/09/2011	31/12/2012	16	Alam Sekitar	WATER	RESOURCE SUSTAINABILITY	ZAITON BT ABDUL MAJID	Contract	Contract	Syarikat Air Johor Holding Berhad	50,865.00
Wastewater Treatment Facilities Unit	2011	19/09/2011	31/12/2012	16	Bioteknologi	BIOTECHNOLOGY	HEALTH AND WELLNESS	WAN AZLINA BT AHMAD	Others	Others	MALYSIAN BIOTECHNOLOGY CORPORATION	280,882.00
Mathematical Modeling of Convective Boundary Layer Flow and Heat Transfer on Viscoelastic Fluid Past a Sphere	2012	01/01/2012	31/12/2013	24	Sains Gunaan	NANOTECHNOLOGY	FRONTIER MATERIALS	SHARIDAN BIN SHAFIE	Fundamental	FRGS	MOHE	125,000.00
Novel Functional Nanomaterials : Design And Synthesis	2011	01/10/2011	31/12/2013	27	Material Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	MUSTAFFA BIN SHAMSUDDIN	Sciencefund	NanoCOE	MOSTI	500,000.00
Synthesis Of Preferred Oriented Titanium Dioxide Materials Under Strong Magnetic Field And Their Photocatalytic Activity	2012	22/02/2012	21/02/2013	12	Chemical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	HADI NUR	Others	Others	NIPPON SHEET GLASS FOUNDATION (NSG)	18,102.00
NANOSTRUCTURED BIMETALLIC OXIDE MODIFIED SILICA AS OXIDATIVE-ACIDIC BIFUNCTIONAL CATALYSTS FOR ALIKENE	2011	01/04/2011	31/03/2013	24	Material Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	LEE SIEW LING	GUP	Tier 1	UTM	150,000.00
SEA WATER ANALYSIS BY LASER INDUCED BREAKDOWN SPECTROSCOPY TECHNIQUE	2011	01/04/2011	31/03/2013	24	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	NORIAH BT BIDIN	GUP	Tier 1	UTM	150,000.00
BIOMATERIALS SUPPORTED PHYTOSYNTHESISED PALLADIUM NANOPARTICLES AS CATALYST FOR CARBON-CARBON COUPLING	2011	01/04/2011	31/03/2013	24	Chemical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	MUSTAFFA BIN SHAMSUDDIN	GUP	Tier 1	UTM	129,000.00
Development Of A Continuous Microwave Reactor For The Production Of Nanomaterials	2011	01/04/2011	31/03/2013	24	Engineering Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	RAFAQAT HUSSAIN	GUP	Tier 1	UTM	129,000.00
PHOTOCATALYTIC ORGANIC SYNTHESIS ON MESOPOROUS CARBON NITRIDE-BASED MATERIALS	2011	01/04/2011	31/03/2013	24	Chemical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	LENY YULIATI	GUP	Tier 1	UTM	150,000.00

Tajuk Projek Penyelidikan	Tahun Lulus Geran	Tarikh Mula	Tarikh Tamat 1	Tempoh (Bln)	Sektor (FOR Category)	Research Alliance	Research Alliance/Niche Area Baru	Ketua Projek Utama	Kategori Projek	Jenis Projek	Penaja	Peruntukan Diluluskan (RM)
SMART NANOCOMPOSITES FOR NONLINEAR OPTIC APPLICATIONS	2011	01/04/2011	31/03/2013	24	Material Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	HENDRIK OKTENDY LINTANG	GUP	Tier 1	UTM	150,000.00
The Number of Conjugacy Classes for 2-Generator 2-Groups of Nilpotency Class 2	2011	01/04/2011	31/03/2013	24	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	NOR HANIZA BT. SARMIN	GUP	Tier 1	UTM	150,000.00
REMOVAL OF OIL AND GREASE FROM INDUSTRIAL WASTEWATER	2011	01/04/2011	31/03/2013	24	Biotechnology	BIOTECHNOLOGY	HEALTH AND WELLNESS	WAN AZLINA BT AHMAD	GUP	Tier 1	UTM	170,000.00
KAJIAN KESEUAIAN TAPAK REAKTOR KUASA NUKLEAR DI NEGERI JOHOR	2011	01/04/2011	31/03/2013	24	Applied Sciences and Technology	SUSTAINABILITY	RESOURCE SUSTAINABILITY	AHMAD TERMIZI BIN RAMLI	GUP	Tier 1	UTM	148,000.00
Design of new Al-based Raney-type catalysts for hydrogen storage	2011	01/04/2011	31/03/2013	24	Chemical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	RIADH SAHNOUN	GUP	Tier 1	UTM	150,000.00
Dark Soliton Propagation within the Micro and Nano-waveguide Ring Resonator for Secured Communication.	2011	01/04/2011	31/03/2013	24	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	JALIL BIN ALI	GUP	Tier 1	UTM	170,000.00
BIOLOGICAL OXIDATION OF ARSENIC USING LOCALLY ISOLATED MICROORGANISMS FOR ON-SITE TREATMENT OF ARSENIC	2011	01/04/2011	31/03/2013	24	Biotechnology	SUSTAINABILITY	RESOURCE SUSTAINABILITY	SHAFINAZ BINTI SHAHIR	GUP	Tier 1	UTM	150,000.00
GAS-LIQUID CHEMICAL VAPOUR DEPOSITION REACTION FOR CONTROLLED PRODUCTION OF HIGH QUALITY CARBON	2011	01/04/2011	31/03/2013	24	Material Sciences	SUSTAINABILITY	RESOURCE SUSTAINABILITY	NOR AZIAH BT BUANG	GUP	Tier 1	UTM	150,000.00
Biodegradation of Palm Oil Trunks by Cellulase and Xylanase produced by locally isolated fungi for Polyoses Production using Solid	2011	01/04/2011	31/03/2013	24	Biotechnology	SUSTAINABILITY	RESOURCE SUSTAINABILITY	MADIHAH BINTI MD SALLEH	GUP	Tier 1	UTM	130,000.00
SUSTAINABILITY FACTORS FOR SPAWNING AND GROWTH OF GREEN MUSSELS (PERNA VIRIDIS) AT DANGA-PENDAS STRAITS	2011	01/04/2011	31/03/2013	24	Chemical Sciences	WATER	RESOURCE SUSTAINABILITY	ABDULL RAHIM BIN HJ MOHD YUSOFF	GUP	Tier 1	UTM	130,000.00
DESIGN AND SYNTHESIS OF THERMAL STABILITY NANOPARTICLE LOADED MESOSTRUCTURED SILICA	2011	01/04/2011	31/03/2013	24	Material Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	SUGENG TRIWAHYONO	GUP	Tier 1	UTM	130,000.00
CHEMICAL PROFILING, CHEMICAL MARKERS, AND STANDARDISATION OF MEDICINAL ZINGIBERACEAE TOWARDS ANTIMICROBES, ANTI-	2011	01/04/2011	31/03/2013	24	Chemical Sciences	BIOTECHNOLOGY	HEALTH AND WELLNESS	HASNAH BT MOHD SIRAT	GUP	Tier 1	UTM	148,000.00
Design and Characteristics of MXN Switch Single Mode Fiber Coupler	2011	01/04/2011	31/03/2013	24	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	SAKTIOTO	GUP	Tier 1	UTM	144,000.00

Tajuk Projek Penyelidikan	Tahun Lulus Geran	Tarikh Mula	Tarikh Tamat 1	Tempoh (Bln)	Sektor (FOR Category)	Research Alliance	Research Alliance/Niche Area Baru	Ketua Projek Utama	Kategori Projek	Jenis Projek	Penaja	Peruntukan Diluluskan (RM)
Synthesis of Nanostructured Zinc Oxide Thin Films and Nanowires for Gas Sensing.	2011	01/04/2011	31/03/2013	24	Material Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	NIHAD K.ALI	GUP	Tier 1	UTM	130,000.00
A NEW APPROACH IN CONTROL OF THE CATALYTIC ACTIVITY AND SELECTIVITY IN OXIDATION REACTIONS BY MAGNETIC FIELD	2011	01/04/2011	31/03/2013	24	Chemical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	HADI NUR	GUP	Tier 1	UTM	169,000.00
NEW HYBRID MODEL FOR FORECASTING SHORT TERM ELECTRICITY LOAD DEMAND	2011	01/04/2011	31/03/2013	24	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	MUHAMMAD HISYAM LEE @ LEE WEE YEW	GUP	Tier 1	UTM	130,000.00
SUPPORTED LIQUID MEMBRANE AND ELECTROCHEMICAL MEASUREMENT SYSTEM FOR DETERMINATION OF TOXIC METALS	2011	01/04/2011	31/03/2013	24	Chemical Sciences	SUSTAINABILITY	RESOURCE SUSTAINABILITY	RAHMALAN BIN AHAMAD	GUP	Tier 1	UTM	104,000.00
High protein and probiotic-rich product from EM-fermented prawn waste as aquaculture feed ingredient.	2011	01/04/2011	31/03/2013	24	Biotechnology	BIOTECHNOLOGY	HEALTH AND WELLNESS	ZAINOHA BT ZAKARIA	GUP	Tier 1	UTM	150,000.00
SYNTHESIS OF CARBON NANOTUBES USING A VERY HIGH FREQUENCY-CHEMICAL VAPOUR DEPOSITION	2011	01/04/2011	31/03/2013	24	Applied Sciences and Technology	NANOTECHNOLOGY	FRONTIER MATERIALS	SAMSUDI BIN SAKRANI	GUP	Tier 1	UTM	150,000.00
PHOTOCATALYTIC DEGRADATION AND CLEAN-UP OF SOME ORGANOARSENIC AND PESTICIDES USING MODIFIED HOLLOW SILICA-	2011	01/04/2011	31/03/2013	24	Material Sciences	SUSTAINABILITY	RESOURCE SUSTAINABILITY	ALIAS BIN MOHD YUSOF	GUP	Tier 1	UTM	168,000.00
Dilute-nitride InNAs quantum dots for room temperature long wavelength laser operation in the mid-infrared	2011	01/04/2011	31/03/2013	24	Material Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	THOMAS JEFFREY COCKBURN HOSEA	GUP	Tier 1	UTM	150,000.00
CREATING POSITIVE PERSONAL, ACADEMIC AND SOCIAL EXPERIENCES FOR INTERNATIONAL STUDENTS IN MALAYSIA	2011	01/04/2011	31/03/2013	24	Social Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	MOHD ISMAIL BIN ABD AZIZ	GUP	Tier 1	UTM	130,000.00
GREEN TECHNOLOGY UTILIZING CATALYTIC METHANATION FOR THE TREATMENT OF COAL BURNING POWER PLANT GREENHOUSE	2011	01/04/2011	31/03/2013	24	Chemical Sciences	SUSTAINABILITY	RESOURCE SUSTAINABILITY	RUSMIDAH BT ALI	GUP	Tier 1	UTM	150,000.00
A NOVEL CHEMICAL FOR THE REMOVAL OF ORGANIC ACIDS IN PETROLEUM CRUDE OIL AND THE ELECTROPHORETIC SEPARATION BY	2011	01/04/2011	31/03/2013	24	Chemical Sciences	WATER	RESOURCE SUSTAINABILITY	JAFARIAH BT JAAFAR	GUP	Tier 1	UTM	150,000.00
Physically-based biodosimetry detected by electron paramagnetic resonance (EPR) for radiation accident emergency management	2011	01/04/2011	31/03/2013	24	Applied Sciences and Technology	SUSTAINABILITY	RESOURCE SUSTAINABILITY	SUHAIRUL BIN HASHIM	GUP	Tier 1	UTM	165,000.00
Solving Mixed Boundary Value Problem via an Integral Equation with the Generalized Neumann Kernel	2011	01/04/2011	31/03/2013	24	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	ALI HASSAN BIN MOHAMED MURID	GUP	Tier 1	UTM	93,000.00

Tajuk Projek Penyelidikan	Tahun Lulus Geran	Tarikh Mula	Tarikh Tamat 1	Tempoh (Bln)	Sektor (FOR Category)	Research Alliance	Research Alliance/Niche Area Baru	Ketua Projek Utama	Kategori Projek	Jenis Projek	Penaja	Peruntukan Diluluskan (RM)
Catalytic Oxidative Desulfurization of Diesel utilizing Transition and Lanthanide Metal Oxides	2011	01/04/2011	31/03/2013	24	Material Sciences	SUSTAINABILITY	RESOURCE SUSTAINABILITY	WAN AZELEE BIN WAN ABU BAKAR	GUP	Tier 1	UTM	130,000.00
SOL-GEL SILICA HYBRID ORGANIC-INORGANIC COATING FOR STIR BAR SORPTIVE EXTRACTION OF PHARMACEUTICALLY ACTIVE	2011	01/04/2011	31/03/2013	24	Chemical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	WAN AINI BT WAN IBRAHIM	GUP	Tier 1	UTM	165,000.00
Sol Gel Nano Calcium Oxide from Egg Shells for Base Heterogeneous Transesterification of Palm Oil to Biodiesel.	2011	01/04/2011	31/03/2013	24	#N/A	SUSTAINABILITY	RESOURCE SUSTAINABILITY	ABD.RAHIM BIN YACOB	GUP	Tier 1	UTM	121,000.00
Manufacturing Process Quality Control for Small and Medium Industries in Complex Setting	2011	01/04/2011	31/03/2013	24	Mathematical Sciences	K-ECONOMY	SMART DIGITAL COMMUNITY	MAMAN ABDURACHMAN DJAUHARI	GUP	Tier 1	UTM	170,000.00
Development of nanostructure materials using polymer template for lithium battery	2011	01/04/2011	31/03/2013	24	Material Sciences	MATERIAL AND MANUFACTURING	FRONTIER MATERIALS	MADZLAN BIN AZIZ	GUP	Tier 1	UTM	128,000.00
The Formation and Application of Ordered Molecular Sieve Silica-Dendrimer Supported Homogeneous Catalysts in	2011	01/04/2011	31/03/2013	24	Chemical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	SALASIAH BT ENDUD	GUP	Tier 1	UTM	129,000.00
NEW FUNCTIONALIZED MESOPOROUS SILICA SOLID PHASE MEMBRANE TIP EXTRACTION FOR THE ANALYSIS OF ANTIFUNGAL	2011	01/04/2011	31/03/2013	24	Chemical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	MOHD MARSIN BIN SANAGI	GUP	Tier 1	UTM	148,000.00
Anti-inflammatory and Antioxidant Phytochemicals from Piper febrifugum and Piper maingayi	2011	01/04/2011	31/03/2013	24	Chemical Sciences	BIOTECHNOLOGY	HEALTH AND WELLNESS	FAREDIAH BT AHMAD	GUP	Tier 1	UTM	144,000.00
Spatial Analysis of EEG Signal During Epileptic Seizure on Non-Polar CEEG	2011	01/04/2011	31/03/2013	24	Applied Sciences and Technology	NANOTECHNOLOGY	FRONTIER MATERIALS	TAHIR BIN AHMAD	GUP	Tier 1	UTM	83,000.00
IMPLEMENTATION OF NEW MODIFIED ADAPTIVE NEURO-FUZZY SYSTEM (MANFIS) FOR ELECTRICITY PEAK LOAD DEMAND FORECASTING	2011	01/04/2011	31/03/2013	24	Mathematical Sciences	K-ECONOMY	SMART DIGITAL COMMUNITY	ZUHAIMY BIN HAJI ISMAIL	GUP	Tier 1	UTM	138,000.00
Theoretical Modeling of Physical Properties of Metal Hydrides	2011	01/04/2011	31/07/2012	16	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	RASHID AHMED	GUP	Tier 2	UTM	40,000.00
ON SOLUTIONS OF MAGNETOHYDRODYNAMIC BOUNDARY-LAYER FLOW IN A POROUS MEDIUM.	2011	01/04/2011	31/07/2012	16	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	KAMRAN FAKHAR	GUP	Tier 2	UTM	40,000.00
STUDY OF OPTICAL NONLINEARITIES OF ERBIUM DOPED TELLURITE GLASSES CONTAINING METALLIC	2011	01/04/2011	31/05/2012	14	Physical Sciences	MATERIAL AND MANUFACTURING	FRONTIER MATERIALS	SIB KRISHNA GHOSHAL	GUP	Tier 2	UTM	40,000.00

Tajuk Projek Penyelidikan	Tahun Lulus Geran	Tarikh Mula	Tarikh Tamat 1	Tempoh (Bln)	Sektor (FOR Category)	Research Alliance	Research Alliance/Niche Area Baru	Ketua Projek Utama	Kategori Projek	Jenis Projek	Penaja	Peruntukan Ditoluskan (RM)
THE HOMOLOGICAL FUNCTORS OF FINITE 2-ENGEL GROUPS	2011	01/04/2011	31/07/2012	16	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	NOR MUHAINIAH BINTI MOHD ALI	GUP	Tier 2	UTM	40,000.00
Parameterisation of the solute kinetics in body fluid for simulating optimal dialysis time of kidney patient	2011	01/04/2011	31/07/2012	16	Physical Sciences	SUSTAINABILITY	RESOURCE SUSTAINABILITY	NOORDDIN BIN IBRAHIM	GUP	Tier 2	UTM	40,000.00
Thermoluminescence response of calcium tellurite borate based glass for dose measurement subjected to photon irradiation	2011	01/04/2011	31/07/2012	16	Physical Sciences	SUSTAINABILITY	RESOURCE SUSTAINABILITY	HUSIN BIN WAGIRAN	GUP	Tier 2	UTM	40,000.00
THE THERMOLUMINESCENCE CHARACTERISTICS OF LiKB4O7: CU AND LiKB4O7: GE GLASS FOR IONIZING RADIATIONS	2011	01/04/2011	31/07/2012	16	Physical Sciences	SUSTAINABILITY	RESOURCE SUSTAINABILITY	MD. IMAM HOSSAIN	GUP	Tier 2	UTM	40,000.00
Study of Structural and Electronic Properties of III-V Compounds by First Principle	2011	01/04/2011	31/07/2012	16	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	MOHAMMAD ALAM SAEED	GUP	Tier 2	UTM	40,000.00
NONLINEAR OPTICAL BEHAVIOR OF ERBIUM DOPED PHOSPHATE GLASS CONTAINING NANOPARTICLES	2011	01/04/2011	30/09/2012	18	Physical Sciences	MATERIAL AND MANUFACTURING	FRONTIER MATERIALS	RAMLI BIN ARIFIN	GUP	Tier 2	UTM	40,000.00
DESIGN AND SYNTHESIS OF NOVEL LIGHT-HARVESTING PORPHYRIN ARRAYS	2011	01/04/2011	31/07/2012	16	Chemical Sciences	BIOTECHNOLOGY	HEALTH AND WELLNESS	MOHD BAKRI BIN BAKAR	GUP	Tier 2	UTM	40,000.00
LEACHABILITY STUDIES OF HEAVY METALS FROM ALUM SLUDGE DERIVED FROM WATER OPERATOR	2011	01/04/2011	31/07/2012	16	Applied Sciences and Technology	WATER	RESOURCE SUSTAINABILITY	HANIM BT AWAB	GUP	Tier 2	UTM	40,000.00
Optical CO2 Sensing Applying Nanotungsten Zircon Oxides And Polyphenol Dyes Based on DRIFT Integrated by PLS Analysis	2011	01/04/2011	30/09/2012	18	Chemical Sciences	MATERIAL AND MANUFACTURING	FRONTIER MATERIALS	RITA SUNDARI	GUP	Tier 2	UTM	40,000.00
CHEMOMETRIC APPROACH FOR CLASSIFICATION OF ACCELERANTS IN FIRE DEBRIS	2011	01/04/2011	31/07/2012	16	Chemical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	MOHAMED NOOR BIN HASAN	GUP	Tier 2	UTM	40,000.00
REGIONAL PROBABILITY DISTRIBUTION TYPE OF PENINSULAR MALAYSIA ANNUAL STREAMFLOW BY PL-MOMENTS	2011	01/04/2011	31/07/2012	16	Mathematical Sciences	WATER	RESOURCE SUSTAINABILITY	ANI BIN SHABRI	GUP	Tier 2	UTM	40,000.00
REMOVAL OF NATURAL ORGANIC MATTER FROM RAW WATER USING SURFACTANT MODIFIED ZEOLITE	2011	01/04/2011	31/07/2012	16	Chemical Sciences	WATER	RESOURCE SUSTAINABILITY	UMI KALTHOM BT AHMAD	GUP	Tier 2	UTM	40,000.00
A user friendly of High speed and High repetition rate Pockels cell driver for Solid State laser	2011	01/04/2011	31/07/2012	16	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	ABD RAHMAN BIN TAMURI	GUP	Tier 2	UTM	40,000.00

Tajuk Projek Penyelidikan	Tahun Lulus Geran	Tarikh Mula	Tarikh Tamat 1	Tempoh (Bln)	Sektor (FOR Category)	Research Alliance	Research Alliance/Niche Area Baru	Ketua Projek Utama	Kategori Projek	Jenis Projek	Penaja	Peruntukan Diluluskan (RM)
DESIGN NANOSTRUCTURED SILICA ENCAPSULATED TRANSITION METAL COMPLEXES FOR OXIDATION OF ORGANIC	2011	01/04/2011	31/07/2012	16	Chemical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	JON EFENDI	GUP	Tier 2	UTM	40,000.00
DETOXIFICATION OF HEAVY METALS IN GREEN-LIPPED MUSSEL USING EDIBLE CHELATING AGENT	2011	01/04/2011	31/07/2012	16	Environmental Sciences	WATER	RESOURCE SUSTAINABILITY	HASHIM BIN BAHARIN	GUP	Tier 2	UTM	40,000.00
STRUCTURAL CHARACTERISTICS OF INXGA1-XP NANOWIRES GROWN USING VERTICAL CHAMBER MOCVD WITH GOLD SEED-ASSISTED AS	2011	01/04/2011	31/07/2012	16	Material Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	ZULKAFI BIN OTHAMAN	GUP	Tier 2	UTM	40,000.00
Laser induced acoustic wave and ultrasonic spectroscopy studies.	2011	01/04/2011	31/07/2012	16	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	YUSOF BIN MUNAJAT	GUP	Tier 2	UTM	40,000.00
Design and construction of quasi - three level laser	2011	01/04/2011	31/07/2012	16	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	YAACOB BIN MAT DAUD	GUP	Tier 2	UTM	40,000.00
Identification of Latent Fingerprints using Lawsone in Comparison with Ninhydrin	2011	01/04/2011	31/07/2012	16	Chemical Sciences	BIOTECHNOLOGY	HEALTH AND WELLNESS	NORAZAH BINTI BASAR	GUP	Tier 2	UTM	40,000.00
Persistent Splicing Systems in DNA Computing	2011	01/04/2011	30/06/2012	15	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	FONG WAN HENG	GUP	Tier 2	UTM	40,000.00
Handling of under and over-dispersion of count data via censoring using the stochastic zero-inflated count regression models in	2011	01/04/2011	30/06/2012	15	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	ROBIAH BT ADNAN	GUP	Tier 2	UTM	40,000.00
ULTRA-FAST LASER MODELING OF Ti:SAPPHIRE LASER	2011	01/04/2011	31/07/2012	16	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	HAZRI BIN BAKHTIAR	GUP	Tier 2	UTM	40,000.00
GARCH MODELS FOR FORECASTING HETEROSCEDASTIC TIME SERIES	2011	01/04/2011	30/09/2012	18	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	MAIZAH HURA BT AHMAD	GUP	Tier 2	UTM	40,000.00
Photoluminescence Characteristics of Thin films Phosphor of Rare-Earth Aluminum Borate Grown by RF Magnetron Sputtering.	2011	01/04/2011	30/09/2012	18	Physical Sciences	MATERIAL AND MANUFACTURING	FRONTIER MATERIALS	BAKAR BIN ISMAIL	GUP	Tier 2	UTM	40,000.00
Phytochemicals with Antibacterial Property from Artocarpus anisophyllus Mig. (Moraceae)	2011	01/04/2011	31/07/2012	16	Chemical Sciences	BIOTECHNOLOGY	HEALTH AND WELLNESS	SHAJARAHTUNNUR BINTI JAMIL	GUP	Tier 2	UTM	40,000.00
SPECTROSCOPIC INVESTIGATION OF OPTICAL UP-CONVERSION IN RARE EARTH DOPED TELLURITE NANOGLASSES	2011	01/04/2011	30/09/2012	18	Physical Sciences	MATERIAL AND MANUFACTURING	FRONTIER MATERIALS	MD RAHIM BIN SAHAR	GUP	Tier 2	UTM	40,000.00

Tajuk Projek Penyelidikan	Tahun Lulus Geran	Tarikh Mula	Tarikh Tamat 1	Tempoh (Bln)	Sektor (FOR Category)	Research Alliance	Research Alliance/Niche Area Baru	Ketua Projek Utama	Kategori Projek	Jenis Projek	Penaja	Peruntukan Diluluskan (RM)
SELECTIVITY OF NANO-SIZED METAL OXIDE SEMICONDUCTOR SENSOR ARRAY	2011	01/04/2011	31/07/2012	16	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	WAN NURULHUDA BT WAN SHAMSURI	GUP	Tier 2	UTM	40,000.00
UDY OF HIGH RESOLUTION TRANSMISSION ELECTRON MICROSCOPY TO THE INDIUM GALLIUM PHOSPHIDE NANOWIRES	2011	01/04/2011	31/07/2012	16	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	DWI GUSTIONO RIBAN	GUP	Tier 2	UTM	40,000.00
The structure and luminescence properties of alkaline earth phosphates doped with rare earth ions	2011	01/04/2011	30/09/2012	18	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	MOHD NOR BIN MD YUSUF	GUP	Tier 2	UTM	40,000.00
Q-ball search using very large Multi Pixel Photon Counter readout	2011	01/04/2011	31/07/2012	16	Physical Sciences	SUSTAINABILITY	RESOURCE SUSTAINABILITY	WAN MUHAMAD SARIDAN BIN WAN HASSAN	GUP	Tier 2	UTM	40,000.00
FIBER OPTIC LONG PERIOD GRATING BASED NANO-SENSOR FOR GAS & CHEMICAL SENSING	2011	01/04/2011	31/07/2012	16	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	ROSLY BIN ABDUL RAHMAN	GUP	Tier 2	UTM	40,000.00
CRAFTING MATHEMATICAL EXPERIENCES TO DEVELOP ENGINEERING THINKING AMONGST UNDERGRADUATES	2011	01/04/2011	30/09/2012	18	Social Sciences	K-ECONOMY	SMART DIGITAL COMMUNITY	YUDARIAH BT MOHAMMAD YUSOF	GUP	Tier 2	UTM	40,000.00
EQUILIBRIUM, KINETIC AND THERMODYNAMIC INVESTIGATION OF REACTIVE TEXTILE DYES BIOSORPTION ONTO ANANAS	2011	01/04/2011	31/07/2012	16	Chemical Sciences	WATER	RESOURCE SUSTAINABILITY	ZAITON BT ABDUL MAJID	GUP	Tier 2	UTM	40,000.00
Single Electron Transistor: Theory, Simulation and Design	2011	01/04/2011	31/07/2012	16	Applied Sciences and Technology	NANOTECHNOLOGY	FRONTIER MATERIALS	AHMAD RADZI BIN MAT ISA	GUP	Tier 2	UTM	40,000.00
Spectral analysis of structural & pigmentary colours of selected tropical leaves for structural, compositional & reflectance	2011	01/04/2011	31/07/2012	16	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	ROSLY BIN ABDUL RAHMAN	GUP	Tier 2	UTM	40,000.00
ASSESSMENT OF ALIPHATIC AND AROMATIC PETROLEUM HYDROCARBONS IN JOHOR STRAITS	2011	01/04/2011	31/07/2012	16	Environmental Sciences	WATER	RESOURCE SUSTAINABILITY	RAZALI BIN ISMAIL	GUP	Tier 2	UTM	40,000.00
Catalytic Oxidative Demetallization of Heavy Metals in petroleum Crude Utilizing Oxidant agents	2011	01/04/2011	31/12/2012	21	Applied Sciences and Technology	WATER	RESOURCE SUSTAINABILITY	RUGAYAH BT MOHAMED	GUP	Tier 2	UTM	40,000.00
A STUDY ON THE PERISTALTIC TRANSPORT OF BIOFLUIDS.	2011	01/04/2011	30/09/2012	18	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	NORZIEHA BINTI MUSTAPHA	GUP	Tier 2	UTM	40,000.00
CONVECTIVE BOUNDARY LAYER FLOW OVER A THREE-DIMENSIONAL STAGNATION POINT WITH INTERNAL HEAT	2011	01/04/2011	31/07/2012	16	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	SHARIDAN BIN SHAFIE	GUP	Tier 2	UTM	40,000.00

Tajuk Projek Penyelidikan	Tahun Lulus Geran	Tarikh Mula	Tarikh Tamat 1	Tempoh (Bln)	Sektor (FOR Category)	Research Alliance	Research Alliance/Niche Area Baru	Ketua Projek Utama	Kategori Projek	Jenis Projek	Penaja	Peruntukan Diluluskan (RM)
3D FDTD Simulation of Coaxial Transmission Line for Broadband Dielectric Characterization	2011	01/04/2011	31/07/2012	16	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	AMIRUDDIN BIN SHAARI	GUP	Tier 2	UTM	40,000.00
DESIGN OF METAL OXIDES SUPPORTED NANOSODALITE BASED CATALYTS FOR PHOTOCATALYSIS	2011	01/04/2011	31/10/2012	19	Chemical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	ZAINAB BT RAMLI	GUP	Tier 2	UTM	40,000.00
DETERMINATION OF THE ELEMENTAL MINERALS IN RICE USING LASER MATERIAL CHARACTERIZATION	2011	01/04/2011	31/07/2012	16	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	ASIAH BT YAHAYA	GUP	Tier 2	UTM	40,000.00
Spectroscopic INVESTIGATION OF OPTICAL UP-CONVERSION IN RARE EARTH DOPED LITHIUM NIOBATE SINGLE CRYSTAL	2011	01/04/2011	31/07/2012	16	Physical Sciences	MATERIAL AND MANUFACTURING	FRONTIER MATERIALS	MD SUPAR BIN ROHANI	GUP	Tier 2	UTM	40,000.00
Sparse resultant formulas and multihomogeneous optimal resultant matrices	2011	01/04/2011	31/07/2012	16	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	NOR'AINI BT ARIS	GUP	Tier 2	UTM	40,000.00
CLUSTERING BASED CLASSIFICATION ON DAILY RAINFALL PATTERN	2011	01/04/2011	30/09/2012	18	Applied Sciences and Technology	WATER	RESOURCE SUSTAINABILITY	NORHAIZA BINTI AHMAD	GUP	Tier 2	UTM	40,000.00
Hidden Markov Models For Tropical Climate	2011	01/04/2011	30/09/2012	18	Engineering Sciences	WATER	RESOURCE SUSTAINABILITY	FADHILAH BINTI YUSOF	GUP	Tier 2	UTM	40,000.00
Nanoelectromechanical System (NEMS) Sensor Based on Au-Si Nanodots Structure for Generic Detection of Biochemical Species	2011	01/04/2011	31/07/2012	16	Applied Sciences and Technology	NANOTECHNOLOGY	FRONTIER MATERIALS	ABD.KHAMIM BIN ISMAIL	GUP	Tier 2	UTM	40,000.00
Luminescence Properties of Doped Alkaline Earth Borophosphate	2011	01/04/2011	31/07/2012	16	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	ROSLI BIN HUSSIN	GUP	Tier 2	UTM	40,000.00
Laser scanning system for surface analysis	2011	01/04/2011	31/07/2012	16	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	JASMAN BIN ZAINAL	GUP	Tier 2	UTM	40,000.00
CORROSION RESISTANCE INVESTIGATION OF RARE EARTH DOPED OPTICAL GLASSES TOWARDS THE MODIFICATION OF	2011	01/04/2011	30/09/2012	18	Physical Sciences	MATERIAL AND MANUFACTURING	FRONTIER MATERIALS	KHAIDZIR BIN HAMZAH	GUP	Tier 2	UTM	40,000.00
DETERMINATION OF CONSTITUTIVE MODEL FOR SOFT TISSUES USING PHYSICAL INTERPRETATION PARAMETERS	2011	01/04/2011	31/07/2012	16	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	MAHAD BIN AYEM	GUP	Tier 2	UTM	40,000.00
Gelation of Nematic Liquid Crystals: An Electron Spin Resonance Investigation	2011	01/04/2011	31/07/2012	16	Chemical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	CHE ROZID BIN MAMAT	GUP	Tier 2	UTM	40,000.00

Tajuk Projek Penyelidikan	Tahun Lulus Geran	Tarikh Mula	Tarikh Tamat 1	Tempoh (Bln)	Sektor (FOR Category)	Research Alliance	Research Alliance/Niche Area Baru	Ketua Projek Utama	Kategori Projek	Jenis Projek	Penaja	Peruntukan Dituluskan (RM)
Mathematical modelling of mass transfer of Ellipsoidal Drops in RDC column.	2011	01/04/2011	30/09/2012	18	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	JAMALLUDIN BIN TALIB	GUP	Tier 2	UTM	40,000.00
SYNTHESIS, CHARACTERIZATION AND APPLICATION OF DENDRIMER-BASED NANOSTRUCTURED MATERIALS FOR THE SEPARATION	2011	01/08/2011	31/07/2013	24	Chemical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	MOHD MARSIN BIN SANAGI	GUP	Flagship	UTM	299,600.00
Synthesis, characterization and application of amine surface bonded nanoporous carbon spheres in removal of new	2011	01/08/2011	31/07/2013	24	Chemical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	HADI NUR	GUP	Flagship	UTM	300,600.00
NOVEL NANOMATERIALS FOR THE SEPARATION AND REMOVAL OF NEW EMERGING POLLUTANT : SYNTHESIS, CHARACTERIZATION,	2011	01/08/2011	31/07/2013	24	Material Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	LENY YULIATI	GUP	Flagship	UTM	289,080.00
Design of DSS prediction model based on water yield retrieval from main water catchments and sub-catchments in Peninsular Malaysia.	2011	01/08/2011	31/07/2014	37	Information, Computer and Communication Technology (ICT)	WATER	RESOURCE SUSTAINABILITY	ABDULL RAHIM BIN HJ MOHD YUSOFF	GUP	Flagship	UTM	126,400.00
FUNDAMENTAL AND EXPERIMENTAL STUDIES OF BIO-PHOTONICS RING RESONATOR SENSOR	2011	01/08/2011	31/07/2014	37	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	JALIL BIN ALI	GUP	Flagship	UTM	551,000.00
Simulation of Bio-Photonics Sensor Based on Micro Ring Resonator	2011	01/08/2011	31/07/2014	37	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	SAKTIOTO	GUP	Flagship	UTM	138,500.00
TEMPLATE SOL-GEL SYNTHESIS OF GOLD NANOPARTICLES IN THE NANOSCOPIC CHANNELS OF MESOPOROUS SILICA	2011	01/09/2011	31/08/2012	12	Material Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	HENDRIK OKTENDY LINTANG	GUP	Innovation Encouragment	UTM	20,000.00
IMPROVEMENT OF VISUALIZATION AND THERMAL HOT ZONE BY MODIFYING THE INSULATOR DESIGN OF CZOCHRALSKI GROWTH	2011	01/09/2011	03/08/2012	12	Material Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	ZUHAIRI BIN IBRAHIM	GUP	Innovation Encouragment	UTM	20,000.00
DETERMINATION OF HYDROCARBON LEVEL IN WATER BY LASER INDUCED ACOUSTIC TECHNIQUE	2012	01/04/2012	31/03/2014	24	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	NORIAH BT BIDIN	Fundamental	FRGS	MOHE	104,000.00
PORPHYRINS ASSEMBLIES AND ARRAYS FOR MOLECULAR PHOTONIC SYSTEM	2012	01/04/2012	31/03/2014	24	Chemical Sciences	BIOTECHNOLOGY	HEALTH AND WELLNESS	MOHD BAKRI BIN BAKAR	Fundamental	FRGS	MOHE	73,000.00
First Principles study to search for Diluted Magnetic Semiconductors (DMS) based on Transition Metals Doped II-VI Compounds	2012	01/04/2012	31/03/2014	24	Material Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	RASHID AHMED	Fundamental	FRGS	MOHE	84,800.00
Design and Studies of Argon Filled Plasma in NX2	2012	01/05/2012	30/04/2014	24	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	JALIL BIN ALI	GUP	Tier 1	UTM	70,000.00

Tajuk Projek Penyelidikan	Tahun Lulus Geran	Tarikh Mula	Tarikh Tamat 1	Tempoh (Bln)	Sektor (FOR Category)	Research Alliance	Research Alliance/Niche Area Baru	Ketua Projek Utama	Kategori Projek	Jenis Projek	Penaja	Peruntukan Diluluskan (RM)
Synthesis Of Novel Tetrahydropyran Derivatives Under Prins Cyclisation	2012	01/04/2012	31/03/2014	24	Chemical Sciences	BIOTECHNOLOGY	HEALTH AND WELLNESS	JOAZAIZULFAZLI BIN JAMALIS	Fundamental	FRGS	MOHE	64,000.00
OPTICAL DELAYS IN PHOTONIC CRYSTAL FIBER USING STIMULATED BRILLOUIN SCATTERING.	2012	01/05/2012	30/04/2014	24	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	SAKTIOTO	GUP	Tier 1	UTM	65,000.00
DESIGN AND SYNTHESIS OF ZR-MSN FOR ADSORPTION OF CHROMIUM (VI)	2012	01/05/2012	30/04/2014	24	Material Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	SUGENG TRIWAHYONO	GUP	Tier 1	UTM	70,000.00
A HIGH POWER DIODE PUMPED VANADATE LASER SYSTEM	2012	01/05/2012	30/04/2014	24	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	NORIAH BT BIDIN	GUP	Tier 1	UTM	65,000.00
THE DEVELOPMENT OF MATHEMATICAL MODEL FOR FREE CONVECTION FLOW IN NON-NEWTONIAN BRINKMAN TYPE	2012	01/05/2012	30/04/2014	24	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	SHARIDAN BIN SHAFIE	GUP	Tier 1	UTM	60,000.00
Physical-Chemical Properties and Photocatalytic Behavior of TiO2 Modified Metal Oxides Supported on Silica	2012	01/05/2012	30/04/2014	24	Material Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	LEE SIEW LING	GUP	Tier 1	UTM	65,000.00
SMART PHOSPHORESCENT NANOSENSOR COMPOSITES FOR TEMPERATURE SENSOR APPLICATIONS	2012	01/05/2012	30/04/2014	24	Material Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	HENDRIK OKTENDY LINTANG	GUP	Tier 1	UTM	60,000.00
A New Approach for Formaldehyde Detection using Onion as Chromogenic Agent	2012	01/05/2012	30/04/2014	24	Biotechnology	BIOTECHNOLOGY	HEALTH AND WELLNESS	WAN AZLINA BT AHMAD	GUP	Tier 1	UTM	100,000.00
New Microemulsion Electrokinetic Chromatography Method for the Analysis of Selected Non Steroidal Anti-inflammatory Drugs	2012	01/05/2012	30/04/2013	12	Chemical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	DADAN HERMAWAN	GUP	Tier 2	UTM	31,800.00
Unsteady Mixed Convective Boundary layer Flow of a Nanofluid	2012	01/05/2012	30/04/2013	12	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	ANATI BTE ALI	GUP	Tier 2	UTM	28,000.00
HOMOTOPY ANALYSIS METHOD (HAM) FOR SOLVING MAGNETOHYDRODYNAMIC (MHD)ROTATING FLOW OF NON	2012	01/05/2012	30/04/2013	12	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	ZAINAL BIN ABDUL AZIZ	GUP	Tier 2	UTM	30,000.00
AN AUTOMATED REAL-TIME OPTICAL EMISSION SPECTROSCOPY DIAGNOSTICS FOR LASER INDUCED BREAKDOWN SPECTROSCOPY	2012	01/05/2012	30/04/2013	12	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	RAJA KAMARULZAMAN BIN RAJA IBRAHIM	GUP	Tier 2	UTM	30,000.00
WATSON-CRICK AUTOMATA WITH GROUPS	2012	01/05/2012	30/04/2013	12	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	FONG WAN HENG	GUP	Tier 2	UTM	31,800.00

Tajuk Projek Penyelidikan	Tahun Lulus Geran	Tarikh Mula	Tarikh Tamat 1	Tempoh (Bln)	Sektor (FOR Category)	Research Alliance	Research Alliance/Niche Area Baru	Ketua Projek Utama	Kategori Projek	Jenis Projek	Penaja	Peruntukan Diluluskan (RM)
Vibration analysis of angle-ply composite annular circular plates under shear deformation theory with different thickness variations	2012	01/05/2012	30/04/2013	12	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	KODAKKAL KANNAN VISWANATHAN	GUP	Tier 2	UTM	31,800.00
Mathematical Modeling of Tumor Cells Growth by Fuzzy-Time Delay Differential Equations	2012	01/04/2012	31/03/2014	24	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	NORMAH BTE MAAN	Fundamental	FRGS	MOHE	98,800.00
EXPLORATION OF MESOSTRUCTURED SILICEOUS NANOMATERIAL FOR PREPARING OF NEW TYPE OF CATALYST:	2012	15/06/2012	14/06/2014	24	Material Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	SUGENG TRIWAHYONO	Exploration	ERGS	MOHE	81,000.00
High performance prediction of Sustainable Urban Land Use and Development by GIS based on a Synthesis Neural-network (NA) and	2012	01/05/2012	30/04/2014	24	Information, Computer and Communication Technology (ICT)	NANOTECHNOLOGY	FRONTIER MATERIALS	NORMA BT ALIAS	GUP	Tier 1	UTM	60,000.00
MODELING AND SIMULATIONS OF PHYSICAL PROPERTIES OF SOME II-VI AND III-V CRYSTALLINE MATERIALS BY FIRST PRINCIPLES	2012	01/05/2012	30/04/2014	24	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	RASHID AHMED	GUP	Tier 1	UTM	65,000.00
Determination of Mass Attenuation Coefficient of Natural Minerals in Malaysia	2012	01/05/2012	30/04/2014	24	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	MOHAMMAD ALAM SAEED	GUP	Tier 1	UTM	60,000.00
Structural and Optical Characterization of Ge/Si Nano Islands and Quantum Dots Grown using Magnetron Sputtering and	2012	01/05/2012	30/04/2014	24	Applied Sciences and Technology	NANOTECHNOLOGY	FRONTIER MATERIALS	ZULKAFLI BIN OTHAMAN	GUP	Tier 1	UTM	65,000.00
HYDROGEN PRODUCTION VIA PHOTOCATALYTIC WATER SPLITTING OVER MODIFIED ZINC SULFIDE PHOTOCATALYSTS	2012	01/05/2012	30/04/2014	24	Material Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	LENY YULIATI	GUP	Tier 1	UTM	70,000.00
Magnetically Separable Gold Nanoparticles Catalyst for Aerobic Oxidation Reactions	2012	01/05/2012	30/04/2014	24	Material Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	MUSTAFA BIN SHAMSUDDIN	GUP	Tier 1	UTM	70,000.00
The Mathematical Modelling of Flow and Deformation in the Human Eye	2012	01/05/2012	30/04/2013	12	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	ZUHAILA BINTI ISMAIL	GUP	Tier 2	UTM	28,000.00
Bayesian Survival Mixture Models In The Existence of Covariates Using Frailty Models	2012	01/05/2012	30/04/2013	12	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	ZARINA BINTI MOHD KHALID	GUP	Tier 2	UTM	28,000.00
CAPABILITY OF ALL FINITE METACYCLIC p-GROUPS	2012	01/05/2012	30/04/2013	12	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	NOR MUHAINIAH BINTI MOHD ALI	GUP	Tier 2	UTM	28,155.00
Preparation and Characterization of Environmentally friendly Chitin Nanowhiskers/Poly lactide Composites	2012	01/05/2012	30/04/2013	12	Applied Sciences and Technology	BIOTECHNOLOGY	HEALTH AND WELLNESS	ZAINOHA BT ZAKARIA	GUP	Tier 2	UTM	50,000.00

Tajuk Projek Penyelidikan	Tahun Lulus Geran	Tarikh Mula	Tarikh Tamat 1	Tempoh (Bln)	Sektor (FOR Category)	Research Alliance	Research Alliance/Niche Area Baru	Ketua Projek Utama	Kategori Projek	Jenis Projek	Penaja	Peruntukan Diluluskan (RM)
Anti-proliferative and apoptotic studies of Malaysian Clinacanthus nutans towards several cancer cell lines	2012	01/05/2012	30/04/2013	12	Chemical Sciences	BIOTECHNOLOGY	HEALTH AND WELLNESS	NORAZAH BINTI BASAR	GUP	Tier 2	UTM	18,000.00
Flavonoids from Artocarpus lowii King with Anti-proliferative Activity.	2012	01/05/2012	30/04/2013	12	Chemical Sciences	BIOTECHNOLOGY	HEALTH AND WELLNESS	SHAJARAHTUNNUR BINTI JAMIL	GUP	Tier 2	UTM	18,000.00
A Novel Hybridization of Least Support Vector Machine and Cluster Analysis for stream flow forecasting	2012	01/05/2012	30/04/2013	12	Mathematical Sciences	WATER	RESOURCE SUSTAINABILITY	ANI BIN SHABRI	GUP	Tier 2	UTM	31,999.00
Hybrid of Self-Organizing Map and Multivariate Adaptive Spline Regression in Prediction of Missing Rainfall Data in Malaysia	2012	01/05/2012	30/04/2013	12	Engineering Sciences	WATER	RESOURCE SUSTAINABILITY	FADHILAH BINTI YUSOF	GUP	Tier 2	UTM	22,000.00
Arsenic removal using natural adsorbents based filter	2012	01/05/2012	30/04/2013	12	Environmental Sciences	WATER	RESOURCE SUSTAINABILITY	RAZALI BIN ISMAIL	GUP	Tier 2	UTM	21,000.00
DESIGN & SYNTHESIS OF NANOMETAL/MSN NANOHYBRID CATALYST FOR METHANATION OF CO2 IN MALAYSIAN NATURAL	2012	01/07/2012	30/06/2014	24	Material Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	SUGENG TRIWAHYONO	Sciencefund	SF	MOSTI	174,120.00
Unveiling The Data Processing Methodology of World Competitiveness Index used by World Competitiveness Yearbook	2012	01/07/2012	31/12/2012	6	Mathematical Sciences	K-ECONOMY	SMART DIGITAL COMMUNITY	MUHAMMAD HISYAM LEE @ LEE WEE YEW	GUP	Flagship	UTM	25,000.00
Rare Earth doped alkali borotellurite glass ceramic for alternative lighting source	2012	01/04/2012	31/03/2014	24	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	ROSLI BIN HUSSIN	Fundamental	FRGS	MOHE	98,400.00
SYNTHESIS AND CHARACTERIZATION OF RARE EARTH DOPED PHOSPHATE GLASSES CONTAINING METALLIC	2012	15/06/2012	14/06/2014	24	Material Sciences	MATERIAL AND MANUFACTURING	FRONTIER MATERIALS	MD RAHIM BIN SAHAR	Exploration	ERGS	MOHE	90,000.00
The potential use of Optical Fibre Doped Silica Glass as a Thermoluminescence System for Radiotherapy Dosimetry.	2012	01/05/2012	30/04/2014	24	Applied Sciences and Technology	SUSTAINABILITY	RESOURCE SUSTAINABILITY	SUHAIRUL BIN HASHIM	GUP	Tier 1	UTM	100,000.00
FUNDAMENTAL PROPERTIES OF DOPED BORATE GLASS FOR RADIOTHERAPEUTIC DOSE MEASUREMENT	2012	01/05/2012	30/04/2014	24	Physical Sciences	SUSTAINABILITY	RESOURCE SUSTAINABILITY	HUSIN BIN WAGIRAN	GUP	Tier 1	UTM	100,000.00
RAMSEY MODEL ON OPTIMAL SAVING: AN OPTIMAL CONTROL APPROACH ON ECONOMIC CYCLICAL CONSUMPTION AND	2012	01/05/2012	30/04/2013	12	Applied Sciences and Technology	NANOTECHNOLOGY	FRONTIER MATERIALS	ROHANIN BT AHMAD	GUP	Tier 2	UTM	30,000.00
MOLECULAR DYNAMICS STUDY OF ALKANE DIFFUSION MECHANISM IN UREA INCLUSION COMPOUND	2012	01/05/2012	30/04/2013	12	Chemical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	HASMERYA BINTI MAAROF	GUP	Tier 2	UTM	30,000.00

Tajuk Projek Penyelidikan	Tahun Lulus Geran	Tarikh Mula	Tarikh Tamat 1	Tempoh (Bln)	Sektor (FOR Category)	Research Alliance	Research Alliance/Niche Area Baru	Ketua Projek Utama	Kategori Projek	Jenis Projek	Penaja	Peruntukan Ditoluskan (RM)
SURFACE PLASMON RESONANCE ENHANCED LUMINESCENCE OF METALLIC NANOPARTICLES CO-EMBEDDED RARE EARTH DOPED	2012	01/05/2012	30/04/2013	12	Physical Sciences	MATERIAL AND MANUFACTURING	FRONTIER MATERIALS	SIB KRISHNA GHOSHAL	GUP	Tier 2	UTM	50,000.00
SYNTHESIS AND SPECTROSCOPIC CHARACTERIZATION OF PLASMONIC NANOGLOSS	2012	01/05/2012	30/04/2013	12	Material Sciences	MATERIAL AND MANUFACTURING	FRONTIER MATERIALS	MD RAHIM BIN SAHAR	GUP	Tier 2	UTM	50,000.00
SYNTHESIS AND CHARACTERIZATION OF LUMINOL FUNCTIONALISED SILICEOUS ZEOLITE NANOPARTICLES AS	2012	01/05/2012	30/04/2013	12	Chemical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	ZAINAB BT RAMLI	GUP	Tier 2	UTM	30,000.00
Chromanochalcons with xanthine oxidase activities	2012	01/04/2012	31/03/2014	24	Chemical Sciences	BIOTECHNOLOGY	HEALTH AND WELLNESS	FAREDIAH BT AHMAD	Fundamental	FRGS	MOHE	89,000.00
A Review on Sub-Factor used in World Competitiveness Report - Scientific Infrastructure	2012	01/07/2012	31/12/2012	6	Social Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	SALASIAH BT ENDUD	GUP	Flagship	UTM	25,000.00
Chemical compositions and Bioactivity studies of the Essential Oils of Etingera species	2012	01/05/2012	30/04/2013	12	Chemical Sciences	BIOTECHNOLOGY	HEALTH AND WELLNESS	HASNAH BT MOHD SIRAT	GUP	Tier 2	UTM	15,000.00
MONTE CARLO SIMULATION OF OPTICAL FIBERS DOSIMETRY	2012	01/05/2012	30/04/2013	12	Applied Science	SUSTAINABILITY	RESOURCE SUSTAINABILITY	SUHAILI BT ZAKARIAH @ ZAKARIA	GUP	Tier 2	UTM	22,000.00
LASER INDUCED BREAKDOWN SPECTROSCOPIC DIAGNOSTICS OF BIOLOGICAL SAMPLES FOR PRACTICAL APPLICANTS	2012	15/06/2012	14/06/2014	24	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	YUSOF BIN MUNAJAT	Exploration	ERGS	MOHE	78,000.00
FINGER-PRINTS OF METAL OXIDE SEMICONDUCTOR ELECTRONIC NOSE	2012	01/05/2012	30/04/2013	12	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	WAN NURULHUDA BT WAN SHAMSURI	GUP	Tier 2	UTM	31,800.00
OPTICAL BEHAVIOR OF METALLIC NANOPARTICLES EMBEDDED RARE EARTH DOPED GLASSES FOR NANOPHOTONICS	2012	01/05/2012	30/04/2013	12	Physical Sciences	MATERIAL AND MANUFACTURING	FRONTIER MATERIALS	RAMLI BIN ARIFIN	GUP	Tier 2	UTM	30,000.00
Mathematical Modelling of Blood Flow in an Arterial Stenosis	2012	01/05/2012	30/04/2014	24	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	NORSARAHADA BT SAIDINA AMIN	GUP	Tier 1	UTM	60,000.00
Prototype Development of Optical Device for Detecting and Analyzing Transmission Grid Health	2012	01/08/2012	31/07/2014	24	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	AHMAD RADZI BIN MAT ISA	Prototaip	PRGS	MOHE	165,000.00
Pembangunan Video BLOSSOM untuk Topik Sains	2012	01/11/2012	31/10/2013	12	Social Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	MOHAMED NOOR BIN HASAN	Institutional	Instructional Development Grant - IDG	CTL	15,000.00

Tajuk Projek Penyelidikan	Tahun Lulus Geran	Tarikh Mula	Tarikh Tamat 1	Tempoh (Bln)	Sektor (FOR Category)	Research Alliance	Research Alliance/Niche Area Baru	Ketua Projek Utama	Kategori Projek	Jenis Projek	Penaja	Peruntukan Diluluskan (RM)
FOURTH GENERATION PHOTOCATALYSTS: NANO-ENGINEERED COMPOSITES FOR WATER CONTAMINATION IN LOW-	2012	14/11/2012	31/12/2015	37	Material Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	LENY YULIATI	Contract	Contract	European Union	1,520,240.00
Proton Transfer Mechanism of Sulfonic Acid Functionalized Nanocomposite for Proton Exchange Membrane	2012	01/04/2012	31/03/2014	24	Chemical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	HASMERYA BINTI MAAROF	Fundamental	FRGS	MOHE	124,000.00
FABRICATION OF HORIZONTAL ELECTROSPINNING REACTOR SYSTEM FOR THE PRODUCTION OF NEW GENERATION CNTS-POLYMER	2012	01/12/2012	31/12/2014	25	Material Sciences	SUSTAINABILITY	RESOURCE SUSTAINABILITY	NOR AZIAH BT BUANG	GUP	Tier 1	UTM	90,000.00
A RECOMBINANT THERMOSTABLE URICASE FOR URIC ACID BIOSENSOR APPLICATION	2012	01/12/2012	31/12/2014	25	Biological Sciences	SUSTAINABILITY	RESOURCE SUSTAINABILITY	SHAFINAZ BINTI SHAHIR	GUP	Tier 1	UTM	90,000.00
CHEMICAL MODIFICATION OF CHITIN BY GRAFTING OF POLYSTYRENE SYNTHESIZED VIA AMMONIUM PER SULPHATE	2012	01/12/2012	31/12/2013	13	Chemical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	AHMEDY BIN ABU NAIM	GUP	Tier 2	UTM	32,000.00
PHYSICAL INTERPRETATION CONSTITUTIVE MODEL FOR BIOLOGICAL TISSUES WITH APPLICATION TO MITRAL VALVE	2012	01/12/2012	31/12/2013	13	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	MAHAD BIN AYEM	GUP	Tier 2	UTM	32,000.00
NANO SILICA THIN FILM DEPOSITION BY DENSE PLASMA FOCUS DEVICE	2012	01/12/2012	30/11/2014	24	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	JALIL BIN ALI	GUP	Tier 1	UTM	120,000.00
THERMOLUMINATION PROPERTIES OF DOPED AL2O3 THIN FILM DOSEMETRY SUBJECTED TO IONIZING RADIATION	2012	01/12/2012	31/12/2014	25	Physical Sciences	SUSTAINABILITY	RESOURCE SUSTAINABILITY	HUSIN BIN WAGIRAN	GUP	Tier 1	UTM	90,000.00
KAJIAN IMPLIKASI RISIKO RADIOLOGI TERHADAP ISKANDAR MALAYSIA DARIPADA PEMBINAAN REAKTOR NUKLEAR TORIUM DI	2012	01/12/2012	31/12/2014	25	Applied Sciences and Technology	SUSTAINABILITY	RESOURCE SUSTAINABILITY	AHMAD TERMIZI BIN RAMLI	GUP	Tier 1	UTM	86,000.00
COMPUTATION OF STICKER SYSTEM IN DNA OVER GROUPS	2012	01/12/2012	31/12/2013	13	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	FONG WAN HENG	GUP	Tier 2	UTM	32,000.00
A MECHANISTIC MODEL OF HIGH DOSE IRRADIATION DAMAGE	2012	01/12/2012	31/12/2013	13	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	FUAADA BT MOHD SIAM	GUP	Tier 2	UTM	32,000.00
CHARACTERIZATION OF TIN-DOPED ZINC OXIDE NANOBELTS	2012	01/12/2012	31/12/2013	13	Material Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	SAMSUDI BIN SAKRANI	GUP	Tier 2	UTM	32,000.00
STUDY OF LASER INDUCED COULOMB EXPLOSION BY GOLD NANOPARTICLE USING NANOPHOTOLYSIS TECHNIQUE FOR	2012	01/12/2012	31/12/2014	25	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	MOHAMMAD ALAM SAEED	GUP	Tier 1	UTM	67,600.00

Tajuk Projek Penyelidikan	Tahun Lulus Geran	Tarikh Mula	Tarikh Tamat 1	Tempoh (Bln)	Sektor (FOR Category)	Research Alliance	Research Alliance/Niche Area Baru	Ketua Projek Utama	Kategori Projek	Jenis Projek	Penaja	Peruntukan Diluluskan (RM)
MESOPOROUS MATERIALS MIXED MATRIX MEMBRANE FOR ELECTROMEMBRANE EXTRACTION OF PHARMACEUTICAL	2012	01/12/2012	31/12/2014	25	Chemical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	MOHD MARSIN BIN SANAGI	GUP	Tier 1	UTM	119,300.00
MAGNETITE SUPPORTED BIOSYNTHESED GOLD-PALLADIUM NANOMETALS AS CATALYST FOR OXIDATION REACTIONS	2012	01/12/2012	31/12/2014	25	Chemical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	MUSTAFFA BIN SHAMSUDDIN	GUP	Tier 1	UTM	103,800.00
REMOVAL OF OIL AND GREASE FROM ELECTRONIC EFFLUENT USING BIOLOGICAL APPROACH.	2012	01/12/2012	31/12/2014	25	Biotechnology	BIOTECHNOLOGY	HEALTH AND WELLNESS	WAN AZLINA BT AHMAD	GUP	Tier 1	UTM	200,000.00
NOVEL NANOPARTICLE IDENTIFICATION AND CLASSIFICATION SYSTEM FOR DRUG DELIVERY IN CANCER CELL	2012	01/12/2012	31/12/2013	13	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	NORMA BT ALIAS	GUP	Tier 2	UTM	32,000.00
DESIGN OF GRAPHENE-BASED MESOPOROUS MATERIALS AS PHOTOCATALYSTS FOR CONVERSION OF ORGANIC	2012	01/12/2012	31/12/2014	25	Material Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	LENY YULIATI	GUP	Tier 1	UTM	120,000.00
ESTIMATION OF STOCHASTIC VOLATILITY WITH LONG MEMORY	2012	01/12/2012	31/12/2013	13	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	ARIFAH BINTI BAHAR	GUP	Tier 2	UTM	32,000.00
TRANSITION METAL COIMPLEX FUNCTIONALIZED SILICA COVERED NANO MAGNETITE CATALYST FOR OXIDATION OF ALCOHOLS USING	2012	01/12/2012	31/12/2013	13	Chemical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	JON EFENDI	GUP	Tier 2	UTM	36,634.00
DYNAMIC OF BLOOD FLOW IN THE MICROCIRCULATION	2012	01/12/2012	31/12/2013	13	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	WAN RUKAIDA BINTI WAN ABDULLAH	GUP	Tier 2	UTM	32,000.00
WELL-ALIGNED TITANIA WITH HIGH LENGTH TO DIAMETER RATIO SYNTHESIZED UNDER MAGNETIC FIELD USING LIQUID CRYSTAL	2012	01/12/2012	01/12/2014	24	Chemical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	HADI NUR	GUP	Tier 1	UTM	120,000.00
ENHANCED OPTICAL ABSORPTION OF RARE EARTH DOPED METALLIC NANOGASSES FOR PLASMONIC SOLAR CELLS	2012	01/12/2012	31/12/2013	13	Physical Sciences	MATERIAL AND MANUFACTURING	FRONTIER MATERIALS	SIB KRISHNA GHOSHAL	GUP	Tier 2	UTM	50,000.00
FEMTOSECOND LASER ABLATION FOR MICRO AND NANO-STRUCTURATION	2012	01/12/2012	31/12/2014	25	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	HAZRI BIN BAKHTIAR	GUP	Tier 1	UTM	102,000.00
AN EFFECTIVE OUTLIER DETECTION METHOD FOR CLUSTER'S ANOMALOUS HEALTH SCIENCES DATA USING TCLUST.	2012	01/12/2012	31/12/2013	13	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	ROBIAH BT ADNAN	GUP	Tier 2	UTM	32,000.00
INVESTIGATION ON ROLE OF SILICA MATRIXES AS SUPPORT FOR TIO2-BASED PHOTOCATALYSTS	2012	01/12/2012	31/12/2014	25	Material Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	LEE SIEW LING	GUP	Tier 1	UTM	120,000.00

Tajuk Projek Penyelidikan	Tahun Lulus Geran	Tarikh Mula	Tarikh Tamat 1	Tempoh (Bln)	Sektor (FOR Category)	Research Alliance	Research Alliance/Niche Area Baru	Ketua Projek Utama	Kategori Projek	Jenis Projek	Penaja	Peruntukan Diluluskan (RM)
EFFECT OF CONTINUOUS THERAPEUTIC ULTRASOUND ON GROWTH OF TWO TYPE OF BREAST CANCER CELL LINES	2012	01/12/2012	31/12/2013	13	Medical and Health Sciences	BIOTECHNOLOGY	HEALTH AND WELLNESS	SITI PAULIENA BINTI MOHD BOHARI	GUP	Tier 2	UTM	50,000.00
TWO-STEP METHOD OF STRUCTURAL PARAMETER ESTIMATION OF SDE	2012	01/12/2012	31/12/2013	13	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	HALIZA BT ABD RAHMAN	GUP	Tier 2	UTM	32,000.00
PHYTOCHEMICALS AND BIOACTIVITIES OF THREE WILD MEDANG (B. PAHANGENSIS, B. TONKINENSIS AND B. BREVIPES)	2012	01/12/2012	31/12/2014	25	Chemical Sciences	BIOTECHNOLOGY	HEALTH AND WELLNESS	FAREDIAH BT AHMAD	GUP	Tier 1	UTM	200,000.00
RARE-EARTH DOPED TERNARY SULFIDE-BASED CERAMICS PHOSPHOR	2012	01/12/2012	31/12/2014	25	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	ROSLI BIN HUSSIN	GUP	Tier 1	UTM	88,000.00
PROTEIN STRUCTURAL PREDICTIONS/FUNCTION BY COMPUTATIONAL STUDIES AND SITE DIRECTED MUTAGENESIS OF	2012	01/12/2012	31/12/2014	25	Biological Sciences	BIOTECHNOLOGY	HEALTH AND WELLNESS	FAHRUL ZAMAN BIN HUYOP	GUP	Tier 1	UTM	120,000.00
NANOPARTICLES/GRAPHENE NANOCOMPOSITES FOR SUPERCAPACITOR APPLICATIONS	2012	01/12/2012	31/12/2014	25	Material Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	HENDRIK OKTENDY LINTANG	GUP	Tier 1	UTM	102,000.00
BIOHYDROGEN GENERATION FROM STARCH-CONTAINING WASTEWATER USING BACTERIA ISOLATED FROM LOCAL SOURCES	2012	01/12/2012	31/12/2013	13	Biological Sciences	SUSTAINABILITY	RESOURCE SUSTAINABILITY	MOHD FIRDAUS BIN ABDUL WAHAB	GUP	Tier 2	UTM	32,000.00
APPLICATION OF THE PARALLEL MULTISCALE ELEMENT FREE GALERKIN METHOD (EFG) IN 2-D SHAPE MEMORY ALLOY (SMA)	2012	01/12/2012	31/12/2013	13	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	YEAK SU HOE	GUP	Tier 2	UTM	32,000.00
DEVELOPMENT OF XENON FLASHLAMP AND KRYPTON FLASHLAMP AND THEIR EFFECTIVENESS IN REDUCING	2012	01/12/2012	30/11/2013	12	Biotechnology	NANOTECHNOLOGY	FRONTIER MATERIALS	ABD RAHMAN BIN TAMURI	GUP	Tier 2	UTM	32,000.00
FORMULATION OF ANTI-ULCER CAPSULE FROM POLYGONUM MINUS (KESUM) EXTRACT	2012	01/12/2012	31/12/2014	25	Medical and Health Sciences	BIOTECHNOLOGY	HEALTH AND WELLNESS	SALEHUDDIN BIN HAMDAN	GUP	Tier 1	UTM	200,000.00
SYNTHESIS OF DEFECT-FREE INGAAS NANOWIRES USING MOCVD	2012	01/12/2012	31/12/2013	13	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	DWI GUSTIONO RIBAN	GUP	Tier 2	UTM	32,000.00
VIBRATION ANALYSIS OF CROSS AND ANGLE-PLY PLATES OF VARIABLE THICKNESS	2012	01/12/2012	31/12/2013	13	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	KODAKKAL KANNAN VISWANATHAN	GUP	Tier 2	UTM	32,000.00
ONLINE SCHEDULING IN PARALLEL PROCESSOR SYSTEM	2012	01/12/2012	31/12/2013	13	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	SYARIFAH ZYURINA BINTI NORDIN	GUP	Tier 2	UTM	32,000.00

Tajuk Projek Penyelidikan	Tahun Lulus Geran	Tarikh Mula	Tarikh Tamat 1	Tempoh (Bln)	Sektor (FOR Category)	Research Alliance	Research Alliance/Niche Area Baru	Ketua Projek Utama	Kategori Projek	Jenis Projek	Penaja	Peruntukan Diluluskan (RM)
SYNTHESIS AND CHARACTERISATION OF NOVEL BIOLOGICAL LIKE APATITES FOR ORTHOPEDIC APPLICATIONS	2012	01/12/2012	31/12/2014	25	Material Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	RAFAQAT HUSSAIN	GUP	Tier 1	UTM	120,000.00
THE NONABELIAN TENSOR SQUARES AND HOMOLOGICAL FUNCTORS OF ALL GROUPS OF ORDER P^3Q	2012	01/12/2012	31/12/2014	25	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	NOR HANIZA BT. SARMIN	GUP	Tier 1	UTM	102,000.00
DFT STUDY OF III-V ALLOYS: PROSPECTIVE MATERIALS FOR THE APPLICATIONS IN OPTOELECTRONIC DEVICES	2012	01/12/2012	31/12/2014	25	Material Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	RASHID AHMED	GUP	Tier 1	UTM	88,000.00
LASER SURFACE ALLOYING ON ALUMINUM	2012	01/12/2012	31/12/2014	25	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	NORIAH BT BIDIN	GUP	Tier 1	UTM	120,000.00
NOVEL SOL-GEL MATERIALS FOR ANALYSIS OF BIOMARKER COMPOUNDS OF LUNG CANCER	2012	01/12/2012	31/12/2014	25	Chemical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	WAN AINI BT WAN IBRAHIM	GUP	Tier 1	UTM	77,400.00
CHARACTERIZATION OF UNDOPED AND AL DOPED ZINC OXIDE THIN FILM PREPARED BY SOL-GEL METHOD	2012	01/12/2012	31/12/2013	13	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	KARIM BIN DERAMAN	GUP	Tier 2	UTM	32,000.00
UNSTEADY MIXED CONVECTION PAST AN ELLIPTIC CYLINDER	2012	01/12/2012	31/12/2013	13	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	ANATI BTE ALI	GUP	Tier 2	UTM	32,000.00
DESIGN AND SYNTHESIS OF CRO3-ZRO2 FOR ACID CATALYTIC REACTION	2012	01/12/2012	31/12/2014	25	Material Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	SUGENG TRIWAHYONO	GUP	Tier 1	UTM	120,000.00
MATHEMATICAL MODELING OF NON-NEWTONIAN FLUIDS WITH RAMPED WALL TEMPERATURE	2012	01/12/2012	31/12/2014	25	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	SHARIDAN BIN SHAFIE	GUP	Tier 1	UTM	88,200.00
MODELING DIOXIN FURAN EMISSION IN INCINERATION SYSTEM USING GRAPH THEORETICAL CONCEPT	2012	01/12/2012	31/12/2013	13	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	NORMAH BTE MAAN	GUP	Tier 2	UTM	32,000.00
THE RELATIVE COMMUTATIVITY DEGREE OF FINITE NILPOTENT GROUPS OF CLASS TWO	2012	01/12/2012	31/12/2013	13	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	NOR MUHAINIAH BINTI MOHD ALI	GUP	Tier 2	UTM	32,000.00
NOVEL PHOTONIC MATERIALS FOR DEVICE OPERATION IN THE NEAR- AND MID-INFRARED : BISMIDES, BISMIDES/NITRIDES AND	2012	01/12/2012	31/12/2014	25	Material Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	THOMAS JEFFREY COCKBURN HOSEA	GUP	Tier 1	UTM	102,000.00
GROWTH AND SPECTROSCOPIC CHARACTERISTICS OF ER3+-YBVO4 CRYSTAL	2012	01/12/2012	31/12/2013	13	Material Sciences	MATERIAL AND MANUFACTURING	FRONTIER MATERIALS	MD SUPAR BIN ROHANI	GUP	Tier 2	UTM	50,000.00

Tajuk Projek Penyelidikan	Tahun Lulus Geran	Tarikh Mula	Tarikh Tamat 1	Tempoh (Bln)	Sektor (FOR Category)	Research Alliance	Research Alliance/Niche Area Baru	Ketua Projek Utama	Kategori Projek	Jenis Projek	Penaja	Peruntukan Diluluskan (RM)
SPECTROMETER WAVELENGTH CALIBRATION USING FIBRE OPTIC WHITE LIGHT INTERFEROMETRY	2012	01/12/2012	31/12/2013	13	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	YUSOF BIN MUNAJAT	GUP	Tier 2	UTM	32,000.00
CRITICAL DEADLINE SCHEDULING OF DIRECTED CYCLIC GRAPHS FOR NETWORK OPTIMIZATION	2012	01/12/2012	31/12/2014	25	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	SHAHARUDDIN BIN SALLEH	GUP	Tier 1	UTM	70,000.00
ISOLATION AND IDENTIFICATION OF BIOACTIVE ESSENTIAL OILS AND PHYTOCHEMICALS FROM RARE SPECIES OF HORNSTEDTIA AND	2012	01/12/2012	31/12/2014	25	Chemical Sciences	BIOTECHNOLOGY	HEALTH AND WELLNESS	HASNAH BT MOHD SIRAT	GUP	Tier 1	UTM	200,000.00
CONSTRUCTION OF VARIABLE REPETITION RATE ER-YAG LASER SYSTEM	2012	01/12/2012	31/12/2013	13	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	ROSLINDA BINTI ZAINAL	GUP	Tier 2	UTM	32,000.00
LIQUID LEVEL DETECTION USING FIBER COUPLER SENSOR	2012	01/12/2012	31/12/2013	13	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	ASIAH BT YAHAYA	GUP	Tier 2	UTM	32,000.00
REPRESENTATION OF FINITE P-GROUPS	2012	01/12/2012	31/12/2013	13	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	HAMISAN BIN RAHMAT	GUP	Tier 2	UTM	32,000.00
OPTICAL SPIN MANIPULATION USING DARK-BRIGHT SOLITON BEHAVIORS IN A PANDA RING RESONATOR	2012	01/12/2012	31/12/2014	25	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	SAKTIOTO	GUP	Tier 1	UTM	102,000.00
FIBRE OPTIC SENSORS FOR REFRACTIVE INDEX OF LIQUIDS USING THE OTDR TECHNIQUE	2012	01/12/2012	31/12/2014	25	Applied Sciences and Technology	NANOTECHNOLOGY	FRONTIER MATERIALS	ROSLY BIN ABDUL RAHMAN	GUP	Tier 1	UTM	102,000.00
CONTINUOUS FLOW ELECTRO-DRIVEN EXTRACTION ACROSS CARRIER MEDIATED POLYMER INCLUSION MEMBRANE	2012	01/12/2012	31/12/2014	25	Chemical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	SEE HONG HENG	GUP	Tier 1	UTM	116,200.00
SPIRAL SLIT MAPS AND STRAIGHT LINE SLIT MAPS OF MULTIPLY CONNECTED REGIONS VIA THE GENERALIZED NEUMANN KERNEL	2012	01/12/2012	31/12/2014	25	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	ALI HASSAN BIN MOHAMED MURID	GUP	Tier 1	UTM	76,500.00
FABRICATION OF III-V SEMICONDUCTOR NANOWIRES ON SILICON SUBSTRATE FOR ELECTRONIC APPLICATIONS	2012	01/12/2012	31/12/2014	25	Applied Sciences and Technology	NANOTECHNOLOGY	FRONTIER MATERIALS	YUSSOF BIN WAHAB	GUP	Tier 1	UTM	102,000.00
CHARACTERISATION OF INGaP/GaAs QUANTUM DOTS HETEROSTRUCTURE FOR SOLAR CELLS FABRICATED USING METAL	2012	01/12/2012	31/12/2014	25	Applied Sciences and Technology	NANOTECHNOLOGY	FRONTIER MATERIALS	ZULKAFLI BIN OTHAMAN	GUP	Tier 1	UTM	97,900.00
DESIGN AND CONSTRUCTION OF COMPUTERIZED LASER CUTTER AND ENGRAVER	2012	01/12/2012	31/12/2013	13	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	YAACOB BIN MAT DAUD	GUP	Tier 2	UTM	32,000.00

Tajuk Projek Penyelidikan	Tahun Lulus Geran	Tarikh Mula	Tarikh Tamat 1	Tempoh (Bln)	Sektor (FOR Category)	Research Alliance	Research Alliance/Niche Area Baru	Ketua Projek Utama	Kategori Projek	Jenis Projek	Penaja	Peruntukan Diluluskan (RM)
MOLECULAR MECHANISMS OF PREVENTIVE AND THERAPEUTIC ACTIVITY OF PHALERIA MACROCARPA IN SKIN CANCER	2012	01/12/2012	31/12/2013	13	Chemical Sciences	BIOTECHNOLOGY	HEALTH AND WELLNESS	NORAZAH BINTI BASAR	GUP	Tier 2	UTM	50,000.00
SYNTHESIS OF NOVEL BICYCLIC COMPOUNDS: TOWARDS THE SYNTHESIS OF BIOACTIVE ANTI-TUMOR BLEPHAROCALYXIN	2012	01/12/2012	31/12/2013	13	Chemical Sciences	BIOTECHNOLOGY	HEALTH AND WELLNESS	JOAZAIZULFAZLI BIN JAMALIS	GUP	Tier 2	UTM	35,000.00
STUDY OF BREAST CANCER CELL DEATH MECHANISM TREATED WITH FLAVONOIDS FROM ARTOCARPUS LOWII	2012	01/12/2012	31/12/2013	13	Chemical Sciences	BIOTECHNOLOGY	HEALTH AND WELLNESS	SHAJARAHTUNNUR BINTI JAMIL	GUP	Tier 2	UTM	50,000.00
RATIONAL DESIGN OF A GEOBACILLUS SP. LIPASE FOR IMPROVED CATALYTIC PROPERTIES AND ENANTIOSELECTIVITY	2012	01/12/2012	31/12/2013	13	Biological Sciences	BIOTECHNOLOGY	HEALTH AND WELLNESS	ROSWANIRA BINTI AB. WAHAB	GUP	Tier 2	UTM	50,000.00
PREPARATION OF ZEOLITE GRANULAR EXTRUDATES FOR THE REMOVAL OF HUMIC SUBSTANCES FROM SOURCE RIVER WATER	2012	01/12/2012	31/12/2013	13	Chemical Sciences	WATER	RESOURCE SUSTAINABILITY	UMI KALTHOM BT AHMAD	GUP	Tier 2	UTM	50,000.00
MOLECULAR CLONING OF CARNITINE ACETYLTRANSFERASE (CAT) FROM PSYCHROPHILIC YEAST, GLACIOZYMA ANTARCTICA P112 BY	2012	01/12/2012	31/12/2013	13	Biotechnology	BIOTECHNOLOGY	HEALTH AND WELLNESS	FAEZAH BINTI MOHD SALLEH	GUP	Tier 2	UTM	43,900.00
PHOSPHATE NANO GLASSES: FROM PREPARATION TO CHARACTERIZATION	2012	01/12/2012	31/12/2013	13	Physical Sciences	MATERIAL AND MANUFACTURING	FRONTIER MATERIALS	RAMLI BIN ARIFIN	GUP	Tier 2	UTM	50,000.00
PROFILING OF EEG DATA DURING SEIZURE USING INDEPENDENT COMPONENT ANALYSIS (ICA)	2012	01/12/2012	31/12/2014	25	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	TAHIR BIN AHMAD	GUP	Tier 1	UTM	84,400.00
PHOTOCATALYTIC DEGRADATION OF POLYCHLORINATED BIPHENYL COMPOUNDS IN GREEN MUSSEL (PERNA VIRDIS)	2012	01/12/2012	31/12/2014	25	Chemical Sciences	SUSTAINABILITY	RESOURCE SUSTAINABILITY	WAN AZELEE BIN WAN ABU BAKAR	GUP	Tier 1	UTM	100,000.00
MICROWAVE INDUCED MOLYBDENUM CARBIDE FOR HYDROGENATION OF CARBON DIOXIDE	2012	01/12/2012	31/12/2014	25	Applied Sciences and Technology	SUSTAINABILITY	RESOURCE SUSTAINABILITY	ABD. RAHIM BIN YACOB	GUP	Tier 1	UTM	86,000.00
Theoretical study for the nanoclusters of germanium (Ge), gallium (Ga), aluminum (Al) and antimony (Sb) in the gas and	2013	01/03/2013	28/02/2014	12	Chemical Sciences	MATERIAL AND MANUFACTURING	FRONTIER MATERIALS	HASSAN H. ABDALLAH	GUP	PAS	UTM	30,000.00
ENHANCEMENT OF LIPID PRODUCTIVITY FOR BIODIESEL PRODUCTION BY NANNOCHLOROPSIS OCULATA	2012	01/12/2012	31/12/2013	13	Agricultural Sciences	SUSTAINABILITY	RESOURCE SUSTAINABILITY	HARYATI BINTI JAMALUDDIN	GUP	Tier 2	UTM	35,000.00
STUDY OF STRUCTURAL, ELECTRONIC AND OPTICAL PROPERTIES OF SPINEL COMPOUNDS BY MODIFIED BECKE-	2012	01/12/2012	31/12/2013	13	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	AHMAD RADZI BIN MAT ISA	GUP	Tier 2	UTM	32,000.00

Tajuk Projek Penyelidikan	Tahun Lulus Geran	Tarikh Mula	Tarikh Tamat 1	Tempoh (Bln)	Sektor (FOR Category)	Research Alliance	Research Alliance/Niche Area Baru	Ketua Projek Utama	Kategori Projek	Jenis Projek	Penaja	Peruntukan Diluluskan (RM)
BIODEGRADATION OF LIGNOCELLULOLYTIC BIOMASS USING TERMITE DIGESTION PATHWAY	2012	01/12/2012	31/12/2014	25	Biotechnology	SUSTAINABILIT Y	RESOURCE SUSTAINABILITY	MADIHAH BINTI MD SALLEH	GUP	Tier 1	UTM	86,000.00
MOLECLAR APPROACH FOR THE ANALYSIS OF EFFECTIVE MIX BACTERIAL CONSORTIUM IN TREATING REAL TEXTILE	2012	01/12/2012	31/12/2014	25	Environmental Sciences	SUSTAINABILIT Y	RESOURCE SUSTAINABILITY	ZAHARAH BT IBRAHIM	GUP	Tier 1	UTM	100,000.00
IDENTIFYING ELECTROCHEMICAL PROPERTIES OF AMINO ACID FUNCTIONALIZED ORDERED MESOPOROUS CARBON-BASED	2012	01/12/2012	31/12/2014	25	Chemical Sciences	NANOTECHNO LOGY	FRONTIER MATERIALS	SALASIAH BT ENDUD	GUP	Tier 1	UTM	112,000.00
Study of the effects of surface area and crystallinity of Hierarchical Mesoporous Titanium Dioxide Nanomaterial (MTN) on the surface	2013	01/04/2013	31/03/2015	24	Material Sciences	NANOTECHNO LOGY	FRONTIER MATERIALS	SUGENG TRIWAHYONO	Fundamental	FRGS	MOHE	79,000.00
Determination of fundamental electronic band structure of III-V semiconductors for improved infrared device performance	2013	01/04/2013	31/03/2015	24	Material Sciences	NANOTECHNO LOGY	FRONTIER MATERIALS	THOMAS JEFFREY COCKBURN HOSEA	Fundamental	FRGS	MOHE	83,000.00
Characterization and Fundamental Properties of Radiosensitive Borate Glass doped with Nano Gold Particles for Radiotherapeutic	2013	01/04/2013	31/03/2015	24	Material Sciences	SUSTAINABILIT Y	RESOURCE SUSTAINABILITY	SUHAIRUL BIN HASHIM	Fundamental	FRGS	MOHE	90,000.00
Temperature-controlled selectivity in oxidation of alkenes by using aqueous hydrogen peroxide by layer textile catalyst and its	2013	01/04/2013	31/03/2015	24	Chemical Sciences	NANOTECHNO LOGY	FRONTIER MATERIALS	HADI NUR	Fundamental	FRGS	MOHE	92,000.00
Spatio-Temporal Modeling of Rainfall Using Generalized Additive Model	2013	01/04/2013	31/03/2015	24	Mathematical Sciences	WATER	RESOURCE SUSTAINABILITY	SHARIFFAH SUHAILA BINTI SYED JAMALUDIN	Fundamental	FRGS	MOHE	61,000.00
Synthesis, Characterization and Evaluation of Agarose and Poly(methy methacrylate) grafted Carbon Nanotubes for extraction of	2013	01/04/2013	31/03/2015	24	Chemical Sciences	NANOTECHNO LOGY	FRONTIER MATERIALS	MOHD MARSIN BIN SANAGI	Fundamental	FRGS	MOHE	127,900.00
THE ABSORPTION OF TERAHERTZ RADIATION FIELD REGIME FOR CANCER ANALYSIS AS MEDICAL DIAGNOSIS TOOL	2013	01/04/2013	31/03/2015	24	Applied Sciences and Technology	NANOTECHNO LOGY	FRONTIER MATERIALS	YUSOF BIN MUNAJAT	Fundamental	FRGS	MOHE	100,000.00
INCULCATING 5S METHODOLOGY TO CREATE CONDUCTIVE WORK PLACE IN RESEARCH MANAGEMENT CENTRE NG	2012	01/09/2012	31/08/2013	12	Economic,Business and Management	NANOTECHNO LOGY	FRONTIER MATERIALS	SALASIAH BT ENDUD	GUP	Innovation Encouragment	UTM	10,000.00
Development of Models For The Optimal Urban Planning Based on Geographical and Land Price Characteristics	2013	01/04/2013	31/03/2015	24	Mathematical Sciences	NANOTECHNO LOGY	FRONTIER MATERIALS	ROHANIN BT AHMAD	Fundamental	FRGS	MOHE	70,000.00
SYNTHESIS AND VOLTAMMETRIC STUDIES OF NEW SCHIFF BASE LIGANDS FOR THE DETECTION OF METAL IONS	2013	01/04/2013	31/03/2015	24	Chemical Sciences	SUSTAINABILIT Y	RESOURCE SUSTAINABILITY	RAHMALAN BIN AHAMAD	Fundamental	FRGS	MOHE	70,300.00

Tajuk Projek Penyelidikan	Tahun Lulus Geran	Tarikh Mula	Tarikh Tamat 1	Tempoh (Bln)	Sektor (FOR Category)	Research Alliance	Research Alliance/Niche Area Baru	Ketua Projek Utama	Kategori Projek	Jenis Projek	Penaja	Peruntukan Ditoluskan (RM)
SIMULTANEOUS SENSING AND IMAGING OF TEMPERATURE USING PHOSPHORESCENT MESOPOROUS SILICA NANOSENSORS	2013	01/04/2013	31/03/2015	24	Material Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	HENDRIK OKTENDY LINTANG	Fundamental	FRGS	MOHE	89,000.00
Production of Green Diesel using Oxidative Desulfurization Reaction in Presence of Supported Manganese-Molybdenum Oxides	2013	01/04/2013	31/03/2015	24	Chemical Sciences	SUSTAINABILITY	RESOURCE SUSTAINABILITY	WAN AZELEE BIN WAN ABU BAKAR	Fundamental	FRGS	MOHE	95,500.00
ION RECOGNITION STUDY FOR CHEMICAL PROFILING OF PYROTECHNIC EXPLOSIVES VIA ION EXCHANGE SOLID PHASE	2013	01/04/2013	31/03/2015	24	Chemical Sciences	WATER	RESOURCE SUSTAINABILITY	UMI KALTHOM BT AHMAD	Fundamental	FRGS	MOHE	88,000.00
synthesis gold nanoparticles via synchrotron radiation	2013	01/04/2013	31/03/2014	12	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	NORIAH BT BIDIN	GUP	Flagship	UTM	200,000.00
THE HOMOLOGICAL FUNCTORS OF SOME BIEBERBACH GROUPS WITH DIHEDRAL POINT GROUP	2013	01/04/2013	31/03/2015	24	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	NOR HANIZA BT. SARMIN	GUP	Matching Grant (RACE)	UTM	25,000.00
CHARACTERIZATION OF NITROGEN DOPED DIAMOND THIN FILMS GROWN BY DIRECT CURRENT PLASMA-ENHANCED CHEMICAL	2012	01/12/2012	31/12/2013	13	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	WAN NURULHUDA BT WAN SHAMSURI	GUP	Tier 2	UTM	50,000.00
Integrating BLOSSOMS as a Pedagogical Tool for Interactive Instruction in Promoting and Facilitating Students Thinking Skills	2013	01/04/2013	31/03/2014	12	Social Sciences	K-ECONOMY	SMART DIGITAL COMMUNITY	YUDARIAH BT MOHAMMAD YUSOF	GUP	Flagship	UTM	30,000.00
Optimization of Protein Meal Production from EM-Fermented Prawn Waste for Aquaculture Feed Applications using a stirred vertical	2013	01/06/2013	31/05/2015	24	Biotechnology	BIOTECHNOLOGY	HEALTH AND WELLNESS	ZAINOHA BT ZAKARIA	Exploration	ERGS	MOHE	140,000.00
Conformal Mapping Software for Medical Image Processing using Integral Equations with Generalized Neumann Kernel	2013	01/04/2013	31/03/2014	12	Medical and Health Sciences	K-ECONOMY	SMART DIGITAL COMMUNITY	ALI HASSAN BIN MOHAMED MURID	GUP	Flagship	UTM	123,000.00
Kautz graph characterization of multicolumn channels and switches for optimal channel assignments in cellular network systems	2013	01/04/2013	31/03/2014	12	Mathematical Sciences	K-ECONOMY	SMART DIGITAL COMMUNITY	SHAHARUDDIN BIN SALLEH	GUP	Flagship	UTM	113,000.00
Electrochemical Study of Amino-Group Functionalized SBA-15 Impedance Biosensor	2013	01/04/2013	31/03/2015	24	Chemical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	SALASIAH BT ENDUD	Fundamental	FRGS	MOHE	100,000.00
Fractional Flow Reserve (FFR) of non-Newtonian blood flow in coronary artery with irregular stenosis	2013	01/04/2013	31/03/2014	12	Mathematical Sciences	K-ECONOMY	SMART DIGITAL COMMUNITY	NORZIEHA BINTI MUSTAPHA	GUP	Flagship	UTM	122,500.00
Stochastic Model for Groundwater Transport Flow in Peninsular Malaysia	2013	01/04/2013	31/03/2014	12	Mathematical Sciences	K-ECONOMY	SMART DIGITAL COMMUNITY	ARIFAH BINTI BAHAR	GUP	Flagship	UTM	107,000.00

Tajuk Projek Penyelidikan	Tahun Lulus Geran	Tarikh Mula	Tarikh Tamat 1	Tempoh (Bln)	Sektor (FOR Category)	Research Alliance	Research Alliance/Niche Area Baru	Ketua Projek Utama	Kategori Projek	Jenis Projek	Penaja	Peruntukan Diluluskan (RM)
Airlines On-Time Performance Through Integrated Aircraft Routing and Crew Scheduling	2013	01/04/2013	31/03/2014	12	Mathematical Sciences	K-ECONOMY	SMART DIGITAL COMMUNITY	ZAITUL MARLIZAWATI BT ZAINUDDIN	GUP	Flagship	UTM	70,500.00
Mathematical Modelling Of River Pollution Problem by Determining the Level of Dissolved Oxygen and Pollutant Concentration	2013	01/04/2013	31/03/2014	12	Mathematical Sciences	K-ECONOMY	SMART DIGITAL COMMUNITY	ZAINAL BIN ABDUL AZIZ	GUP	Flagship	UTM	50,000.00
Low gravity fluid flows and heat transfer	2013	01/04/2013	31/03/2014	12	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	NORSARAHADA BT SAIDINA AMIN	GUP	Flagship	UTM	84,000.00
INVESTIGATION ON THE EFFECTS OF AMIDE GROUP SUBSTITUENTS ON THE GELLING ABILITY OF TROPONOID LIQUID CRYSTALS	2013	01/06/2013	31/05/2015	24	Material Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	CHE ROZID BIN MAMAT	Exploration	ERGS	MOHE	86,600.00
MECHANISTIC STUDY FOR THE REMOVAL OF NAPHTHENIC ACIDS FROM PETROLEUM CRUDE OIL UTILIZING BASIC CHEMICAL AND	2013	01/04/2013	31/03/2015	24	Chemical Sciences	WATER	RESOURCE SUSTAINABILITY	JAFARIAH BT JAAFAR	Fundamental	FRGS	MOHE	87,000.00
A STOCHASTIC MODEL FOR PREDICTING THE OUTCOME OF PROFESSIONAL SQUASH MATCHES	2013	01/04/2013	31/03/2014	12	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	MOHD ISMAIL BIN ABD AZIZ	GUP	Flagship	UTM	50,000.00
Exploratory Spatio Temporal Library in Observing the large scope Ocean circulation and Movement for Sensor Grid Based on CPU-GPU	2013	01/06/2013	31/05/2016	37	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	NORMA BT ALIAS	Exploration	ERGS	MOHE	89,000.00
Teaching old enzymes new tricks: Finding new purposes for Candida rugosa lipase through combinatorial chemical and	2013	01/06/2013	31/05/2016	37	Biotechnology	BIOTECHNOLOGY	HEALTH AND WELLNESS	ROSWANIRA BINTI AB. WAHAB	Exploration	ERGS	MOHE	137,000.00
Production of Chemical Markers (Sinensetin & Eupatorin) from Orthosiphon stamineus and (Eurycomanone & 9-	2013	20/06/2013	30/06/2015	25	Chemical Sciences	BIOTECHNOLOGY	HEALTH AND WELLNESS	HASNAH BT MOHD SIRAT	Technofund MOA	NRGS	MOA	890,000.00
Dependence of organic ion transport profiles on nature of polymer inclusion membranes composition under strong electric	2013	01/04/2013	31/03/2015	24	Chemical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	SEE HONG HENG	Fundamental	FRGS	MOHE	88,000.00
STOCHASTIC LOGISTIC MODEL WITH TIME DELAY OF SOLVENT PRODUCTION BY C. ACETOBUTYLICUM P262	2013	01/04/2013	31/03/2015	24	Mathematical Sciences	K-ECONOMY	SMART DIGITAL COMMUNITY	ARIFAH BINTI BAHAR	GUP	Matching Grant (RACE)	UTM	25,000.00
Synthesis and characterization of graphene-cellulose nanocrystal aerogel.	2013	01/04/2013	31/03/2015	24	Chemical Sciences	WATER	RESOURCE SUSTAINABILITY	ZAITON BT ABDUL MAJID	Fundamental	FRGS	MOHE	86,000.00
Flexural Vibration of anti-symmetric angle-ply laminated circular cylindrical walls of constant and variable thickness	2013	01/04/2013	31/03/2014	12	Mathematical Sciences	K-ECONOMY	SMART DIGITAL COMMUNITY	KODAKKAL KANNAN VISWANATHAN	GUP	Flagship	UTM	84,000.00

Tajuk Projek Penyelidikan	Tahun Lulus Geran	Tarikh Mula	Tarikh Tamat 1	Tempoh (Bln)	Sektor (FOR Category)	Research Alliance	Research Alliance/Niche Area Baru	Ketua Projek Utama	Kategori Projek	Jenis Projek	Penaja	Peruntukan Diluluskan (RM)
DEVELOPMENT AND APPLICATION OF AGAROSE GEL MEMBRANE MICROEXTRACTION FOR REMOVAL AND ANALYSIS OF	2013	01/05/2013	30/04/2015	24	Chemical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	MOHD MARSIN BIN SANAGI	Sciencefund	SF	MOSTI	125,640.00
Nonlinear Transversely Isotropic Constitutive Equation for Biological Tissues	2013	01/04/2013	31/03/2015	24	Material Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	MAHAD BIN AYEM	Fundamental	FRGS	MOHE	116,500.00
SOUTHEAST ASIAN WATER CHALLENGE	2013	01/05/2013	31/01/2014	9	Social Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	MOHD ISMAIL BIN ABD AZIZ	Others	Others	UNIVERSITI SAINS MALAYSIA	200,000.00
PROTOTYPE DIODE PUMPED SOLID STATE LASER DEVICES	2013	01/08/2013	31/07/2015	24	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	NORIAH BT BIDIN	Prototaip	PRGS	MOHE	156,000.00
Green Technology Utilizing Catalytic Methanation for the Carbon Dioxide Treatment of Coal Burning Power Plant Flue Gasses	2013	01/06/2013	30/05/2015	24	Chemical Sciences	SUSTAINABILITY	RESOURCE SUSTAINABILITY	RUSMIDAH BT ALI	Sciencefund	SF	MOSTI	255,080.00
Development of prototype for the detoxification of hexavalent chromium using improvised ChromeBac™ system incorporated	2013	01/08/2013	31/07/2015	24	Biotechnology	BIOTECHNOLOGY	HEALTH AND WELLNESS	ZAINUL AKMAR BIN ZAKARIA	Prototaip	PRGS	MOHE	234,000.00
SUARA HATI JOHOR	2013	01/06/2013	31/05/2014	12	Social Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	MOHD ISMAIL BIN ABD AZIZ	Others	Others	UNIT PERANCANG EKONOMI JOHOR	200,000.00
STUDY OF BROADBAND GAIN FOR AlGaAs/GaAs THz QUANTUM CASCADE LASER GROWTH USING METAL ORGANIC CHEMICAL	2013	16/12/2013	15/12/2015	24	Physical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	MOHD KHALID BIN KASMIN	Fundamental	FRGS	MOHE	105,000.00
NEW EXACT SOLUTIONS FOR A NON-NEWTONIAN WALTERS-B FLUID WITH HEAT AND MASS TRANSFER ANALYSIS	2013	16/12/2013	15/12/2015	24	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	SHARIDAN BIN SHAFIE	Fundamental	FRGS	MOHE	82,300.00
PHYSICAL AND TRANSPORT PROPERTIES OF POLY (ETHER ETHER KETONE) / GRAPHENE NANOCOMPOSITE FOR DIRECT	2013	16/12/2013	15/12/2015	24	Material Sciences	MATERIAL AND MANUFACTURING	FRONTIER MATERIALS	MADZLAN BIN AZIZ	Fundamental	FRGS	MOHE	112,000.00
GENERAL TIME SERIES MODELLING FOR STATISTICAL PROCESS CONTROL	2013	16/12/2013	15/12/2015	24	Mathematical Sciences	K-ECONOMY	SMART DIGITAL COMMUNITY	ZUHAIMY BIN HAJI ISMAIL	Fundamental	FRGS	MOHE	75,000.00
Topological Kriging and canonical correlation analysis for design flood prediction in ungauged catchments	2013	16/12/2013	15/12/2015	24	Mathematical Sciences	WATER	RESOURCE SUSTAINABILITY	ANI BIN SHABRI	Fundamental	FRGS	MOHE	70,000.00
SYNTHESIS OF PRENYLATED CHALCONES AND THEIR DERIVATIVES FROM ARTOCARPUS LOWII WITH ANTIPROLIFERATIVE	2013	16/12/2013	15/12/2015	24	Chemical Sciences	BIOTECHNOLOGY	HEALTH AND WELLNESS	SHAJARAHTUNNUR BINTI JAMIL	Fundamental	FRGS	MOHE	93,000.00

Tajuk Projek Penyelidikan	Tahun Lulus Geran	Tarikh Mula	Tarikh Tamat 1	Tempoh (Bln)	Sektor (FOR Category)	Research Alliance	Research Alliance/Niche Area Baru	Ketua Projek Utama	Kategori Projek	Jenis Projek	Penaja	Peruntukan Diluluskan (RM)
TAILORED CHRYSIN-FUNCTIONALIZED MAGNETIC NANOPARTICLES AS SORBENT FOR SOLID PHASE EXTRACTION OF	2013	16/12/2013	15/12/2015	24	Chemical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	WAN AINI BT WAN IBRAHIM	Fundamental	FRGS	MOHE	92,200.00
SPECTROSCOPIC ENHANCEMENT OF ER3+ NANOPARTICLES CO-DOPED NANOGLASS	2013	16/12/2013	15/12/2015	24	Material Sciences	MATERIAL AND MANUFACTURING	FRONTIER MATERIALS	MD RAHIM BIN SAHAR	Fundamental	FRGS	MOHE	110,000.00
Forecasting Rainfall Time series using Bayesian-based approach combined with linear and nonlinear models.	2013	16/12/2013	15/12/2015	24	Mathematical Sciences	NANOTECHNOLOGY	FRONTIER MATERIALS	FADHILAH BINTI YUSOF	Fundamental	FRGS	MOHE	65,000.00
Approximate Analytical Solutions Of Magnetohydrodynamics Rotating Flow Of Third And Fourth Grade Fluids In Porous Space	2013	16/12/2013	15/12/2016	37	Mathematical Sciences	K-ECONOMY	SMART DIGITAL COMMUNITY	ZAINAL BIN ABDUL AZIZ	Fundamental	FRGS	MOHE	110,000.00
Structure Properties Relationship of Novel low cost fermented Chitin Nanowhiskers Reinforced Polylactide Biocomposites	2013	16/12/2013	15/12/2015	24	Material Sciences	BIOTECHNOLOGY	HEALTH AND WELLNESS	ZAINOHA BT ZAKARIA	Fundamental	FRGS	MOHE	88,600.00
CHARACTERIZATION OF RARE EARTH DOPED LITHIUM NIOBATE (RE:LiNbO3) SINGLE CRYSTAL GROWN BY CZOCHRALSKI METHOD	2013	16/12/2013	15/12/2015	24	Material Sciences	MATERIAL AND MANUFACTURING	FRONTIER MATERIALS	MD SUPAR BIN ROHANI	Fundamental	FRGS	MOHE	81,000.00
TITANIUM NANOPARTICLES ASSISTED MODIFICATION IN STRUCTURAL AND OPTICAL PROPERTIES OF RARE EARTH	2014	01/04/2014	31/03/2016	24	PHYSICAL SCIENCES	MATERIAL AND MANUFACTURING	FRONTIER MATERIALS	SIB KRISHNA GHOSHAL	GUP	Tier 1	UTM	80,000.00
THE PHYSICAL AND OPTICAL CHARACTERISTIC OF ERBIUM DOPED MAGNESIUM ANTIMONY PHOSPHATE GLASS EMBEDDED	2014	01/04/2014	31/03/2016	24	PHYSICAL SCIENCES	MATERIAL AND MANUFACTURING	FRONTIER MATERIALS	MD RAHIM BIN SAHAR	GUP	Tier 1	UTM	80,000.00
SYNTHESIS AND BIOASSAY TESTS OF NOVEL BIOACTIVE HETEROCYCLIC COMPOUNDS CONTAINING OXYGEN.	2014	01/04/2014	31/03/2016	24	CHEMICAL SCIENCES	BIOTECHNOLOGY	HEALTH AND WELLNESS	JOAZAIZULFAZLI BIN JAMALIS	GUP	Tier 1	UTM	47,500.00
DEVELOPMENT OF NOVEL GRAPHENE OXIDE NANOCOMPOSITE HYBRIDS FOR WATER TREATMENT APPLICATION	2014	01/04/2014	31/03/2016	24	APPLIED SCIENCES AND TECHNOLOGIES	MATERIAL AND MANUFACTURING	FRONTIER MATERIALS	MADZLAN BIN AZIZ	GUP	Tier 1	UTM	100,000.00
FIRST PRINCIPLES STUDY OF STRUCTURAL, ELECTRONIC AND OPTICAL PROPERTIES OF THIO AND OXIDES SPINEL COMPOUNDS FOR	2014	01/04/2014	31/03/2016	24	PHYSICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	MOHAMMAD ALAM SAEED	GUP	Tier 1	UTM	60,000.00
FIRST PRINCIPLES COMPUTATIONAL MODELING STUDY OF THE NOVEL ORGANIC SEMICONDUCTORS MATERIALS TO SEARCH FOR	2014	01/04/2014	31/03/2016	24	MATERIAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	RASHID AHMED	GUP	Tier 1	UTM	60,000.00
FUZZY STATE SPACE MODEL TO FUZZY AUTOCATALYTIC SET VIA TRANSFORMATION OF CLINICAL WASTE INCINERATION PROCESS	2014	01/04/2014	31/03/2016	24	MATHEMATICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	TAHIR BIN AHMAD	GUP	Tier 1	UTM	45,100.00

Tajuk Projek Penyelidikan	Tahun Lulus Geran	Tarikh Mula	Tarikh Tamat 1	Tempoh (Bln)	Sektor (FOR Category)	Research Alliance	Research Alliance/Niche Area Baru	Ketua Projek Utama	Kategori Projek	Jenis Projek	Penaja	Peruntukan Diluluskan (RM)
RECOVERY OF LEAD AND ZINC FROM ELECTRONIC WASTE BY USING MODIFIED BANANA STEM FIBRE FOR PRECURSOR OF ACID-	2014	01/04/2014	31/03/2016	24	MATERIAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	SUGENG TRIWAHYONO	GUP	Tier 1	UTM	60,000.00
FUNDAMENTAL INVESTIGATION OF GRAPH THEORETIC PROPERTIES IN PROBABILITY OF GROUPS	2014	01/04/2014	31/03/2016	24	MATHEMATICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	NOR MUHAINIAH BINTI MOHD ALI	GUP	Tier 1	UTM	45,100.00
SUCCESSIONAL PATTERNS OF NECROPHAGOUS INSECTS INFESTING RABBIT CARCASSES DECOMPOSING IN VARIOUS	2014	01/04/2014	31/03/2015	12	BIOLOGICAL SCIENCES	BIOTECHNOLOGY	HEALTH AND WELLNESS	NAJI ARAFAT BIN HAJI MAHAT	GUP	EG	UTM	45,000.00
SOLVING TIME DEPENDENT VEHICLE ROUTING PROBLEM WITH DUE DATES USING METAHEURISTIC ALGORITHMS	2014	01/04/2014	30/06/2015	15	SOCIAL SCIENCE	NANOTECHNOLOGY	FRONTIER MATERIALS	FARHANA BT JOHAR	GUP	EG	UTM	28,040.00
MATHEMATICAL STRUCTURE OF NON POLAR CEEG (NPCEEG) AND ABILITY TEST IN EPILEPSY (ATIE) DURING EPILEPTIC SEIZURE	2014	01/04/2014	30/06/2015	15	MATHEMATICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	AMIDORA BINTI IDRIS	GUP	EG	UTM	28,040.00
OPTIMAL CONTROL OF VECTOR-BORNE DISEASE IN METAPOPOPULATION	2014	01/04/2014	30/06/2015	15	MATHEMATICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	RASHIDAH BT AHMAD	GUP	EG	UTM	28,040.00
PARALLEL MULTISCALE FAST MULTIPOLE WITH BOUNDARY ELEMENT METHOD FOR LAPLACE EQUATIONS	2014	01/04/2014	31/03/2015	12	MATHEMATICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	MUNIRA BT ISMAIL	GUP	EG	UTM	28,040.00
A NOVEL ALGORITHM OF A GRAVITATIONAL MODULATION INDUCED BY CONVECTION OVER AN INCLINED STRETCHING PLATE	2014	01/04/2014	31/03/2015	12	MATHEMATICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	MUKHETA BIN ISA	GUP	EG	UTM	28,040.00
PHYTOCHEMICALS FROM CALOPHYLLUM SYMINGTONIANUM WITH ANTI-ACETYLCHOLINESTERASE AND ANTI-	2014	01/04/2014	31/03/2016	24	CHEMICAL SCIENCES	BIOTECHNOLOGY	HEALTH AND WELLNESS	FAREDIAH BT AHMAD	GUP	Tier 1	UTM	50,000.00
SOLUTION OF DELAY DIFFERENTIAL EQUATION USING SYMMETRY ANALYSIS	2014	01/04/2014	31/03/2016	24	MATHEMATICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	NORMAH BTE MAAN	GUP	Tier 1	UTM	45,100.00
ISOLATION AND IDENTIFICATION OF BIOACTIVE PHYTOCHEMICALS FROM ARTOCARPUS SCORTECHINII	2014	01/04/2014	31/03/2016	24	CHEMICAL SCIENCES	BIOTECHNOLOGY	HEALTH AND WELLNESS	SHAJARAHTUNNUR BINTI JAMIL	GUP	Tier 1	UTM	55,000.00
OPTICAL ABSORPTION PROPERTIES OF BIOLOGICAL TISSUE USING TERAHERTZ RADIATION REGIME IN MEDICAL APPLICATION	2014	01/04/2014	31/03/2016	24	PHYSICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	YUSOF BIN MUNAJAT	GUP	Tier 1	UTM	60,000.00
ROLE OF MIXED ALKALI IN BIOGLASS 4555 STRUCTURE BY MOLECULAR DYNAMICS SIMULATION	2014	01/04/2014	31/03/2016	24	MATERIAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	AMIRUDDIN BIN SHAARI	GUP	Tier 1	UTM	45,100.00

Tajuk Projek Penyelidikan	Tahun Lulus Geran	Tarikh Mula	Tarikh Tamat 1	Tempoh (Bln)	Sektor (FOR Category)	Research Alliance	Research Alliance/Niche Area Baru	Ketua Projek Utama	Kategori Projek	Jenis Projek	Penaja	Peruntukan Ditoluliskan (RM)
EXACT SOLUTIONS FOR UNSTEADY MHD FREE CONVECTION FLOWS WITH ARBITRARY SHEAR STRESS AT THE WALL	2014	01/04/2014	31/03/2016	24	MATHEMATICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	SHARIDAN BIN SHAFIE	GUP	Tier 1	UTM	60,000.00
COMPARISON BETWEEN CLASSICAL AND BAYESIAN MULTIPLE GROUP NONLINEAR STRUCTURAL EQUATION MODELS OF ORDERED	2014	01/04/2014	31/03/2016	24	MATHEMATICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	ROBIAH BT ADNAN	GUP	Tier 1	UTM	45,100.00
MESOPOROUS SODALITE AS BASIC CATALYST IN KNOEVENAGEL REACTION	2014	01/04/2014	31/12/2015	21	CHEMICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	ZAINAB BT RAMLI	GUP	Tier 1	UTM	39,173.00
APPLICATION OF THE PARALLEL MULTISCALE LOCALIZED DIFFERENTIAL QUADRATURE METHOD (LDQ) IN 2-D SHAPE	2014	01/04/2014	30/04/2015	13	MATHEMATICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	CHE LOKMAN BIN JAAFAR	GUP	EG	UTM	28,040.00
SPATIAL MODELING AND INTERPOLATION USING COPULAS	2014	01/04/2014	31/03/2016	24	ENVIRONMENTAL SCIENCES	WATER	RESOURCE SUSTAINABILITY	SHARIFFAH SUHAILA BINTI SYED JAMALUDIN	GUP	Tier 1	UTM	40,000.00
THE USE OF THERMOPHILIC AND MESOPHILIC CONSORTIUM FOR THE BIOREDUCTION AND BIOSORPTION OF CHROMIUM (VI)	2014	01/04/2014	31/03/2016	24	BIOTECHNOLOGY	BIOTECHNOLOGY	HEALTH AND WELLNESS	WAN AZLINA BT AHMAD	GUP	Tier 1	UTM	65,000.00
MICROENCAPSULATION OF BENZOIC ACID USING NATIVE TAPIOCA STARCH	2014	01/04/2014	30/06/2015	15	CHEMICAL SCIENCES	SUSTAINABILITY	RESOURCE SUSTAINABILITY	AZLI BIN SULAIMAN	GUP	EG	UTM	30,000.00
CHARACTERIZATION OF A TAILOR-MADE OPTICAL FIBRES FOR COMPUTED TOMOGRAPHY (CT)DOSIMETRY SYSTEM	2014	01/04/2014	31/03/2015	12	NUCLEAR SCIENCES	SUSTAINABILITY	RESOURCE SUSTAINABILITY	SUHAIRUL BIN HASHIM	GUP	Tier 1	UTM	50,000.00
STUDY ON THE DIFFERENT NANOFIBERS STRUCTURAL FORMATION USING VARIOUS SOLVENT SYSTEMS BY	2014	01/04/2014	31/03/2016	24	APPLIED SCIENCES AND TECHNOLOGIES	SUSTAINABILITY	RESOURCE SUSTAINABILITY	NOR AZIAH BT BUANG	GUP	Tier 1	UTM	45,000.00
ASSESSMENT OF RADIOLOGICAL RISK IN THE PRODUCTS AND BY PRODUCTS OF AMANG AND ILMENITE TIN TAILING PROCESS AT	2014	01/04/2014	31/12/2014	9	PHYSICAL SCIENCES	SUSTAINABILITY	RESOURCE SUSTAINABILITY	HUSIN BIN WAGIRAN	GUP	Tier 1	UTM	50,000.00
MULTI ELEMENTS DOPING (ZR AND NI)SUPPORTED TiO2 BASED PHOTOCATALYST FOR DEGRADATION OF PARAQUAT	2014	01/04/2014	31/03/2015	12	CHEMICAL SCIENCES	SUSTAINABILITY	RESOURCE SUSTAINABILITY	RUSMIDAH BT ALI	GUP	Tier 1	UTM	55,000.00
PUZZLED RESPONSE IN BRAIN DECISION MAKING USING VISIO-BRAIN EVOKED POTENTIAL	2014	01/04/2014	31/03/2016	24	PHYSICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	ABD.KHAMIM BIN ISMAIL	GUP	Tier 1	UTM	39,173.00
OPTICAL ENHANCEMENT IN RARE EARTH DOPED TELLURITE GLASS CONTAINING SILVER NANOPARTICLES.	2014	01/04/2014	31/03/2016	24	PHYSICAL SCIENCES	MATERIAL AND MANUFACTURING	FRONTIER MATERIALS	RAMLI BIN ARIFIN	GUP	Tier 1	UTM	60,000.00

Tajuk Projek Penyelidikan	Tahun Lulus Geran	Tarikh Mula	Tarikh Tamat 1	Tempoh (Bln)	Sektor (FOR Category)	Research Alliance	Research Alliance/Niche Area Baru	Ketua Projek Utama	Kategori Projek	Jenis Projek	Penaja	Peruntukan Diluluskan (RM)
New Baseline Hazard Function for Cox Regression Model Incorporating Covariates and Random Effect Using Bayesian	2014	01/04/2014	30/06/2015	15	MATHEMATICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	NORASLINDA BINTI MOHAMED ISMAIL	GUP	EG	UTM	28,040.00
POINT PROCESS MODELS FOR DIURNAL VARIATION RAINFALL DATA	2014	01/04/2014	30/06/2015	15	MATHEMATICAL SCIENCES	WATER	RESOURCE SUSTAINABILITY	NORAZLINA BT ISMAIL	GUP	EG	UTM	20,000.00
SYNTHESIS, CHARACTERIZATION AND APPLICATION OF CALIXARENE-BASED MODIFIED MATERIALS FOR THE REMOVAL OF TOXIC HEAVY	2014	01/04/2014	31/03/2016	24	CHEMICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	WAN AINI BT WAN IBRAHIM	GUP	Tier 1	UTM	60,000.00
OPTICAL PROPERTIES OF GOLD NANOPARTICLE EMBEDDED Nd ³⁺ DOPED Sb-Na ₂ O-ZnO GLASS	2014	01/04/2014	31/03/2016	24	PHYSICAL SCIENCES	MATERIAL AND MANUFACTURING	FRONTIER MATERIALS	MD SUPAR BIN ROHANI	GUP	Tier 1	UTM	60,000.00
A Numerical Simulation of Unsteady Blood Flow Coupled with Mass Transfer Through Arterial Stenosis	2014	01/05/2014	30/04/2016	24	MATHEMATICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	NORSARAHADA BT SAIDINA AMIN	GUP	Matching Grant (RACE)	UTM	25,000.00
GENERATION OF RAINFALL SEQUENCE USING STOCHASTIC RAINSTORM CHARACTERISTIC METHOD	2014	01/04/2014	31/03/2016	24	MATHEMATICAL SCIENCES	WATER	RESOURCE SUSTAINABILITY	FADHILAH BINTI YUSOF	GUP	Tier 1	UTM	53,000.00
NUMERICAL SIMULATION OF NUTRIENT EFFECT TO SINGLE CELL OF AVASCULAR TUMOR GROWTH	2014	01/04/2014	30/06/2015	15	MATHEMATICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	ZAKARIA BIN DOLLAH	GUP	EG	UTM	28,040.00
ELLIPTIC-PARABOLIC EQUATION ON FRUIT WASTE DRYING PROCESS INTO POWDER AND NATURAL DYE USING INSTANT CONTROL	2014	01/04/2014	30/06/2015	15	MATHEMATICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	CHE RAHIM BIN CHE TEH	GUP	EG	UTM	28,040.00
ANALYSIS OF A DENGUE DISEASE TRANSMISSION MODEL WITH CONSIDERATION OF INCUBATION PERIOD	2014	01/04/2014	30/06/2015	15	MATHEMATICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	YUSOF BIN YAACOB	GUP	EG	UTM	28,040.00
TOPOLOGICAL DESCRIPTION OF EPILEPTIC SEIZURE VIA FLAT EEG	2014	01/05/2014	30/04/2016	24	MATHEMATICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	TAHIR BIN AHMAD	GUP	Matching Grant (RACE)	UTM	25,000.00
Persepsi Pensyarah Terhadap Kepimpinan dan Pengurusan Universiti : Satu Kajian Holistik Kualitatif Berdasarkan Pendekatan	2014	01/05/2014	31/07/2014	3	ECONOMICS, BUSINESS AND MANAGEMENT	K-ECONOMY	SMART DIGITAL COMMUNITY	ZUHAIMY BIN HAJI ISMAIL	Institutional	Top Down	UTM	15,000.00
Characterization and Fundamental Properties of Radiosensitive Borate Glass	2014	01/05/2014	30/04/2015	12	NUCLEAR SCIENCES	SUSTAINABILITY	RESOURCE SUSTAINABILITY	SUHAIRUL BIN HASHIM	GUP	PSAN	UTM	28,500.00
Spray drying of bacterial pigments for their application in food model systems	2014	01/05/2014	30/04/2015	12	BIOTECHNOLOGY	BIOTECHNOLOGY	HEALTH AND WELLNESS	WAN AZLINA BT AHMAD	GUP	PSAN	UTM	28,500.00

Tajuk Projek Penyelidikan	Tahun Lulus Geran	Tarikh Mula	Tarikh Tamat 1	Tempoh (Bln)	Sektor (FOR Category)	Research Alliance	Research Alliance/Niche Area Baru	Ketua Projek Utama	Kategori Projek	Jenis Projek	Penaja	Peruntukan Diluluskan (RM)
MOLECULAR IMPRINT SYNTHESIS OF SELECTIVE CALCIUM FUNCTIONALIZED MESOPOROUS MATERIALS	2014	01/04/2014	31/12/2015	21	MATERIAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	SALASIAH BT ENDUD	GUP	Tier 1	UTM	89,000.00
FTIR and Laser Induced Photo-acoustic Spectroscopy for Cancer Tissue Optical Absorption Investigation	2014	01/05/2014	30/04/2015	12	PHYSICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	YUSOF BIN MUNAJAT	GUP	PSAN	UTM	28,500.00
New Sol-Gel Magnetic Graphene-based Nanocomposite Sorbent For Analysis of Selected Organophosphorus Pesticides	2014	01/05/2014	30/04/2015	12	CHEMICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	WAN AINI BT WAN IBRAHIM	GUP	PSAN	UTM	28,500.00
A NOVEL APPROACH OF USING INTEGRATED PLASMA-FTIR SYSTEM FOR BREAST CANCER DIAGNOSTIC	2014	01/05/2014	30/04/2015	12	PHYSICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	RAJA KAMARULZAMAN BIN RAJA IBRAHIM	GUP	PSAN	UTM	28,500.00
MICROSTRUCTURAL AND ELECTRICAL PROPERTIES OF CERAMIC BASED ON CULLET-PAPER ASH-KAOLIN CLAY	2014	01/04/2014	31/03/2016	24	PHYSICAL SCIENCES	MATERIAL AND MANUFACTURING	FRONTIER MATERIALS	MASLEEYATI BT YUSOP	GUP	Tier 1	UTM	50,000.00
TITANIUM NANOPARTICLES STIMULATED SURFACE PLASMON MEDIATED OPTICAL ENHANCEMENT IN ERBIUM DOPED	2014	01/07/2014	30/06/2016	24	PHYSICAL SCIENCES	MATERIAL AND MANUFACTURING	FRONTIER MATERIALS	SIB KRISHNA GHOSHAL	Fundamental	FRGS	MOHE	88,000.00
Using Emotional Intelligence in the Development of Mathematical Competency	2014	01/07/2014	30/06/2016	24	SOCIAL SCIENCE	K-ECONOMY	SMART DIGITAL COMMUNITY	YUDARIAH BT MOHAMMAD YUSOF	Fundamental	FRGS	MOHE	84,000.00
Synthesis, characterization and anti cancer assays of novel heterocyclic compounds containing sulphur	2014	01/07/2014	30/06/2016	24	CHEMICAL SCIENCES	BIOTECHNOLOGY	HEALTH AND WELLNESS	JOAZAIZULFAZLI BIN JAMALIS	Fundamental	FRGS	MOHE	86,000.00
Catalytic Chelating Agent for the Removal of Metals and Pesticides from Food Products	2014	01/04/2014	31/03/2015	12	CHEMICAL SCIENCES	WATER	RESOURCE SUSTAINABILITY	RAZALI BIN ISMAIL	GUP	Tier 1	UTM	35,000.00
HYBRID OF BOX-JENKINS AND GARCH MODELS FOR MODELLING VOLATILE TIME SERIES	2014	01/07/2014	30/06/2015	12	MATHEMATICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	MAIZAH HURA BT AHMAD	GUP	Tier 1	UTM	20,000.00
AN IMPROVED ARTIFICIAL BEE COLONY ALGORITHM FOR GLOBAL SOLUTION OF CONSTRAINED OPTIMIZATION PROBLEMS.	2014	01/07/2014	30/06/2015	12	MATHEMATICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	ROHANIN BT AHMAD	GUP	Tier 1	UTM	20,000.00
Decomposition of volatile organic compounds by means of non-thermal plasma technology operating at atmospheric pressure	2014	01/07/2014	30/06/2015	12	PHYSICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	RAJA KAMARULZAMAN BIN RAJA IBRAHIM	GUP	Tier 1	UTM	20,000.00
MODELING ON ASCENDING, DESCENDING AND ARBITRARY ORDER CHARACTERISTIC OF TASK SCHEDULING IN UNRELATED	2014	01/07/2014	30/06/2015	12	MATHEMATICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	SYARIFAH ZYURINA BINTI NORDIN	GUP	Tier 1	UTM	20,000.00

Tajuk Projek Penyelidikan	Tahun Lulus Geran	Tarikh Mula	Tarikh Tamat 1	Tempoh (Bln)	Sektor (FOR Category)	Research Alliance	Research Alliance/Niche Area Baru	Ketua Projek Utama	Kategori Projek	Jenis Projek	Penaja	Peruntukan Diluluskan (RM)
MULTISCALE MODELLING OF UNSTEADY BLOOD FLOW IN MICROCIRCULATION NETWORKS	2014	01/07/2014	30/06/2015	12	MATHEMATICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	WAN RUKAIDA BINTI WAN ABDULLAH	GUP	Tier 1	UTM	20,000.00
Photoluminescence of Copper Nitride Thin Films	2014	01/07/2014	30/06/2015	12	MATERIAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	WAN NURULHUDA BT WAN SHAMSURI	GUP	Tier 1	UTM	20,000.00
NUMERICAL COMPUTATION AND SIMULATION OF PHYSIOLOGICAL FLUID FLOW	2014	01/07/2014	30/06/2015	12	MATHEMATICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	ZUHAILA BINTI ISMAIL	GUP	Tier 1	UTM	20,000.00
DESIGN AND CONSTRUCTION OF LOW COST DIGITAL SPECTROMETER.	2014	01/07/2014	30/06/2015	12	PHYSICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	YAACOB BIN MAT DAUD	GUP	Tier 1	UTM	20,000.00
FABRICATION AND CHARACTERIZATION OF ZNO NANOWIRES FOR SOLAR CELLS APPLICATION	2014	01/07/2014	30/06/2015	12	APPLIED SCIENCES AND TECHNOLOGIES	NANOTECHNOLOGY	FRONTIER MATERIALS	KARIM BIN DERAMAN	GUP	Tier 1	UTM	20,000.00
SYNTHESIS OF ETS-4 MIXED MATRIX MEMBRANES FOR GAS SEPARATION	2014	01/07/2014	30/06/2015	12	CHEMICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	CHE ROZID BIN MAMAT	GUP	Tier 1	UTM	20,000.00
NUMERICAL ALGORITHMS FOR FINDING THE GREATEST COMMON DIVISORS OF POLYNOMIALS IN THE ORTHOGONAL BASIS	2014	01/07/2014	30/06/2015	12	MATHEMATICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	NOR'AINI BT ARIS	GUP	Tier 1	UTM	20,000.00
MODELING AND NUMERICAL SIMULATION OF THERMAL CONTROL CURING PROCESS FOR THERMOSET COMPOSITE MATERIAL	2014	01/07/2014	30/06/2015	12	MATHEMATICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	HAMISAN BIN RAHMAT	GUP	Tier 1	UTM	20,000.00
Deposition of Gold Film and Gold Nanoparticles on Bare Optical Fibre	2014	01/07/2014	30/06/2015	12	PHYSICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	ASIAH BT YAHAYA	GUP	Tier 1	UTM	20,000.00
Stochastic Modeling of ADHD research in Malaysia	2014	01/07/2014	30/06/2015	12	MATHEMATICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	HALIZA BT ABD RAHMAN	GUP	Tier 1	UTM	20,000.00
TIME-DEPENDENT INTERVAL DATA IN THE CLASSIFICATION OF RAINFALL PATTERNS	2014	01/07/2014	30/06/2015	12	MATHEMATICAL SCIENCES	WATER	RESOURCE SUSTAINABILITY	NORHAIZA BINTI AHMAD	GUP	Tier 1	UTM	20,000.00
EQUILIBRIUM, KINETIC AND THERMODYNAMIC INVESTIGATION OF PERFLUOROOCTANESULFONATE SORPTION ONTO SURFACE	2014	01/07/2014	30/06/2015	12	APPLIED SCIENCES AND TECHNOLOGIES	WATER	RESOURCE SUSTAINABILITY	ZAITON BT ABDUL MAJID	GUP	Tier 1	UTM	20,000.00
The characterization and stability testing of violet pigment from <i>C. violaceum</i> UTM5 grown in liquid pineapple waste.	2014	01/07/2014	30/06/2016	24	BIOTECHNOLOGY	BIOTECHNOLOGY	HEALTH AND WELLNESS	WAN AZLINA BT AHMAD	Fundamental	FRGS	MOHE	143,860.00

Tajuk Projek Penyelidikan	Tahun Lulus Geran	Tarikh Mula	Tarikh Tamat 1	Tempoh (Bln)	Sektor (FOR Category)	Research Alliance	Research Alliance/Niche Area Baru	Ketua Projek Utama	Kategori Projek	Jenis Projek	Penaja	Peruntukan Ditoluskan (RM)
SYNTHESIS AND CHARACTERIZATION OF GOLD NANOPARTICLE DOPED ZINC LITHIUM BORATE WITH	2014	01/07/2014	30/06/2016	24	ENGINEERING AND TECHNOLOGY	SUSTAINABILITY	RESOURCE SUSTAINABILITY	HUSIN BIN WAGIRAN	Fundamental	FRGS	MOHE	90,000.00
A study to search for suitable composition of copper bismuth sulphide and copper antimony sulphide thin films for solar cell	2014	01/07/2014	30/06/2016	24	MATERIAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	RASHID AHMED	Fundamental	FRGS	MOHE	110,000.00
Comparative Analysis on the Performance of Stochastic Differential Equation's Parameter Estimation	2014	01/07/2014	30/06/2016	24	MATHEMATICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	HALIZA BT ABD RAHMAN	Fundamental	FRGS	MOHE	68,280.00
THE INFLUENCE OF LASER PULSE ENERGY ON THE QUALITY OF PLASMA FORMATION IN THE LASER INDUCED BREAKDOWN	2014	01/07/2014	31/03/2016	21	PHYSICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	YAACOB BIN MAT DAUD	Fundamental	FRGS	MOHE	71,500.00
Theoretical Study on Free and Mixed Convection of Jeffrey Fluid	2014	01/07/2014	30/06/2016	24	MATHEMATICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	ANATI BTE ALI	Fundamental	FRGS	MOHE	66,200.00
Fundamental studies into the calcium deficient apatite based adsorbent for the treatment of phenolic pollutants	2014	01/07/2014	30/06/2016	24	CHEMICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	RAFAQAT HUSSAIN	Fundamental	FRGS	MOHE	81,000.00
synthesize gold nanoparticles by laser ablation	2014	01/07/2014	30/06/2016	24	PHYSICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	NORIAH BT BIDIN	Fundamental	FRGS	MOHE	129,000.00
Synthetic Study of Drug-Polymer Conjugate Based on Amphiphilic Co-Polymer of PHPMA using RAFT Polymerisation	2014	01/05/2014	30/04/2015	12	CHEMICAL SCIENCES	BIOTECHNOLOGY	HEALTH AND WELLNESS	MOHD BAKRI BIN BAKAR	GUP	PSAN	UTM	28,500.00
FABRICATION OF CHITOSAN-CHITIN NANOWHISKERS FILMS BY ELECTROSPINNING AND SOLUTION CASTING METHOD: STUDY ON	2014	01/05/2014	30/04/2015	12	BIOTECHNOLOGY	BIOTECHNOLOGY	HEALTH AND WELLNESS	ZAINOHA BT ZAKARIA	GUP	PSAN	UTM	28,500.00
PEMETAAN ISODOS SINARAN MENGIKON NEGERI SABAH DAN SARAWAK	2014	01/07/2014	31/12/2016	30	PHYSICAL SCIENCES	SUSTAINABILITY	RESOURCE SUSTAINABILITY	AHMAD TERMIZI BIN RAMLI	Sciencefund	SF	MOSTI	1,251,226.00
Influence of electron-donating and electron-withdrawing substituents on fluorescence properties of coumarinyl chalcones	2014	01/10/2014	30/09/2015	12	CHEMICAL SCIENCES	BIOTECHNOLOGY	HEALTH AND WELLNESS	NORAZAH BINTI BASAR	GUP	PSAN	UTM	20,000.00
DESIGN AND SYNTHESIS OF HIERARCHICAL MESOPOROUS ZSM5 FOR CONVERSION OF CELLULOSE INTO SUGAR ALCOHOL	2014	01/10/2014	30/09/2015	12	MATERIAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	SUGENG TRIWAHYONO	GUP	PSAN	UTM	20,000.00
The Applications of Metaheuristics in Inventory Routing Problems	2014	01/09/2014	31/08/2015	12	MATHEMATICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	NUR ARINA BAZILAH BINTI AZIZ	GUP	PAS	UTM	20,000.00

Tajuk Projek Penyelidikan	Tahun Lulus Geran	Tarikh Mula	Tarikh Tamat 1	Tempoh (Bln)	Sektor (FOR Category)	Research Alliance	Research Alliance/Niche Area Baru	Ketua Projek Utama	Kategori Projek	Jenis Projek	Penaja	Peruntukan Ditoluskan (RM)
MECHANISM OF ALIGNMENT OF THE WELL-ALIGNED TITANIA BY MAGNETIC SUSCEPTIBILITY BALANCE	2014	01/11/2014	31/10/2015	12	CHEMICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	NURSYAFREENA BINTI ATTAN	GUP	PAS	UTM	20,000.00
Effects of the Antenna Polarization and the Target-Medium Dielectric Contrast on the Ground Penetrating Radar (GPR) Signals	2014	01/06/2014	31/05/2016	24	ENGINEERING AND TECHNOLOGY	NANOTECHNOLOGY	FRONTIER MATERIALS	AMIRUDDIN BIN SHAARI	Sciencefund	SF	MOSTI	155,000.00
A new hydrocarbon empirical potential for the molecular dynamics simulation	2014	01/12/2014	30/11/2016	24	MATHEMATICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	YEAH SU HOE	Fundamental	FRGS	MOHE	52,000.00
Variational Multiscale Element Free Galerkin Method in Two Dimensional Shape MemoryAlloy models	2014	01/12/2014	30/11/2016	24	MATHEMATICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	MUNIRA BT ISMAIL	Fundamental	FRGS	MOHE	50,000.00
A Model for Visualizing Some Properties of Some Finite Groups	2014	01/10/2014	30/09/2015	12	MATHEMATICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	NOR MUHAINIAH BINTI MOHD ALI	GUP	PSAN	UTM	20,000.00
Plasma temperature and electron density study on stainless steel using Nd:YAG laser at 1064nm and 532nm wavelength	2014	01/12/2014	30/11/2016	24	APPLIED SCIENCES AND TECHNOLOGIES	NANOTECHNOLOGY	FRONTIER MATERIALS	ROSLINDA BINTI ZAINAL	Fundamental	FRGS	MOHE	104,000.00
Synthesis of Homopolymer and Block Copolymer of Poly(chloroethyl methacrylate) via RAFT Polymerisation and Thiol-	2014	01/12/2014	30/11/2016	24	CHEMICAL SCIENCES	BIOTECHNOLOGY	HEALTH AND WELLNESS	KHAIRIL JUHANNI BINTI ABD KARIM	Fundamental	FRGS	MOHE	137,000.00
Mathematical Modelling of Non-Newtonian Biomagnetic Blood Flow with Body Acceleration	2014	01/12/2014	30/11/2016	24	MATHEMATICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	ZUHAILA BINTI ISMAIL	Fundamental	FRGS	MOHE	64,400.00
SYNTHESIS, BIOTRANSFORMATION AND BIOACTIVITY STUDIES OF STEREOSELECTIVE SESQUITERPENOID TOWARDS	2014	01/12/2014	31/12/2016	25	CHEMICAL SCIENCES	BIOTECHNOLOGY	HEALTH AND WELLNESS	NORAZAH BINTI BASAR	Fundamental	FRGS	MOHE	143,000.00
LUNG AND COLON CANCER IDENTIFICATION BASED ON VOLATILE ORGANIC COMPOUNDS(VOC)ANALYSIS	2014	01/12/2014	30/11/2016	24	PHYSICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	RAJA KAMARULZAMAN BIN RAJA IBRAHIM	Fundamental	FRGS	MOHE	106,000.00
A COMBINATORIAL APPROACH TO SUCCESSFUL MODULATION OF DEHALOGENASE DEHE-SUBSTRATE SPECIFICITY BY IN-SILICO AND	2014	01/12/2014	30/11/2016	24	BIOTECHNOLOGY	BIOTECHNOLOGY	HEALTH AND WELLNESS	ROSWANIRA BINTI AB. WAHAB	Fundamental	FRGS	MOHE	96,000.00
INFLUENCES OF GOLD NANOPARTICLES ON STRUCTURAL AND OPTICAL PROPERTIES OF ERBIUM/SAMARIUM CO-DOPED	2014	01/12/2014	30/11/2016	24	MATERIAL SCIENCES	MATERIAL AND MANUFACTURING	FRONTIER MATERIALS	RAMLI BIN ARIFIN	Fundamental	FRGS	MOHE	115,000.00
High Performance PSVM Modeling and Simulation on Tumor Cell Classification using MRI Medical Images	2014	01/12/2014	30/11/2016	24	MATHEMATICAL SCIENCES	NANOTECHNOLOGY	FRONTIER MATERIALS	CHE RAHIM BIN CHE TEH	Fundamental	FRGS	MOHE	68,000.00

Tajuk Projek Penyelidikan	Tahun Lulus Geran	Tarikh Mula	Tarikh Tamat 1	Tempoh (Bln)	Sektor (FOR Category)	Research Alliance	Research Alliance/Niche Area Baru	Ketua Projek Utama	Kategori Projek	Jenis Projek	Penaja	Peruntukan Diluluskan (RM)
Electrolysis Mechanism and Structural Characterization of Voltammetric Sensor Based on Au-Si nanodots Structure for the	2014	01/10/2014	30/09/2015	12		NANOTECHNOLOGY	FRONTIER MATERIALS	ABD.KHAMIM BIN ISMAIL	GUP	PSAN	UTM	20,000.00
DOSIMETRIC PROPERTIES OF CU-DOPED CALCIUM LITHIUM BORATE GLASS SUBJECTED TO IONIZING RADIATIONS	2015	01/01/2015	31/12/2015	12		SUSTAINABILITY	RESOURCE SUSTAINABILITY	HUSIN BIN WAGIRAN	Others	Others	KOYA UNIVERSITY,KU RDISTAN IRAQ	36,000.00
NON-STATIONARY FLOOD FREQUENCY ANALYSIS IN PENINSULAR MALAYSIA USING L-MOMENT METHOD	2015	12/01/2015	11/01/2017	25		WATER	RESOURCE SUSTAINABILITY	ANI BIN SHABRI	Fundamental	FRGS	MOHE	117,200.00
Modified Wrinkled Mesoporous Silica Nanoparticle (WMSN) for Conversion of Wide Range of Molecular Weight Cellulose Into	2015	01/01/2015	31/12/2015	12			FRONTIER MATERIALS	SUGENG TRIWAHYONO	Others	Others	NIPPON SHEET GLASS FOUNDATION (NSG)	21,600.00
STRUCTURAL AND OPTICAL PROPERTIES OF SM3+ DOPED SODIUM-TELLURITE GLASSES IN THE PRESENCE OF GOLD	2015	01/02/2015	31/12/2015	11			FRONTIER MATERIALS	MD RAHIM BIN SAHAR	Others	Others	SALAHADDIN UNIVERSITY-ERBIL KURDISTAN,	18,000.00
Role of Metallic Nano-particles on Thermal, Structural and Spectroscopic Properties of Rare Earth Co-Doped Zinc Tellurite Glass	2015	01/02/2015	31/12/2015	11			FRONTIER MATERIALS	MD RAHIM BIN SAHAR	Others	Others	SALAHADDIN UNIVERSITY-ERBIL KURDISTAN,	18,000.00
Simulation of Pollutant Distribution during Flood in Johor River	2015	01/04/2015	31/12/2015	9			RESOURCE SUSTAINABILITY	RAZALI BIN ISMAIL	Fundamental	FRGS	MOHE	38,700.00
Flood and Flood disaster: Modelling flood hydrograph in Sg. Kelantan River Basin using functional concept	2015	01/04/2015	31/12/2015	9			RESOURCE SUSTAINABILITY	SHARIFAH SUHAILA BINTI SYED JAMALUDIN	Fundamental	FRGS	MOHE	37,000.00
Detecting Trend and developing Intensity-Duration-Frequency(IDF) Curves of future rainfall data	2015	01/04/2015	31/12/2015	9			RESOURCE SUSTAINABILITY	FADHILAH BINTI YUSOF	Transdisiplinari	TRGS	MOHE	69,198.00
ADVANCEMENT OF GENERAL PLATING PROCESSES FOR INDUSTRIAL GREEN TECHNOLOGIES APPLICATION	2015	01/04/2015	31/03/2017	24			FRONTIER MATERIALS	SUGENG TRIWAHYONO	Contract	Contract	UYEMURA (M) SDN BHD	30,000.00
A STEP TOWARDS GREEN AND SUSTAINABLE FUTURE: APPLICATION OF MODIFIED CHITOSAN-LIPASE BIOCATALYSTS	2015	01/05/2015	31/10/2016	18			HEALTH AND WELLNESS	ROSWANIRA BINTI AB. WAHAB	GUP	Tier 1	UTM	49,800.00
Nutritional source from necrophagous larvae and prawn waste in maturation diets for giant freshwater prawn, Macrobrachium	2015	01/05/2015	31/10/2016	18			HEALTH AND WELLNESS	ZAINOHA BT ZAKARIA	GUP	Tier 1	UTM	48,800.00
ALKALI EARTH BOROSULPHATE GLASSES/CERAMICS: MECHANISM AND PERSISTENCE PHOSPHOR ANALYSIS	2015	01/05/2015	31/10/2016	18			FRONTIER MATERIALS	ROSLI BIN HUSSIN	GUP	Tier 1	UTM	50,000.00

Tajuk Projek Penyelidikan	Tahun Lulus Geran	Tarikh Mula	Tarikh Tamat 1	Tempoh (Bln)	Sektor (FOR Category)	Research Alliance	Research Alliance/Niche Area Baru	Ketua Projek Utama	Kategori Projek	Jenis Projek	Penaja	Peruntukan Diluluskan (RM)
Microrheological Study of Nanocellulose Solution Using Optically Trapped Single Microparticle	2015	01/04/2015	31/03/2018	36			FRONTIER MATERIALS	YUSOF BIN MUNAJAT	GUP	Matching Grant (RACE)	UTM	25,000.00
Catalytic Conversion of Cellulose to Biofuels by Using Functional and Non-Functional Mesoporous Silica Nanoparticles	2015	01/04/2015	31/03/2018	36			FRONTIER MATERIALS	SUGENG TRIWAHYONO	GUP	Matching Grant (RACE)	UTM	25,000.00
DEVELOPMENT OF NEW METHODS FOR STRUCTURAL ANALYSES OF SUPRAMOLECULAR COMPLEXES USING ION MOBILITY MASS	2015	01/05/2015	31/10/2016	18			FRONTIER MATERIALS	HENDRIK OKTENDY LINTANG	GUP	Tier 1	UTM	50,000.00
DOSIMETRIC PROPERTIES OF ALUMINIUM OXIDE DOPED WITH RARE EARTH (RE) ELEMENTS PREPARED BY COMBUSTION	2015	01/05/2015	31/10/2016	18			FRONTIER MATERIALS	ABD RAHMAN BIN TAMURI	GUP	Tier 1	UTM	50,000.00
FUZZY METRIZABLE SPACE OF FUZZY AUTOCATALYTIC SET (FACS) OF FUZZY GRAPH TYPE-3	2015	01/05/2015	31/10/2016	18			FRONTIER MATERIALS	TAHIR BIN AHMAD	GUP	Tier 1	UTM	49,900.00
DESIGN AND SYNTHESIS OF WRINKLED MESOPOROUS SILICA NANOPARTICLE FOR SELECTIVE ADSORPTION OF NI AND CU IONS	2015	01/05/2015	31/10/2016	18			FRONTIER MATERIALS	SUGENG TRIWAHYONO	GUP	TIER 1	UTM	50,000.00
Carbon Thin Films Deposition using Laser Induced Plasma	2015	01/05/2015	31/10/2016	18			FRONTIER MATERIALS	JALIL BIN ALI	GUP	Tier 1	UTM	50,000.00
DESIGN OF HIGH PERFORMANCE NITROGEN-MODIFIED TITANIA FABRIC WITH ENHANCED HEAT ABSORBILITY	2015	01/05/2015	31/10/2016	18			FRONTIER MATERIALS	LEE SIEW LING	GUP	Tier 1	UTM	50,000.00
SYNTHESIS, CHARACTERIZATION AND THERMOLUMINESCENCE STUDIES OF EU3+ DOPED CALCIUM BORATE NANOCRYSTALLINE	2015	01/05/2015	31/10/2016	18			RESOURCE SUSTAINABILITY	HUSIN BIN WAGIRAN	GUP	Tier 1	UTM	50,000.00
DEVELOPMENT OF LIQUID CHROMATOGRAPHY METHOD PACKAGES FOR NITROGEN-CONTAINING COMPOUNDS AND	2015	01/05/2015	31/10/2016	18			FRONTIER MATERIALS	LENY YULIATI	GUP	Tier 1	UTM	50,000.00
STUDY OF COPPER ANTIMONY TIN SULPHIDE (CATS) THIN FILMS BY COMBINATORIAL THERMAL EVAPORATION TECHNIQUE FOR	2015	01/05/2015	31/10/2016	18			FRONTIER MATERIALS	WAN NURULHUDA BT WAN SHAMSURI	GUP	Tier 1	UTM	50,000.00
Ab-initio study of structural, electronic and optical properties of pure and doped Defect Chalcopyrite.	2015	01/05/2015	31/10/2016	18			FRONTIER MATERIALS	MOHAMMAD ALAM SAEED	GUP	Tier 1	UTM	50,000.00
EIGENVALUE PROBLEM FOR THE TWO PARTICLE SCHRODINGER OPERATOR ON LATTICE	2015	01/07/2015	30/06/2016	12			FRONTIER MATERIALS	MUKHIDDIN MUMINOV	GUP	PAS	UTM	20,000.00

Tajuk Projek Penyelidikan	Tahun Lulus Geran	Tarikh Mula	Tarikh Tamat 1	Tempoh (Bln)	Sektor (FOR Category)	Research Alliance	Research Alliance/Niche Area Baru	Ketua Projek Utama	Kategori Projek	Jenis Projek	Penaja	Peruntukan Diluluskan (RM)
Numerical Performance of Image Manifold and Volume Estimation Method in Constructing 3D Model Visualization for MRI Medical	2015	01/04/2015	31/03/2017	24			FRONTIER MATERIALS	NORMA BT ALIAS	GUP	Matching Grant (RACE)	UTM	25,000.00
Degradation of sago wastewater effluent by TiO2 photocatalysis and photo-Fenton treatments	2015	01/04/2015	31/03/2017	24			RESOURCE SUSTAINABILITY	WAN AZELEE BIN WAN ABU BAKAR	GUP	Matching Grant (RACE)	UTM	25,000.00
Implementing Higher Order Thinking Skills in Engineering Mathematics Among First Year Students of UTM	2015	01/06/2015	31/05/2017	24			FRONTIER MATERIALS	ONG CHEE TIONG	Institutional	DANA PEMBANGUNAN PENGAJARAN CTL	CTL	20,000.00
Flow field and traverse times for fan forced injection of fumigant into stored grain	2015	01/07/2015	30/06/2016	12			FRONTIER MATERIALS	ZAITON BINTI MAT ISA	GUP	PAS	UTM	20,000.00
Developing Efficient Glass Based Solid State Lasers	2015	01/07/2015	30/06/2017	24			FRONTIER MATERIALS	MD RAHIM BIN SAHAR	Prototaip	PRGS	MOHE	166,000.00