



# **ANUGERAH KECEMERLANGAN INOVASI**

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**Majlis Anugerah Kecemerlangan Dan Inovasi (AKI) Tahun 2013  
6 November 2014 | Hotel The Everly, Putrajaya**



# PECIPTA 2013



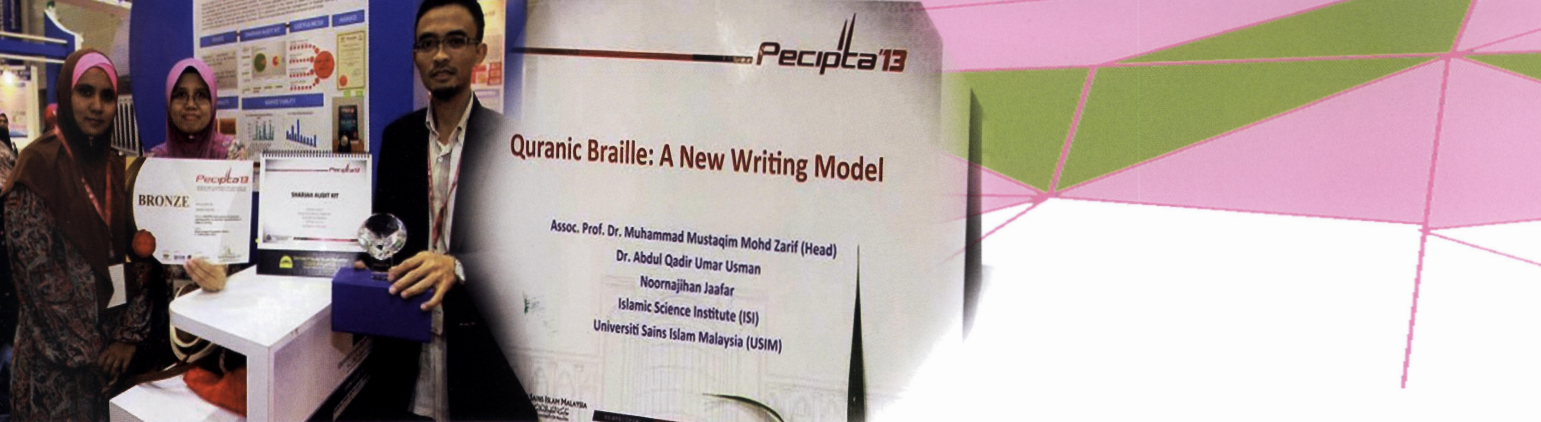
...karena telah lebih dahulu kesediaan untuk, dan  
aktifnya karena tidak mampu jajan,  
tawar-menawar saat dalam kesediaan berdagang!  
(Hadis riwayat Imam al-Bukhari)

**Kumpulan sasaran:**

- Semua keluarga ingin dapat mempunyai satu salinan modul ini yang memuat mereka memelihara Sabah berkeseluruhan semasa sakit.
- Semua - hospital, para mahasiswa, Universiti dan kolej di Sabah yang menjadi institusi/hospital pasca Sabah.

**Modul Pengajaran Wudhu, Tayammum dan Solat ketika sakit**





**& AWARDS  
IN CEREMONY  
BER 2013**



Supported by



# ANUGERAH KECEMERLANGAN INOVASI 2013 (KAKITANGAN AKADEMIK)

## PECIPTA 2013



Nama : Dr Madihah Mohd Saudi  
No Staf : S737  
Fakulti : Fakulti Sains Dan Teknologi (FST)  
Pencapaian:  
- Anugerah Khas- World Intellectual Property Association (WIIPA) From Taiwan  
- Pingat Emas

### EZSIBER

*Dr Hanina Mohd Noor, Dr Nurlida Basir, Dr Nazean Jomhari  
Dr Nurhayati Ahmat, Dr Syadiah Nor*

Worms have been improved and a range of sophisticated techniques have been integrated, which make the detection and response processes much harder and longer than in the past. Therefore, in this research, an eZSIBER model is built to detect worms attack in order to respond to worms more efficiently. The new concept introduced in this model which is named apoptosis, is borrowed from the human immunology system has been mapped in terms of a security perspective. . Furthermore, the encouraging results achieved by this research are validated by applying the security metrics for assigning the weight and severity values to trigger the apoptosis.

# ANUGERAH KECEMERLANGAN INOVASI 2013 (KAKITANGAN AKADEMIK)

## PECIPTA 2013



Nama : Encik Norman Hamdan  
No Staf : S994  
Fakulti : Fakulti Ekonomi Dan Muamalat (FEM)  
Pencapaian: Pingat Perak

### **E-MIMAS: INOVASI MASJID**

*Asharaf Mohd Ramli, Abdullaah Jalil  
Dr Asmaddy Haris, Mohd Aizuddin Abd Aziz*

Masjid merupakan institusi yang mempunyai kepelbagaian sumber dan penggunaan dana. Penggunaan dana masjid perlulah selari dengan prinsip Shariah berkaitan dengan sumber dana masjid. Peranan utama masjid sebagai sebuah institusi berteraskan ijtima'i perlulah disokong dengan fungsi idari yang tersusun. Namun begitu, aktiviti tjari dalam menjana ekonomi dan kewangan masjid dilihat sebagai satu keperluan mendesak pada masa kini. Tanpa adanya sistem pengurusan kewangan masjid yang sistematik, maka ia akan terdedah kepada risiko ketidakpatuhan Shariah di dalam pengurusan kewangan. Oleh yang demikian, e-Mimas telah dibangunkan bagi memenuhi keperluan tersebut.

# ANUGERAH KECEMERLANGAN INOVASI 2013 (KAKITANGAN AKADEMIK)

## PECIPTA 2013



Nama : Prof. Madya Dr Muhammad Mustaqim Mohd Zarif  
No Staf : S241  
Fakulti : Fakulti Pengajian Quran Dan Sunnah (FPQS)  
Pencapaian: Pingat Perak

### UTHMANIC MODEL OF QURANIC ORTHOGRAPHY IN BRAILLE KEPADA QURAINEC BRAILLE : A NEW WRITING MODEL

*Dr Abdul Qadir Umar Usman, Noornajihan Jaafar*

Current editions of Quranic Braille are orthographically not standardized. This causes mistakes and inconsistencies in the writing of the Quranic verses. In solving these issues, this product proposes a new model of Quranic Braille orthography based on Rasm Uthmani through the sample of surah Maryam. It is not only the first of its kind in the world, but is also accurate, error-free and can be used as standard in Malaysia and internationally.

# ANUGERAH KECEMERLANGAN INOVASI 2013 (KAKITANGAN AKADEMIK)

PECIPTA 2013



Nama : Prof. Madya Dr Asma Abdul Rahman  
No Staf : S013  
Fakulti : Fakulti Pengajian Bahasa Utama (FPBU)  
Pencapaian: Pingat Perak

## **METODOLOGY OF GENERATIVE GRAMMAR AND TRANSFORMATIONAL MGG&TF/MTBP & TF; APPLICATION IN VERSES HOLY QURAN AMONG STUDENTS IN THE UNIVERSITIES OF MALAYSIA**

*Dr Fuadah Binti Johari, Dr Zurina Kefeli @ Zulefli, Dr Norailis Ab Wahab  
Dr Ahmad Abdul Rahman (UMK), En. Zaki Amiruddin (UMK)*

This study was to examine the teaching of Arabic linguistic “syntaxes, morphology, phonology, lexicology, semantics, etymology” skills to apply the method of MGG&Tf Method to students who are not speaking Arabic as a first language at four universities in Malaysia. This method is the main pedagogical principles to ensure that teaching and learning of Arabic linguistics place effectively. Researchers to build 319 items for the questionnaire uses five sub-scales based on the method of MGG&Tf method to build using positive statements.

# ANUGERAH KECEMERLANGAN INOVASI 2013 (KAKITANGAN AKADEMIK)

## PECIPTA 2013



Nama : Prof. Madya Dr. Alina Abdul Rahim  
No Staf : S310  
Fakulti : Fakulti Sains Dan Teknologi (FST)  
Pencapaian: Pingat Perak

### HORLEY LAKSA NOODLE MADE FROM BARLEY

*Mulaikah Azizan, Khadijah Ab Majid, Norain Farah Bt Moktar  
Amirah Najwa Jarani, Noor Najwa Hassan, Aini U'naizah Zalizam*

Laksa (noodle made from rice flour) is an ethnic balanced dish among Malaysians, widely accepted by the multiracial communities in Malaysia, because it is low in fat, easily cooked, delicious besides having high protein sources, from the fish gravy, consumed together with vegetables. The traditional laksa made from rice flour is not diabetic friendly, with high glucose content. Nutritionwise, "HORLEY LAKSA NOODLE" is a healthier choice for Malaysians so that the high beta-glucan and low in glycemic index value found in barley, can be benefitted through Horley laksa dish. This innovation provides minerals, soluble and insoluble fiber that is better, compared to the commercial dried laksa noodles. Commercial laksa noodle, made from wheat flour is available in fresh or in dried form.

# ANUGERAH KECEMERLANGAN INOVASI 2013 (KAKITANGAN AKADEMIK)

## PECIPTA 2013



**Nama** : Prof. Madya Dr Norita Md. Nawawi  
**No Staf** : S1368  
**Fakulti** : Fakulti Sains Dan Teknologi (FST)  
**Pencapaian**: Pingat Perak

## NOBLE DIGITAL SOCIAL NETWORK : ISLAM TAG

*Nader Yahya Alkeinay, Dr Najwa Hayaati Mohd Alwi, Dr Roesnita Ismail  
Dr Fauziah Abdul Wahid*

Social Networking Sites (SNSs) have become a global experience, with communities such as Facebook, MySpace and Friendster which reported user figures to be in the hundreds of millions. People, have been invited into or chosen to join these communities and are able to publish multimedia content about themselves, their interests and concerns. With intensive information been shared, privacy concern are rising up. Social networks privacy is different from the classical privacy setting. The current privacy settings give advantage and ownership to the developer and causing a lot of problems such as exposure of sensitive information.

# ANUGERAH KECEMERLANGAN INOVASI 2013 (KAKITANGAN AKADEMIK)

## PECIPTA 2013



Nama : Prof. Madya Dr Norita Md. Nawawi  
No Staf : S1368  
Fakulti : Fakulti Sains Dan Teknologi (FST)  
Pencapaian: Pingat Perak

### SEMANTIC INFORMATION RETRIEVAL SYSTEM FOR HADITH

*Roqia Jwad Khadim, Assoc. Prof. Dr Adel Mohamad Abdul Aziz*

The field of information retrieval has been witnessing tremendous investigations to address rising challenges resulted by the increasing amount of information. Information retrieval has served a wide range of users in different domains, such as academia, politics, industry, tourism, medicine, commerce, media and different public audience applications. Despite these huge contributions of information retrieval in nowadays applications, there is a lack of study that addresses information retrieval for Islamic knowledge resources. Thus, this research focuses on studying Hadith documents through the field of semantic information retrieval.

# ANUGERAH KECEMERLANGAN INOVASI 2013 (KAKITANGAN AKADEMIK)

## PECIPTA 2013



**Nama** : Prof. Madya Dr. Muhammad Shamsir Mohd Aris  
**No Staf** : S1582  
**Fakulti** : Fakulti Perubatan Dan Sains Kesihatan (FPSK)  
**Pencapaian:** Pingat Gangsa

### WUDHU' TAYAMUM SOLAT KETIKA SAKIT

*Prof. Dr Mohd. Yunus Abdullah, Dr Dzulkhairi Mohd. Rani*

Solat merupakan ibadah yang paling penting dalam ajaran Islam dan ia wajib dilakukan dalam keadaan apa cara sekalipun. Orang yang sakit pula diberikan kemudahan (rukhsah) untuk menunaikan solat menurut keupayaan dan kemampuannya dalam menunaikan solat. Islam sebagai agama yang lengkap, membenarkan solat dilakukan menurut kemampuan dan keupayaan pesakit tersebut. Modul ini akan memberikan tunjuk –ajar dan panduan secara lengkap dan satu-persatu berkenaan cara melakukan tayammum, pengambilan air sembahyang semasa sakit dan juga rukhsah solat semasa sakit. Kaedah menunaikan kewajipan Rukun Islam ini dapat diikuti dengan mudah dan cara penyampaian oleh pelajar perubatan USIM ini dapat difahami dengan jelas dan teratur.

# ANUGERAH KECEMERLANGAN INOVASI 2013 (KAKITANGAN AKADEMIK)

## PECIPTA 2013



Nama : Prof. Madya Dr. Alina Abdul Rahim  
No Staf : S310  
Fakulti : Fakulti Sains Dan Teknologi (FST)  
Pencapaian: Pingat Gangsa

### **BAMBUSIA**

*Zulfawwaz Bin Mohamad, Mohamad Syafiq Bin Saifudin  
Mohamad Wafi Bin Shamsudin, Mohd Akmal Bin Zakaria  
Mohamed Sabri Bin Esa, Muhammad Saifullah Mohd Yusof*

Bambusia powder is a revolutionary product because the way bamboo shoot is traditionally consumed, fresh, pickled, is changed to allow the powder to become versatile and convenient, in the form of minimal bamboo flavour, aroma or aftertaste, or strong unique bamboo aroma and taste which is adjustable. In dried powder form, this can be stored at room temperature, with extended shelf life. A specially designed process was developed to produce bamboo shoot powder that can be added into varieties of formulations which function as raw material in food, beverage and functional food ingredients. Examples include spaghetti and dried noodles, or bakery products like cookies, bread or health supplement which utilize bamboo powder as fibre raw materials.

# ANUGERAH KECEMERLANGAN INOVASI 2013 (KAKITANGAN AKADEMIK)

PECIPTA 2013



**Nama** : Prof. Madya Dr Zurina Shafii  
**No Staf** : S157  
**Fakulti** : Fakulti Ekonomi Dan Muamalat (FEM)  
**Pencapaian:** Pingat Gangsa

## SHARIAH AUDIT KIT

*Prof. Dato' Dr Mustafa Mohd Hanefah, Nurazalia Zakaria, Supiah Salleh  
Norman Hamdan*

Shariah Audit Kit can be used by Islamic financial institutions (IFIs) to determine the Shariah compliance level based on determined parameters. These parameters are founded on the Shariah Governance Framework issued by Bank Negara Malaysia (BNM) in 2010, Shariah parameters, Shariah Standards, prior research findings and literatures. The scope of the parameters will cover Shariah governance process, financial statements, organisational structure, information technology, human resource management and business processes. Currently, computer assisted tools are used by internal auditors in conducting sampling and testing of internal controls and no assisted tool is available in the market to determine the level of Shariah compliance.

# ANUGERAH KECEMERLANGAN INOVASI 2013 (KAKITANGAN AKADEMIK)

PECIPTA 2013



Nama : Prof. Madya Dr Zaiton Hassan  
No Staf : S820  
Fakulti : Fakulti Sains Dan Teknologi (FST)  
Pencapaian: Pingat Gangsa

## INHIBITORY ACTIVITY OF LACTIC ACID BACTERIA ISOLATED FROM VARIOUS SOURCES AGAINST SPOILAGE YEAST RHODOTORULA MUCILAGINOSA

*Muhammad Faiz Abdul Kuthoose , Ili Farhana Abd. Hamid, Shahidah Md. Nor*

Rhodotorula mucilaginosa is a yeast that readily spoil fruits and vegetables.

Rhodotorula produces pink to red colonies and blastoconidia that are unicellular lacking pseudohyphae and hyphae. Rhodotorula spp. have been recognised as emerging yeast pathogens in humans in the last two decades. Rhodotorula spp. are common airborne organisms and have been implicated as an infrequent cause of infections, such as septicemia, endocarditis, meningitis, and peritonitis. Two strains of spoilage yeast isolated from cucumber and carrot were identified as Rhodotorula mucilaginosa using ITS fungal detection method.

# ANUGERAH KECEMERLANGAN INOVASI 2013 (KAKITANGAN AKADEMIK)

## PECIPTA 2013



Nama : Dr. Yuslina Mohamed  
No Staf : S426  
Fakulti : Fakulti Pengajian Bahasa Utama (FPBU)  
Pencapaian: Pingat Gangsa

### I-HAJ

*Dr Madihah Mohd Saudi, Dr Nurlida Basir, Dr Ramiaida Darmi  
Dr Kauthar Abdul Kadir*

*'Arabic for Haj and Umrah' application (i-Haj) is a product that contains vocabulary, terminology, short phrases, normal conversations and situational-based conversations starting from the airport, immigration department, Bir Ali, Madinah, Makkah, Muzdalifah, Mina and other tourist spots that Haj and Umrah pilgrims often visit. It is designed to help Haj and Umrah pilgrims when they are at the Holy land. The uniqueness and the novelty of this application is based on the method integrated with it, which is called as the 'Ryan Method'. It classifies vocabulary and terminology for Arabic for specific purpose such as for Tourism and Arabic for Journalism. This product is targeted for non-Arabic native speaker and people who has no knowledge in Arabic especially for those at the Holy Land.*

# PENGIKTIRAFAN PEMENANG BRITISH INVENTION SHOW (BIS 2014)

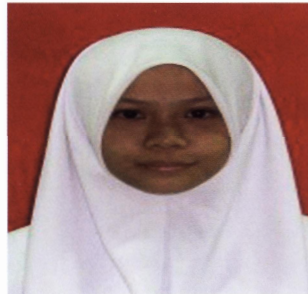
**Nama Kumpulan** : IMTL  
**Nama Produk** : Novel Green Active Nanofiltration GANF™  
**Pencapaian** : - Anugerah Khas - Best Invention Of The Year - Double Gold & Diploma Of Excellence For Promotion Of Creativity From Romanian Inventors Forum  
- Pingat Emas  
**Fakulti** : Fakulti Sains Dan Teknologi (FST)  
**Kursus** : Ijazah Sarjana Muda Sains Dengan Kepujian (Teknologi Kimia Industri)

## ABSTRAK

The environmental and subsequent health effects of dyes released in textile industry wastewater are becoming subject to scientific scrutiny. By using well-established phase inversion process, new formulation of GANF™ membrane with present of important key materials, active agent (AA). An experimental data on the dyes treatment showed about 99.5% of colour removal. The tailor made of even, ultrathin, smooth and high selective Novel Green Active Nanofiltration GANF™ membrane with morphological structures control for dyes wastewater treatment industry. Ultimately, the attachment of AA into the membranes was found to be very significant towards performances-properties as well as more selective active skin layer



**Siti Nurhafiz Asyren Abu Bakar**  
1112285



**Riza Asma'a Saari**  
1110114



**Nur Hidayah Hassan**  
1110367

# PENGIKTIRAFAN PEMENANG BRITISH INVENTION SHOW (BIS 2014)

**Nama Kumpulan:** Authen6  
**Nama Produk :** Crushy Energy Bar  
**Pencapaian :** Pingat Perak  
**Fakulti :** Fakulti Sains Dan Teknologi (FST)  
**Kursus :** Ijazah Sarjana Muda Sains Dengan  
Kepujian (Bioteknologi Makanan)

## ABSTRAK

A nutritionally dense bar with dates, figs, raisins, nuts and almond which is convenient, natural and suitable for children and people with busy lifestyle, Crushy Bar is formulated with health, taste and ready-to-eat compact form.



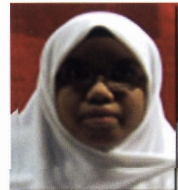
**Muzammeer Mansor**  
1110137



**Norliyana Nordin**  
1110139



**Nor Alia Dollah**  
1110138



**Sarah Alia Shahrim**  
1110142



**Nur Imanina  
Abdullah Thaidi**  
1110015



**Nur Hanisah Hamidin**  
1110143



**Nadia Abd Salam**  
1110141

BIS 2014





## **USIM TERUS MAJU**

Malaysia maju di zaman merdeka  
Umatnya bergerak berganding bahu  
USIM menyahut harapan bangsa  
Menjadi universiti termaju

Cabaran masa teras kegiatan  
Penyelidikannya untuk dunia  
Terus progresif membina insan  
Berdisiplin mengamal nilai mulia

\* Benteng harapan untuk terus maju  
Menjadi universiti terkini  
Meredah halangan mencipta mutu  
Mengharum negara seluruh bumi

USIM berjanji pada ibunda  
Berjasa berbudi untuk semua  
Siswanya adalah tunggak negara  
Kan terus membela maruah kita



**Sekalung penghargaan daripada:  
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Website:<http://ppp.usim.edu.my>**

