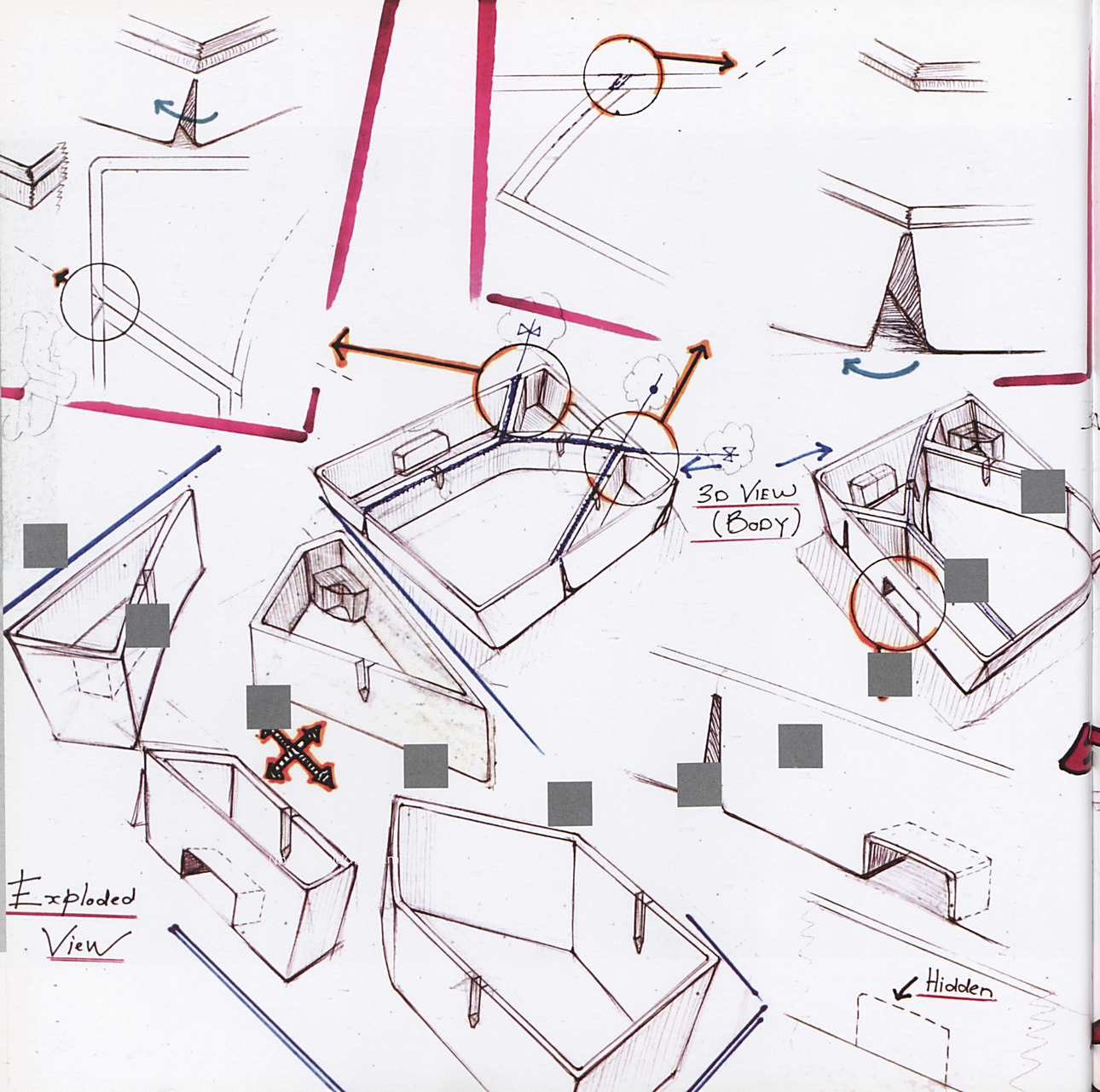

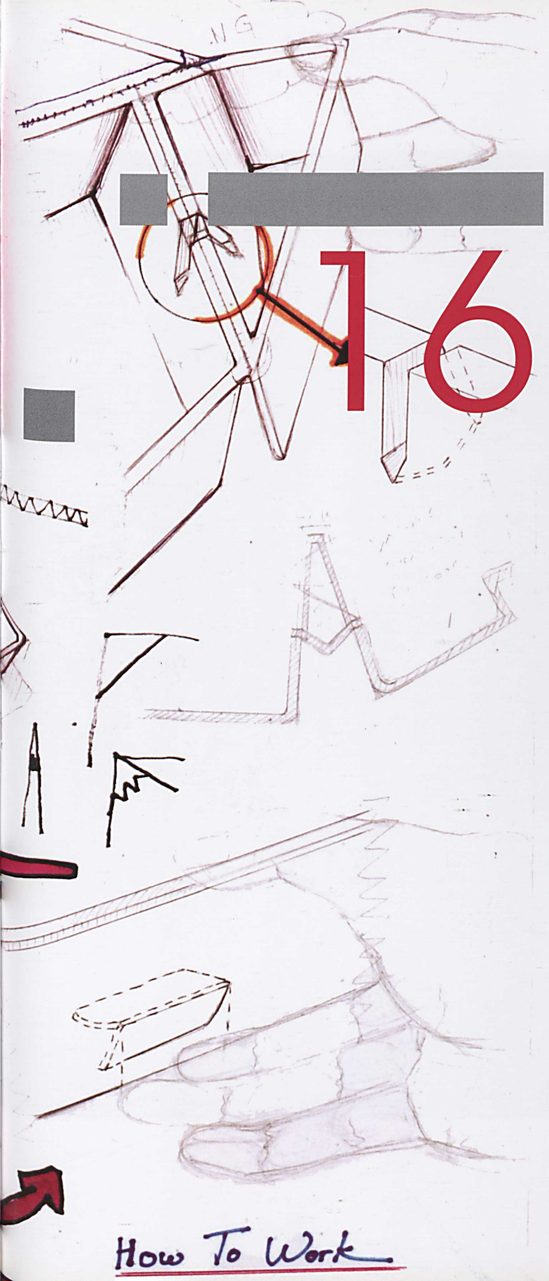

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The Green Design Emphasis

Hasri Yunardi Hassan & Raja Ahmad Azmeer Raja Ahmad Effendi

The Green Design Emphasis

Hasri Yunardi Hassan & Raja Ahmad Azmeer Raja Ahmad Effendi

It is the first time ever, the integration of design studio and design laboratory final year project have been made. The intention was to enable students to be more focused on their projects and also to ensure that the quality of the design output and the prototype fabrication could be optimized. The Green Design had become the theme that was being emphasized by the final year students during the Semester 2010/2011. Green Design is about designing a physical object that would comply with the principles of economic, social, environmental and ecological sustainability. During the initial stage, students were encouraged to dynamically explore and study the epistemology of the selected issues. The purpose of this exercise is to ensure that by the end of the final year degree project, students will be able to produce a product design that could be proposed as a solution to eliminate negative environmental impact completely through a skillful and sensitive design process. The product design will also become a solution that will let users interact more with the environment and the product sustains the environment maximally.

At the end of the research exercise, students were able to propose various kinds of outstanding and potential project titles. The product consists of environmental functional sculptures, furniture for public service areas, agricultural-based product, food packaging, safety and protection device and medical products. On the aesthetics and styling design aspects, the final year project exposes students to a structured design approach which emphasizes on the problem solving factors such as ergonomics, technology application and contemporary design trends. The design project also challenged students to demonstrate their understanding and skills in exploring issues pertaining to green and sustainable aspects, identifying the most appropriate materials that complied with green design and justifying all other design factors that could support designers in reducing impacts to the environments and maximizing the green design application.

Jury Review

Baharudin Ujang

The design issues of the product are relevant and deal with current contemporary issues that are prevalent in today's global society. Issues that are highlighted through the designs such as sustainability and environmentally friendly designs for products are vital and important. It is commendable that the students' works signal their sense of responsibility and accountability to support and promote green living. Moreover, it is also clear and evident that the designs proposed and the issues underlying the designs will be able to help cultivate the public's perception and acceptance towards the wealth of green living.

The research conducted by students is sound as the designs explore a niche area in design that focuses on a specific area of interest. The ideas cover a spectrum of potential products for the market – this is a good sign as it indicates the students' level of awareness on global issues.

The strength of the ideas is not merely in the function of the product but also the fact that it addresses the practicality of the design and the associated emotive response resulting from the designs. It is interesting to see the students' attempt in exploring the potential of various materials deemed eco-friendly and sustainable. In addition, the products are also aesthetically pleasing as well as having a high commercial value. The design ideas are overall strong and noteworthy.

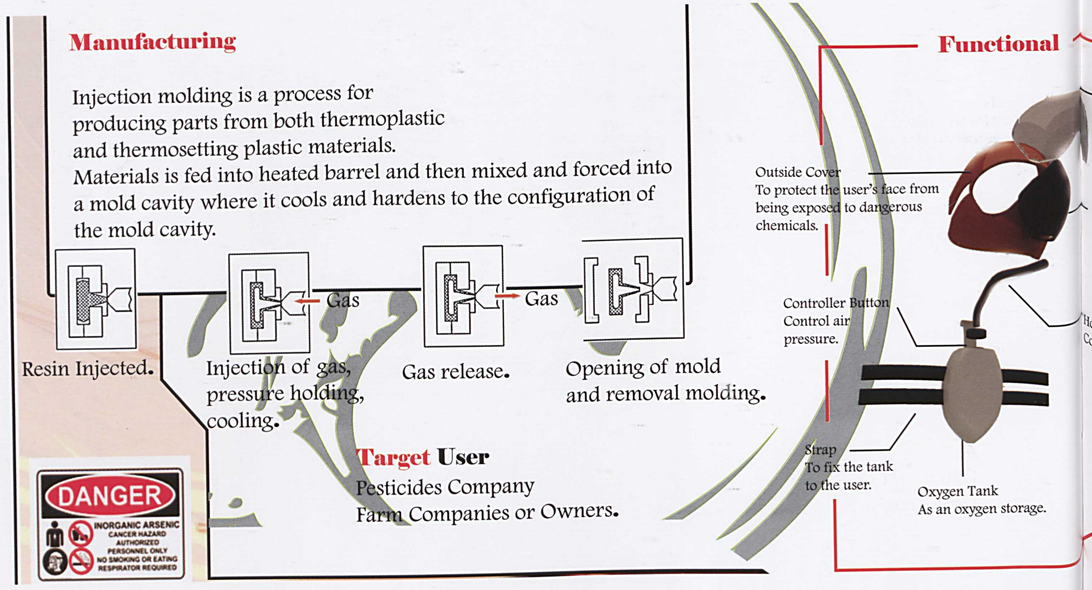
The proposed designs could significantly help solve the problems that are faced in today's society. The social, cultural and environmental issues addressed from the designs of the products are significant and substantial, for instance, the safety mask and the children's' personal alarm are designs indicative of the strong students' capability towards design solving. Other noteworthy designs such as the functional sculpture and food/medicine packaging have great potential for production. Furthermore, the design solutions demonstrate the students' positive responses and awareness towards the needs of today's society.

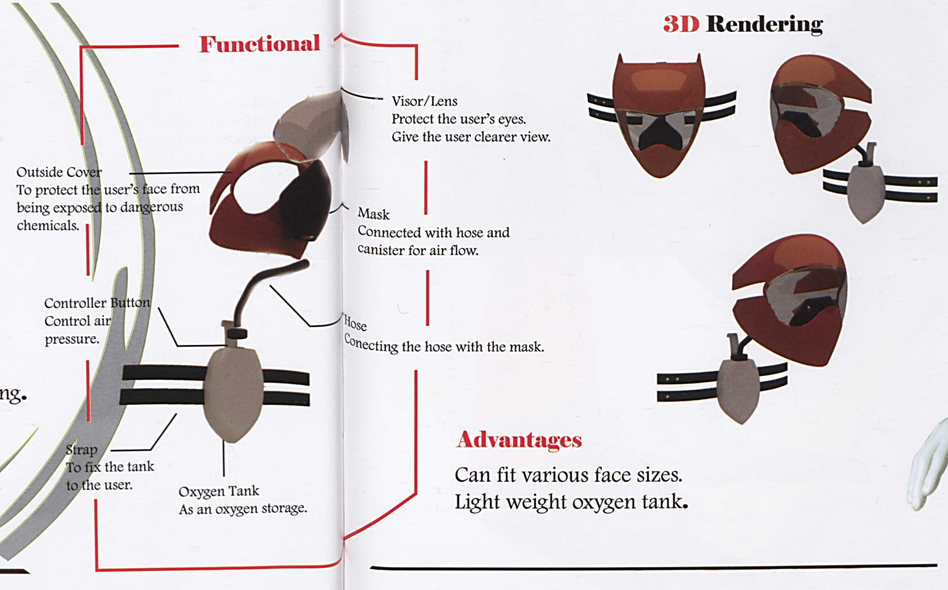
In view of this, it is recommended that the designs can be further improved and strengthened as they appear to have the potential for commercialization and production. Perhaps, a closer look and further research on material selection can be considered in order to raise the standard of the designs for the global market.

Safety Mask for Pesticides Activity

Hasri Yunardi Hassan & Azrol Kassim

The use of safety equipment products for nose, mouth and eye protection are often neglected during pesticide activities. The so-called 'pesticide exposure' can cause damage and harm to the human body. Among the contributing factors are the lack of aesthetic appearance and the feeling of discomfort when using the existing safety equipment products. A research was carried out using qualitative and quantitative methods to understand the users' opinion on the look and function of the existing safety equipment products and problems which occur during pesticides activities. Based on the research findings and idea development, the designer has produced a new safety mask's design that combined aesthetical value, safety and comfort. Besides protecting its wearer from inhaling airborne pollutants and hazardous toxic, its design can fit various faces and uses a SCBA System for ease of breathing.





Advantages

Can fit various face sizes.
Light weight oxygen tank.

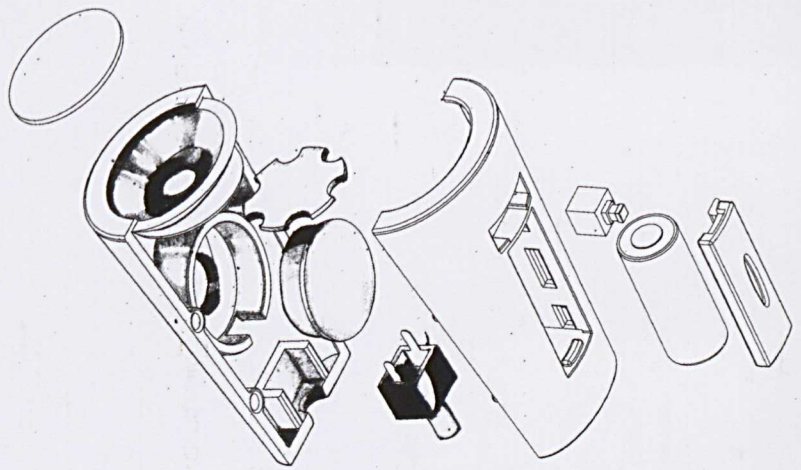
Mohd Azrol Hafiz Mat Jusoh
ID Regestration : MY 11-00165-0101
Award : Silver PRPI 2011
Co-inventors : Hasri Yunardi Hassan & Muhammad Faizal Che Leh

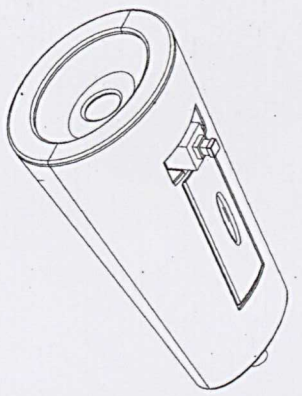
Personal Alarm for Kids

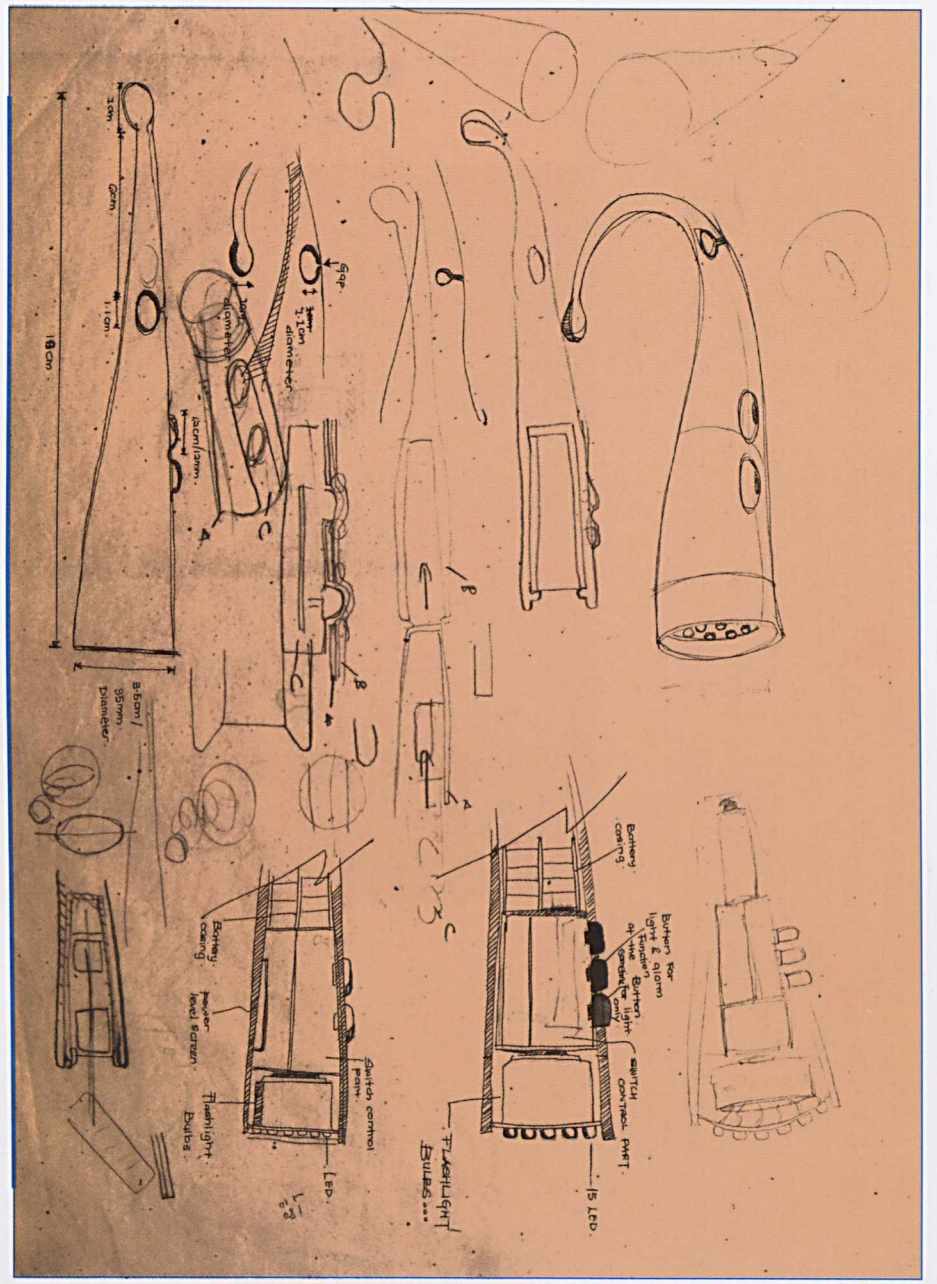
Razman Ramli & Arnis Aziz

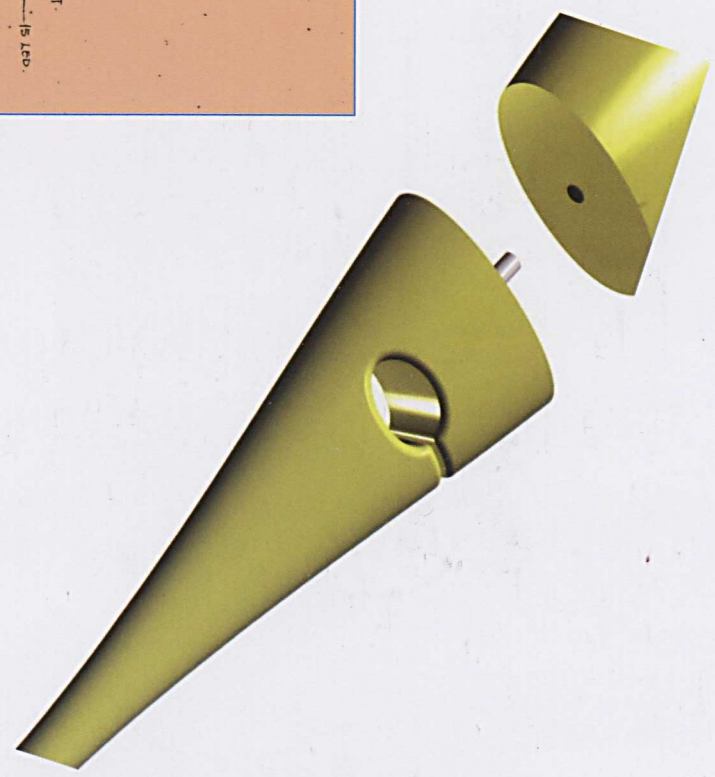
At present, child abduction cases in Malaysia are on the rise. The violence against children in the community occurs especially in places where children live and play. Although local authorities have introduced preventive actions to resolve this problem, the cases are increasing at an alarming rate. Therefore, in search for a design solution, the designer conducted a survey to obtain the respondent's level of awareness on children's safety and their knowledge on the current available self-defense devices. The design displays a product innovation that could help prevent children harassment, abduction and molestation. The alarm system incorporated in the product will equip children whenever they are out in the public and acts as a safety protection against psychological threat of criminals and bullies.

■ Lim Shin Yee
ID registration: MY 11-00164-0101
Award: Gold - PRPI 2011
Co-inventors: Razman Ramli, Nik Aizan Nik Abdullah & Hasri Yunardi Hassan









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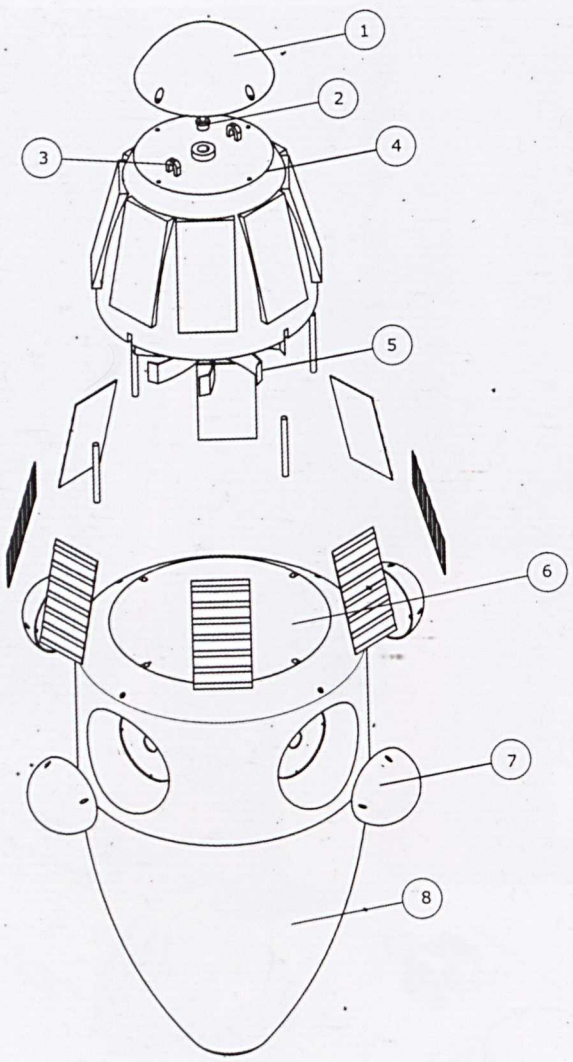
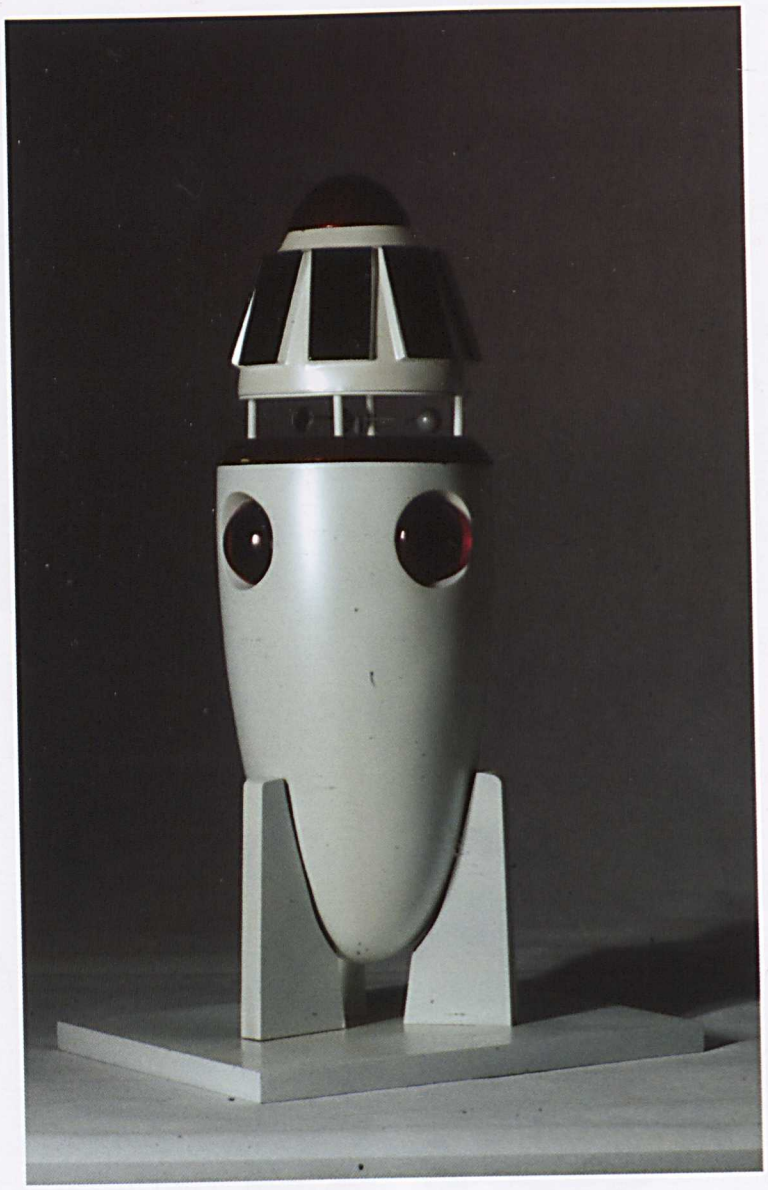
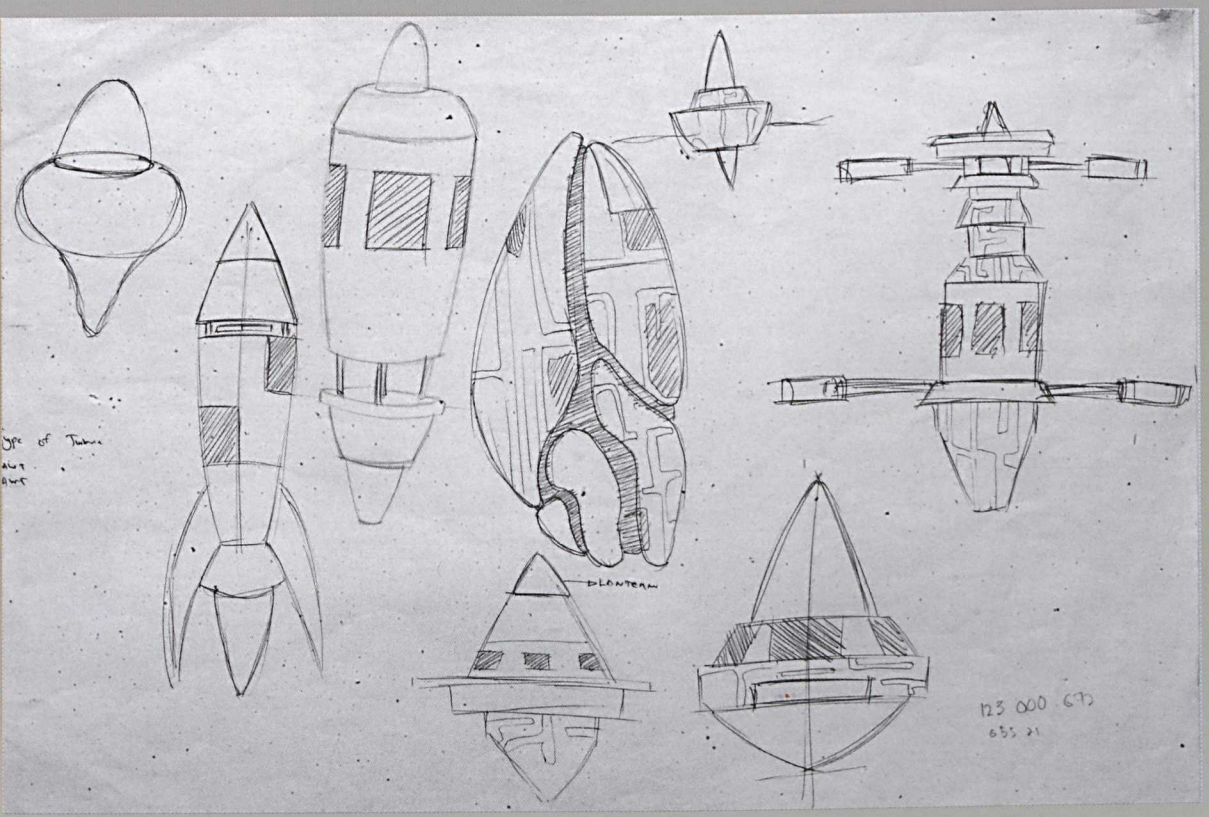
Hybrid Water Buoy

Razman Ramli, Bakri Bakar@Ismail & Nik Aizan Nik Abdullah

Lake Kenyir in Terengganu is known for its activities such as tourism, fishing and logging. These activities are normally carried out during daytime and also at night. Therefore, it is necessary to provide an appropriate way finder system for smooth navigation. In dealing with this issue, the designer conducted research on the existing function, technology and buoy external appearance. A new design concept of Hybrid Water Buoy is introduced. It fuctions as a lighting guidance system which also helps to optimize safety during the journey or whenever boaters move across the lake. Proposed to be used in Lake Kenyir, Terengganu, this product uses solar panels for energy sources. Therefore, it is sustainable, easily maintained and self-rechargeable.







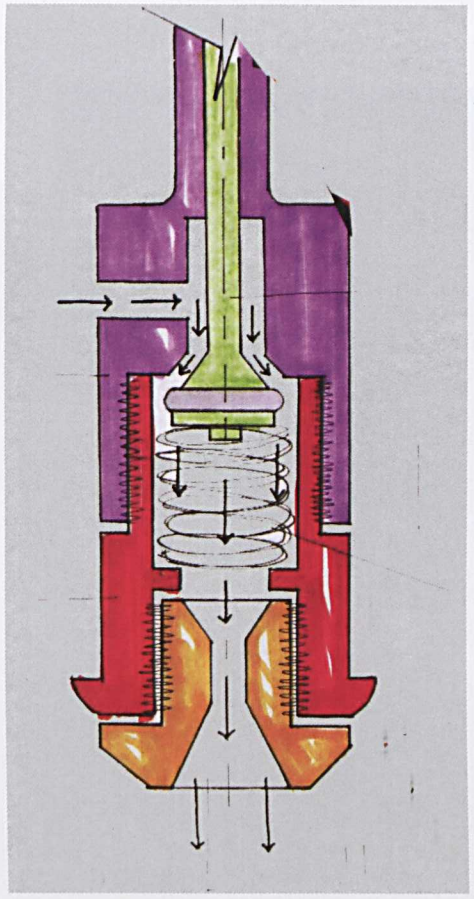
Muhamadizuan Abdul Manah
ID registration: MY10-01587-0101
Award: Gold PRPI 2011
Co-inventors: Razman Ramli & Muhamadizuan Abdul Manah

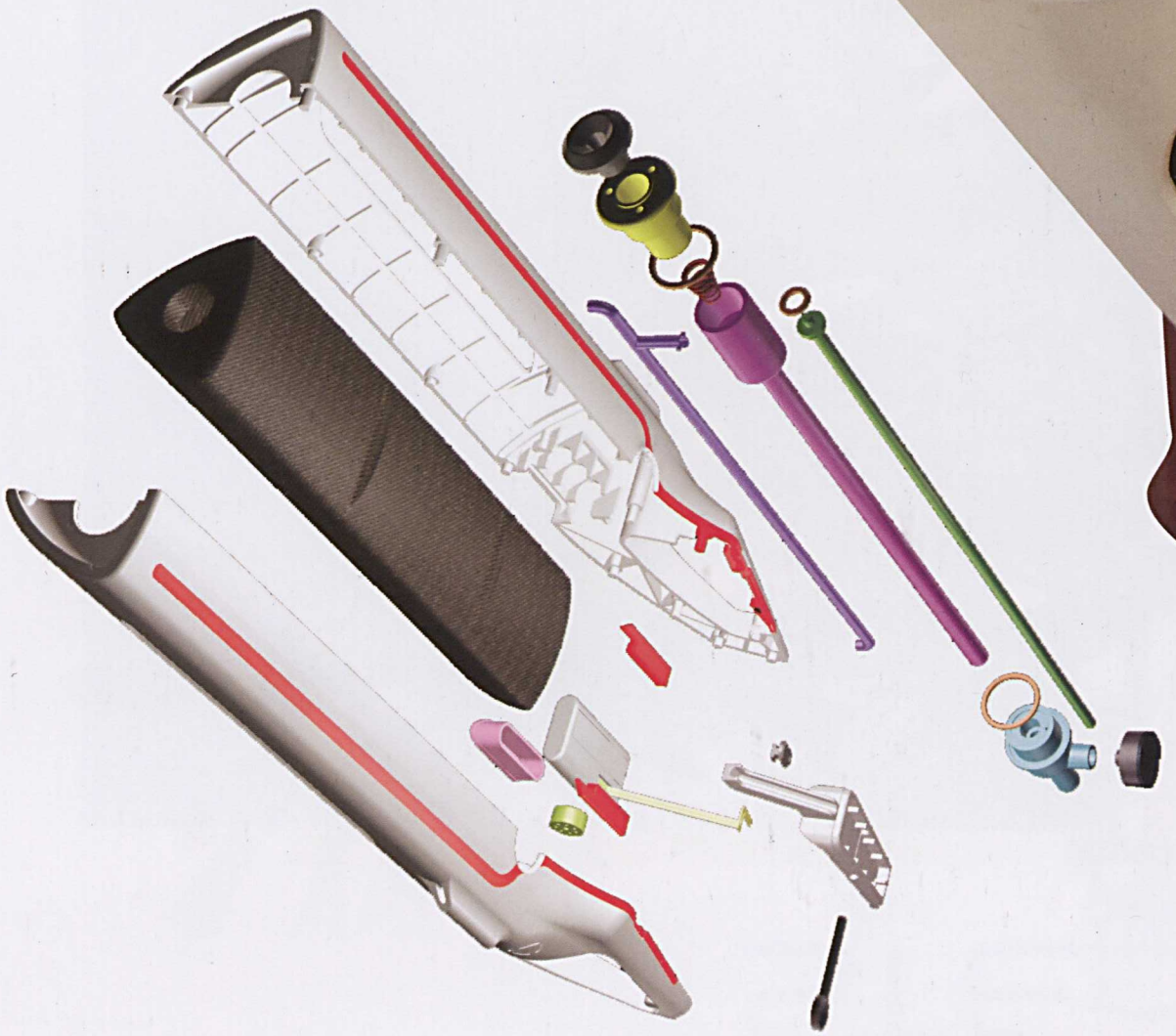
Handy Fire Extinguisher

Mohd Faiz Yahaya & Khairul Manami Kamarudin

Fire cases are caused by many factors. In Malaysia, the lack of user's awareness towards the existence of fire extinguisher has been identified as one of the causing factors. This is due to the poor product appearance and non-user friendly. In addressing this issue, the designer conducted surveys and observation on users' understanding towards design appearance and function of the existing fire extinguisher. Through the analysis and design development process, the designer has successfully created a new external outlook for the fire extinguisher which emphasizes on aesthetic and function. Portraying an impressive styling, the new fire extinguisher model fulfills the aesthetic and functional aspects of design. This product will promote sensitivity amongst household owners to use fire extinguishers during emergency situations.

Mohd Azhar Mohd Amin Tawakkal
ID registration: MY11-00494-0101
Award: Silver PRPI 2011
Co-inventors: Mohd Faiz Yahaya & Indastri Saion





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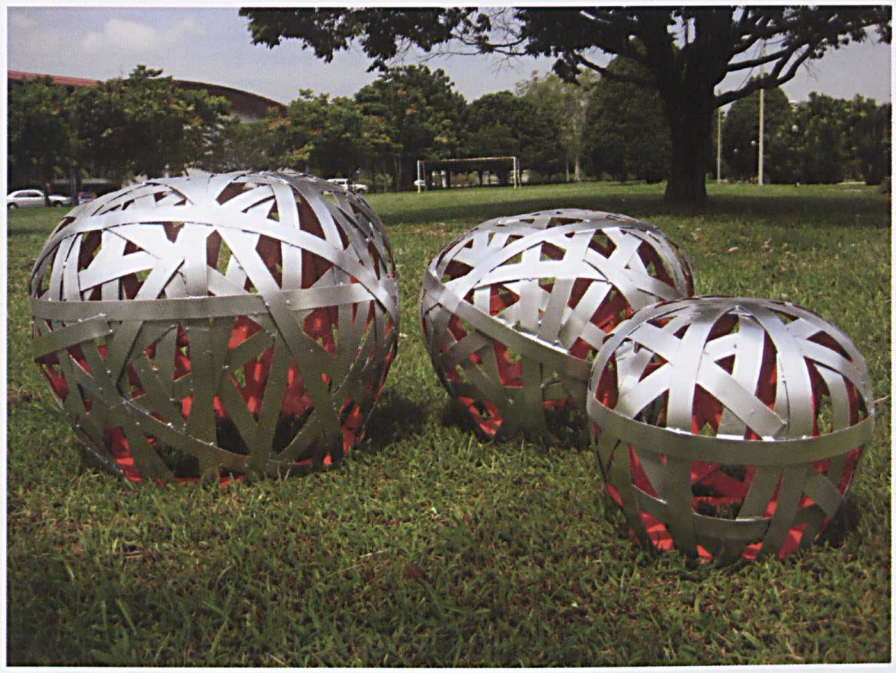
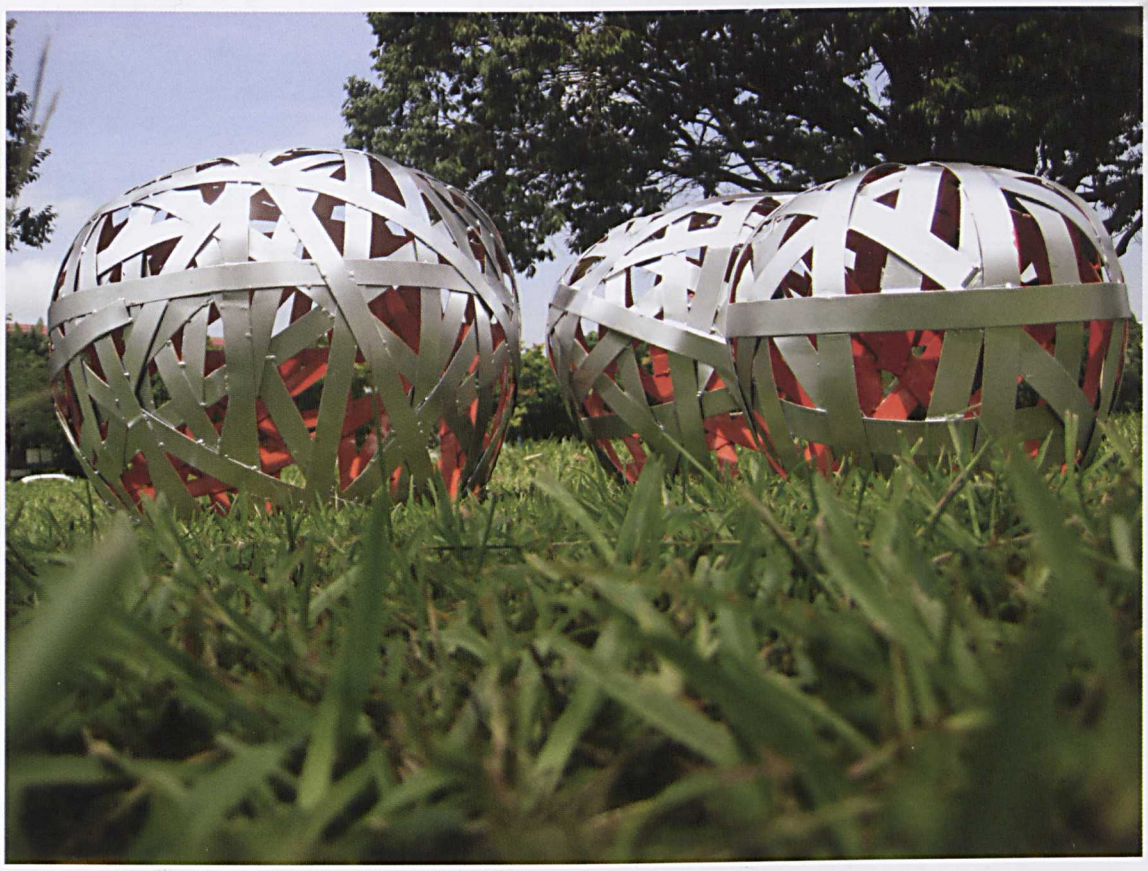
Functional Seating Sculpture

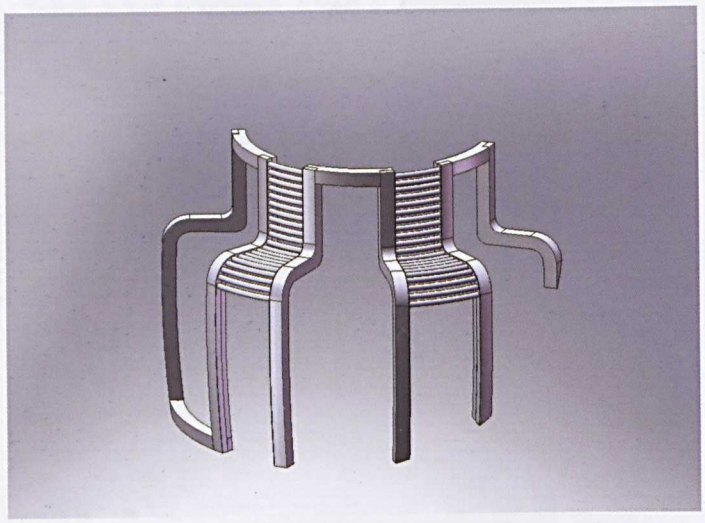
Hasri Yunardi Hassan & Ruhaizin Sulaiman

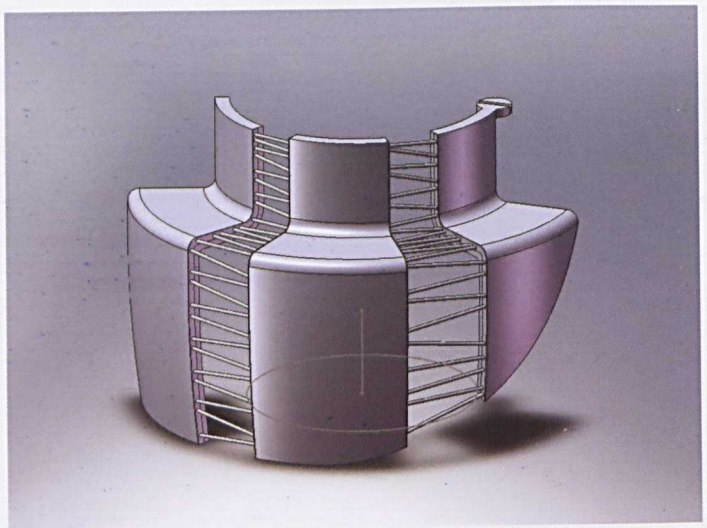
Under-utilized outdoor spaces can be associated with an empty or uninteresting environment. The absence of functional and appealing seating objects contributes to the underutilization of outdoor spaces fronting the Sultan Salahuddin Abdul Aziz Shah Cultural and Art Centre (SSAASCAC) located at Universiti Putra Malaysia. Hence, this may have influenced the public perception towards the image of SSAASCAC. To mitigate the problem, the designer has conducted a study as a basis to design the suitable types of seating objects and materials to be used for the setting. The use of 'green material' is important to support environmental sustainability. Based on the identifiable aesthetic and human needs, a stylish functional seating sculpture is introduced to create a more attractive, lively and usable outdoor space for people.

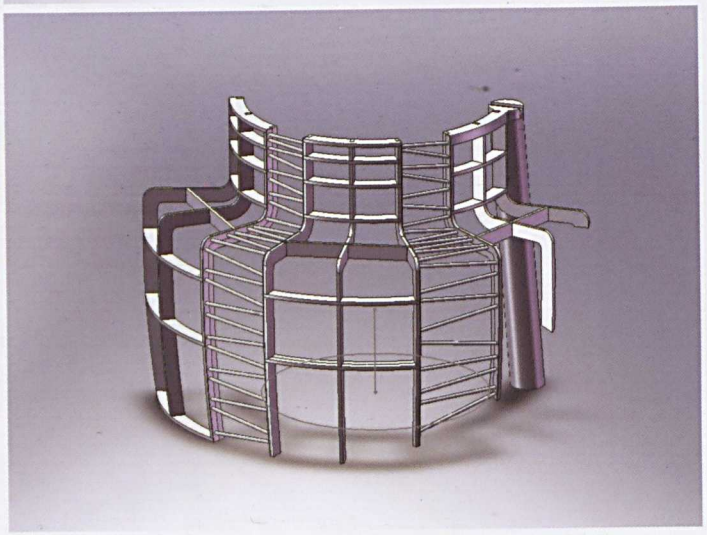


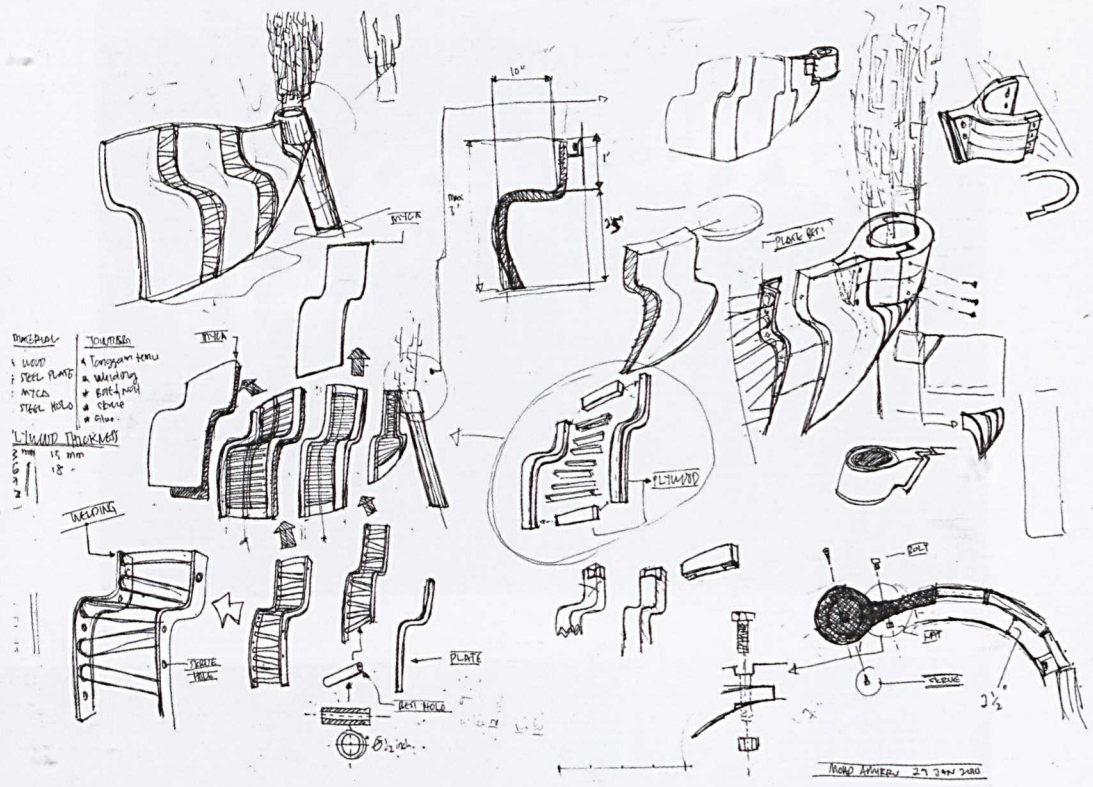


Mohd Nasrul Hakimi Mohd Noor
ID registration: MY 11-00166-0101
Award: Silver PRPI 2011
Co-inventors: Hasri Yunardi Hassan & Nik Aizan Nik Abdullah



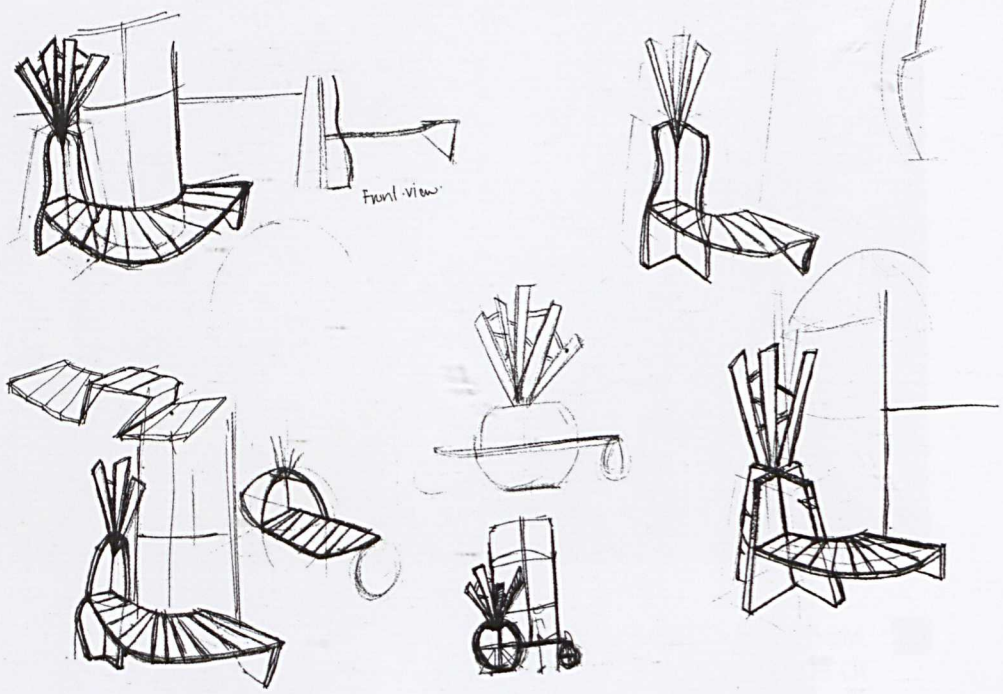






Functional Sculpture For Putra Banquet Hall

For Banquet



Mohd Amirru Abdullah
ID registration: MY 10-01579-0101
Award: Bronze PRPI 2011
Co-inventors: Nik Aizan Nik Abdullah & Indastri Saion

Functional Sculpture Furniture

Nik Aizan Nik Abdullah & Raja Ahmad Azmeer Raja Ahmad Effendi

It is imperative for a product to be designed in response to the environmental issues. Designers have the tendency to produce impressive styling while in many cases disregard the need to address the environmental issues in the design development process. This includes the lack of understanding on the potential of green materials for environmentally sustainable products. The designer addresses the concern through furniture design. Based on his study on the design and materials appropriate for Universiti Putra Malaysia's Banquet Hall, a new design of functional sculpture furniture is introduced. The environmental friendly furniture uses biodegradable materials and the appearance is influenced by the Pier Moundry Art which symbolizes the ceremony, happiness and relationship elements in product design.

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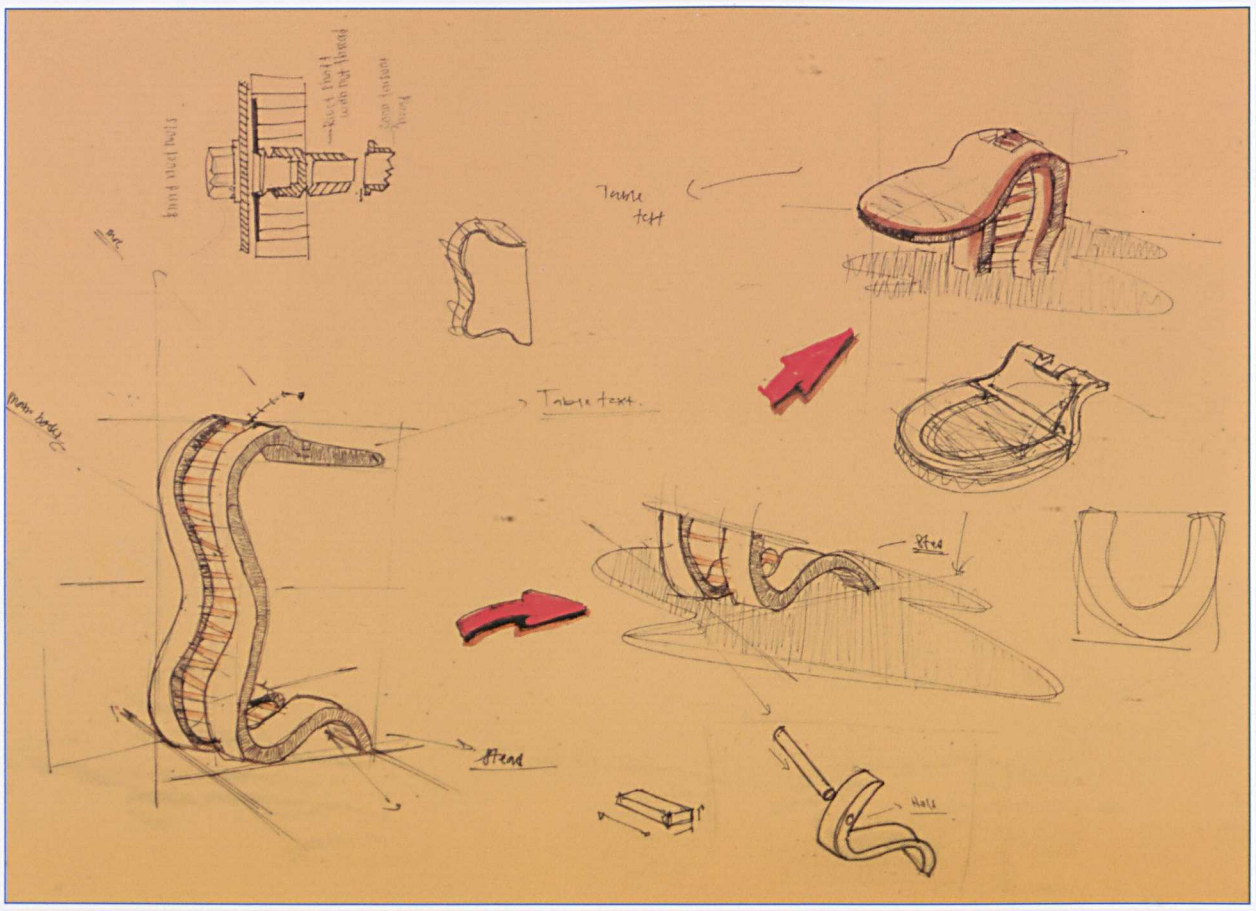
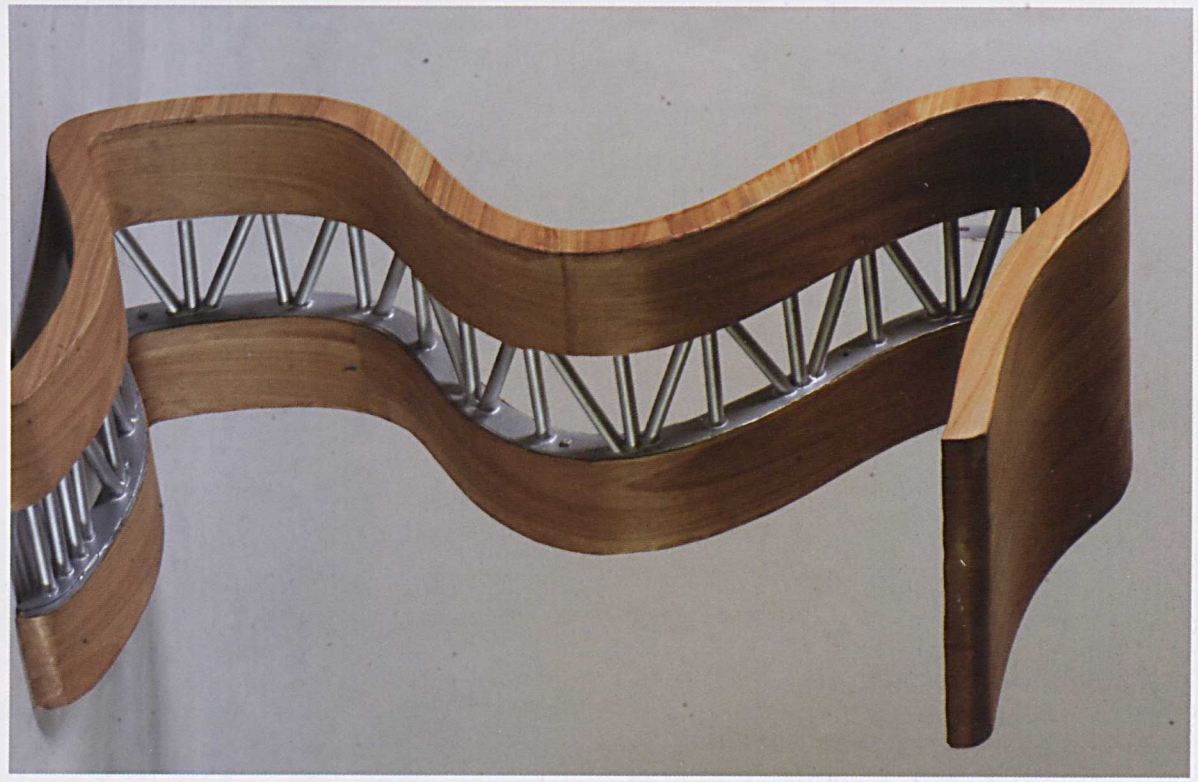
Eco-Rostrum

Baharudin Suarnur & Muhamad Faizal Che Leh

An effective corporate identity is influenced by an effective product appearance. The design concept, function and technology contribute to the image making of the product that can have a profound impact to an organization's competitive position. The designer addresses the issues regarding lacking of identity of the UPM's rostrum and its limitation on the application of creative function and technology. A survey and observations on the effectiveness of the design, material and the corporate identity of the university's existing rostrum were conducted to identify the functional and aesthetic needs appropriate to the current image of the organization. A new compact and "minimalist" style rostrum is designed in compliance with the design issues identified in the study. A wood plastic composite which is considered as an environmentally friendly material is used to respond to the need for environmental sustainability.



Mohd Zulkifli Ali
ID registration: MY 10-01584-0101
Co-inventors: Baharudin Suanur & Hasri Yunardi Hassan



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Military Medical Pack

Mohd Faiz Yahaya & Siti Mastura Ishak

In military units, soldiers usually depend on medical officers or combat medic in providing them with medical care when injuries happen. In a worst case scenario, if an injured soldier is separated from his unit in the battlefield, matters will worse if communication is lost and the injury could not be treated by a combat medic. Therefore, with assistance from the Malaysian's Ministry of Defense (MOD) and Science and Technology Research Institute of Defense (STRIDE), the designer had conducted a survey to propose a design solution for the problem. As a result, a medical kit for the individual soldier was designed to be used during military operations. The product not only provides a multi-resistant and heavy duty medical kit but also compartments that can separate and divide the medical prescription accordingly.

■ Ahmad Nazirul Wanchik
ID registration: MY11-00566-0101
Award: Bronze PRPI 2011
Co-inventors: Mohd Faiz Yahaya & Hasri Yunardi Hassan

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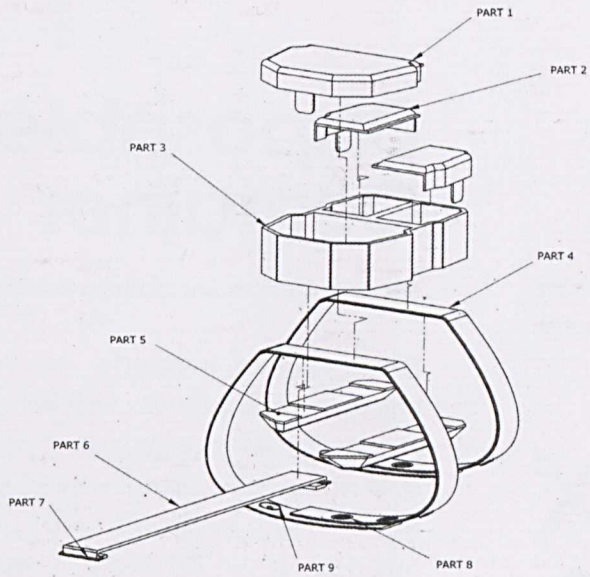
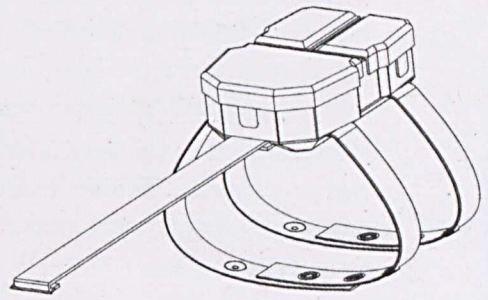
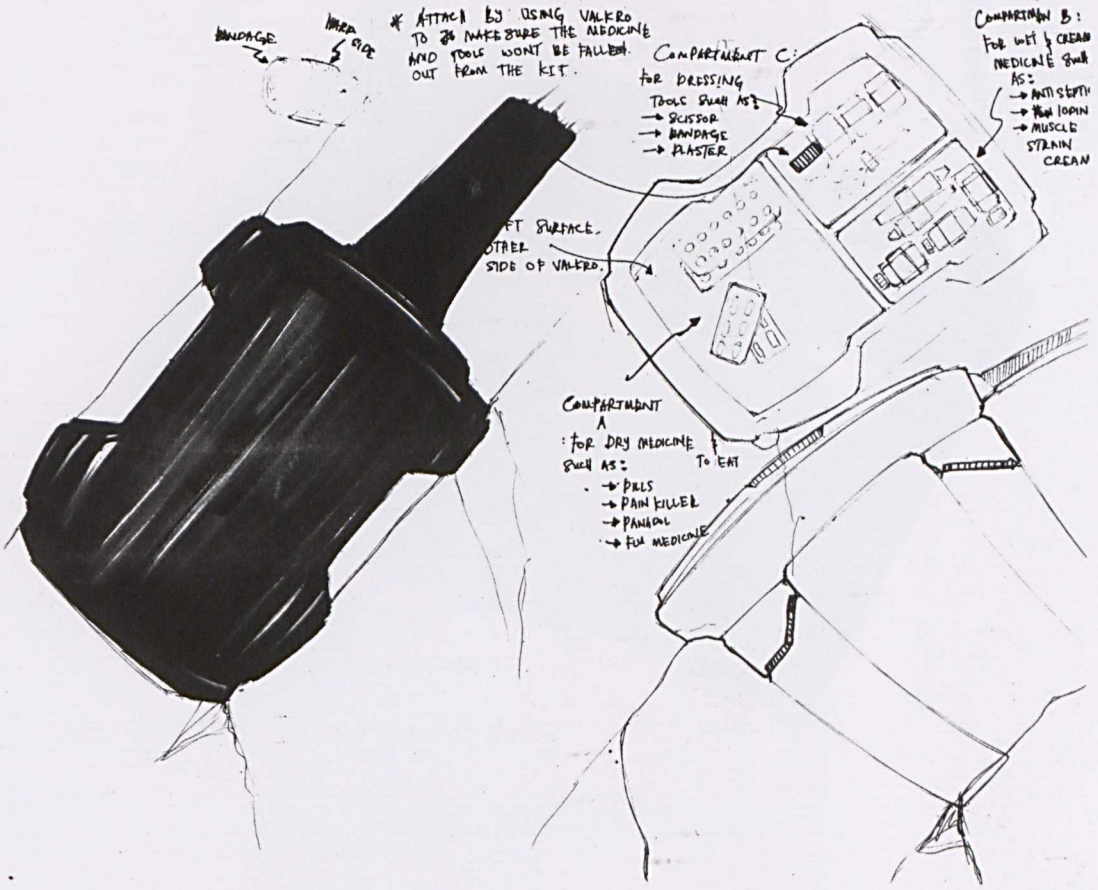


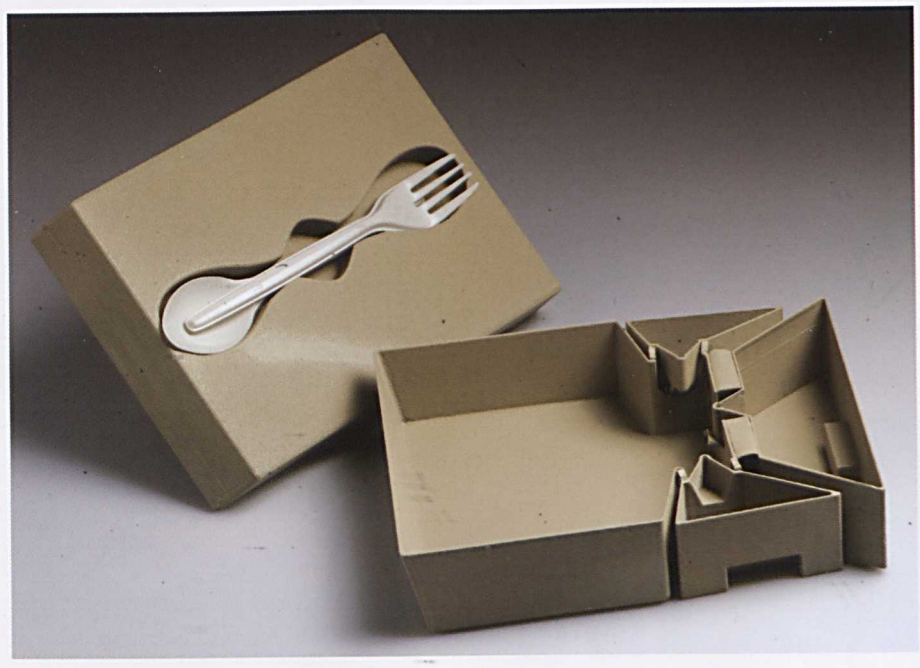




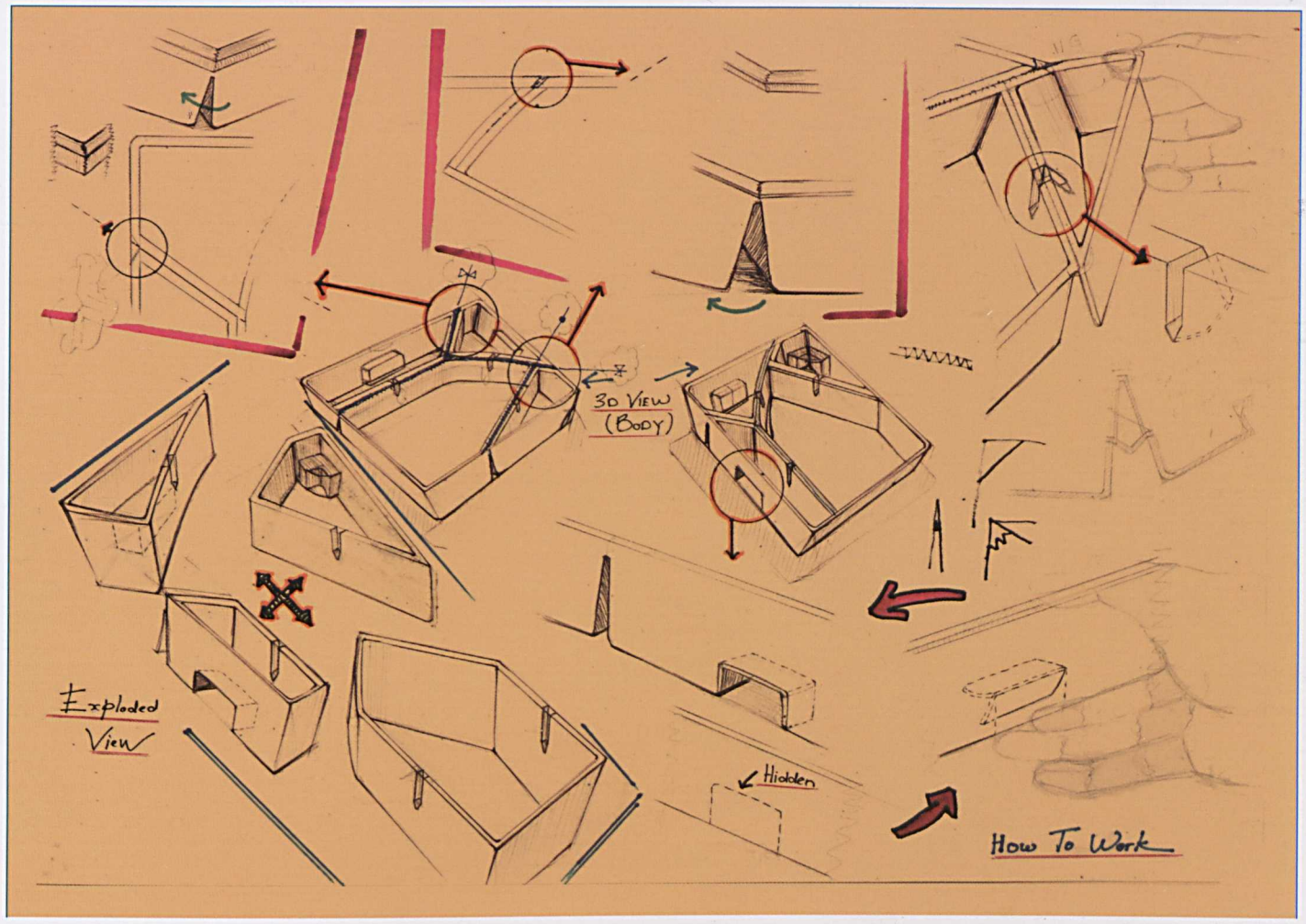
Disposable Food Container

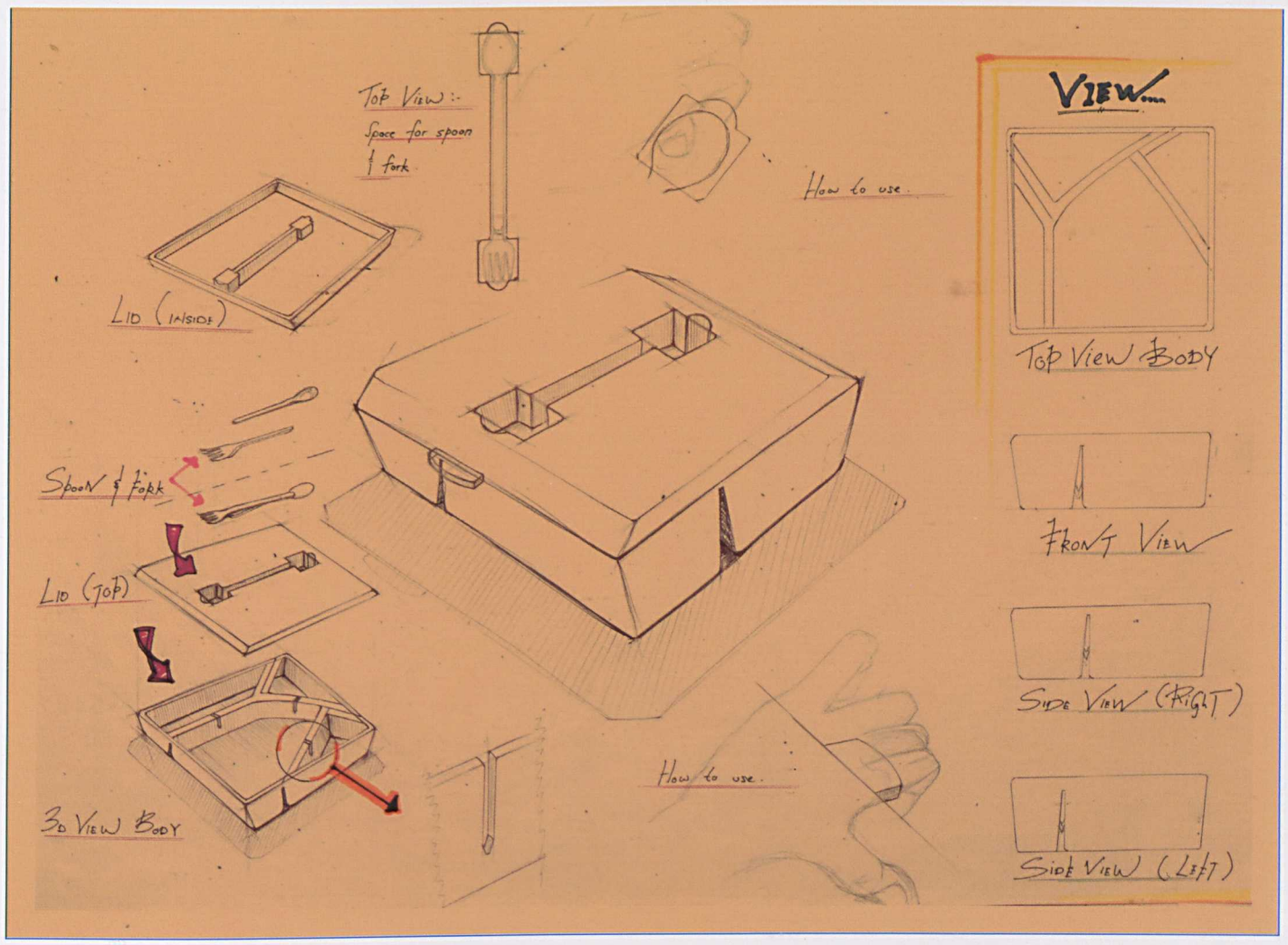
Shahrul Azman Shahbudin & Indastri Saion

Environmental problems are mainly attributed to the impact caused by our lack of caring towards nature. For instance, the extensive use of polystyrene as a material for disposable food container is found to be hazardous to the environment. In understanding the impact, the designer has carried out an in-depth research on the subject by assessing the sensitivity level among food sellers and users on the negative effect of polystyrene food containers as well as identifying alternative materials that can be used for a new container. Environmental friendly food container for the famous Malaysian cuisine, 'Chicken Rice', has been designed using biodegradable and recycled material. For better usability, different compartments are provided for soy sauce, soup, chili, rice and chicken which contribute to the uniqueness of the product.



Noor Shahidatul Akma Abdul Razak
ID registration: MY 10-01583-0101
Award: Gold PRPI 2011
Co-inventors: Bakri Bakar@Ismail & Indastri Saion


Exploded View
3D View (Body)
Hidden
How To Work


Top View :-
Space for spoon & fork
How to use.
VIEW
Lid (Inside)
Top View Body
Spoon & Fork
Front View
Lid (Top)
Side View (Right)
3D View Body
How to use.
Side View (Left)