

## **Showcasing of Amity Technologies**

**29 July, 2011**

**Amity innovation Incubator, sector-125, Noida**

Amity's endeavour to benefit the world through scientific research and patented technologies found centre stage once more in this exclusive event organized to showcase the potential of Amity Technologies to countries and organizations in need of innovations and improvements. Initiated with the blessings of the Honourable Founder President Dr. Ashok .K. Chauhan , the event was organized by the Amity Innovation Incubator and held on the 29<sup>th</sup> of July, 2011. It was chaired by Dr. (Mrs.) Shaleen Raizada and graced by a distinguished guest list of personalities including personnel from Embassies.

11 technologies from Biotechnology, herbal and food products and nanotechnologies were presented by Inventors which was followed by questions and answers. A round table discussion was held after each technology showcasing in which the strategic and commercial implications of technologies were explained by Dr. (Mrs.) Shaleen Raizada. The representatives of less developed countries expressed interest in the technologies presented and gave positive indication of high commercialization possibilities in their countries.

The technology showcase was followed by an eye opening insightful presentation on "Amity Education" by Wing commander S. K. Goel which was much appreciate by the conglomerate of guests from diverse nations among others. On request Mr.

Ojasvi Babber also rose to the occasion of acquainting the present audience with a brief but highly informative introduction to the nature, role and function of the Amity Innovation Incubator along with its incubatee companies- which led to the present delegates expressing keen interest in the Incubatee companies and a lengthy discussion regarding possibilities of business opportunities in their respective countries. Beginning to end the event was filled with many excitement moments and a triumph not just for its organizers but for the beneficial technologies that change the world.

A GLIMPSE OF DISCUSSIONS HELD:

**NOVEL COMPOSITION OF BIOPOLYMERS AND A PROCESS FOR THE  
PREPARATION THEREOF- PRESENTED BY DR. HARSHA**

The invention provides a novel composition comprising biopolymers derived from Cassia and Sesbania species along with amino acids with promising synergistic effect and suitable additives. The invention provides a composition which can be useful for treating diarrhoea comprising an effective amount of an L-glutamine including, but not limited to, methionine and L-tyrosine and combinations thereof. In addition, omega-3- fatty acids along with other additives such as antioxidants, thickening agents, electrolytes all together form a novel composition.

## **PROCESS FOR THE PREPARATION OF ANTIDANDRUFF HERBAL**

### **FORMULATION- PRESENTED BY DR. DHAN PRAKASH**

The invention discloses a novel herbal formulation and the process for the preparation of the same which is effective in preventing and curing dandruff. The herbal formulation has fungicidal action towards dandruff causing fungus. The components of herbal formulation have synergistic effects towards preventing and curing dandruff. It may be in different form for application such as powder, shampoo, lotion, soap. The herbal formulation has no side effects.

### **HERBAL BALM FOR CHAPPED LIPS- PRESENTED BY DR. DHAN PRAKASH**

The invention relates to a novel herbal formulation, effective in treatment of chapping, drying & cracking of the lips and a process for the preparation of the same. It is produced from the unique blend of herbal extracts and essential oils. It contains a natural UV filter and vitamin E which nourishes, tones and softens the lips. The formulation comprises of extracts and oils of herbs and medicinal plants.

## **AN IMPROVED METHOD FOR MANUFACTURING EXTRACT WITH ATLEAST 40%**

### **STEVIOSIDE FROM STEVIA- PRESENTED BY DR. D. D. JOSHI**

The invention provides a process for manufacturing extract having atleast 40% stevioside from Stevia, as free flowing powder. Steviosides is reportedly suitable for diabetics as it does not impact blood sugar levels. Steviosides can replace sugar in the diet and can be used as a flavour enhancer. It can be used to bring out the true flavours in cereals, juices, berries, ice cream, candies, chewing gum, toothpaste and

mouthwash in addition to its normal sweetening activity. This extract can also be used topically as a mask ingredient. Interest was shown in this technology by almost all the people. Dr. (Mrs.) Shaleen Raizada promised a tour of the Stevia farms, situated near Delhi on the next visit.

**PLANT BIOMASS NANOMATERIAL COMPOSITE BASED ELECTRODE FOR THE  
REMOVAL OF INDUSTRIAL DYES FROM WASTE WATER- PRESENTED BY DR.  
SUMAN**

The invention relates to a system, process and apparatus for the sorption of dye and hazardous pollutants from aqueous solution. An electrode composed of plant biomass-nanoparticle composite was used as the adsorbent for removal of dyes, chemical and biological hazardous contaminants from aqueous solution. The composite comprised of activated carbon nanotube and orange peel powder. The novel electrode provides an economical, user-friendly, efficient and re-usable adsorption treatment method for removing dyes from textile effluents. The nanomaterial in the electrode is responsible for its enhanced performance by dual action of providing large surface area and by preventing biodegradation of orange peel and increasing the shelf life of the electrode.

**NANO-CEMENT BASED COMPOSITE COATED CONCRETE PEBBLES FOR  
SURFACE WATER TREATMENT- PRESENTED BY DR. SUMAN AND MR. ABHINAV  
CHAUHAN**

The invention provides nano-cement based composite coated concrete pebbles for surface water treatment. The composite produces a high surface area system for the active, high-throughput inactivation of bacteria in water. This not only decontaminates the biological and ionic contaminants but also provides a rigid cement base which doesn't allow the nanomaterial to come out into treated water.

**ANTIMICROBIAL ACTIVITY OF AQUEOUS EXTRACT OF ASWAGANDHA  
(*WITHANIA SOMNIFERA*) TO INHIBIT THE GROWTH OF METHICILLIN  
RESISTANT *STAPHYLOCOCCUS AUREUS*- PRESENTED BY DR. SHOMA PAUL**

The invention relates to the use of an aqueous extract of the plant, *Withania somnifera* to inhibit the growth of methicillin resistant *Staphylococcus aureus* as active agent used for the treatment of its infection caused in humans. The antimicrobial effect of the plant extract against methicillin-resistant *Staphylococcus aureus* is due to the bioactive compounds present in the aqueous extract by exhibiting big zone of inhibition against the bacterium.

**PROCESS FOR PRODUCING VITAMIN SUPPLEMENT TABLET-FORM FROM  
BRASSICA VEGETABLE LEAF POWDER- PRESENTED BY DR. S. K. ROY**

The invention discloses a process for preparing green leaf powder and tablets from the leafy portions of the Brassica vegetables for use as a vitamin supplement. This

green leaf powder is mixed with an edible binder and then compressed into easy to use tablet form. The tablets are not for direct consumption. They are added to pre-cooked food to enrich it with vitamins.

**DEVELOPMENT OF A PLANT BIOMASS BASED METAL SORPTION COLUMN  
WITH MODIFIED SILICA GEL AND THE APPLICATION THEREOF- PRESENTED  
BY DR. RACHNA**

The invention provides a process for developing a plant biomass based biosorption column for the removal of metal ions. The biomaterial comprising of leaves of *Jatropha* is immobilized on a modified silica gel. The silica gel is modified with cationic polymers for improving the binding of the biomaterial, porosity of the column and to maintain uniform flow rate. The biosorption column may have possible application in the removal of specific ions from contaminated sites or wastewater.

**METHOD AND KIT TO CHECK THE OXIDATION OF EDIBLE OIL- PRESENTED BY  
DR. RAJNI**

The invention provides a method and a kit for testing the oil quality by detecting the oxidative changes in the edible oil. The oxidation of the edible oil is assessed by the presence of free fatty acids in the oil samples. The method of detection involves a change in colour of the samples using an indicator dye solution.

## **CANCER CHEMOPREVENTION NUTRACEUTICAL(S) AND PROCESS FOR THE PREPARATION THEREOF PRESENTED BY DR. GIRISH**

The invention provides a process for preparing an herbal nutraceutical to treat drug resistant breast cancer cells. The nutraceutical comprises the anti-cancer effects of polyphenols enriched extracts from the fruits of Fabaceae family and phytoestrogen enriched grape seeds extract (GSE) either alone and in combination in estrogen receptor-positive MCF-7 human breast cancer cells.

### **SNAPSHOTS**

