

Memorandums of Understanding/Agreements 2013 - 14

The Corporation continued to lay emphasis on broadening and strengthening the technology resource base by nurturing long-term relationships with R&D institutions as well as universities, technical organizations, industries and also individual inventors. This endeavour is reflected in the Corporation signing Memorandums of Understanding/Agreements with 14 new organizations for assignment of technologies developed by them. These organizations are indicated below :

- Maharshi Dayanand University, Rohtak
- National Institute of Ocean Technology, Chennai
- ISF College of Pharmacy, Moga
- Chaudhary Charan Singh Haryana Agricultural University (CCSHAU), Hisar
- Council of Scientific & Industrial Research
- KIIT, Bhubaneswar
- Manav Rachna International University, Faridabad
- The University of Petroleum and Energy Studies, Dehradun
- Lala Lajpat Rai University of Veterinary and Animal Sciences (LUVAS), Hisar
- European Business and Technology Centre (EBTC) Delhi
- Indian Institute of Petroleum (IIP)(CSIR), Dehradun
- Graphic Era University, Dehradun
- Indian Institute of Technology, Kanpur
- Nachimuthu Industry Association (NIA), Pollachi

PROCESSES ASSIGNED 2013-14

During the year, 68 new processes were assigned to the Corporation as compared to 66 no. of processes in the previous year. The processes assigned to the Corporation from various research institutes, Universities were:

Central Sericultural Research & Training Institute, Berhampore

- A light weight rearing tray for rearing of silkworms

Central Silk Technological Research Institute, Bengaluru

- Manufacture of multi-end reeling machine
- CSTRI eco-degumming machine
- An automatic tasar cocoon separating machine
- An improved reeling cum twisting machine (Wet Reeling)
- A solar operated spinning machine

Central Sericultural Research & Training Institute, Mysore

- NEMAHARI—A plant based formulation for management of mulberry root knot disease
- A machine for harvesting silkworm concoons from plastic collapsible mountages
- Seri room heater
- PVC stand for rearing young-age silkworm (Chowki rearing stand)

Indian Institute of Spices Research, Kozhikode, Calicut

- A micronutrient composition for ginger and a process for its preparation (for soils with pH below seven)
- A micronutrient composition for ginger and a process for its preparation (for soils with pH above seven)
- A micronutrient composition for turmeric and a process for its preparation (for soils with pH below seven)
- A micronutrient composition for turmeric and a process for its preparation (for soils with pH above seven)
- A micronutrient composition for black pepper and a process for its preparation
- A micronutrient composition for cardamom and a process for its preparation
- A seed coating composition and a process for its preparation

National Physical Laboratory, New Delhi

- Smart epoxy conducting polymer composite for corrosion protection
- Photoactive scratch resistant TiO₂ thin coating on glass
- Ceramic coating for photocatalysis and self cleaning glass

KIIT University, Patia, Bhubaneswar

- Decontamination of hospital effluent by solar photocatalytic process
- Topical formulation for rheumatic pain
- A topical pain relief formulation with anti-microbial properties
- Formulation to override injection site pain
- Carbon macro tubes with enhanced Gibb's free energy
- Novel L-asparaginase for the treatment of acute lymphatic leukemia
- Live attenuated salmonella typhimurian vaccine

National Institute of Ocean Technology, Chennai

- Tsunami test rig system
- Tsunami detection system ISF College of Pharmacy, Moga
- Nano-transmucosal patch for insulin delivery
- Topical nano-fibrous ocular patch

JSS College of Pharmacy, Ooty

- Preparation of naturally derived water soluble fraction of Isphagula mucilage
- Preparation of naturally derieved water soluble fraction of mango gum
- Preparation of naturally derieved water soluble fraction of fenugreek mucilage
- Preparation of composition of terbinafine HCl topical nano emulsion gel for treating fungal disease
- Preparation of novel polyherbal formulation containing curcumin, quercetin, piperine, etc

Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar

- Development of protein rich chicken meat powder incorporated cookies
- Development of chicken meat powder minced enriched biscuits
- Development of proteins rich chicken meat powder incorporated biscuits

Maharshi Dayanand University, Rohtak

- Co-immobilization of detergent enzymes onto a plastic bucket and brush for their application in cloth washing
- Immobilization of proteins onto solid support and its process thereof
- Improved immobilized proteins composition and its process thereof
- Acrylamide biosensor
- Ascorbic acid biosensor
- Bilirubin biosensor
- Cholesterol biosensor
- Choline biosensor
- Creatinine biosensor
- Cytochrome-C biosensor

- D-Amino acid biosensor
- Galactose biosensor
- Glucose biosensor
- Glutathione biosensor
- Hydrogen peroxide biosensor
- Lactic acid biosensor
- Lactose biosensor
- L-Amino acid biosensor
- L-Glutamate biosensor
- Lysine biosensor
- Organophosphorus biosensor
- Oxalic acid biosensor
- Polyphenols biosensor
- Sulphite biosensor
- Triglycerides biosensor
- Tyramine biosensor
- Tyrosine biosensor
- Uric acid biosensor
- Xanthine biosensor

PROCESSES LICENSED DURING 2013-14

The Corporation managed to sign 19 licence agreements during the year compared to 28 licence agreements signed in the previous year. Some of the major technologies licensed by the Corporation in the financial year were:

Central Sericultural Research & Training Institute, Berhampore

- Sericillin—a synergistic composition for disinfecting silkworm body and silkworm bed - 1

Regional Medical Research Centre, Port Blair

- Recombinant IgM elisa kit for the diagnosis of leptospirosis - 1

Indian Institute of Horticultural Research, Bengaluru

- A process for preparation of neem soap for agricultural use - 1
- A cost effective, eco-friendly para-pheromone trap for effective monitoring of fruit flies belonging to bactrocera SPP for use in horticulture - 2
- A process for preparation of formulation for the management of Borers (Healer & Sealer) - 1
- A process for preparation of arka mango (Magnifera indica L.) foliar spray formulation - 1
- A process for preparation of crop specific foliar micronutrient formulation for banana (Musa sp.) (Arka banana foliar special) - 1
- A process for preparation of arka vegetable foliar spray formulation - 1

Central Sericultural Research & Training Institute, Mysore

- Vijetha supplement powder (Silkworm Bed Disinfectant) - 1
- A machine for harvesting silkworm cocoons from plastic collapsible mountages - 1
- Seri room heater - 1
- Induction of color to fibroin in silkworm - 1

Central Coir Research Institute, Alleppey

- Coco lawn - 1

Shri P.C. Sharma, Ghaziabad, (Inventor)

- Ferro-cement tanks grain bins - 1

Indian Institute of Spices Research, Kozhikode (Calicut), Kerala

- A micronutrient composition for ginger and a process for its preparation (for soils with pH above seven) - 2
- A micronutrient composition for ginger and a process for its preparation (for soils with pH below seven) - 1
- A micronutrient composition for turmeric and a process for its preparation (for soils with pH above seven) – 1

In the coming years, the Corporation expects substantial royalty from these processes. Your Corporation

strives to keep its competitive advantage by enhancing its repository of new processes and technologies that are available to it for transfer and taking new initiatives to further its objectives in the future.