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To  
The Editor,

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Sir,

I request that the following matter may kindly be published in your esteemed daily:

### **Russian Young Scientists trained at TNAU**

Two Russian young scientists from Boreskov Institute of Catalysis, Siberian Branch of the Russian Academy of Sciences (BIC), Novosibirsk is getting trained at Biocatalysts lab of the Department of Agricultural Microbiology, Tamil Nadu Agricultural University (TNAU), Coimbatore from Nov 13-20, 2015.

This training is offered under Indo-Russian joint research project being operated since last year with Prof. U. Sivakumar as Principle Investigator from India and Prof. Valentin Parmon from Russia. This joint project aims at the development of scientific bases of integrated, highly sustainable and energy efficient bio-refinery for the local lignocellulosic (crops/wood) feed stocks. Some of the key areas to be addressed in the project are novel biomass pretreatment, use of thermophilic enzymes for biomass deconstruction, biofuel production, development of combined methods for production of lignin derived chemicals and fuel additives using biocatalysts and solid catalysts. This unique adapted combination of catalytic and biocatalytic technologies will allow us to develop integrated biomass processing value chains which results in the production of variety of valuable products such as fuels, chemicals and other semi-finished products essential for local and international markets; the possibility of upgrading and integrating this biorefinery into existing plants; overall improvement of process economy by reduction of costs for biomass processing, fermentation, waste product management.

One of the main focuses of this project is to conduct joint experiments with samples from Russia and to exchange the technology between India and Russia on bio-refinery

aspects. In order to train researchers who are working in the project, two young scientists from Russia, Dr.Artemiy Ayusheev and Dr.Yulia Samoilovia were invited to carry out laboratory experiments.

The Russian researchers met the Vice-Chancellor Dr.K.Ramasamy and Registrar in-charge Dr. C.R. Anadha Kumar discussed about the development of scientific bases and future challenges of biomass based alternate energy and also they said that there is a great potential in utilizing crop biomass in green biorefineries and these green biomass contains significant amounts of high-value protein, phytochemicals and carbohydrates. Dr.Ramasamy said these carbohydrates can be converted into bulk chemicals, such as lactic acid and acetic acid, or fuels such as ethanol, butanol and biogas. He also added that the complementarity of the team would bring wealth from waste and such technology would eventually improve the economy of both India and Russia. Further, the exchange visits between scientists will help in exchange of expertise and develop some innovative technologies in biomass derived fuels and chemicals.

The Project Investigator from Indian side, Dr. U. Sivakumar while speaking about the project, the combination of biocatalytic processes of TNAU and catalytic processes of Russia would definitely bring out value added commodity chemicals such as Hydroxy Methyl Furfural, Xylo-oligosaccharide, Vanillin, Benzoate and so on. During the meeting, the center Director, Dr.V.P. Duraisami, the Head of the Department, Dr.P. Marimuthu, Joint Registrar, Dr.G.Goplaswami and Co-Investigator of the project, Dr.D. Ramesh were present.

This joint project is initially sanctioned for three years and funded independently by Science and Technology Ministries of respective countries (DBT for India and RMS for Russia).

Asst. Public Realitons Officer