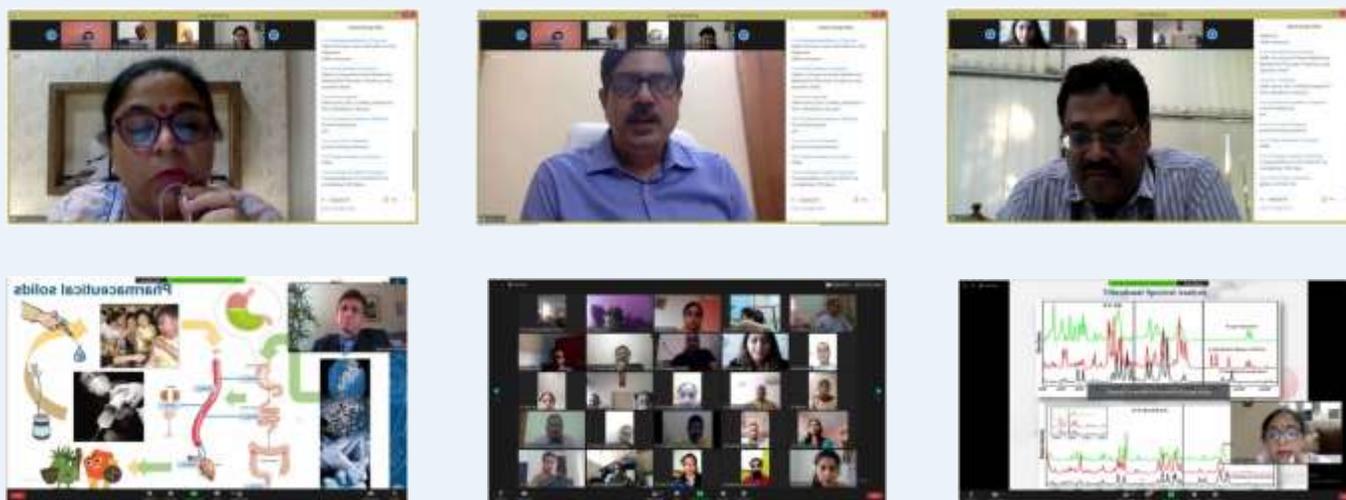




Indo-Brazilian e-symposium on solid state properties of pharmaceuticals (20-30 April, 2020)

Today, when the entire world is going through a very unusual time and we all are battling against a global pandemic, many scientists and researchers are working hard to develop some rapid diagnostic kits, effective protocols and new drugs to combat this pandemic situation. It is very timely for **“Indo-Brazilian e-Symposium on Solid State Properties of Pharmaceuticals”** to take place. More than 150 researchers from ten countries including UK, Hungary, Czech Republic, Portugal, Argentina, Uruguay, Nepal, China, Brazil and various parts of India have registered their presence and contributed their ideas about drug development which may help them to push the limits of science, improve global health and contribute to the prosperity of society.

University of Lucknow and Federal University of Ceará have jointly organized two day Indo-Brazilian e-symposium on initiated by the head of Physics department, Prof. Poonam Tandon and the Brazilian coordinator Prof. Alejandro P. Ayala. Both the universities have shared very long term collaboration in this area. The Vice-Chancellor of the University of Lucknow Prof. Alok K. Rai addressed the event. He said that pharmaceuticals is one of the important areas which we all are worried about especially the commercial, business and strategical aspects of it that how medicines can be made affordable for the masses. He also talked about the close relationship in research between both the countries.



Head, International Division, Department of Science and Technology, Prof. Sanjeev K, Varshney inaugurated the session. He said that the primary function of the research-based pharmaceutical corporations is to create value by discovering and producing effective medicines, vaccines and services that improve patients’ well-being. Both India and Brazil are the emerging economies which should work on co-development of new pharmaceutical molecules in order to not only cut the cost but also to save the time. He said that the solid state properties of pharmaceuticals have profound effects on the quality of drug substances and drug products. He focused on the promotion of scientific research in India and also on the international scientific cooperation. He talked about various multilateral platforms, like IBSA and BRICS which provide opportunities to work together.



University of Lucknow (UoL)

Federal University of Ceará (UFC)

The first day of the e-symposium ended with six lectures from the Brazilian coordinator and his research group. Prof. Alejandro P. Ayala in his lecture told how the stoichiometry of a drug molecule through crystal engineering controls the solid state properties of the drug. Solid forms of drug have direct impact on physicochemical properties of drug by adding coformer and offers an opportunity to increase the intellectual property of it. Prof. Javier Ellena from University of São Paulo, discussed some anticancerous drugs. He inspects and recognizes the chemical features which are preferably required in designing new solid forms.

Day 2 of the symposium continued with six lectures. Prof. Poonam Tandon, head of Physics department started the session with her talk on “Crystal engineering– Design and development of new solid forms”. She said that this technique is very useful for the designing and development of new drugs. Prof. Amrithesh C. Shukla from Botany Department, University of Lucknow and Prof. Papiya Chowdhury from Japye Institute of Information and Technology, Noida shared their views in the symposium. Several Oral and poster presentations were welcomed during the e-symposium to motivate the research work of various participants. More than 20 posters were invited and also displayed on the social media platforms.

YouTube video links

- <https://www.youtube.com/watch?v=VO8RaIC258A&t=150s>
- <https://www.youtube.com/watch?v=yHQUCXwaKz8&t=278s>
- <https://www.youtube.com/watch?v=v9Wa2wP0bqQ>
- <https://www.youtube.com/watch?v=juQvUbZ4-CQ&t=13s>
- <https://www.youtube.com/watch?v=v9Wa2wP0bqQ>
- <https://www.youtube.com/watch?v=8cZ53cg-IDI&list=PLykybfvo2yAbITtPd4b6wy2AqU7IQLSz&index=2&t=127s>
- <https://www.youtube.com/watch?v=gFUij5ErcZg&list=PLykybfvo2yAbITtPd4b6wy2AqU7IQLSz&index=4&t=4s>
- <https://www.youtube.com/watch?v=wkAxoU8fBuw&t=24s>

सस्ती दवाओं के विकास पर ब्राजील संग मिलकर प्रोत्साहन देना

लखनऊ (PNS): लखनऊ विश्वविद्यालय, जो ब्राजील के फेडरल विश्वविद्यालय (CEARA) के सहयोग से एक ऑनलाइन इंडो-ब्राजीलियन e-संश्लेषण परिसर को आयोजित कर रहा है, जो दवाओं के ठोस अवस्था गुणों को समझने और नए दवाओं को डिज़ाइन करने में मदद करेगा।

लखनऊ विश्वविद्यालय के अध्यक्ष प्रो. ए.के. शर्मा ने कहा कि यह संयोजन भारत में दवाओं के विकास को प्रोत्साहित करेगा और वैश्व स्तर पर दवाओं की लागत को कम करेगा।

इस संयोजन के अंतर्गत, लखनऊ विश्वविद्यालय के शोधकर्ता ब्राजील के शोधकर्तों के साथ मिलकर दवाओं के ठोस अवस्था गुणों को समझने और नए दवाओं को डिज़ाइन करने में मदद करेंगे।

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LU holds e-symposium with Brazilian university

Lucknow (PNS): Lucknow University, in association with Federal University (Ceara), on Wednesday organised an Indo-Brazilian e-symposium on solid state properties of pharmaceuticals. Head of Physics department Poonam Tandon said both the universities have a long-term collaboration in this field.

Several researchers participated in the e-symposium along with LU Vice-Chancellor Alok Kumar Rai, and Brazilian coordinator of the workshop Alejandro Pedro Ayala from the University of Ceara.

Head of international cooperation, Department of Science and Technology, SK Varshney said the primary function of the research-based pharmaceutical corporations was to create value by discovering and producing effective

medicines, vaccines and services that improve patients' well-being.

"Both India and Brazil are the emerging economies and should work on co-development of new pharmaceutical molecules in order to not only cut down on the cost but also to save time. It is an appropriate time for this Indo-Brazilian e-symposium. Solid state properties of pharmaceuticals such as polymorphism, formation of hydrates and solvates, degree of crystallinity, and mechanical properties have profound effects on the quality of drug substances and drug products," he said.

He said that the study of such properties are important during quality control testing of drugs with respect to solubility, dissolution, bioavailability, and stability.