

## Report of Expert Talk on ‘Robotics and its Industrial Applications’

<b>Event Name</b>	Talk on ‘Robotics and its Industrial Applications’
<b>Centre (name)</b>	IETE Chandigarh Centre
<b>Venue (College/Institute)</b>	Virtually
<b>Date &amp; Time</b>	April 09, 2025 at 2.30 PM
<b>Chief Guest</b>	--
<b>Topic of Chief Guest Speech &amp; Highlights (Max. 25 words)</b>	--
<b>Important dignitaries attended</b>	<p>Dr. Umesh Kumar Tiwari, Chairman, IETE Chandigarh Centre  Dr. Surender S. Saini, Honorary Treasurer, IETE Chandigarh Centre  Dr. Ranjan Kumar Jha, Expert Speaker &amp; Awardee- IETE Hari Ramji Toshniwal Award  Dr. TS Kamal, Senior Fellow, IETE Chandigarh Centre  Dr. Labh Singh, Senior Fellow IETE Chandigarh Centre  Dr. GS Singh, Senior Fellow IETE Chandigarh Centre  Sh. Manmohan Singh Maini, EC Member IETE Chandigarh Centre  Dr. Garima Saini, EC Member IETE Chandigarh Centre  Dr. Amit Laddi, EC Member IETE Chandigarh Centre  Dr. Divya Aggarwal, EC Member IETE Chandigarh Centre  Dr. Sanjeev Kumar, Fellow IETE Chandigarh Centre  Dr. Raj Kamal Grewal, Fellow IETE Chandigarh Centre</p>
<b>Brief Report including above information</b>	<p>The Institution of Electronics and Telecommunication Engineers (IETE) Chandigarh Centre successfully organized a virtually talk on <b>‘Robotics and its Industrial Applications’</b> by <b>Dr. Ranjan Kumar Jha</b>, IETE Hari Ramji Toshniwal Awardee &amp; Scientist CSIR-CSIO Chandigarh on <b>April 09, 2025</b>.</p> <p>The Programme started with welcome address delivered by <b>Dr. Umesh Kumar Tiwari</b>, Chairman IETE Chandigarh Centre. He welcomed Dr. Ranjan Kumar Jha, Expert Speaker &amp; IETE Hari Ramji Toshniwal Awardee, Senior IETE Members, EC Members of Chandigarh Centre, staff &amp; Students participants.</p> <p>The talk was focussed on usage of Robotics and its Industrial Applications such as, Material Handling, Material transfer, Machine loading and uploading, spot welding, spray Coating, Assembly, Medical, Military application. It generated lot of interest among the audience which was visible from a long question-answer session.</p> <p>More than 30 IETE Corporate Members, students, staff members from IETE &amp; NIELIT Chandigarh participated in the talk.</p> <p><b>Dr. Surender Singh Saini</b>, Honorary Treasurer IETE Chandigarh Centre presented a formal vote of thanks at the end.</p>

# Photographs

Ranjan Jha (Presenting)

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## Robotics and It's Industrial Applications

TALK  
ON  
ROBOTICS

09<sup>th</sup> April 2025, Talk @ IETE CHANDIGARH

Dr. Ranjan Jha  
Sr. Scientist, BioMedical Applications (BMA)  
CSIR- Central Scientific Instruments Organisation  
Chandigarh, India

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Ranjan Jha (Presenting)

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## INDUSTRIAL ROBOT: TESLA CAR ASSEMBLY

### THE COOLEST ROBOTS IN TESLA'S FACTORY

BUSINESS INSIDER

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11



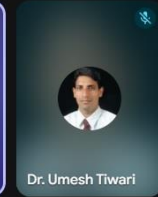
## INDUSTRIAL ROBOT: TESLA CAR ASSEMBLY



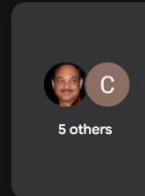
Surender has left the meeting



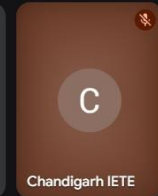
Ranjan Jha



Dr. Umesh Tiwari



5 others



Chandigarh IETE

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## LAPAROSCOPIC SURGERY

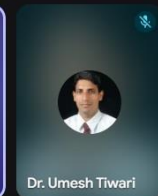


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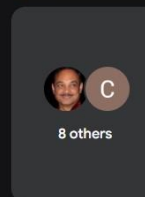
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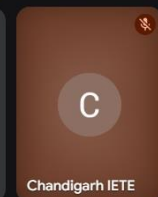
Ranjan Jha



Dr. Umesh Tiwari



8 others



Chandigarh IETE

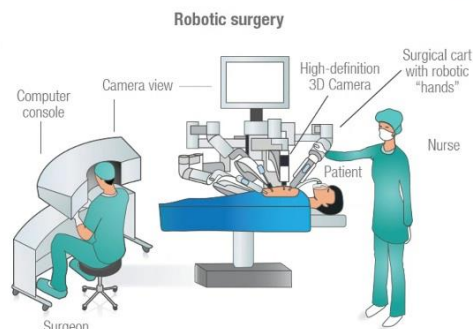
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## ROBOTIC SURGERY

- Robotic surgery**, or robot-assisted surgery, allows doctors to perform many types of complex procedures with more precision, flexibility and control than is possible with conventional techniques.
- Most widely used robotic surgical system includes a camera arm and mechanical arms with surgical instruments attached to them. The computer console gives the surgeon a high-definition, magnified, 3-D view of the surgical site. The surgeon leads other team members who assist during the operation.

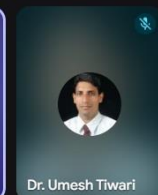


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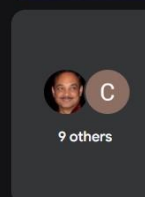
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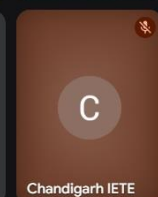
Ranjan Jha



Dr. Umesh Tiwari



9 others



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Ranjan Jha (Presenting)

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## BENEFITS TO SURGEONS

- Greater visualization or immersive view through tiny incisions
- Enhanced dexterity (motor skills)
- Reach inaccessible areas with ease
- Greater precision
- Easier to attach nerve endings
- No risk of transmission of diseases
- Reduce surgeon fatigue

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Ranjan Jha

Dr. Umesh Tiwari

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PARASINGH KAMAL

VINAY SHUKLA

Dr. Sanjeev Kumar

5 others

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Ranjan Jha (Presenting)

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Ranjan Jha

Dr. Umesh Tiwari

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PARASINGH KAMAL

VINAY SHUKLA

Jyoti Sharma

8 others

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Ranjan Jha (Presenting)

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Ranjan Jha

Dr. Umesh Tiwari

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PARASINGH KAMAL

VINAY SHUKLA

Dr. Sanjeev Kumar

8 others

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A screenshot of a Zoom video conference interface showing 15 participants in a grid layout. The participants are arranged in three rows of five. The first row includes Surender, Dr. Umesh Tiwari, Ranjan Jha, Dr Labh Singh, and Chandigarh IETE. The second row includes TARA SINGH KAMAL, Dr. Sanjeev Kumar, AMIT LAD., and Braham Sharma. The third row includes Akhil Arora, Jyoti Sharma, Manmohan, garima NITTTR, Jaspreet Singh, and Chandigarh IETE. The interface includes a bottom toolbar with icons for microphone, video, chat, and other controls. The time displayed is 3:16 PM and the meeting ID is ebx-xfz-ezp.

Participant	Participant	Participant	Participant	Participant
Surender	Dr. Umesh Tiwari	Ranjan Jha	Dr Labh Singh	Chandigarh IETE
TARA SINGH KAMAL	Dr. Sanjeev Kumar	AMIT LAD.	Braham Sharma	
Akhil Arora	Jyoti Sharma	Manmohan	garima NITTTR	Jaspreet Singh
				Chandigarh IETE

3:16 PM | ebx-xfz-ezp

Turn on microphone (ctrl + d)