

3. One paper of RRCAT received the Best Paper Award in 28th National Symposium on Cryogenics and Superconductivity (NSCS28) held at IIT Kharagpur during Oct. 18-21, 2022. The award carries a certificate and a cash prize of ₹ 5000. The details of the paper are given below:



Title: PLC based control system for LN₂ based reefer SHIVAY
Authors: S. C. Patidar, C. Gupta, P. Khare, A. Tiwari, H. K. Patel, S. G. Gilankar, G. Agrawal, D. Sinnarkar

Shri Suresh Chandra Patidar, SO/E, Cryomodule Development & Cryoengineering Application Section, Proton Accelerator Group, RRCAT, who presented the paper, received the award.

4. Six posters of RRCAT received the Best Poster Awards sponsored by the Indian Laser Association (ILA), during 31st DAE-BRNS National Laser Symposium (NLS-31) held at IIT Kharagpur during December 3-6, 2022. The award carries a certificate and a cash prize of ₹ 2000. The details of the posters are given below:

4.1 *Title:* Programmable versatile fast high voltage pulse generator with matched rise-fall times for Paul trap experiments
Authors: Jankee Upadhyay, Sudhir Kumar, P. Saxena, R. Arya



Smt. Jankee Upadhyay, SO/G, Laser Electronics Division, Laser Group, RRCAT, presented the poster and received the award.

4.2 *Title:* Tilted fiber Bragg grating cut-off mode based highly sensitive refractive index sensor
Authors: P. K. Saini, J. Kumar, R. Mahakud, S. Kumar, O. Prakash, S.V. Nakhe



Shri Pankaj Kumar Saini, SO/E, Fibre Sensors & Optical Spectroscopy Section, Materials Science and Advanced Technology Group, RRCAT, presented the poster and received the award.

4.3 *Title:* Preparation and evaluation of a light activable drug loaded composite film for antimicrobial photodynamic therapy application



Authors: Sourabrata Chakraborty, Khageswar Sahu, Shivangi, Shovan Kumar Majumder

Shri Sourabrata Chakraborty, SO/C, Laser Biomedical

Applications Division, Materials Science and Advanced Technology Group, RRCAT, presented the poster and received the award.

4.4 *Title:* Development of underwater laser cutting tool and technique for removal of central cobalt pin from 19-pin PHWR fuel bundle

Authors: R. K. Jain, Rajpal Singh, M. K. Bairwa, Pawan Kumar, Ranveer Singh Meena, Sunil Kumar Sharma, Vijay Shukla, B. K. Saini, Dhruvdeep Narwat, B. N. Upadhyaya, R. Arya, K. S. Bindra.



Shri R. K. Jain, SA/G, Industrial Lasers & Applications Section, Laser Electronics Division, Laser Group, RRCAT, presented the poster and received the award.

4.5 *Title:* Laser cladding of tungsten carbide on SS 304 steel using LDED process

Authors: C. H. Prem Singh, Upendra Kumar, A. K. Rai, G. K. Mishra, C. P. Paul, S. K. Dixit and K. S. Bindra



Shri C. H. Prem Singh, SA/E, Laser Technology Division, Laser Group, RRCAT, presented the poster and received the award.

4.6 *Title:* High precision measurement of effective thermal expansion coefficients of low-coefficient of thermal expansion (CTE) materials using low-coherence interferometry

Authors: K. K. Malakar, S. Chakraborty, B. C. Pant, T. S. Reddy, Y. Verma, Sendhil Raja S.



Shri K. K. Malakar, Ph. D. Scholar, Advanced Electro-Optics Systems Section, Laser Group, RRCAT, presented the poster and received the award.