

INFRASTRUCTURE FACILITIES AVAILABLE

An advanced photonics laboratory has been setup with basic state of art processing and diagnostic facilities e.g. Thin Film deposition techniques and electrical & optical characterization techniques. The research thrust of the department is on achieving scientific and technological excellence, through front line research problems with broader socio- scientific relevance.

The primary area of expertise of our Advanced Photonics Lab (APL) is Simulation and modeling of optoelectronic devices and deposition of thin-film, solution processable novel semiconducting films. Solution-based processes include spin-coating and spray pyrolysis, and offer room temperature atmospheric deposition of semiconducting thin-films. Modeling, simulation, design and characterization of Polymer Light Emitting Diode (PLED) & Organic Light Emitting Diode (OLED) and Solar Cells are major thrust areas in Electronics. PLED/OLED technology is very energy efficient and lends itself to the creation of ultra-thin film lighting displays that will operate at lower voltages. The group has the developed simulators for single and bi layer devices and through simulations, extensive profiles of transient's electric field, carrier density, current and its components, luminescence and recombination density has been generated.

		Other Infrastructural facilities :		
S.No.	Name of Equipment worth Rs. one lakh and above	Year of purchase	Make and address	Cost in Rs.
1.	Programmable Spin Coater	2007	Apex Instruments CO. Kolkata	2,01,868=00
2.	Silvaco Atlas Software for Organic Device Simulation	2014	Silvaco US	6,00,000.00
3.	TFT LCD Video Module	2009	Cranes Software International Bangalore	1,00,000=00
4.	HINDHIVAC Vaccum Coater with Lnt	2009	Hind High Vaccum Company Pvt Ltd Bangalore	2,99,100=00
5.	Semiconductor Parameter Analyzer Test System for I.V.L. Characterization	2010	Agilent Technologies USA	4,50,000=00
6.	Laser Optics Lab Kit	2009	Holmarc Optomechatronics Pvt ltd Kochi	1,10,000=00
7.	Keithley Source Meter	2010	Khandela Electronika Indore	3,73,218=00
8.	Spray Pyrolysis Apparatus	2010	Holmarc Optomechatronics	2,47,500=00
9.	Programmable Spin Coater	2014	Pvt ltd Kochi	1,71,000.00
10.	Ellipsometer	2010	Holmarc Optomechatronics Pvt ltd Kochi	2,47,500=00

Information and Library Network (INFLIBNET) Centre is an Autonomous Inter-University Centre (IUC) of University Grants Commission (UGC) involved in creating infrastructure for sharing of library and information resources and services among Academic and Research Institutions. INFLIBNET works collaboratively with Indian university libraries to shape the future of the academic libraries in the evolving information environment.

Departmental facility :

Well-equipped Computer lab with Wi-Fi.
V-SAT and INFLIBNET facilities enrich the Computer lab. Internet access is available to all students for surfing of study materials/seminars/projects/Research papers.

Win 7 & 8 OS Systems

Server Operating System(Win 2003)

Labview (7.0 Ver) for Windows(10-user License)

Matlab R2007a (05-User)

Tool Boxes-

(i) Image Signal Processing (1-user)

(ii)Image Acquisition (1- User)

(iii)Signal Processing (1-user)

(iv)Neural Network (1-user)

Central facility

S.o.S. in Computer Science is providing central computing facility . The Department was among the selected University Department to receive prestigious UGC-INFONET project in 2003 by University Grant Commission, New Delhi (Govt. of India). Prof. Dr. O.P.Vyas worked as a Coordinator for this project to develop a University wide Campus Area Network (RSU-CAN). Presently RSU-CAN is functional in the Pt. Ravishankar Shukla University, Raipur campus, providing Access to more than 2000 Scholarly Journals under UGC-INFONET Scheme (**E-Journals Consortium**). The Department is also providing research facilities and presently research scholars are working in the area of Data mining and mobile adhoc networking .In a very short span of time the "S.o.S. in Computer Science" has carved a niche for itself among the reputed Institutions of the country imparting quality computer education.