

## Registration Information

### Registration Fee (Non-refundable)

Participants	Amount
Students (UG/PG) / Research Scholar	INR 400
Faculty & Delegates from Industry	INR 600
Students / Faculty (Online Mode)	INR 300

Interested participants should register using the following link  
<https://forms.gle/FsGL8QgQjAV1iUSy5>

### Bank Details

Bank Name	: State Bank of India
Account Holder Name	: Guru Ghasidas Uni Bilaspur
Branch	: Lodhi Para Koni
A/c No.	: 37137162271
IFSC	: SBIN0018879
MICR Code	: 495002034
Type of Account	: Current Account

### Eligibility Criteria

- Academicians/Scientists/Post-Doc Fellow/Ph.D. Fellows/Industry Persons who are actively involved in R & D.
- Minimum Qualification : Post Graduate (Science) or B. Tech. / B.E.
- Paper publication/Indexing charges will be extra as applicable

### Contact Us

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**Dr. Rakesh Kumar Pandey** (Co-Convener)

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**Last Date of Registration : December 04, 2022**

Youtube Live Link : .....

Facebook Live Link : .....

Google Meet Link (for online participate) : .....

## Organizing Committee



### Chief Patron

**Prof. Alok Kumar Chakrawal**  
 Hon'ble Vice-Chancellor



### Patron

**Prof. Manish Shrivastava**  
 Registrar



### Chairman

**Prof. Parmendra Kumar Bajpai**  
 Dean, SoS Physical Sciences



### Head

**Prof. Madhvendra Nath Tripathi**  
 Department of Pure & Applied Physics



### Mentor

**Prof. Hari Shanker Tewari**  
 Department of Pure & Applied Physics



### Convener

**Dr. Rajesh Sharma**  
 Department of Pure & Applied Physics



### Co-Convener

**Dr. Rakesh Kumar Pandey**  
 Department of Pure & Applied Physics

### Local Organizing Committee

- Prof. Parijat Thakur
- Dr. R. P. Patel
- Dr. M. P. Sharma
- Dr. G. R. Turpu
- Dr. S. P. Patel
- Dr. Awadhesh Kumar Dubey
- Dr. Jai Singh
- Dr. Pradip Das
- Dr. Devinder Singh

### Technical Committee

- Dr. A. K. Singh
- Mr. P. Ram Babu
- Dr. Dinesh Uthra
- Dr. Alka Singh
- Dr. Shalinta Tigga
- Dr. R. Vijaya Kumar

# International Symposium on Recent Trends in Optical Materials and Photonic Devices (RTOMPD-2022) Hybrid Mode

**December 07, 2022**



*Organized by*

**Department of Pure  
 and Applied Physics  
 Guru Ghasidas Vishwavidyalaya  
 (A Central University)  
 Bilaspur (C.G.) – 495009, INDIA**



## About the University

Guru Ghasidas Vishwavidyalaya (GGV) is a Central University, situated in Bilaspur in Chhattisgarh State, established under the Central Universities Act 2009. Formerly it was known as Guru Ghasidas University (GGU), established by an act of the State Legislative Assembly, on June 16, 1983. GGV is an active member of the Association of Indian Universities and Association of Commonwealth Universities. It is situated in a socially and economically challenged area of Chhattisgarh State. The university is appropriately named after the great Satnami Saint Guru Ghasidas, who championed the cause of downtrodden and waged a relentless struggle against all forms of social evils prevailing in the then society. Vishwavidyalaya is now draws about 7000 students from different parts of the country. Apart from the regular academics in the campus, the university has successfully managed to extend its services for the welfare of society. The campus is lush green, calm and quiet and free from urban noise and pollution, an ideal temple for education and research.

## About the Department

Department of Pure and Applied Physics, one of the premier departments of the University, was established in 1995. Since its inception, it has been actively involved in teaching and research activities. The department has grown by itself and emerged as the leader of science education in this region of central India. The department offers teaching and research programs in Experimental & Theoretical Condensed Matter Physics, Experimental Materials Science, Experimental Nuclear Physics, Spectroscopy, and Plasma Physics. The department offers wide-ranging courses, such as, two years M.Sc. in Physics & Electronics, and Ph. D. in Physics. New specializations in Nuclear Physics and Laser Science are going to be offered in coming sessions at the Master's level along with the presently offered Material Science. Department is having well-equipped laboratories for general physics, mechanics, heat and thermodynamics, optics, electronics, and computational techniques. Advanced material characterization facilities such as SEM, AFM, FTIR, UV - Vis spectrophotometer, and XRD. Department established a 3 MV high current pelletron accelerator facility. This facility will make us stand in the national science picture as one of the emerging research departments of the country. The department is having dynamic academic activity by coordinating regular seminars of eminent science personalities, workshops, and symposia which provide excellent opportunities, particularly to the UG/PG students of the department. Students from the department are encouraged to appear in national-level examinations like NET, GATE, JEST, etc. Department is striving very hard to improve the quality of Physics education to stand as one of the leading science education centers in the country.

**Best Poster Presentation Award will be given**

## About the Bilaspur City

Bilaspur is situated on the bank of river Arpa which has its own history in the holy books. The state capital Raipur is 111 kilometers from Bilaspur. It is the second largest city in Chhattisgarh and is known as NYAYADHANI because of the High Court of the state (largest High Court of Asia) being situated here. The South East Central Railway (SECR) Zone and South-Eastern Coal Fields Limited (SECL) have their Headquarters in this city. The city is surrounded by many historical places and temples; Siddha Peeth Maa Mahamaya at Ratanpur and Amarkantak which is the origin of river Narmada, life line river of Madhya Pradesh. Bilasa Devi Kevat Airport Bilaspur is the nearest airport to connect Bilaspur.

## About Symposium

The International Symposium on **Recent Trends in Optical Materials and Photonic Devices** (RTOMPD-2022) will focus on the research in the field of advanced optical materials, ultrafast optics, terahertz radiations, nanomaterials, vacuum technologies, thin film based photonic devices, and particle detector materials in nuclear physics, which should give significant advancement to the understanding of science and technology. In the international scientific community, one of the recent hot topics of research is related to generation and detection of terahertz radiations. The symposium would address photonic approaches to direct terahertz generation, down-conversion from the visible regime by using nonlinear or photoconductive effects. There will be special emphasis on quantum cascade lasers, which are also popular sources of mid-infrared and terahertz radiations. Moreover, ultrafast optics related to advanced materials, nonlinear optical properties of materials, far Infrared spectroscopy, ultrafast optics, carrier dynamics in materials would also be featured topics of the discussion. Overall, the aim of the symposium will be to bring together eminent National & International researchers from universities, research institutes, and industries on a single platform to share their knowledge in the emerging area of optical materials and photonics. The symposium will be organized in hybrid mode.

## Sub Themes

- Ultra Fast Optics
- Optical Materials
- Optical Imaging
- Optical Communications
- Modeling and Simulation of Devices
- Terahertz Radiations
- Optoelectronic Devices
- Nano-materials and Devices
- Renewable and Sustainable Energy
- Characterization techniques

## Targeted Participants

- Scientists from R&D / Industry
- Faculty Members from Universities and Colleges
- Research Scholars
- UG / PG Students from science and Engineering

## KEY SPEAKERS



**Prof. Alexander Khmaladze**

The State University of New York  
United States of America

Prof. Alexander Khmaladze has obtained his Ph. D. degree in Applied Physics from University of South Florida in 2008 and worked as a Postdoctoral Researcher, University of Michigan from 2008 – 2013. He has many peer-reviewed publications, patents and guided several research projects. His research interests are Raman spectroscopy and microscopy, three-dimensional digital holographic imaging, microscope design, hyperspectral imaging of live cells and biological tissue imaging. His research interest also include technologies that combine several different imaging techniques to study a particular biological system.

**Prof. Luca Varani**

University of Montpellier  
France



Luca Varani was born in Carpi (Italy) in 1963. He received the Ph.D. degree in physics from the University of Modena (Italy) in 1993 and the Ph.D. degree in electronics in 1996 from the University of Montpellier (France). He is full professor of the University

of Montpellier and has been head of the research group TeHO (TeraHertz, High-Frequency and Optics) of the Institute of Electronics and Systems (IES). His main research activities are in theoretical and experimental transport phenomena with a special attention to the terahertz frequency range. He has been supervisor of 18 PhD thesis, member of the scientific/advisory committees of 6 international conferences and chairman of 3 conferences. He is author/coauthor of about 300 scientific articles in refereed journals and conference proceedings.



**Prof. Sanjay Tiwari**

Vice-Chancellor  
Bhoj Open University, Bhopal, India

Professor Sanjay Tiwari is currently working as Vice-Chancellor of Madhya Pradesh Bhoj (Open) University, Bhopal (M.P.). He obtained his Ph.D. degree from Rani Durgavati University, Jabalpur (M.P.), and did his Post-Doctoral research from renowned Cavendish Lab, University of Cambridge, U.K. He is the recipient of many prestigious awards / fellowships such as Fulbright-Nehru Senior Research Fellowships, Senior Associate ship of Abdus Salam ICTP, Italy, and INSA Academy Fellowship, National UGC Research Award of University Grants Commission, New Delhi, Cambridge University & UKIERI Award of British Council, SAARC Fellowship, Best Young Scientist Award for his research contributions etc. His area of interests is Synthesis, Characterization of semiconductor materials and Devices, simulation of optoelectronic devices and inorganic and organic semiconductors.

**Prof. Arun Anand**

Sardar Patel University, Anand, Gujarat  
India



Prof. Arun Anand is working as Professor in Physics at Department of Physics, Sardar Patel University, Anand, Gujarat. He was a Post-Doctoral Fellow of ITO University of Stuttgart, Germany, Stuttgart. He is a SPIE Senior Fellow of International Society for Optics and Photonics (SPIE). He is a Regular ICTP Associateship at ICTP, Trieste, Italy and BOYSCAST Fellowship, Germany. His area of interest are Wavefront sensing, Digital holography, Optical coherence tomography, Optical instrumentation, biomedical imaging, 3D microscopy. He has published around 140 research papers in national and International Journals of high repute.