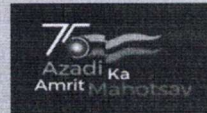


## Organized following Special Guest Lectures



# School of Physics

DEVI AHILYA VISHWAVIDYALAYA, INDORE  
(NAAC accredited A+ State University)



An interactive session with the experts in Laser Science who are alumnus of School of Physics-DAVV has been organized. Speakers will talk on the emerging technological areas and the role of scientists and engineers trained in photonics and lasers in the emerging world. The time, date and the google meet for this session is as follows:

Time 11:00am – 1:00 pm on 18<sup>th</sup> September 2021, Google meet ID: yau-rtek-kjo

### List of Speakers:

#### 1. Dr. Kallash Sati,

**Scientists F (Associate Director) Center for High Energy science and Systems (CHESS) Hyderabad DRDO, Ministry of Defense.**

Laser technology has observed a great advancement over the last few decades. This technology is used for a wide range of applications including medical sciences, military, industrial manufacturing, electronics, holography, spectroscopy and much more. The highly directive nature of a laser beam is also used as a directed energy laser weapon. These highly powerful and light weighted directed energy laser weapons are very cost-effective countermeasures for airborne threats. Military operations often demand a secure and timely transmission of a massive amount of information from one place to another. The military tactical operations are carrying out on the ground or space-based platforms using laser weapons. This market features highly specialized applications including explosives detection, directed infrared countermeasures, combat identification, precision targeting/marketing, pre-shot detection and free-space communications.



#### 2. Dr. Sandeep Maity,

**Chief Scientist(Sensor & Analytics),GE/ Baker Hughes, 70+ patents**

Industry 4.0 is used interchangeably with the fourth industrial revolution and represents a new stage in the organization and control of the industrial value chain. IR 4.0 is the ongoing automation of traditional manufacturing and industrial practices, using modern smart technology. Large-scale machine-to-machine communication (M2M) and the internet of things (IoT) are integrated for increased automation, improved communication and self-monitoring, and production of smart machines that can analyse and diagnose issues without the need for human intervention. The backbone of such communications to modern manufacturing is photonics. Photonics plays a major role from modern day warfare to the medical system. To enable such industrial revolution, it is needed to have skill development and system thinking- inter connected systems including photonics, artificial intelligence, additive manufacturing, quantum computation. Dr. Maity will talk about the outlook of photonics industries and photonic enabled IR 4.0 transition.



#### 3. Shri Anant Deshpande,

**Director and owner, Trokut solutions Pvt Ltd, Mumbai**

Title of the talk: Industrial laser market scenario in India



#### 4. Dr. Mukesh Javeria,

**Sr. Scientist and Assist.Professor( AcSIR),National Physical Laboratory, New Delhi**

Masters degree in Physics (M.Sc. Physics) provides you a chance to enhance your problem solving and critical thinking skills. These help students to understand scientific data. You will gather skills like numerical problem-solving, data analysis, and the communication of complex ideas. Along with this, you will have a better understanding of how the world works on a scientific level. Physicists have helped us in the modern age. With their complex theories, they help bring sense to this confusing place we call home. And, as a physics student, you will do the same. However, you need to be very strong with numbers and scientific principles. Furthermore, you need to have a keen interest in discoveries related to the physical world.



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**Prof. & Head**  
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Khandwa Road, INDORE-452017





**DEVI AHILYA VISHWAVIDYALAYA, INDORE**  
**(NAAC accredited A+ State University)**  
**SCHOOL OF PHYSICS**



School of Physics-DAW announces popular lecture series on various advanced topics of physics. The inaugural talk will be delivered by Dr. Anand Moorti, SOH, Head, Advanced Plasma Acceleration Section, RRCAT, Indore. He is also Professor at Homi Bhabha National Institute, Department of Atomic Energy (DAE), Mumbai.



**Topic: Fascinating advanced science  
and technology of accelerating  
particles to high energies**

**Speaker: Dr. Anand Moorti  
RRCAT, Indore**



**Dr. A. Mishra**  
Professor & Head



**Dr. G. Mishra**  
Professor, Coordinator



**Dr. S. N. Kane**  
Professor



**Dr. Y. Choyal**  
Professor

**Date, Time : 15-09-2021, 11 AM Google meet: nqe-gszc-bus**

  
**Prof. & Head**  
School of Physics  
Devi Ahilya Vishwavidyalaya  
Khandwa Road, INDORE-452017





DEVI AHILYA VISHWAVIDYALAYA, INDORE  
(NAAC Accredited A+ State University)  
SCHOOL OF PHYSICS



'Aazadi ka Amrit Mohatsav' popular lecture series, organized by School of Physics,  
Devi Ahilya Vishwavidyalaya, Indore announces two lectures by prominent scientists  
from Raja Ramanna Centre for advanced Technology (RRCAT), Indore:

Time 11:00 A. M. – 01:00 P. M., On 9<sup>th</sup> October 2021, Google meet ID : poa-orba-upv

**Today's Eminent Speakers**

1. **Shri Shesh Nath Singh**, SOH, Head, Accelerator Magnet Technology Division (AMTD)  
Raja Ramanna Centre for Advanced Technology (RRCAT), Indore

**Topic of the lecture :**

*Power Power Everywhere*

**Abstract :**

This lecture will be a general lecture outlining the importance and ubiquity of power supplies. It will introduce a general meaning of 'power supply' and try to make the audience feel that power supplies are part of almost every electrical/electronic system. The core of the lecture will be about various types of power supplies and their characteristics.

**About Shri Shesh Nath Singh:**

Shri Shesh Nath Singh is an electrical engineer from Regional Institute of Technology Jamshedpur (NIT Jamshedpur, at present). He completed his BE in 1987 and joined BARC training school at Mumbai. After completing one year orientation course there, he was appointed at Raja Ramanna Centre for Advanced technology Indore where he was responsible for design, development and operation of various power supplies for particle accelerator magnets. From 2019, he is heading Accelerator Magnet Technology Division (AMTD) which is responsible for design, development and deployment of various types of magnets for particle accelerators.



2. **Dr. Kailash Ruwali**, SOG, Accelerator Magnet Technology Division (AMTD)  
Raja Ramanna Centre for Advanced Technology (RRCAT), Indore

**Topic of the lecture :**

*Magnets for Accelerators*

**Abstract :**

This lecture will be a glimpse of importance of magnets for accelerators. Basic outline and introduction to various type of magnets used in accelerators will be covered along with the design, fabrication and magnetic measurement techniques.

**About Dr. Kailash Ruwali:**

Kailash Ruwali did M.Sc. (Physics) from DAVV, Indore in 1994 and joined RRCAT in October 1994. He did his Ph.D. from The Graduate University for Higher Studies, SOKENDAI: Shonan Village, Hayama, Kanagawa, Japan. He is involved in the design and characterization of magnets for various projects at RRCAT viz. Indus-1, Indus-2, Free Electron Laser, Agricultural Radiation Processing Facility and also for other institute.



**Faculty: School of Physics, Devi Ahilya Vishwavidyalaya, Indore**



**Dr. A. Mishra**  
Prof. & Head



**Dr. G. Mishra**  
Professor



**Dr. S. N. Kane**  
Professor, Coordinator



**Dr. Y. Choyal**  
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