

PASHYAKA (The One Who Sees) Talks:

National Science Day Celebrations, "*The Raman Effect and Its Applications*"

Date & Time: Feb 28, 2021, 2pm - 4pm (Indian Standard Time)

About the Event:

India celebrates the **February 28th** of each year as the **National Science Day - the day the Raman Effect was discovered in 1928**. The change in the wavelength of light that occurs when a light beam interacts with matter is called the Raman effect. The Hyderabad section of the IEEE Photonics Society is organizing a **seminar** to celebrate this momentous occasion where eminent speakers will give an overview of the **Life & Work of Sir.C.V.Raman and modern-day applications of the Raman Effect**.

Agenda:

2:00pm – 2:05pm **Welcome**

2.05pm – 2:15pm **"Life and Work of Sir C.V.Raman"**

2.15pm – 3:00pm **"A Professional Journey on the shoulders of the Science Giant Sir. C.V. Raman"**

Dr. Herve Fevrier, Global Optical Architecture, Facebook

In this talk, Dr. Fevrier will discuss the important role the Raman Effect and its applications have played in his career. He will also discuss how core technologies such as Raman amplifiers are an important part of the Optical Network infrastructure at cutting-edge companies like Facebook. Through his talk, Dr. Fevrier wishes to convey to the student community the magic of transforming fundamental science into practical applications.

3:00pm- 3:45pm **"Lasers based on the Raman Effect"**

Prof. V.R.Supradeepa, Indian Institute of Science, Bengaluru

High power Laser technology - despite being a multi-billion-dollar industry with applications in industry, defence and medicine - works in very few wavelength bands due to inherent material and physical limitations. Through a very interesting application of the Raman effect, Prof. Supradeepa's research group has been able to develop laser sources at a wide variety of wavelengths previously unachievable. In this talk, he will give an overview of the field and his work in the area of Raman lasers.

3:45pm - 4:00pm **Closing remarks** (with margin for delays)

We hope you will attend this exciting seminar.

Please note the event is being organized in an **online format** due to COVID-19. **Registration is free but mandatory.** For any assistance, please contact Dr. Kasyapa Balemarthy (Chair) at kasyapa@ieee.org.

Best regards,

IEEE Photonics Society, Hyderabad Section

About the "PASHYAKA Talks" Seminar Series:

Photonics has transformed almost all facets of daily living - communications, medical diagnosis/surgery, computing, energy, transportation, manufacturing, defence, space, quantum technologies, consumer devices and entertainment applications are just a few examples. Throughout this year, we will be organizing a **series of seminars** where subject matter **experts** from all over the world will **talk** about these diverse **applications of**

photonics. We hope these seminars will be **useful to** both practicing Photonics **engineers & researchers** as well as to **students** seeking meaningful careers in the exciting field of Photonics.

An **expert is one who sees (PASHYAKA in the Sanskrit language) deep into their field and beyond.** Earlier this year we launched the "**PASHYAKA Talks**" **seminar series** where PASHYAKA stands for Photonics Advances Seminar, HYderabad, by A Knowledgeable Authority. Some of these seminars will be focused on a particular Photonics application whereas others will have a different kind of commonality. For example, the first two events in this seminar series this year focused on "Photonics in Hyderabad" and "Quantum Communications" respectively. This event will focus on the Raman Effect and its Applications.