



# VIROCON 2021

March 26 - 28, 2022



**National Conference of Virology (Virtual mode)  
on  
“Emerging and Re-emerging Viral Diseases - Climate  
Change Impacts and Mitigation ”**

**Organised by  
Department of Microbiology,  
All India Institute of Medical Sciences, Bibinagar,  
Hyderabad Metropolitan Region, Telangana**

**Under the aegis of Indian Virological Society**



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ICAR - National Research Centre for Banana,  
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## Invitation

It is our greatest pleasure to invite you to attend the National Conference of Virology (Virtual mode) on the Theme “Emerging and Reemerging Viral Diseases – Climate Change Impacts and Mitigation”. The conference is organised by the Department of Microbiology, AIIMS, Bibinagar, Hyderabad from March 26 to 28, 2022 in virtual mode. This conference will provide unique opportunity to share your knowledge and exchange ideas with the internationally and nationally recognised scientists and researchers working in the field of Medical, Veterinary, Plant and aquatic viruses & Viral Diseases. The major highlights of the conference would be the Joint symposium involving all these specialities, invited guest lectures by world famous scientists, various IVS oration awards, IVS young scientist awards, Oral and Poster presentations. Your participation in the conference would be a great source of inspiration for the young researchers and the fellow participants.

## About Indian Virological Society (IVS)

The Indian Virological Society (IVS), was established in 1984. Since its inception it has been involved relentlessly in the field of research and diagnosis of viral diseases. It provides platform for organising National and International conferences, symposium, workshops and continued medical education (CME) programs, Industry-Academia meets. Being a member of International Union of Microbiological Societies (IUMS), the society has earned international accolades. **Virus Disease**, the widely circulated journal of Indian Virological Society is published in collaboration with Springer, Nature. The society is also member of World Society for Virology.

## Conference Highlights

### Orations & Awards

- Kameshwar Sahai Bhargava oration award.
- Shyama Prasad Raychaudhuri oration Award
- IVS-PGI oration award in Medical Virology
- IVS Fellowship
- IVS - Young Scientist award
- Best Presentation awards in Oral and poster presentations

### Technical Sessions

- Impact of climate change on Viral epidemics
- Host-viral interactions and Viral Diagnostics
- Guest Lectures on Emerging and re-emerging viral diseases

### Special Scientific Sessions :

- **Joint Symposium** including medical, Veterinary, plant and aquatic virologists on climate change and viral diseases
- **Special session** on SARS-CoV2 and disease dynamics
- One Health session

### E-Poster Presentation

## CONFERENCE SCHEDULE

Day 1 : March 26<sup>th</sup> (Saturday)

Venue : HALL - A

S.No	Time	Event
1.	10.00 am - 11.00 am	Inauguration of conference <ul style="list-style-type: none"><li>• Lighting the Lamp</li><li>• Welcome address by Organising Chairperson, <b>Dr Rahul Narang</b>.</li><li>• Introduction of Indian Virological Society (IVS) by Secretary General IVS, <b>Prof. (Dr) Yashpal S. Malik</b>.</li><li>• Address by Director, AIIMS Bibinagar <b>Dr Vikas Bhatia</b>.</li><li>• Address by President IVS, <b>Dr Raj Kumar Singh</b>.</li><li>• IVS fellow award presentation :<ul style="list-style-type: none"><li>- President IVS, <b>Dr Raj Kumar Singh</b></li><li>- Secretary General IVS, <b>Prof. (Dr) Yashpal S. Malik</b></li></ul></li><li>• Address By Chief Guest, <b>Dr George D'souza</b>.</li></ul>
2.	11.00am -12.00 pm	Kameshwar Sahai Bhargava oration award
3.	12.00 pm- 1.30 pm	<div><b>Joint Symposium</b> <b>“Climate Change : Impact on human life, livestock &amp; crops”</b> <b><u>Chairpersons</u></b><ul style="list-style-type: none"><li>• <b>Dr. Narayan Rishi</b>, Professor &amp; Adviser, Amity Institute of Virology and Immunology, Amity University, Noida.</li><li>• <b>Dr. M.P. Yadav</b>, Ex-President IVS, Ex-vice Chancellor</li><li>• <b>Dr. A C Mishra</b>, Former Director, NIV, Pune, Director, interactive research school of Health affairs ( IRSHA), Bharati Vidyapeeth University</li><li>• <b>Dr Indrani Karunasagar</b>, Director ( Projects of DST-TEC)NITTE CDU Coordinator, M.sc Marine Biotech (Dist), NUSER, Director, UNESCO resources center for Biotech</li></ul><b><u>Speakers</u></b><ul style="list-style-type: none"><li>➤ <b>Climate change and its impact on some vector-borne viral diseases</b></li><li>➤ <b>Dr Siraj Ahmed Khan</b>, Scientist F, ICMR, RMRC, Dibrugarh.</li><li>➤ <b>Impact of climate change on animal production and health</b></li><li>➤ <b>Dr Ashok Kumar Tiwari</b>, Director, ICAR-Central Avian Research Institute, Izatnagar.</li><li>➤ <b>Impact of Climate change on emergence of plant viruses</b></li><li>➤ <b>Dr M. Krishna Reddy</b>, ICAR-Indian Institute of Horticultural Research Bengaluru</li><li>➤ <b>Impact of viral diseases on global aquaculture production</b></li><li>➤ <b>Dr.Iddya Karunasagar</b> , Retired FAO Senior Fishery and Food Safety officer</li></ul></div>
4.	1.30 pm - 2.10 pm	Lunch Break

5. 2.10 pm - 3.30 pm

**Medical Virology Symposium****COVID19 Pandemic: The Developments****Chairpersons**

- **Dr. Savithri Sharma**, Director Emeritus Laboratory services, LVPEI, Hyderabad.
- **Dr. Lalit Dar**, incharge-Virology, Department of Microbiology, AIIMS New Delhi.

**Speakers**

- ❖ India efforts toward COVAXIN developments and variant of Concern Challenges -Dr Pragya Yadav, Scientist F, NIV, Pune.
- ❖ Serosurvey during COVID pandemic and its utility -Dr Tarun Bhatnagar, Scientist F, ICMR school of Public health, Chennai.
- ❖ Serological response in recovered and immunized individuals- Dr Gajanan Sapkal, Scientist F, NIV, Pune.
- ❖ Science behind Omisure -Dr V Ravi, Senior Professor, NIMHANS, Bengaluru.

6. 3.30 pm - 3.40 pm

Tea Break

7. 3.40 pm - 4.20 pm

**Lead Lectures in Medical Virology****Chairpersons:**

- **Prof S.K. Saxena**, Vice Dean, Head (Stem cell), Centre for Advanced Research, KGMU, Lucknow.
- **Dr. Manmohan Parida**, Scientist "G" & Director Defence Research and Development Establishment (DRDE), DRDO, Ministry of Defence, Gwalior

**Speakers:**

- ❖ Viral infections in organ transplant recipients - **Dr Ekta Gupta**, Prof & Head, Dept of Clinical Virology, ILBS, New Delhi
- ❖ Nationwide Influenza Surveillance - **Dr Neetu Vijay**, Scientist D, Department of Health Research, MoHFW, New Delhi

8. 4.20 pm - 5.30 pm

Oral Presentations in Medical Virology

9. 5.30 pm - 6.30 pm

IVS executive body meeting (online)

Time	Event
11.00 am - 12.00 pm	IVS - PGI oration award on Medical Virology
12.00 pm - 1.00 pm	IVS - Young Scientist award (Medical, Veterinary & Plant Virology)
1.00 pm – 1.30 pm	Lunch Break
1.30 pm - 3.30 pm	<p style="text-align: center;"><b>Emerging and Re-emerging Viral Diseases</b></p> <p style="text-align: center;"><u><b>Chairpersons</b></u></p> <ul style="list-style-type: none"> <li>• <b>Dr Ashok Kumar</b>, Assistant Director General (Animal Health), ICAR, Delhi</li> <li>• <b>Dr D K Sarma</b>, Professor, Veterinary Microbiology, Guwahati</li> </ul> <p style="text-align: center;"><u><b>Speakers</b></u></p> <ul style="list-style-type: none"> <li>➤ Vaccination against H9N2 low pathogenic avian influenza – pros and cons - <b>Dr C Tosh</b>, Principal Scientist, National Institute of High Security Animal Diseases, Bhopal.</li> <li>➤ Host-directed Antiviral Therapy - <b>Dr Naveen Kumar</b>- Principal Scientist, ICAR National Research Centre on Equines, Hisar.</li> <li>➤ Current Scenario of Peste des petits ruminants and Control and Eradication Strategic plan in India - <b>Dr V Balamurugan</b>- Principal Scientist, NIVEDI, Bengaluru.</li> <li>➤ Emergence of African swine fever in India: Impact on Small Holding Pig farming system, risk analysis and recommendations to mitigate future outbreak - <b>Dr N N Barman</b>, Professor, Department of Microbiology, College of Veterinary Science, Guwahati.</li> <li>➤ Crimean-Congo Hemorrhagic Fever: Current status-<b>Dr Divkar Hemadri</b>, Principal Scientist, NIVEDI, Bengaluru.</li> <li>➤ Rabies: Diagnostic Challenges with Neutralization Assays and Immunomodulation with Novel Adjuvant-<b>Dr K G Tirumurugan</b>, Professor &amp; Head, Zoonoses Research Laboratory, Chennai.</li> <li>➤ Investigating emerging &amp; re-emerging viruses in wildlife: our experience - <b>Dr Souvik Ghosh</b>, Professor Zoonoses, Saint Kitts Island, West Indies.</li> </ul>
3.30 pm - 4.30 pm	<p style="text-align: center;"><b>One Health Symposium</b></p> <p style="text-align: center;"><u><b>Chairpersons</b></u></p> <ul style="list-style-type: none"> <li>• <b>Dr Praveen Malik</b>, Animal Husbandry Commissioner, New Delhi</li> <li>• <b>Dr Subeer Majumdar</b>, NIAB, Hyderabad</li> </ul> <p style="text-align: center;"><u><b>Speakers</b></u></p> <ul style="list-style-type: none"> <li>❖ Commentary on One-Health in India -<b>Dr D T Mourya</b>, Director, NIV Pune.</li> <li>❖ Implementing One health to prevent future pandemics -<b>Dr Praveen Malik</b>, Animal Husbandry Commissioner, New Delhi</li> <li>❖ Viral zoonoses, One Health and Biotechnology-<b>Dr Narendra Hegde</b>, NIAB, Hyderabad.</li> </ul>
4.30 pm - 5.30 pm	Oral Presentations in Animal Virology
5.30 pm - 6.30 pm	General Body meeting of IVS (Online)

# CONFERENCE SCHEDULE

**Day 3 : March 28<sup>th</sup> (Monday)**

**Venue : HALL - A**

S.No	Time	Event
1.	11.00 pm - 12.00 pm	<p><b>Lead Lectures/ Symposium in Aquatic Virology</b></p> <p><u>Chairperson</u></p> <ul style="list-style-type: none"> <li>• <b>Dr. Indrani Karunasagar</b>, Director, Projects and DST TEC, Nitte Deemed to be University</li> </ul> <p><u>Speakers</u></p> <ul style="list-style-type: none"> <li>➤ <b>Dr.Arun Dhar</b>, University of Arizona, USA</li> <li>➤ <b>The Race to Identify Shrimp Viral Disease Etiology: Combining Histopathology and Genomics to Expedite Viral Pathogen Discovery-</b></li> <li>➤ <b>Dr.Neeraj Sood</b>, NBFGF, Lucknow</li> <li>➤ <b>Émerging viral diseases in finfish aquaculture in India</b></li> <li>➤ <b>Dr.Indrani Karunasagar</b>, Director, Projects and DST TEC, Nitte Deemed to be University</li> <li>➤ <b>Aquatic bacteriophages: role in ecology and disease management-</b></li> </ul>
2	12:00- 01:00 pm	➤ <b>Shyama Prasad Raychaudhuri oration award</b>
3.	1.00pm – 1.30 pm	Lunch Break
4.	1.30 pm - 4.30 pm	<p><b>Lead Lectures/ Symposium in Plant Virology</b></p> <p><b>Chairpersons:</b></p> <ul style="list-style-type: none"> <li>➤ <b>Dr. V. G. Malathi</b>, Former Emeritus Scientist, IARI, New Delhi</li> <li>➤ <b>Dr. R K Jain</b>, Former Dean (IARI) &amp; Emeritus Scientist (ICAR), ICAR-Indian Agricultural Research Institute, New Delhi</li> <li>➤ <b>Rapporteurs:</b> <b>Dr. Y.B. Basavaraj</b>, Scientist Senior Scale, Division of Plant Pathology, ICAR-Indian Agricultural Research Institute, New Delhi</li> <li>➤ <b>Convenors:</b> <b>Dr Indranil Dasgupta</b>, VP, IVS; <b>R Selvarajan</b>, Secretary- Plant Virus, IVS</li> </ul> <p><u>Speakers</u></p> <ul style="list-style-type: none"> <li>➤ <b>Dr Suresh L.M</b>, Maize Pathologist - Sub Saharan Africa &amp; MLN Facility Manager (Global Maize Program), CIMMYT, Nairobi, Kenya</li> <li>➤ <b>Threats and options of emerging transboundary disease in Sub-Saharan Africa – Maize Lethal Necrosis</b></li> <li>➤ <b>Dr Sunil Kumar Mukherjee</b>, Emeritus Scientist, Division of Plant Pathology, ICAR-Indian Agricultural Research Institute, New Delhi</li> <li>➤ <b>CRISPR-Cas9 system to mitigate plant DNA viruses</b></li> <li>➤ <b>Dr Supriya Chakraborty</b>, Professor School of Life Sciences Jawaharlal Nehru University New Delhi.</li> <li><b>Roles of coding and non-coding regions of beta satellite DNA in the pathogenesis</b></li> <li>➤ <b>Dr A. Ishwara Bhat</b>, Principal Scientist, ICAR- Indian Institute of Spices Research, Calicut</li> <li><b>Coat protein-mediated resistance to cucumber mosaic virus in black pepper</b></li> <li>➤ <b>Dr Amalendu Ghosh</b>, Scientist (Senior Scale), Advanced Centre for Plant Virology, Division of Plant Pathology, ICAR-Indian Agricultural Research Institute, New Delhi</li> <li><b>Thrips transmission of tospoviruses: infection, determinants, and pathogenic effects</b></li> <li>➤ <b>Dr Basavaprabhu L. Patil</b>, Principal Scientist, ICAR-Indian Institute of Horticultural Research (IIHR), Bengaluru</li> </ul>



5.

4.30 pm - 5.30 pm

### Oral Presentations in Plant Virology

- **Gaurav Sharma**
- Investigating the antiviral role of RNAi components in rice (*Oryza sativa* L.) against Rice tungro bacilliform virus
- **Taruna Gupta**
- Expression of LwaCas13a protein for the application in diagnostic and therapeutics
- **Gnanaprakash. J**
- Insights into the host protein interactions with Transcriptional Activator Protein (TrAP) of Chilli leaf curl Ahmedabad Virus: An In-silico approach
- **Jayanthi thiruppathi**
- Screening of multiple begomoviruses causing Chilli leaf curl disease in ten major chilli growing areas of Tamil Nadu
- **Sunil Kumar Srivastava**
- Plant-based generation of Virus like Particles and Expression Platforms for the production of Vaccines, Biosimilars and Therapeutics to address Global Health Security and Inequities

### E-Posters

- **Tripthi Singhal**
- Development of a CRISPR/Cas 12a based detection tool for begomovirus in India
- **Arulsia**
- Serodiagnosis of Tobacco streak virus in Okra
- **Ashish Prasad**
- The sly-miR166-SlyHB module acts as a susceptibility factor during ToLCNDV infection
- **Neelam Jagram**
- The Extent of VIGS-Mediated Gene Silencing in Rice Depends upon The Virus Susceptibility
- **Rohit Kumar**
- Expanding role of AC5 in geminiviral infection

6.

5.30 pm - 6.30 pm

### Valedictory function

## CONFERENCE SCHEDULE

Venue : HALL - B

### E-Poster Presentation

S.N o	Date	Time	E-posters Category
1.	March 26, 2022	4.30 pm - 5.30 pm	Medical Virology
2.	March 27, 2022	4.30 pm - 5.30 pm	Animal Virology
3.	March 28, 2022	4.30 pm - 5.30 pm	Plant & Aquatic Virology





# VIROCON 2021

March 26 - 28, 2022



Chief Guest

**Dr. George D'Souza**

President,  
AIIMS, Bibinagar,  
Hyderabad



Chief Patron

**Dr. Vikas Bhatia**

Executive Director,  
AIIMS, Bibinagar,  
Hyderabad



Organizing Chairperson

**Dr. Rahul Narang**

Dean (Academics)  
AIIMS, Bibinagar,  
Hyderabad

## Organizing Team



Organizing secretary

**Dr. Lakshmi Jyothi Tadi**

Additional Professor  
Microbiology



Co-organizing secretary

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Associate Professor  
Microbiology



**Dr. Shalam Nikhat Sheerin**

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**Dr. Sunil Kumar D Chavan**

Assistant Professor  
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**Dr. Raja S**

Assistant Professor  
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**Dr. P Rajeshwari**

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Microbiology



**Dr. Yona Manchikalapati**

Senior Resident,  
Microbiology



**Dr. Wajiha Iftexhar**

Senior Resident,  
Microbiology



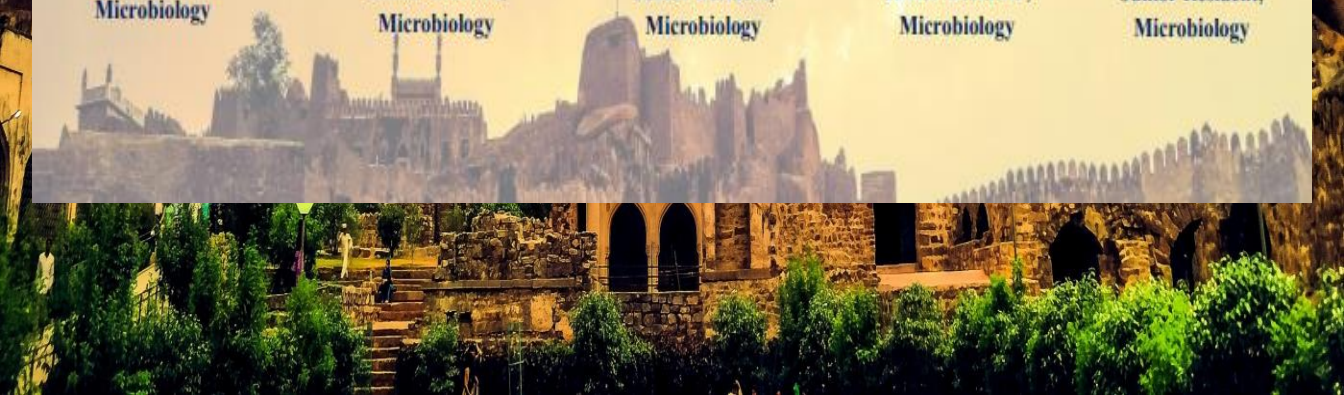
**Dr. Arjun Banerjee**

Junior Resident,  
Microbiology



**Dr. K Rajesh Kanna**

Junior Resident,  
Microbiology



### Important Dates

- Conference dates : **March 26 - 28, 2022**
- Last date for submission of Oral / e-poster : **March 20, 2022**
- Acceptance of presentation (Oral / e-poster) : **March 23, 2022**

### Registration link

**Registration is free but mandatory**

**<https://forms.gle/JGxofBrhk1v7UdiZ7>**

### Guidelines for Oral/E poster Presentation

**<https://tinyurl.com/5n6ens8c>**

(copy link in your browser)

### Contact

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