DRDO

CURTAIN RAISER
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New Delhi

International Conference on Chronic Hypoxia

Defence Institute of Physiology & Allied Sciences (DIPAS) is a premier institution of **Defence Research and Development Organisation (DRDO)**. Fifty years after its modest commencement, DIPAS celebrates "**50 Golden Years"** of research into enhancing human capabilities and responses this year.

To commemorate the Golden Jubilee year, DIPAS is organizing Global Hypoxia Summit and 4th International Conference on Chronic Hypoxia from 9th Aug to 12th Aug, 2012. The meeting will lead to the assemblage of the worldwide known experts and eminent researchers working in the field of hypoxia/ high altitude. The summit aims to gain a better, comprehensive understanding of biological and physiological responses to hypoxia with special reference to native high landers and extrapolate the same for improving and promoting quality health under hypoxic environment. Further, this conference will bring together the Basic Researchers, Clinicians and Academicians from various parts of the world on a common platform to tackle the issue of hypoxia by an interdisciplinary approach so as to provide universally acceptable research strategies and protocols to promote health in high altitude.

The primary objective of this international conference is to take stock of the recent advancements and accomplishments in the field of high altitude physiology and medicine, to understand from man to molecule. High altitude research is of paramount importance to our nation as we are constrained to deploy a large volume of troops in high altitude regions of Himalayas upto an altitude of 21,000 feet above sea level. A large number of native population of India live in high altitude regions. Pilgrims visit shrines over the Himalayas. Besides, mountaineers and tourists also sojourn different high altitude locations. So it is necessary for scientists to improve the health and efficiency of human kind at high altitude. This conference will open up new avenues for improving the health and well being of the troops and the other sojourners to high altitude and improve the quality of life of the local people living there.

The conference will provide the participants an opportunity to discuss the most recent advances in High altitude Research, Chronic Hypoxia, Oxygen Sensing and Translational Research. The synergy of the research efforts among biologists, physiologists and clinicians will provide the wind under the wings to this flight of research into the frontiers of hypoxia. Last but not the least, this meeting would also provide a great opportunity for scientific exchanges, personal and institutional contacts thus facilitating a more efficient scientific collaboration worldwide. We are strongly convinced that the efforts put forth would lead to a better integration and amalgamation of researchers and clinicians.

About 350 delegates from National Institutes and Universities and more than 70 delegates from countries like USA, UK, Japan, China, Russia, Germany, Canada, Finland, Bolivia, Australia, Ukraine, Nepal etc will participate and present their papers in the conference on various aspects of High altitude research, Chronic Hypoxia, Oxygen Sensing and Translational Research

There will be 70 invited lectures & 60 posters spread over 4 days. There will be interactive sessions with clinicians, neurobiologists, physiologists, biochemists, and molecular biologists to formulate future R & D strategies. The lecture notes, abstracts/papers of oral and poster presentations will form the essence of the proceeding.

The following topics will be covered in the conference:

Systemic Hypoxia: Sensing and Signaling
Hypoxia-Cardio-Respiratory Homeostasis
Hypoxia & Renal function
Hypoxia & Free Radicals: Physiology to Pathology
Hypoxia & Central Regulatory Mechanism
Hypoxia & Circadian Rhythm
Hypoxia: Exercise and Performance
Man at High Altitude: Acclimatization & Adaptation
Systemic Responses to Hypoxia: Effects on Tissue injury, Repair and Thrombosis
Technological Solutions to Physiological Problems
Hypoxia & Appetite Regulation
Therapeutic Targeting of Cellular & Systemic Hypoxic Stress: Pharmacological & Non-Pharmacological Approaches

In this global hypoxia summit, we also planned one symposium dedicated in memory of late **"Sukhamay Lahiri"** who is known across the world for his research contribution in oxygen sensing and homeostasis. There will also be a popular session on Health and Adventure at High Altitude.

There will also be several Awards for best paper, oral and poster presentations and travel fellowships for young researchers and students during the meeting. **Honorable Minister of State for Defence Sh MM Pallam Raju, has kindly consented to be present for the inaugural function of the conference.**