

JIGYASA PROGRAMME 2020-21 (CSIR-NISTADS)

NATARAJA: A CONFLUENCE OF ARTS AND SCIENCE

HELD ON JUNE 18, 2020, 7:00 PM

ORGANIZED BY CSIR-NISTADS AND VIBHA

REPORT OF THE WEBINAR PRESENTED BY

DONA DEBNATH, X11-A

KENDRIYA VIDYALAYA, BALLYGUNGE

Nataraja: A Confluence of Arts and Science

June 18, 2020, 7.00 pm

speakers



Prof. Sharada Srinivasan

Professor, National Institute of Advanced Studies, Bangalore



Dr. Anil Kakodkar

Former Chairman, Atomic Energy Commission & Secretary, Govt. of India



Moderators

Prof. Ranjana Aggarwal

Director, CSIR-NISTADS, New Delhi

Shri. Vivekananda Pai

National Secretary, Vijnana Bharati

Program details

Introduction & Welcome Address 7:00 PM - 7:10 PM	Prof. Ranjana Aggarwal Director, CSIR-NISTADS
Keynote Speakers	
7:10 PM - 7:30 PM	Dr. Anil Kakodkar Former Director, BARC, Former Chairman of Atomic Energy Commission of India and Secretary to the Government of India
7:30 PM - 7:50 PM	Prof. Sharada Srinivasan Professor, National Institute of Advanced Studies, Bangalore
Question and Answer Session 7:50 PM - 8:00 PM	Coordinator Shri Vivekananda Pai Secretary, Vijnana Bharti
Vote of Thanks	Dr. Suman Ray Senior Scientist, CSIR-NISTADS

CSIR–NATIONAL INSTITUTE OF SCIENCE, TECHNOLOGY AND DEVELOPMENT STUDIES, NEW DELHI AND VIJNANA BHARATI

Nataraja: A Confluence of Arts and Science

Held on June 18, 2020, 7:00 PM

Chairpersons



Prof. Ranjana Aggarwal
Director,
CSIR-NISTADS, New Delhi



Shri Jayant Sahasrabudhe
National Organising Secretary,
Vijnana Bharti, New Delhi

Keynote Speakers



Dr. Anil Kakodkar
Former Director, BARC,
Former Chairman of Atomic
Energy Commission of India
and Secretary to the
Government of India



Prof. Sharada Srinivasan
Professor, National Institute of
Advanced Studies, Bengaluru

Coordinators



Dr. Mohammad Rais
Chief Scientist,
CSIR-NISTADS, New Delhi



Dr. Suman Ray
Senior Scientist,
CSIR-NISTADS, New Delhi



Dr. Shiv Narayan Nishad
Scientist,
CSIR-NISTADS, New Delhi

**CSIR-National Institute of Science, Technology
and Development Studies and
Vijnana Bharti, New Delhi**

THE SPEAKERS FOR THE WEBINAR WERE –

- PROF. RANJANA AGGARWAL, DIRECTOR NISTADS
- SHRI VIVEKANANDA PAI, SECRETARY, VIJNANA BHARTI
- DR. ANIL KAKODKAR, FORMER DIRECTOR, BARC, FORMER CHAIRMAN OF ATOMIC ENERGY COMMISSION OF INDIA AND SECRETARY TO THE GOVERNMENT OF INDIA
- PROF. SHARADA SRINIVASAN, PROFESSOR, NIAS BENGALURU



Nataraja: A confluence of Arts and Science

Nataraja: A confluence of Arts and Science - Organised By Vijnana Bharati and CSIR-N

DIALOGUE EXCHANGE

VIVEKANANDA PAI: KAKODKAR JI, WHAT WAS THE REASONING PROCEDURE AND DESIRES BEHIND THE GIFTING OF 'NATARAJA' SCULPTURE TO CERN AND HOW COULD THEY GET THIS SPECIFIC PROPOSAL?

Anil Kakodkar: India is having strong and comprehensive relationship with CERN. CERN is a place where Indian scientists have been exploring the research in sub-atomic particles. Earlier people were participating and collaborating as an individual in different research activities at CERN. Then, CERN decided to set up a billion dollar project on 'Large Hadron Collider' involving large number of countries and researchers across the world. As a result, the relationship between India and CERN was strengthened and India decided in some manner to express gratitude by making a good present and there was not a better present than a 'Nataraja' Statue.

VIVEKANANDA PAI: WE HAVE SEEN PICTURES OF YOURS ALONG WITH SCULPTURE AT JUNE 18 2004, AND WE HAVE SEEN A PICTURE OF THAT

PARTICULAR STATUE CASTING A SHADE, ITS NICE PICTURE AND IT IS AVAILABLE IN SOCIAL MEDIA IN DIFFERENT FORMATS. WHERE WAS IT PLACED? WERE WE EXPECTING THIS KIND OF A RECEPTION TO THIS PARTICULAR PIECE OF ART?

Anil Kakodkar: Honestly, this was nothing unexpected that they got this so well. All things considered, introducing bits of Craftsmanship is an extremely normal thing. It was a two meter tall sculpture, one of the tallest Nataraja sculpture on the planet, so it required a little open space, set between two structures at CERN.

VIVEKANANDA PAI: SHARADA JI, NATARAJA HAS CAPTURED THE IMAGINATION OF MANY GENERATIONS AND OVER CENTURIES, TODAY ON THE SAME DATE JUNE 18, WE HAVE THIS IMAGE OF NATARAJA IN MAIN BUILDING AT CERN ALSO, AND HOW DID YOUR RESEARCH JOURNEY IN VARIOUS ASPECTS OF NATARAJA STARTED?

Prof. Sharada Srinivasan: Well, I should state that nuclear vitality is one of my greatest motivations as my dad has been in the territory of atomic vitality. At the point when I was youthful, I used to be taken a portion of the up and coming atomic establishments. Thus, I have as of now this interest and comprehension of possible utilization of

Uranium and Thorium and procedure of combination and splitting.

VIVEKANANDA PAI: LAST YEAR I WAS FORTUNATE TO VISIT TO CHIDAMBARAM AND ALSO IN THE MORNING DURING THAT PUJA, THAT TRANSITION WAS VERY MAGICAL, IT STARTED WITH DRUMS, MUSIC, THE BELLS AND THE AARTI AND THEN ULTIMATELY IT REACHED CRESCENDO AND THAT MOVEMENT THERE WAS SO MUCH OF ENERGY THAT WE COULD FEEL AND THE SAME TIME A VERY MAGICAL SILENCE OR PEACE IN MIND. I WOULD LIKE TO ASK YOU LITTLE BIT MORE ABOUT THE CONCEPT OF NATARAJA MURTI IN CHIDAMBARAM AND AKASHA LINGAM. HOW DO THEY COMPLEMENT EACH OTHER THESE TWO CONCEPT?

Prof. Sharada Srinivasan: Usually in numerous Shiva sanctuaries in Chola locale in South India, which is really the immovability, the lingam in type of the column which is really revered from hundreds of years and the Utsah murti, which is a celebration symbol, which intended to be taken out in parade yet Chidambaram is the main sanctuary where Nataraja symbol is venerated in the primary sanctum. The shiv Nataraja is associated with the five components which speaks to Pancha Bhoota: Prithvi, Varuna, Agni, Vayu, and Akasha.

VIVEKANANDA PAI: YOU SAID, IT IS ONE OF THE BIGGEST NATARAJA STATUE IN THE WORLD, WHERE WAS IT MADE AND WHAT ARE THE UNIQUE ASPECTS IF THAT, HOW LONG DID IT TAKE?

Anil Kakodkar: When it was decided that we will present Nataraja to CERN, there were many traditional schools where this work of sculpture and making a bronzes goes on. So, we actually got interested in this job and discussed with Dr. These are the people who decided to take this project. They decided this work to be done at Swami Malay and the artist was Mr. We also decided that it should be done in traditional wax process as they practice for these bronzes. Primarily this work was done in a traditional manner.

PROF. RANJANA AGGARWAL: WHEN WE SAY THAT NATARAJA AT CERN, MANY ATHEIST MAY TOTALLY DISAGREE WITH AN IDEA OF PLACING A RELIGIOUS STATUE AT CERN, WHICH IS AN IDOL SYMBOL OF HINDUISM. ON THE OTHER HAND CERN IS A PLACE FULL OF PEOPLE WITH PRACTICAL INTELLECT. SO IN THE SAME TIME, THERE ARE SCIENTISTS LIKE FRITJOF CAPRA AND CARL SAGAN WHO ARE DRIVING A METAPHOR BETWEEN DANCE OF SHIVA AND DANCE OF SUB-ATOMIC PARTICLES, THESE ARE THOUGHTS OF VERY HIGH ORDERED THINKING WITH THE PHILOSOPHY INVOLVED. AS A PHYSICIST; HOW WILL YOU

PERCEIVE THIS METAPHOR WHICH A COMMON MAN CAN UNDERSTAND IN THE SIMPLE WAY? SO I WOULD LIKE TO HAVE YOUR VIEWS ON THIS METAPHOR BETWEEN DANCE OF SHIVA AND DANCE OF SUB ATOMIC PARTICLES

Dr. Anil Kakodkar: Human creatures are thinking creatures, and In India, we have long information custom that have been our quality based on profound thought. Our sort of sages have arrived at sublime resolutions and there are bunches of similitudes among them and present day science. However, there are not 100% similitudes, yet there are a few likenesses. Now talking about dance of Shiva, for an example we know sub-atomic particles, there are always continuous energy transition they move from one stage to another stage. Some of the connections we have made. At this stage, I would say that the similarities exists and also appreciate with great respect to the great thinkers of past who came so close to visualizations.

PROF. RANJANA AGGARWAL: WHENEVER WE TALK ABOUT SHIVA'S DANCE, THE PICTURE WHICH COMES IN OUR MIND IS THAT OF TANDAVA WHICH IS 'RUDRA RUPA'. BUT, AS YOU SAID THAT THERE IS 'SOUMYA RUPA' ALSO. I WOULD LIKE TO KNOW WHY THE 'SOUMYA RUPA' OF SHIVA IS NOT SO POPULAR OR NOT SO PROMINENT AND WHY

PEOPLE ARE ALWAYS CONNECTING 'TANDAVA' WITH ANGER ALTHOUGH YOU GAVE NICE CONCEPT OF 'SOUMYA RUPA'. I WOULD LIKE TO HAVE SOME YOUR VIEWS BECAUSE HE IS NATARAJA: THE KING OF DANCE AND A DANCER HAS ALL THE EXPRESSIONS NOT ONLY 'RUDRA RUPA'. I WOULD LIKE TO KNOW WHY THIS SO? AND THEN IN THE SCULPTURES, IF YOU LOOK AT MANY TEMPLES, WHICH ONE YOU FIND MORE AND THE REASON?

Prof. Sharada Srinivasan: Because with such a large amount of metal, in some way it also has to balance it and stone does not have much of concise strength that actually we can see in some of the Chola statue. In some of the Chola sculptures, there is a beautiful leg lifted but below it, there is fear of breaking, granite does not have that much of concise strength. In a way it is mix of that. The secret geometry of six sign star is also seen in the sculpture of Nataraja.



FOR VIDEO REFERENCE

<https://www.youtube.com/watch?v=vVa3vj8fqy0>