# 9th Annual Research Meet, 2019 Homi Bhabha Centre for Science Education

# Day 1 | March 13 (Wednesday)

# 9:30-09:45AM

Inaugural address by the Dean, HBCSE

# 9:45-10:45AM

Presentation 1: Evaluation of Yusuf Hamied Teacher Development Programme in India (Hanza George, Rasika Bhujbalrao, Savita Ladage, Sugra Chunawala, Vijay Lale) // 45m

Presentation 2: Analysis of Education for Sustainable Development in Selected Schools of Raigad District, Maharashtra (Shraddha Kulkarni) // 15m

**10:45-11:15AM** Tea

#### 11:15AM-1:00PM

Presentation 1: Exploring cultures of empathy and cooperation in Mathematics learning (Rossi DSouza, Jeenath Rahaman) // 25m

Presentation 2: Mathematical Explorations (Jayasree S) // 25m

Presentation 3: How's How: Cartoon Ramblings on the Philosophy and the Politics of Science (Charudatta Navare) // 45m

1:00-2:00PM Lunch

# 2:00-3:30PM

Presentation 1: From embodiment to grounded disembodiment: An explanatory account for syntactical symbolic activity (Megha Sanyal, Durgaprasad Karnam, Gaurang Yadav) // 45m

Presentation 2: Activity-based learning & Experiences with students in a primary school (Sonawane Vinodkumar) // 45m

**3:30-4:00PM** Tea & Snacks

# 4:00-4:30PM

Talk: Measuring the Wall Street with a Tape: A case for 'Taking Back' the 'Weapon' (Tathagata Sengupta) // 30m

# Day 2 | March 14 (Thursday)

#### 9:30-10:45AM

Presentation 1: Understanding Scaffolding Strategies To Mediate A Problem-Based Learning Environment: Indigo dyeing wastewater treatment (Sujatha Varadarajan)// 45m

Presentation 2: Intricacies in Identification of Biological Misconceptions (Rajendra Chavan) // 25m

**10:45-11:00AM** Tea

# 11:00AM-1:00PM

Symposium: Research methods in Education research: Experiences, Challenges, Ideas (Meena Kharatmal, Scientific Officer, HBCSE; Shirish Pathare, Scientific Officer, HBCSE; Aisha Kawalkar, Research Scholar, HBCSE; Shikha Takker, Research Scholar, HBCSE) // 120m

1:00-2:00PM Lunch

#### 2:00-3:45PM

Presentation 1: Supernovae of Type IIP and their progenitor models using a stellar evolution code MESA (Gururaj Wagle) // 25m

Presentation 2: Scientific relations of Meghnad Saha and Homi Bhabha in the early days of Atomic research in India (Alak Ray) // 45m

Presentation 3: Does knowing just the products of science without knowing the process (nature of science) render us incapable to build a scientific bent of mind? (Vinay B.R) // 25m

### 3:45-4:15PM

Tea & Snacks

#### 4:15-5:15PM

Talk: Building an academic community in STEM education research areas. (Jayasree Subramanian) // 60m

7:30PM onwards Dinner

# Day 3 | March 15 (Friday)

#### 9:30AM-10:45 AM

Presentation 1: Gödel's Incompleteness and the Place of Experiments in Mathematics: Questioning the Divide between Mathematics and Experimental Sciences (Saumya Malviya) // 45m

Presentation 2: Investigating concreteness and abstraction in the context of mathematics education (Herold P C) // 25m

**10:45-11:00AM** Tea

11:00AM-1:00PM

Symposium: Resources for Teacher Training and Teacher Education (Prof. K. Subramaniam, Centre Director, HBCSE; Mr Kishore Darak, Lead, Teacher Education, Tata Trusts, Mumbai; Pralhad Vitthal Kathole, Assistant Teacher, Zilla Parishad School, Baliwali, District: Palghar, Maharashtra; Prof. Sybil Thomas, Department of Education, Mumbai University; Dr. Kalpana Kharade, Associate Professor, Somaiya College of Education)

1:00PM-2:00PM Lunch

# 2:00-3:30PM

Presentation 1: Understanding learners feedback seeking processes during collaborative problem solving and scaffolding it for enhanced learning (Narasimha Swamy K L, Chandan Dasgupta) // 25m

Presentation 2: Improving uncertainty management skills of the learners in the context of engineering design (Navneet Kaur) // 25m

Presentation 3: Interactive Lecture Demonstration - An effective tool for science popularization (Ravi Sinha) // 25m

**3:30-4:00PM** Tea & Snacks

4:00-5:00PM

Presentation: Artefact-use and cognitive consequences: Why history matters? (Gagan Deep Kaur) // 60m

5:00-5:15PM

Vote of Thanks

Concluding remarks by the Director, HBCSE

Kindly note that the time indicated is inclusive of presentations, queries and discussions. The presenter is free to utilize the allotted time in a manner convenient or follow 45m (35m+10m) and 25m (20m+5m) format.