





# FESTIVAL BOOK

# RAMJAS COLLEGE, UNIVERSITY OF DELHI

Under the aegis of IQAC, Ramjas College

# **2<sup>nd</sup> SCIENCE FILM FESTIVAL**

(Two-Day Film Festival showcasing Award-Winning Science Films from National Science Film Festival of India 2017 & 2018, Govt. of India)

ORGANISERS: Ramjas College, University of Delhi and; VIGYAN PRASAR, Department of Science and Technology, Govt. of India

> SCIENCE FILM FESTIVAL CONVENORS: Dr. Amit Bhattacharya, Department of Zoology, Ramjas College Dr. Hardeep Kaur, Department of Zoology, Ramjas College

> > Date: 28<sup>th</sup> and 29<sup>th</sup> AUGUST 2018 Venue: CONFERENCE HALL

RAMJAS COLLEGE, UNIVERSITY OF DELHI

Co-Sponsored by FENA Foundation, New Delhi



# DAY 1: 28 Aug 2018

9:00 AM to 9:30 AM	REGISTRATION (For 50 Teachers and 150 Students)			
	OPENING SESSION			
9:30 AM to 11:00 AM	Festival Introduction: Dr. Hardeep Kaur, Festival Convenor			
	Welcome Address: Dr. Manoj Khanna, Principal, Ramjas College			
	Inaugural Talk by Chief Guest:			
	"Science Communication through films"			
	<b>Shri. Nimish Kapoor,</b> Scientist- 'E' and Head Science Films' Division, VIGYAN PRASAR, DST, Govt. of India			
	Screening of Animation Film 'LAST CHANCE': Winner of Silver Beaver Award, 8 <sup>th</sup> National Science Film Festival of India 2018 (BIT, Mesra; Duration: 00:03:10)			
	Vote of Thanks: Dr Amit Bhattacharya, Festival Convenor			
11:00 AM to 11:30 AM	TEA/COFFEE BREAK			
11 20 414	Session 1: Film Screening			
11:30 AM to 2:00 PM	<ol> <li>Bhartiya Vastukala: Prachin Payjal Prabandhan (Vigyan Prasar; Duration: 00:23:56; Hindi)</li> </ol>			
	2. Green Soil (IISER, Pune; Duration: 00:03:15; English)			
	<ol> <li>Remotion Knee (Indo-US Science and Technology Forum; Duration: 00:04:38; English)</li> </ol>			
	4. Decoding Silk (Amartya Saha; Duration: 00:12:45; English)			

	<ol> <li>Predating the Predator (Vipul Kirti Sharma; Duration: 00:18:06; Hindi)</li> </ol>			
2:00 PM to 2:30 PM	AFTERNOON BREAK			
2:30 PM to 4:00 PM	Session 2: Film Screening			
	<ol> <li>Yak: Ship of Mountain (ICAR, Delhi; Duration: 00:16:32; English)</li> </ol>			
	7. Beat the Heat (TERI, Delhi; Duration: 00:10:21; English)			
	8. <b>Black Holes: Do they really exist?</b> (Bal Bharati Public School, Delhi; Duration: 00:04:01; English)			
	End of Day1			

# DAY 2: 29 August 2018

	Session 3: Technical Talk			
10:00 AM to 11:30 AM	Topic: Emotional Intelligence and Communication Skills			
	Speaker: Dr. Pooja V. Anand			
	Department of Psychology, Daulat Ram College, University of Delhi (Convenor, Positive Psychology Center, Daulat Ram College, University of Delhi)			
11:30 AM to 12:00 PM	TEA/COFFEE BREAK			
	Session 4: Film Screening			

### NOTE:

- **1.** Registered participants are required to attend all the sessions.
- 2. No-Lunch would be served in the afternoon break.
- **3.** Kindly take care of your belongings.

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Dr. Amit Bhattacharya Associate Professor, Department of Zoology Ramjas College, University of Delhi

## **PRINCIPAL'S MESSAGE**



#### Dr. Manoj Kumar Khanna

Founded in 1917, Ramjas College today boasts of a spacious campus, state-of-the art infrastructure and highly acclaimed faculty trained at leading universities in India and abroad. At Ramjas, we believe in providing holistic education. The primary stress is on achieving academic excellence; however, we also provide various opportunities to help students enhance their knowledge and skills in areas that we believe are important for their all-round development. The broad philosophy at Ramjas is to nurture today's youth to face tomorrow's challenges.

The National Science Film Festivals (NSFF) organized by VIGYAN PRASAR, Govt. of India has been a dynamic forum to highlight diverse local and global issues and challenges through the medium of films. These science films are a powerful tool to ignite the curious young minds with a scientific and skill-based temperament.

The 2<sup>nd</sup> Science Film Festival at Ramjas College will showcase award winning Science Films from National Science Film Festival and Competition 2017 and 2018 (organized by VIGYAN PRASAR, Govt. of India) from different categories like science, technology, environment and health. The primary objective of this festival is to encourage scientific atmosphere through popular science film in the participants. I am thankful to VIGYAN PRASAR for this collaboration.

LET'S CELEBRATE AND ENJOY THE THOUGHT-PROVOKING SCIENCE FILMS.

## **FESTIVAL CONVENOR'S MESSAGE**



Dr. Amit Bhattacharya



**Dr. Hardeep Kaur** 

The stage is all set for the Second Science Film Festival at Ramjas College on 28<sup>th</sup> and 29<sup>th</sup> August 2018. The event is organised in collaboration with VIGYAN PRASAR, Department of Science and Technology, Govt. of India. The current edition of festival at Ramjas College has received more than 200 registrations (students and faculty members). This year's film festival will include screening of award winning films from NSFF 2017 and 2018.

The goal of such events is to fuse scientific learning in one engaging platform and boost creativity among students and teachers. Such film based communication will surely influence novel and additional academics incursions in participants thought process to explore their specialized creative forays into unexplored conceptualizations.

We are thankful to Dr. Manoj Kumar Khanna (Principal, Ramjas College) and IQAC Members for their continuous support and encouragement. We also offer our gratitude to Shri. Nimish Kapoor and VIGYAN PRASAR, Govt. of India. We are thankful to FENA foundation, New Delhi for the co-sponsorship. This is a unique opportunity, first of its kind at Delhi University, to learn specific aspects of science, technology, environment, health and related issues. We promise that you will not be disappointed.

## **SPEAKER PROFILE**



**Shri. Nimish Kapoor** Scientist 'E' & Head, Science Films' Division VIGYAN PRASAR Department of Science & Technology, Government of India A 50, Sector 62, Noida – 201309 Email: <u>nimish2047@gmail.com</u>

Shri. Nimish Kapoor is working as **Scientist & Science Communicator** with VIGYAN PRASAR, Department of Science & Technology, Govt. of India from last 14 years. He has been associated with Science film based initiatives of Vigyan Prasar and coordinating national & international science film festivals, science and technology communication campaigns and science outreach activities for students, teachers, science communicators, journalists, TV producers and other stake holders.

Earlier to Vigyan Prasar, he worked in the area of TV broadcasting, and associated with various media organizations including ETV, Ramoiji Film City, Hyderabad; Zee Network, Doordarshan and All India Radio (since 1998). He is also Guest faculty and member of various committees, editorial boards with various Universities and institutions including CSIR-HRD Centre, DRDO, CEC-UGC, NCSM-Ministry of Culture, NIOS-MHRD, Central Hindi Directorate and CSTT-MHRD.

He has produced over 1000 hours of quality television software of different genera for Television Channels and more than 20 documentary scripts for Discovery Channel and Doordarshan. Shri. Kapoor has published more than 200 popular science articles, science news, review papers and book chapters on science communication in peerreviewed national and international journals and magazines.

## **SPEAKER PROFILE**



**Dr. Pooja V. Anand** Assistant Professor Department of Psychology, Daulat Ram College, University of Delhi Email: <u>poojavanand1@gmail.com</u>

**Pooja V. Anand**, PhD is an Assistant Professor at the Department of Psychology, Daulat Ram College, University of Delhi. She has been teaching Psychology for more than twelve years at the undergraduate level. She is a gold medallist in M.A. Psychology. Her teaching and research interests include Positive Psychology, Social Psychology, and Organizational Behaviour. She is the Founder and Convenor of India's first Positive Psychology Center at Daulat Ram College. She has authored the book Emotional Intelligence: Journey to Self-Positive (2017). She is a member of prestigious associations as Consortium for Research on Emotional Intelligence in Organizations, International Positive Psychology Association and International Association of Applied Psychology. She has translated the Satisfaction with Life Scale in Hindi. She has been the paper coordinator and author for modules for Social Psychology and co-coordinator for Positive Psychology paper for the E-pathshala project (UGC-MHRD). She has been a member of the Core Committee for formulating the syllabi for B.A. (Hons) Psychology, B.A. (Hons) Applied Psychology, and B.A. (Programme) Psychology for the Choice Based Credit System for central universities in India. She has many publications in scientific journals and has authored book chapters for The Psychological Realm and Career Development. She has written articles in newspapers of national repute like The Tribune, Millennium Post, Free Press Journal and Nai Duniya and in the international Emotional Intelligence Magazine. She is the reviewer for many reputed scholarly journals. She is guiding many PhD scholars enrolled at the Department of Psychology, University of Delhi. She has been invited for talks and workshops at many prestigious forums and has presented papers at various national and international conferences. She won the first prize for the best paper presentation at the International Conference on Public Health, Delhi (2016). As the first Convenor for skill development courses in her college she started many Skill development courses in various disciplines including Psychology like Emotional Intelligence, Personality development, Self-enhancement skills and Self-Positive.

### **SCIENCE FILMS SYNOPSIS (DAY 1)**

#### Award Winning Films from 8<sup>th</sup> National Science Film Festival 2018 held at Gauhati University, Assam

#### BHARTIYA VASTUKALA: PRACHIN PAYJAL PRABANDHAN

In this episode of Indian architectural serial, we will try to understand the unique water structures of India with the view of hydrology. In this episode we are launching our journey with the fascinating years of Rajasthan and Gujarat. Then we will explore the traditional water conservation systems of Rajasthan along with the lakes created by Mauryas. Many of these water sources are still in use! The common thing in all of these is that they all reflect the deep understanding of hydrology.

Duration: 00:23:56 Director/Producer: Arjun Bhagat & Radhika Chandershekhar; Vigyan Prasar, delhi Language: Hindi Award: Graphics/Animation/ Special Effects Award, NSFF 2018

#### **GREEN SOIL**

Urban waste management is a serious concern throughout our country. In addition to the initiatives taken by our government, tackling this issue requires an active contribution from citizens as well. Green soil is an inspiring story of how a small family consumes waste. With the goal of managing urban waste, they come up with a brilliant solution. The story, standing as an excellent example of waste management, has moved more than 300 other households in the Pune city to act.

Duration: 00:03:15 Director/Producer: Keerthi Raj B S; IISER, Pune Language: English, Hindi Award: Bronze Beaver Award, NSFF 2018 (Category C)

#### **REMOTION KNEE (Indo-US Science and Technology Forum)**

It is not good that efficient knee systems are not commercially available around the world. It is just that they are prohibitively expensive and therefore beyond the reach of users in the developing world. This is the story of a product developed by bilateral collaboration between India and the United States. This artificial knee joint behaves almost like a human knee and is designed for low resource settings across the world. Dr. Krista Donaldson (Founder of Design Revolution at San Francisco, USA) and Dr. Pooja Mukul (Technical Director, Bhagwan Mahaveer Viklang Sahayat Samiti, Jaipur) and their team have co-developed an innovative knee called the Re-motion Knee or Biomimetic Knee- a low cost, high performance prosthetic knee joint.

Duration: 00:04:38

Director/Producer: Matiur Rahman; Indo-US Science and Technology Forum, Delhi Language: English Award: Special Jury Award, NSFF 2018

#### **DECODING SILK**

The documentary looks at the art, craft and science of silk production. We have a look at sericultural practices from ground zero. A study is made on the mulberry silk cultivation process followed in Murshidabad district of West Bengal. Here, the production of silk happens in both traditional and modern day technology driven way. The documentary tells about both these aspects of sericulture. It also defines the role played by Central Sericulture Research and Training Institute, Berhampore.

Duration: 00:12:45 Director/Producer: Amartya Saha Language: English Award: Silver Beaver Award, NSFF 2018 (Category B)

#### **PREDATING THE PREDATOR**

This documentary showcases the neglected but amazing world of red ant eating spiders. Painstaking and unpublished research work of over five years has been simplified, documented and shot with the eye of macro-lens. Over the million years of evolution, many spiders have learned to mimic ants for their protection. This documentary shows the potential of small and feared creatures like spiders can be used as a model for various research activities and for teaching students. Such documentaries can motivate students to select science as their field of study.

Duration: 00:18:06 Director/Producer: Vipul Kirti Sharma Language: Hindi Award: Golden Beaver Award (Category B)

#### **YAK: SHIP OF MOUNTAIN**

Yak also known as the ship of Himalayas is a unique bovine species of snow covered high altitude mountainous regions of India. Yak husbandry is highly valuable for the Himalayan people because of its contribution to their economy through yak products like meat, milk hair, leather, dung (for fuel and manure), drought animal and provide nutritional security. Considering the constraints in yak husbandry, ICAR-National Research Center (NRC) on Yak was established in 1989 in a hilly terrain of Arunachal Pradesh. NRC today is doing pioneering work by application of reproductive biotechnologies.

Duration: 00:16:32 Director/Producer: Renu Negi, Asarar Shamsi; ICAR, Delhi Language: English Award: Silver Beaver Award (Category A)

#### **BEAT THE HEAT**

In 2010, Ahmedabad lost 310 lives in a single day due to an extreme heat wave. It was then that Ahmedabad Municipal Corporation in association with CDKN came up with a highly effective Heat Action Plan in the year 2013. The films brings to fore the story of its development, its working and the people behind it.

Duration: 00:10:21 Director/Producer: Rishu Nigam; TERI Delhi Language: English 2<sup>nd</sup> SCIENCE FILM FESTIVAL, Ramjas College 2018 Page 11 | 14

#### **BLACK HOLES: DO THEY REALLY EXIST?**

Hi, I'm Aryan from the Byte Club and we are going to uncover this mystery together. They are basically just dead stars. When a massive star dies then it loses the balance in its gravity and its radiation, making its core collapse. If you ever looked at a black hole, what you'd really be seeing is the event horizon. Its called event horizon because any event that occurs beyond this cannot be seen, so its like a horizon.

Duration: 00:04:01

Director/Producer: Students of Bal Bharati Public School, New Delhi Language: English Award: Bronze Beaver Award (Category D)

Dr. Amit Bhattacharya Associate Professor, Department of Zoology Ramjas College, University of Delhi

### **SCIENCE FILM SYNOPSIS (DAY 2)**

#### Award Winning Films from 7th National Science Film Festival 2017 held at BITM, Kolkata

#### **BRAIN'S FAULT**

The documentary titled Brains Fault explains how the physical and biological condition of the brain makes a person criminal before his birth. These people are called psychopaths in medical science. The documentary is an attempt to explain the reason behind psychopaths.

Duration: 00:07:47 Director/Producer: Aditya, Lucknow, UP Language: English Award: Golden Beaver Award, NSFF 2017 (Category D)

#### GAURAIYA, THE GREAT INDIAN SPARROW

The documentary is based on the message of bird and ecological conservation. The film encourages citizens to save this bird which, till a decade back, was a common sight in homes. One can save the bird by providing food, water and shelter.

Duration: 00:10:00 Director/Producer: Students of City Montessori School, Lucknow, UP Language: English Award: Bronze Beaver Award, NSFF 2017 (Category D)

#### JAL

The short film is based on water conservation. Specially-abled child Sumit Rawat of Chipitola has played the lead role effectively and was acknowledged for his acting.

Duration: 00:06:41

Director/Producer: Arjit Mohan Shukla, Agra, UP Language: Silent Award: Bronze Beaver Award, NSFF 2017 (Category C)

#### SRINIVASA RAMANUJAN: THE MATHEMATICIAN & HIS LEGACY

The documentary gives an insight into Srinivas Ramanujan's contributions and achievements. The biographical film explores his childhood days in his hometown Erode (Madras), his academic works at Cambridge University with the British mathematician G H Hardy, and his lasting impression in the study of mathematical analysis, number theory, infinite series, and continued fractions. It's a look into the life of a truly inspiring genius who started off in small town South India, but went on to become one of the greatest and most respected mathematicians all over the world.

Duration: 00:25:00 Director/Producer: Nandan Kudhyadi; Public Service Broadcasting Trust, New Delhi Language: English Award: Jury Award, NSFF 2017

### Science Film Festival: Day 1, 28<sup>th</sup> August 2018, Registration

S.No.	Name	Department	Signature
1	Mayanglambam Ojit Kumar Singh	Zoology	
2	Roma Rani	Botany	
3	Pooja Gupta	Botany	
4	Pooja Jha Maity	Botany	
5	Niti Pathak	Botany	
6	Bharti Chaudhary	Botany	
7	Rupali Sapra	Physics	
8	Jasmina Baveja	Physics	
9	Rangoli Bhatnagar	Physics	
10	Swati Shandilya	Physics	
11	G. S. Chilana	Physics	
12	Poonam Dwivedi	Chemistry	
13	Kartiki Bhatnagar	Botany	
14	Narinder Pushkarna	Statisics	
15			
16			
17			
18			
19			
20			

S.No.	Name	Department/ Course	Year	Signature
1	Nishant Bhardwaj	Zoology	3	
2	Himanshu Sharma	Zoology	3	
3	Manav Gupta	Life Science	1	
4	Astha Singhal	Life Science	1	
5	Akash Chaudhary	Life Science	3	
6	Tamanna	Life Science	2	
7	Akanksha Maurya	Life Science	2	
8	Pragya Gupta	Life Science	2	
9	Gunjan Chauhan	Life Science	1	
10	Kritika Vashistha	Life Science	2	
11	Shweta Choudhry	Life Science	3	
12	Vaishali	Life Science	3	
13	Sakshi Gulia	Life Science	2	
14	Shivani	Zoology	2	
15	Prasoon Prakash	Life Science	3	
16	Kanishka	Zoology	2	
17	Shivani Gautam	Life Science	3	
18	Gunwant Singh Atwal	Zoology	1	
19	Sandeep	Physical Science	1	
20	Vishal Deswal	Physical Science	1	
21	Nikita	Life Science	3	
22	Sanovar Dayal	Zoology	3	
23	Praveen Kumar Yadav	Zoology	3	

24	Rhythm Tyagi	Life Science	3	
25	Atul Selangia	Life Science	3	
26	Gauransh Bhatheja	Botany		
27	K. Thandnanlang	Life Science	3	
28	Diksha Singh	Life Science	2	
29	Nishita Singh	Life Science	2	
30	Kajal	Life Science	3	
31	Piyush Ranjan	Life Science	2	
32	Himani	Life Science	2	
33	Shambhvi Thakur	Life Science	1	
34	Samar Ahmad	Life Science	3	
35	Jatin	Life Science	2	
36	Kanishka Soni	Life Science	3	
37	Samanbar Siddiqui	Life Science	3	
38	Prince Singh	Life Science	2	
39	Anurag Borgohain	Life Science	2	
40	Rudra Narayan Sahoo	Life Science	2	
41	Tonili Monica Awomi	Life Science	3	
42	Manisha Rana	Life Science	3	
43	Anushka	Zoology	3	
44	Shivam	Life Science	2	
45	Vinay Singh Jadon	Life Science	3	
46	Khwairakpam Diyara	Zoology	1	
47	Awantika	Zoology	1	
48	Kankshi Gupta	Zoology	1	

49	Timothy Khongsai	Zoology	1	
50	Rachita Garg	Zoology	1	
51	Laeba Haider	Zoology	3	
	Gaurav Kumar			
52	Upadhyay	Physical Science	2	
53	Ananya Bhardwaj	Life Science	1	
54	Hekrishan Bhargava	Physics	3	
55	Shivani Gahlot	Life Science	3	
56	Nisha	B.A. Programme	3	
57	Hardik Singh	Zoology	3	
58	aavarti Saxena	Zoology	3	
59	Rohit Bansal	Zoology	3	
60	Manisha Singh	Life Science	3	
61	Chetan	Life Science	3	
62	Sneha Tripathi	Life Science	2	
63	Aman Gangwar	Zoology	2	
64	Manita Raina	Zoology	2	
65	Akanksha	Life Science	2	
66	Niharika Payal	Zoology	1	
67	Seema Yadav	Zoology	1	
68	Rachna	Zoology	1	
69	Shashank Gaurav	Zoology	1	
70	Devanshu Kumar	Zoology	1	
71	Nishtha Malhotra	Zoology	3	
72	Nishi Poddar	Zoology	1	

73	Vaishali agarwal	Life Science	2	
74	Yukta Kher	Life Science	2	
75	Twinkle Mulchandani	Life Science	2	
76	Shubhangi Das	Life Science	2	
77	Vishisth Dhama	Life Science	2	
78	Chahat Dhingra	Life Science	2	
79	Prachi Das	Life Science	2	
80	Aproova Sharma	Life Science	2	
81	Saumya Singh	Life Science	2	
82	Ashish Nandal	Life Science	2	
83	Abhishek Singh	Life Science	2	
84	Vaishali Nirwal	Zoology	3	
85	Shivi Maurya	Zoology	3	
86	Anuradha Singh	Life Science	3	
87	Natasha Kumari Gupta	Life Science	3	
88	Gaurav Ahlawat	Life Science	2	
89	Tanya Gulati	Life Science	1	
90	Nikhil Saini	Zoology	3	
91	Vanshikha Kamboj	Zoology	3	
92	Niharika Saini	Zoology	3	
93	Gulnigar Fatima	Zoology	3	
94	Pragati Kumari	Zoology	3	
95	Aakanksha Singh	Zoology	3	
96	Trishala Singh	Life Science		
97	Siddhi Gupta	Zoology	3	

98	Vishal Sinha	Zoology	2	
99	Shabnam K	Botany	1	
100	Deepak Gupta	Life Science		
101	Swati Singh	Life Science		
102	Tannu Chaudhary	Life Science		
103	Ishan Singh	Life Science	1	
104	Shikha Sinha	Life Science	1	
105	Prayut Raina	Life Science	1	
106	Megha	Life Science	3	
107	Anjali	Zoology	2	
108	Kajal	Zoology		
109	Aanchal Singh	Zoology	1	
110	Venessa Grace	Life Science	1	
111	Ankita Prasad	Life Science		
112	Priyanka	Zoology	3	
113	Prachi	Life Science	3	
114	Aditi Singh	Life Science	3	
115	Dharna Bhardwaj	Life Science	3	
116	Sneha Shekhar	Life Science	3	
117	Muskan	Life Science	3	
118	Vidhi	Life Science	1	
119	Mona Yadav	Life Science	1	
120	Ritu Shukla	Life Science	1	
121	Diksha Mittal	Life Science	1	
122	Nikki	Life Science	1	

123	Jatin Kumar	Life Science	2	
124	Mahek Gupta	Life Science	3	
125	Lekha Gupta	Life Science	3	
126	Shweta Chaudhary	Life Science	3	
127	Isha Tandon	Life Science	3	
128	Simran Anand	Life Science		
129	Shweta	Life Science	2	
130	Anu	Life Science		
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## 2<sup>nd</sup> 'SCIENCE FILM FESTIVAL'

Under the aegis of IQAC, Ramjas College (Two-Day Film Festival showcasing Award-Winning Science Films from National Science Film Festival of India, Govt. of India)

### 28<sup>th</sup> and 29<sup>th</sup> August 2018

Organized By: Ramjas College, University of Delhi and VIGYAN PRASAR, DST, Govt. of India

### **CERTIFICATE OF PARTICIPATION**

This is to certify that Mr./Ms./Dr.

of \_\_\_\_\_ (Course/Department/College)

participated in the 2<sup>nd</sup> Science Film Festival held at Ramjas College, University of Delhi.



Dr. Manoj Kumar Khanna Principal **Ramjas College**