

Cover Image Credit: Benazir (S. Khalil, 1964) Courtesy: Kamat Foto Flash

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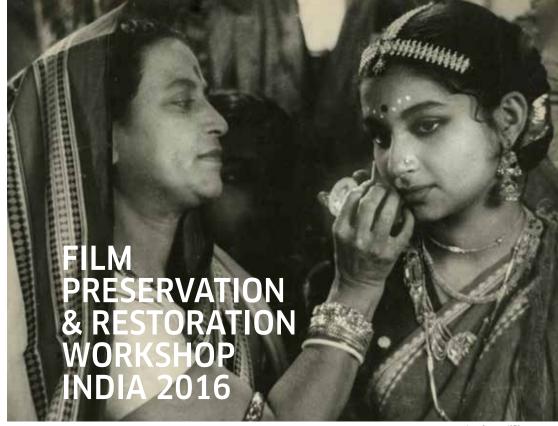












Apur Sansar, 1959

# FEB 26<sup>TH</sup> − MAR 6<sup>TH</sup>

National Film Archive of India Ministry of Information & Broadcasting Government of India, Law College Road Pune, India 411 004 National Film Archive of India Phase 2, Paud Road Kothrud, Behind MIT College Pune, India 411 038

National Film Archive of India (NFAI), Film Heritage Foundation and the International Federation of Film Archives (FIAF) have come together to conduct the Film Preservation & Restoration Workshop India 2016 to provide training in film preservation and restoration to help safeguard India's cinematic heritage.

The ten-day advanced course has been specially designed by David Walsh, Head of the FIAF Technical Commission with a focus on intensive practical training in current film preservation and archival practices. Lectures and practical sessions will be conducted by leading archivists and restorers from preeminent institutions like the George Eastman Museum, the Selznick School of Film Preservation, FIAF and L'Immagine Ritrovata, and is supported by Martin Scorsese's The Film Foundation's World Cinema Project. Lectures and practical classes will be held at NFAI Phase 2, while all film screenings will be held at the NFAI Law College Road premises.

The goal of the programme is not only to augment the infrastructure and capacity of the NFAI but also to build an indigenous resource of film archivists and restorers who can work towards saving India's cinematic heritage in the future.



government's National Film Heritage Mission,

aimed at conservation, digitization and restoration

We have expanded the scope of the course to encompass both film and non-filmic material like

of films and non-filmic material.

posters, lobby cards, photographs and scripts to

sonnel the best preservation practices not just for films but also for the treasure trove of non-filmic material that is an integral part of the film culture

We had an overwhelming response to our call for applications for FPRWI 2016 with 81 applications from all over the country including Bangladesh and Sri Lanka. We were also pleased that many of the participants from FPRSI 2015 applied again for the workshop in a bid to aug-

We were fortunate that Sunil Arora, Secretary, Ministry of Information & Broadcasting, Govt. of India, K. Sanjay Murthy, Joint Secretary - Films, and Prakash Magdum, Director, NFAI agreed with our vision to build capacity and resources for the NFAI. We would like to thank them for their wholehearted support without which FPRWI 2016 would not have been possible. We would also like to thank Santosh Ajmera, OSD, NFHM, D.K. Sharma. Administrative Officer. Kiran Dhiwar, Film Preservation Officer, Arti Karkhanis, Documentation Department, and all the NFAI staff who assisted us with the logistics of the workshop.

A special mention must be made of David Walsh. Head of the FIAF Technical Commission and Head of the Digital Collection at the Imperial War Museum, London, who, at our request, took

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the time out of his busy schedule to put together a specially designed curriculum customised for Indian conditions and a fantastic line-up of faculty. It was a truly challenging assignment and one that he managed with aplomb. We are elated that this time he will be able to join us for the workshop and share his knowledge and experience with the participants.

We would like to thank Christophe Dupin of FIAF who has always been a supporter of our cause and was instrumental in setting the ball rolling in getting FIAF's endorsement for this workshop as well as the generous offer of five scholarships from FIAF to deserving applicants from India and Bangladesh.

Another friend and supporter who played a key role is Paolo Cherchi Usai, Head Curator, George Eastman Museum in Rochester, NY. He helped us put together a superb team of faculty from George Eastman Museum to cover diverse subjects ranging from curatorship, projection and preservation practices of both film and non-filmic material. Our heartfelt thanks to him and to Spencer Christiano, Benjamin Tucker, Nancy Kauffman, Taina Meller and Jurij Meden for coming all the way from Rochester to Pune to teach us how to save our filmic and non-filmic material.

We would also like to thank Thelma Ross from the Museum of Modern Art, New York and Richard Wright who have agreed to come to India to conduct sessions in their specialised fields of documentation and cataloguing, and broadcast archive technology and digitisation respectively.

Davide Pozzi and his team from L'Immagine Ritrovata, Bologna – Emanuele Vissani, Gilles Barberis, Marianna de Sanctis, Silvia Spadotto are back once again to impart their knowledge on world-class film and sound restoration practices. We would like to thank our friends from Bologna who are considered artists in the field of film restoration the world over.

We are deeply grateful to Martin Scorsese, Margaret Bodde, Jennifer Ahn and Kristen Merola for continuing to stand with Film Heritage Foundation as we strive to save India's cinematic heritage with their generous contribution to this project through Film Foundation's World Cinema Project.

Our sincere thanks to M. Ravindran of GAIL India Ltd. and Patrizia Gambarotta of Istituto Italiano di Cultura di Mumbai for coming on board as sponsors for the second consecutive year.

We cannot forget the generosity and unstinting support of Sudhanshu Vats, Group CEO of Viacom 18 who is truly a patron of Indian cinema and its heritage. He was the first person from the film and television industry to come on board as a sponsor for the first school and we cannot thank him enough for his continued patronage that has made it possible for us to conduct the second workshop. We would also like to thank Anshul Ailawadi, Rolina Dantas and Sonia Huria of Viacom 18 for all their help.

I would like to thank my friend Abhimanyu Singh from Contiloe Films, Manish Mundra and Shiladitya Bora of Drishyam Films and Amit Sherigar from Kodak India for extending their supporting to this initiative. My friend Manish Tibrewal of RASA has once again generously sponsored the FPRWI 2016 workshop bags for all the participants and the faculty.

A special thanks to Film Heritage Foundation's advisory council, especially to P.K. Nair, Shyam Benegal, Jaya Bachchan and Gianluca Farinelli for their constant guidance and encouragement.

Last, but not least, I must mention our team from Film Heritage Foundation and Dungarpur Films who have once again pitched in enthusiastically to ensure that this workshop is as big a success as the first one.

Film Heritage Foundation will continue to work tirelessly to save our moving image legacy for posterity. One of our long-term goals as a foundation is to facilitate the introduction of film preservation and restoration into university and film institute curriculums. We believe there is as much a need for the saviours of cinema as there is for the creators of this art.

Shivendra Singh Dungarpur is the Founder-Director of the Film Heritage Foundation.



Padosi, 1941

National Film Archive of India, NFAI, is the premier organisation under Government of India engaged in preservation and promotion of film culture in the country. Established in 1964, NFAI has strived to preserve the country's cinematic legacy through its huge collection of films, posters, photographs, song booklets, lobby cards etc. It has been our constant endeavor to trace and acquire old and rare film footages, preserve them for posterity and bring them into the public domain.

Even though India is one of the largest producers of movies in the world, the general awareness about film preservation is abysmal. Add to it the fact that there are not many skilled practitioners in this niche field. Film handling and care is not looked upon as a career option. All these factors make the task of preserving our cinematic legacy quite challenging. By the time NFAI was established, most of the silent films were lost. Film producers, after the commercial run of the film was over, used the footage to extract silver from nitrate component. This was one of the major factors in losing precious film footage.

Realising the importance of film preservation, Government of India has recently launched National Film Heritage Mission (NFHM), for preservation, conservation, digitisation and restoration of film and filmic material. The project being implemented by NFAI is a timely step in the right direction. One of the highlights of this project is that there is equal emphasis on preservation of heritage on celluloid format along with digitisation. Therefore, we are looking at making use of the latest technological advances that will prolong the life of celluloid film. India is one of the few countries to carry out this project at such a large scale, and has taken it up as a mission to be completed in a time-bound manner. It would be pertinent to mention that NFAI had carried out digitisation and restoration of about 500 and 300 film titles respectively a few years back.

Apart from preservation, another major function of any film archive is to manage the nonfilmic material such as wall posters, publicity pamphlets, still photographs, lobby cards etc. In this context, proper indexing and cataloguing of data assumes significance. Since Indian cinema has been gaining attention of researchers and scholars across the world, it becomes imperative that these aspects along with meta-data management be made ready as per universal standards. This will come handy in terms of facilitating access to the public at large. It will also involve the creation of a comprehensive database backed by an IT solution.

The rapidly changing technological advances in cinema have brought forth digital systems across the world and India is not immune to this. As per informed sources, most of the film production is being done on digital platforms in India. Taking this into consideration, we are also looking at creation of new storage facilities that will cater for both celluloid as well as digital films.

Due to various initiatives taken by NFAI recently, there is a slow but steady increase in the level of awareness about film preservation in the country. The re-discovery and acquisition of the Bengali version of P.C. Barua's landmark film *Devdas* (1935); finding of the Telugu historical film *Palanati Yuddham* (1947) in good condition nitrate base; acquisition of rare World War II footages, etc. has rekindled interest in preserving our cinematic legacy. As a part of public outreach activity, we have been actively using social media platforms to engage passionate film lovers across the world.

At this juncture, NFAI has taken the initiative to organise a ten-day workshop (February 26-March

6, 2016) on film preservation and restoration in which international experts would impart inputs in various fields of film archiving. These inputs would consist of film handling, preventive conservation, digitisation, restoration, indexing, cataloguing, documentation etc. Practical training modules would form an important part of this workshop. FIAF (International Federation of Film Archives) and FHF (Film Heritage Foundation) are our partners in this endeavor and George Eastman Museum, Martin Scorsese's Film Foundation and L'Immagine Ritrovata have supported this workshop. I appreciate FIAF, Kodak and Drishyam Films for having awarded scholarships.

I am sure this workshop would pave the way for increased awareness about film preservation in the country. It will also lead to creation of skilled manpower that can be tapped in future archiving. Let us join hands to preserve our rich legacy!

Prakash Magdum is the Director of the National Film Archive of India

Shapmochan, 1955





Alibaba Aur Chalis Chor, 1954

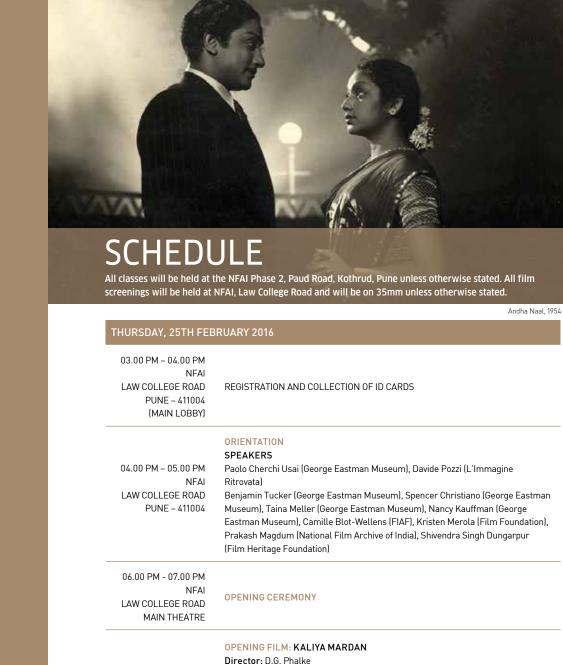
The digital revolution that has swept through all sectors of the film industry since the turn of the millennium has dramatically transformed the archiving field, from preservation to restoration and access. Film heritage institutions around the world have had to adapt quickly to this new reality, often in a difficult financial situation. Today, they must simultaneously preserve and restore their existing analogue collections as well as they can, digitise as much of these collections as possible, and ensure the long-term preservation of born-digital works being produced today. One of the keys to the success of this formidable endeavour is of course the training of film archive staff, in both analogue and digital technologies.

It is therefore crucial for FIAF to actively support training initiatives such as the 2016 Film Preservation and Restoration Workshop India. I am absolutely delighted that our Federation has been able to partner its two affiliates in India

- the National Film Archive of India and the Film Heritage Foundation - to organise this important event, just one year after the successful first film preservation and restoration school organised in Mumbai by the Film Heritage Foundation, to which FIAF was proud to have contributed. I hope that the trainees of this new workshop - not only members of staff of the National Film Archive of India, but also other professionals and students in the field - will fully benefit from their exchanges with the experts who will teach them for 10 days on the premises of the NFAI, and that they in turn will be able to take an active part in safeguarding and promoting the unique film heritage of India and its neighbouring countries, for the benefit of future generations not only in that part of the world, but indeed everywhere.

Eric Le Roy is the President of the International Federation of Film Archives (FIAF).





Film Historian)

Sanjay Gogte : Harmonium Amit Kakde : Flute Avadhoot Rahalkar : Violin Vidyanand Deshpande : Percussion

07:00 - 08:00 PM

India, 1919 | 5 Reels, Silent, B/W, 1465.2 feet, 45 minutes.

Introduction: Suresh Chhabria (Former Director, National Film Archive of India;

With live musical accompaniment by Dr. Kshama Vaidya and her group Dr. Kshama Vaidya : Composer, Co-ordinator ; Side Rhythms and Vocals

FRIDAY, 26TH FEBRU	ARY 2016
09.00 AM- 10.30 AM NFAI PHASE 2, PAUD ROAD, KOTHRUD, BEHIND MIT COLLEGE, PUNE - 411038	HISTORY OF FILM TECHNOLOGY PART 1 SPEAKER: Camille Blot-Wellens (FIAF)
10.30 AM - 11.00 AM	Coffee / Tea Break
11.00 AM - 01.00 PM	FILM CURATORSHIP SPEAKER: Paolo Cherchi Usai (George Eastman Museum)
01.00 PM - 02.00 PM	Lunch Break
02.00 PM - 03.30 PM	FILM HANDLING SPEAKER: Benjamin Tucker (George Eastman Museum)
03.30 PM - 04.00 PM	Coffee / Tea Break
04.00 PM - 06.00 PM	PRESERVATION PRIORITIES AND PRESERVATION ETHICS SPEAKER: Paolo Cherchi Usai (George Eastman Museum)
06.30 PM ONWARD NFAI LAW COLLEGE ROAD	FILM SCREENING: LAL-E-YAMAN Director: J.B.H. Wadia India,1933   35mm, B/W, Hindi, 158 minutes.
SATURDAY, 27TH FEB	RUARY 2016
09.00 AM - 10.30 AM NFAI PHASE 2	RESTORATION ETHICS AND PRACTICE  SPEAKER: Davide Pozzi (L'Immagine Ritrovata)
NFAI PHASE 2	SPEAKER: Davide Pozzi (L'Immagine Ritrovata)
NFAI PHASE 2	SPEAKER: Davide Pozzi (L'Immagine Ritrovata)  Coffee / Tea Break  CONSERVATION OF POSTERS AND DOCUMENTS
NFAI PHASE 2  10.30 AM - 11.00 AM  11.00 AM - 01.00 PM	SPEAKER: Davide Pozzi (L'Immagine Ritrovata)  Coffee / Tea Break  CONSERVATION OF POSTERS AND DOCUMENTS SPEAKER: Nancy Kauffman (George Eastman Museum)
NFAI PHASE 2  10.30 AM - 11.00 AM  11.00 AM - 01.00 PM  01.00 PM - 02.00 PM	SPEAKER: Davide Pozzi (L'Immagine Ritrovata)  Coffee / Tea Break  CONSERVATION OF POSTERS AND DOCUMENTS SPEAKER: Nancy Kauffman (George Eastman Museum)  Lunch Break  FILM PROJECTION
NFAI PHASE 2  10.30 AM - 11.00 AM  11.00 AM - 01.00 PM  01.00 PM - 02.00 PM  02.00 PM - 03.30 PM	SPEAKER: Davide Pozzi (L'Immagine Ritrovata)  Coffee / Tea Break  CONSERVATION OF POSTERS AND DOCUMENTS SPEAKER: Nancy Kauffman (George Eastman Museum)  Lunch Break  FILM PROJECTION SPEAKER: Spencer Christiano (George Eastman Museum)

SUNDAY, 28TH FEBRU	ARY 2016
09.00 AM - 10.30 AM NFAI PHASE 2	CONSERVATION OF PHOTOGRAPHS PART 1 SPEAKER: Taina Meller (George Eastman Museum)
10.30 AM - 11.00 AM	Coffee / Tea Break
11.30 AM - 01.00 PM	PRACTICAL CLASS
01.00 PM - 02.00 PM	Lunch Break
02.00 PM - 03.30 PM	CONSERVATION OF PHOTOGRAPHS PART 2 SPEAKER: Taina Meller (George Eastman Museum)
03.30 PM - 04.00 PM	Coffee / Tea Break
04.00 PM - 06.00 PM	PRACTICAL CLASS
06.30 PM ONWARD NFAI LAW COLLEGE ROAD	FILM SCREENING: KISMET Director: Gyan Mukherjee India,1943   35 mm, 15 Reels, Hindi, B/W, 11844 feet, 143 minutes.
MONDAY, 29TH FEBRU	JARY 2016
09.00 AM - 10.30 AM NFAI PHASE 2	DIGITAL INFRASTRUCTURE, MASTERING AND WORKFLOW SPEAKER: Emanuele Vissani (L'Immagine Ritrovata) OR Practical
10.30 AM - 11.00 AM	Coffee / Tea Break
11.00 AM - 01.00 PM	PRACTICAL CLASS
01.00 PM - 02.00 PM	Lunch Break
02.00 PM - 03.30 PM	INTRODUCTION TO DIGITAL TECHNOLOGY  SPEAKER: Emanuele Vissani (L'Immagine Ritrovata) OR Practical
03.30 PM - 04.00 PM	Coffee / Tea Break
04.00 PM - 06.00 PM	PRACTICAL CLASS
06.30 PM ONWARD NFAI LAW COLLEGE ROAD	FILM SCREENING: DO BIGHA ZAMIN Director: Bimal Roy India, 1953   35 mm, 13 Reels, Hindi with English subtitles, B/W, 142 minutes.
TUESDAY 1ST MARCH	2016
09.00 AM - 10.30 AM NFAI PHASE 2	DISASTER RECOVERY  SPEAKER: Emanuele Vissani (L'Immagine Ritrovata)
11.00 AM - 01.00 PM	PRACTICAL CLASS

01.00 PM - 02.00 PM	Lunch Break
02.00 PM - 03.30 PM	KODAK PRESENTATION  SPEAKER: Amit Sherigar  Account and Business Development Manager (Kodak India) OR Practical
03.30 PM - 04.00 PM	Coffee / Tea Break
04.00 PM - 06.00 PM	PRACTICAL CLASS
06.30 PM ONWARD NFAI LAW COLLEGE ROAD	FILM SCREENING: ANDHA NAAL Director: S. Balachander India, 1954   35 mm, 15 Reels, Tamil, B/W, 13165 feet, 130 minutes.
WEDNESDAY, 2ND MA	RCH 2016
09.00 AM- 10.30 AM NFAI PHASE 2	HISTORY OF SOUND SPEAKER: Gilles Barberis (L'Immagine Ritrovata) OR Practical
10.30 AM - 11.00 AM	Coffee / Tea Break
11.00 AM - 01.00 PM	PRACTICAL CLASS
01.00 PM - 02.00 PM	Lunch Break
02.00 PM - 03.30 PM	DOCUMENTATION AND CATALOGUING PART 1 SPEAKER: Thelma Ross (Museum of Modern Art)
03.30 PM - 04.00 PM	Coffee / Tea Break
04.00 PM - 06.00 PM	PRACTICAL CLASS
06.30 PM ONWARD NFAI LAW COLLEGE ROAD	FILM SCREENING: KAAGAZ KE PHOOL Director: Guru Dutt India, 1959   35 mm Cinemascope, 16 Reels, Hindi, B/W, 153 minutes.
THURSDAY, 3RD MARC	CH 2016
09.00 AM- 10.30 AM NFAI PHASE 2	FILM STORAGE STRATEGIES  SPEAKER: David Walsh (Head of the FIAF Technical Commission)
10.30 AM - 11.00 AM	Coffee / Tea Break
11.00 AM - 01.00 PM	PRACTICAL CLASS
01.00 PM - 02.00 PM	Lunch Break
02.00 PM - 03.30 PM	DOCUMENTATION AND CATALOGUING PART 2 SPEAKER: Thelma Ross (Museum of Modern Art)
03.30 PM - 04.00 PM	Coffee / Tea Break



Rukmini Haran, 1933

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06.30 PM ONWARD NFAI LAW COLLEGE FILM SCREENING: TITAS EKTI NADIR NAAM

Director: Ritwik Ghatak

**Bangladesh, 1973** | 35mm (Restored), B/W, Bengali with English subtitles, 159 minutes.

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FRIDAT, 41H MARCH 2	2010
09.00 AM- 10.30 AM NFAI PHASE 2	SOUND TECHNOLOGY SPEAKER: Gilles Barberis (L'Immagine Ritrovata)
10.30 AM - 11.00 AM	Coffee / Tea Break
11.00 AM - 01.00 PM	PRACTICAL CLASS
01.00 PM - 02.00 PM	Lunch Break
02.00 PM - 03.30 PM	DOCUMENTATION AND CATALOGUING PART 3 SPEAKER: Thelma Ross (Museum of Modern Art)
03.30 PM - 04.00 PM	Coffee / Tea Break

06.30 PM ONWARD  NFAI LAW COLLEGE  ROAD  FILM SCREENING: TARANG  Director: Kumar Shahani  India. 1984   35 mm. 9 Double Reels. Hindi. Colour. 15514 feet. 171 minutes.	
ROAD India, 1764   35 mm, 7 Double Reets, Hindi, Colour, 15514 feet, 171 minutes.	

SATURDAY, 5TH MAR	CH 2016
09.00 AM- 10.30 AM NFAI PHASE 2	FILM SCANNERS AND SCANNING SPEAKER: David Walsh (Head of the FIAF Technical Commission)
10.30 AM - 11.00 AM	Coffee / Tea Break
11.00 AM - 01.00 PM	PRESERVATION OF DIGITAL ASSETS  SPEAKERS: Richard Wright (Preservation Guide)  David Walsh (Head of the FIAF Technical Commission)
01.00 PM - 02.00 PM	Lunch Break
02.00 PM - 03.30 PM	PRESERVATION STRATEGIES SPEAKER: David Walsh (Head of the FIAF Technical Commission)
03.30 PM - 04.00 PM	Coffee / Tea Break
04.00 PM - 06.00 PM	HISTORY OF TELEVISION AND VIDEO TECHNOLOGY  SPEAKER: Richard Wright (Preservation Guide)
06.30 PM ONWARD NFAI LAW COLLEGE ROAD	FILM SCREENING: CHIDAMBARAM  Director: G. Aravindan  India, 1985   35 mm, Malayalam with English subtitles, Colour, 100 minutes.

SUNDAY, 6TH MARCH	2016
09.00 AM- 10.30 AM NFAI PHASE 2	VIDEOTAPE PRESERVATION AND DIGITISATION SPEAKER: Richard Wright (Preservation Guide)
10.30 AM - 11.00 AM	Coffee / Tea Break
11.00 AM - 01.00 PM	ACCESS PROGRAMMING AND PRESENTATION THE PRACTICE OF FILM EXHIBITION SPEAKER: Jurij Meden (George Eastman Museum)
01.00 PM - 02.00 PM	Lunch Break
02.00 PM - 03.30 PM	FEEDBACK AND DISCUSSION
04.30 PM - 05.30 PM NFAI LAW COLLEGE ROAD	CERTIFICATION CEREMONY With Christophe Dupin (FIAF), Shivendra Singh Dungarpur (Film Heritage Foundation), Prakash Magdum (National Film Archive of India)

05.30 PM – 06.00 PM HIGH TEA

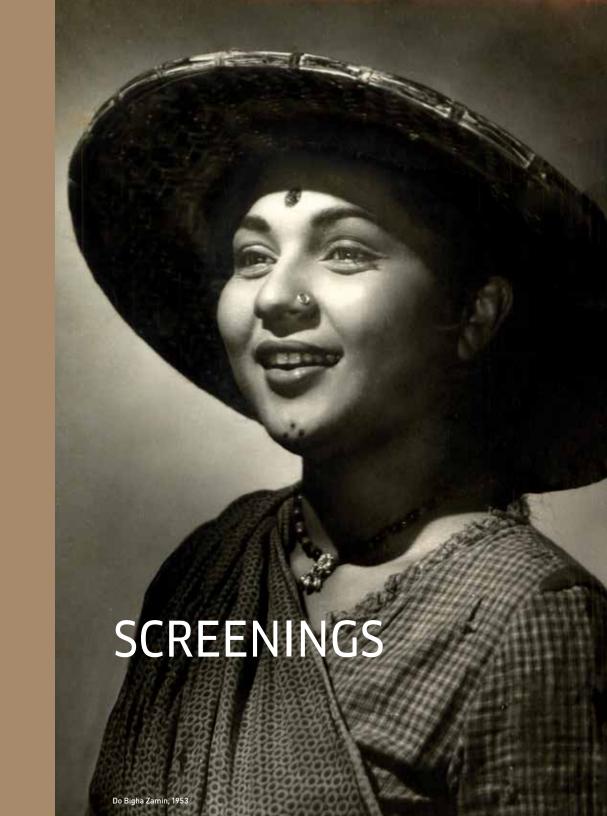
# PRACTICAL SCHEDULE

		CAMILLE BLOT-WELLENS	SILVIA SPADOTTO	MARIANNA DE SANCTIS	BENJAMIN TUCKER	SPENCER CHRISTIANO	NANCY KAUFFMAN	TAINA MELLER	DAVID WALSH, PAOLO CHERCHI USAI	
		Film Iden- tification	Film Comparison/ Selection	Film Handling, repair and preparation 1	Film Handling, repair and preparation 2	Film Film Projection	Posters & documents	Photographs	Archive tour	
28 FEB 2016 SUNDAY	Morning session 2	Е	F	G	Н	Α	В		D	
28 FE SUN	Afternoon session 2	F	G	Н	Α	В	С	D	Е	
	Morning session 1	Α	В							
29 FEB 2016 MONDAY	Morning session 2	G	Н	Α	В	С	D	Е	F	
29 FEE MON	Afternoon session 1			А	В					
	Afternoon session 2	Н	Α	В	С	D	Е	F	G	
91	Morning session 2	Α	В	С	D	В	F	G		Н
1 MAR 2016 TUESDAY	Afternoon session 1	В	A							
==	Afternoon session 2	В	С	D	Е	F	G	Н		Α
91 AY	Morning session 1			В	Α					
2 MAR 2016 WEDNESDAY	Morning session 2	С	D	Е	F	G	Н	Α		В
21 WE	Afternoon session 2	D	E	F	G	Н	A	В		С
3 MAR 2016 THURSDAY	Morning session 2							С	Н	
3 MAF THUR	Afternoon session 2								А	
4 MAR 2016 FRIDAY	Morning session 2								В	
4 MAF FRII	Afternoon session 2								С	

8 groups/7 topics/1 tour Groups A-B: Previous course Groups C-H: New groups

Extra session in place of theory class

Sign-up sessions



#### 01 KALIYA MARDAN

1919, Silent | B/W, 35 mm, 45 minutes

**Director** D.G. Phalke **Producer** Hindustan Cinema Films **Screenplay** D. G. Phalke **Cast** Mandakini Phalke, Neelkanth, Anna Salunke, Sahadevrao Tapkire, Baburao Patil



Introducing Phalke as the 'Pioneering Cineartist of the East', the most complete Phalke film extant opens with a series of shots demonstrating the 7-year old Mandakini Phalke's acting skills through a series of facial expressions. Essentially a series of comic vignettes illustrating the mischievous charm of a juvenile Krishna and his playmates, the film assumes narrative momentum only towards the end, when Krishna faces his most formidable adversary, the serpent demon Kaliya, scourge of Krishna's village and the countryside at large. The film ends with the vanquishing

of the serpent demon Kaliya by Krishna in a fierce underwater sequence, intercut with the faces of anxious observers. This sequence is lauded till date for its incredible trick photography, rendered nearly a century ago, using a larger-than-life stationary model of a hooded serpent. Though a silent film, it employs several narrative conventions that have come to define the popular Indian film: use of comic routines, song-and-dance interludes and a climactic victory of good over evil. Unfortunately, only a fraction of the footage of this film survives till date.

The screening of this film will have live musical accompaniment by eminent vocalist Dr. Kshama Vaidya and her group, consisting of Sanjay Gogte on the harmonium, Amit Kakde on the flute, Avadhoot Rahalkar on the violin and Vidyanand Deshpande on percussions.

# 02 LAL-E-YAMAN

1933, Hindi | B/W, 35 mm, 158 minutes

Director J.B.H. Wadia Producer Wadia Movietone Cinematography Vasant B. Jagtap, Homi Wadia Story Joseph David Screenplay J.B.H. Wadia Dialogue Munshi Ashk, Munshi Sefta Music Joseph David, Master Mohammed Cast Karimja, Jal Khambatta, Padma, Feroze Dastur, Master Mohammed, Boman Shroff



With Alam Ara (1931), film studios in India were exposed, for the first time, to the endless, fascinating possibilities of using sound to augment the spectacle of the moving image. No genre of films lent itself better to such spectacle than the historical/fantasy one: Alam Ara too, was derived from the fantastical plays of Parsee theatre. As one of the earliest complete talkie films available after the advent of sound in the subcontinent, the significance of Lal-e-Yaman cannot be overstated, especially with the loss of Alam Ara, the first talkie in the subcontinent. Chronologically, Lale-Yaman is not too distant from Alam Ara, thus providing film historians and connoisseurs with a nuanced view of the techniques and quality of sound recording of the time. The first production of Wadia Movietone, a major studio of the 30's

and 40's, its plot was a typical swashbuckling tale, culled from several recurring elements of Parsee theatre. A prince, denied legitimacy to the throne by a scheming step-mother, fights several obstacles and adversaries, including supernatural ones, to establish his rightful claim over the throne and win back the love and esteem of his alienated father. It featured extensive stunt-work that was to become the hallmark of the studio over the next decade, besides some adroit special effects. The narrative template of the popular, conventional Hindi film, with its regular interludes of songs and dance, was further consolidated with the success of this film. It was with this film too. that Wadia Movietone heralded itself as a major film production studio in the country.

#### 03 AMRIT MANTHAN

#### 1934, Hindi | B/W, 35 mm, 155 minutes

Director V. Shantaram Producer Prabhat Film Company Story Based on Narayan Hari Apte's novel *Bhagyashree* Cinematographer Keshavrao Dhaiber Music Keshavrao Bhole Cast Chandramohan, Nalini Tarkhad, Shanta Apte, Sureshbabu Mane, Kelkar, Kulkarni, Budasaheb, Desai.



A technical watershed when it released, *Amrit Manthan* was filled with intricate camera angles, movements, lighting and lensing techniques that director V. Shantaram had recently learnt in Germany, which were to greatly inform his expressionist style thereafter. A prime example of it was the opening shot of the film: a tight close-up of the right eye of the priest using a telephoto lens. This was followed by a low-angle circular tracking shot outlining the sinister, demonworshipping cabal in an ancient kingdom whose high priest plots to eliminate the king for having outlawed the ritual sacrifice of human beings and animals. Filled to the brim with palace intrique,

allegory and social reformist commentary that is just as relevant today, the film is a masterpiece of elaborate plotting and storytelling, as thrilling as it is edifying. Chandramohan, making his screen debut in the Hindi version of the film, was lauded for his bloodcurdling turn as the zealot priest, as eager to offer his own head as sacrifice as that of any other. The film also sealed Shanta Apte's status as the pre-eminent singing star in the country, the popularity of her songs spreading as far as Amritsar and Lahore, creating major distribution breakthroughs for Prabhat in the North.

# **04 KISMET**

#### 1943, Hindi | B/W, 35 mm, 143 minutes

Director Gyan Mukherjee Producer Bombay Talkies Cinematographer R.D. Pareenja Screenplay Gyan Mukherjee Story, Dialogue P.L. Santoshi, Shaheed Latif Lyrics Pradeep Music Anil Biswas Cast Ashok Kumar, Mumtaz Shanti, Shahnawaz, Moti, P.F. Pithawala, Chandraprabha, V.H. Desai, Kanu Roy, Jagannath Aurora, Prahlad, Harun, Mubarak, David, Kumari Kamala.



A resounding success when it was first released, *Kismet* attracted its fair share of criticism too, for its morally ambiguous depiction of street crime and the influence it might have upon impressionable minds. The central character Shekhar (Ashok Kumar), a street-wise pickpocket, has no qualms stealing from the rich and the venal in a city riven with inequalities. He is inserted into a convoluted plot involving longlost siblings, villainous fathers, stolen necklaces and bumbling policemen. Keeping him company through all this is his lady love Rani (Mumtaz Shanti) a theatre performer who has been forced to dance to the point of becoming a cripple by her avaricious father. In its pulpy, amoral exploration

of the city and the anti-hero, *Kismet* introduced the striking influence of American film noir to the standard expressionist imagery prevalent in the cinema of the times. Surprisingly, it was also one of the first films to use the trope of a family separated by fate or spite, eventually re-uniting against all odds. The trope, signifying a cosmic sanction for the restoration of the uniquely Indian familial order, has been a highly recurrent and popular one in Indian cinema ever since. *Kismet* was known for its rousing soundtrack as well, especially the stridently patriotic song *Door hato ae duniyawalon*, *Hindustan hamara hai*, written by the renowned Kavi Pradeep.

## **05 DO BIGHA ZAMIN**

#### 1953, Hindi | with English subtitles | B/W, 35 mm, 142 minutes

Director Bimal Roy Producer Bimal Roy Productions Cinematographer Kamal Bose Story: Salil Chaudhury Screenplay Hrishikesh Mukherjee Dialogue Paul Mahendra Lyrics Shailendra Music Salil Chaudhury Cast Balraj Sahni, Nirupa Roy, Murad, Rattan Kumar, Nana Palshikar, Meena Kumari, Jagdeep, Nasir Hussain, Mehmood, Mishra, Dilip Jr., Nandkishore, Rajlakshmi, Noor, Kusum, Hiralal, Sapru, Tiwari.



Profoundly inspired by the Italian neorealist cinema, especially Vittorio de Sica's classic *Bicycle Thieves* (1948), Bimal Roy emphatically relinquished studio sets for shooting on actual locations in the countryside and on city streets. The tale of Shambu Mahato (Balraj Sahni) and his family caught in a downward spiral of debt and poverty was narrated with such searing honesty and angry humanism, that it has branded itself in

the consciousness of cinephiles ever since. The performances of Balraj Sahni and Nirupa Roy have gone down as proverbial gold standards of screen-acting in the country. Winner of both the 1st National Award for Best Feature Film in India and the International Prize at the 7th Cannes Film Festival, the film remains a cinematic high water mark for viewers, filmmakers, film scholars and historians alike.

#### 06 ANDHA NAAL

#### 1954, Tamil | B/W, 35 mm, 130 minutes

**Director** Sundaram Balachander **Producer** AVM Studios **Cinematographer** Maruthi Rao **Screenplay**, **Dialogue** Javar Seetharaman **Cast** Sivaji Ganesan, Pandari Bai, Javar Seetaraman, P.D. Sambandam, T.K. Balachandran, Menaka, Suryakala.



Andha Naal was the first emphatic example of radical experimentation in Tamil cinema. A stark police procedural about the murder of a radio operator against the backdrop of the Japanese bombing of Madras during World War II, the film was entirely bereft of song and dance, a fact almost unheard of in the Tamil industry. The narrative wasn't simply packed with twists; it shifted its contours as it was filtered through the perspectives of different characters, reminiscent of Kurosawa's Rashomon. AVM Studios, after the stupendous success of the epic Parasakthi, was initially loath to produce a song-less film which featured their newly minted star Sivaji Ganesan as an unsavoury character, embedded in such

a tricky narrative. The lukewarm reaction to its initial release prompted studio chief A.V. Meiyappan to resolve against making films devoid of songs and dances. It was only after it won the 1955 National Award for Second Best Feature Film in Tamil, that the film was re-released and received more warmly by audiences. Over the years, the film has assumed a cult status besides becoming a stylistic reference point, often cited as the earliest example of film noir in Tamil cinema. The fact that several films bearing thematic and stylistic similarities to Andha Naal were produced in subsequent years, testifies to its lasting influence.

#### 07 KAAGAZ KE PHOOL

1959, Hindi | B/W, 35 mm Cinemascope, 153 minutes

Director Guru Dutt Producer Guru Dutt Films Cinematography V.K. Murthy Screenplay Abrar Alvi Lyrics Kaifi Azmi Music S.D. Burman Cast Guru Dutt, Waheeda Rehman, Johnny Walker, Mahesh Kaul, Veena Sapru, Baby Naaz, Minoo Mumtaz, Pratima Devi, Niloufer, Sulochana, Sheila Vaz, Bikram Kapoor.



Widely acclaimed today as a classic of world cinema, Guru Dutt's tale of a tormented director beaten down by his family, his muse, his audience and his fate, was not successful when it was first released. There are stretches in the film that appear morbidly prophetic today, as audiences violently reject the director's latest offering, to his devastation. Following the success of *Pyaasa*, Guru Dutt's aesthetic vision, informed by his romantic view of the artist and his existential angst at the increasing materialism of society, found an even more poignant expression in *Kaagaz ke Phool*. The vagaries of human relationships, the turmoil

inherent in artistic creation and the anxiety that these engender are rendered cinematically through masterful control of space and mise-en-scene. V.K. Murthy's close-ups of Waheeda Rehman through the Cinemascope lens (this was the first Indian film to be shot in the Cinemascope format), the stunning chiaroscuro of the empty studio during the song *Waqt ne kiya*, the sublime soundtrack by S.D. Burman and Kaifi Azmi and the lead performances by Rehman and Dutt, all remain eternally, gloriously romantic. The print at the NFAI, to be used for the screening, is the only surviving Cinemascope print of the film.

## **08 TITAS EKTI NADIR NAAM**

1973, Bengali | with English subtitles | B/W, 35 mm (Restored), 159 minutes

Direction Ritwik Ghatak Producer Purba Pran Katha Chitra (Bangladesh) Cinematography Baby Islam Screenplay Ritwik Ghatak Story Advaita Malla Burman's novel of the same name Music Bahadur Khan, Ahid-ul-Haq Cast Rosy Samad, Kaberi Choudhury, Roshan Jamil, Rani Sircar, Sufia Rustam, Banani Choudhury, Prabir Mitra, Chand



The ruptures and upheavals of history that haunted so much of Ghatak's work, for once, propelled him to return from his exile to produce, arguably, his most emotionally cathartic work. Almost as if examining anew, the trauma of severance alongside the euphoria of a new birth, Titas Ekti Nadir Naam, Ghatak's penultimate and most fondly remembered film, opens with a dedication to "the myriad of toilers of everlasting Bengal". The cognitive and emotional trauma that informs so much of Ghatak's filmmaking technique such as in his highly composed frames, radical use of music and sound, and above all in his rigorous, ultramodern editing style are all present in spades here. Based on an autobiographical novel by Advaita Malla Burman, the story is set in the early 1930's among a fishing community in the riparian landscapes of Bengal, although the film projects the trauma of the Partition as was characteristic of Ghatak. Indeed, what some viewers and critics over the past decades saw as eruptions of Ghatak's "rough-edged" style, or perhaps as the limitations of technology at his disposal, appear to twentyfirst century eyes (and ears) as evidence of a film language every bit as sophisticated and restless as Godard's or Lynne Ramsay's. Titas... is, in line with Ghatak's Brechtian orientation, a broken, deliberately disjointed melodrama, arranged into two starkly distinct halves, and gives itself the freedom to hop from one character's story thread to another's- an uncommon technique in world cinema at the time.

Titas Ekti Nadir Naam has been restored by Fondazione Cineteca di Bologna and Il Cinema Ritrovato, using a dupe negative from the Ritwik Memorial Trust in Kolkata, the original camera and sound negatives from the National Film Archive of India, as well as a first-generation combined lavender from the Bundesarchiv-Filmarchiv that was procured by L'Immagine Ritrovata. The process of restoration was conducted under the auspices of the Film Foundation's World Cinema Project. A vintage print provided by the Bundesarchiv-Filmarchiv was used along with another one from the National Film Archive of India, during the grading process.

#### 09 TARANG

#### 1984, Hindi | Colour, 35 mm, 171 minutes

Director Kumar Shahani Producer NFDC Cinematography K.K. Mahajan Screenplay Kumar Shahani, Roshan Shahani Dialogue Vinay Shukla Music Vanraj Bhatia Lyrics Raghuvir Sahay, Gulzar Cast Smita Patil, Amol Palekar, Girish Karnad, Sreeram Lagoo, Jalal Agha, Rohini Hattangadi, Kawal Gadhiok, M.K. Raina, Sulabha Deshpande



The great Indian family with its endemic rivalry, jealousy and attrition in the pursuit of power is explored in *Tarang*. Set in a contemporary milieu, it is a business family that is up for scrutiny, as blood ties give way to associations motivated by greed and expedience. The flourishing business of the family becomes a trigger for the patriarch Sethji (Sreeram Lagoo) and his son-in-law Rahul (Amol Palekar) to contemplate the elimination of Sethji's nephew and assistant, Dinesh (Girish Karnad). This one act sets into motion a chain of events that haunt Sethji and Rahul in unforeseen ways, bringing down the entire edifice

of their professional as well as their personal relationships. The film was especially noted for its deployment of the epic as an indigenous, allegorical mode of storytelling and its intricate incorporation of popular cinematic conventions such as song-and-dance and use of carefully connotative colour schemes, into the narrative tapestry. A relatively more conventional work from Kumar Shahani, after the formally avantgarde Maya Darpan (1972), the film is, upon closer examination, just as rich in visual literacy and intellectual rigour, as it is in its emotional impact.

#### 10 CHIDAMBARAM

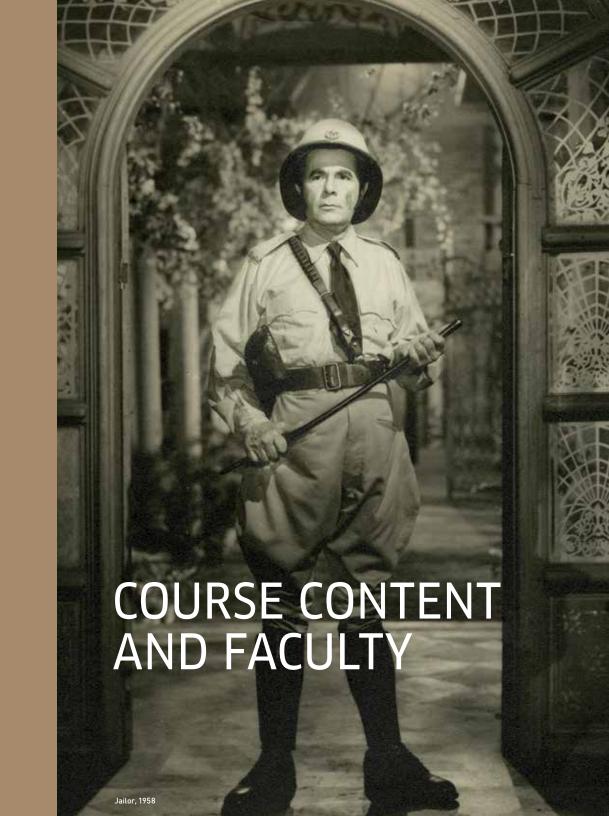
1985, Malayalam | with English subtitles | Colour, 35 mm, 100 minutes

Director G. Aravindan Producer Suryakanthi Filmmakers Cinematography Shaji N. Karun Screenplay G. Aravindan Story C.V. Shriraman Music P. Devarajan Cast Gopi, Smita Patil, Sreenivasan, Mohandas, Murali, Chandran Nair



Chidambaram is a meditation on the manwoman relationship at its most perplexing and vexed. Set in the lush green valleys of a cattle farm in northern Kerala, it tells the story of Shankaran (Gopi), an officer on the farm, Muniyandi (Sreenivasan), a farm-hand, and Muniyandi's newly-wedded wife Sivakami (Smita Patil). Shankaran is a mild-mannered man, who, despite his authority, is kind and considerate towards Muniyandi, who, on his part, is deeply respectful towards Shankaran. When Muniyandi, after marriage, brings Sivakami to the farm, straight from the barren, rugged hinterlands of Tamil Nadu, she cannot contain her wonder and sensuous curiosity at her new surroundings, vastly different from her earlier ones. Her transporting wonder is expressed through the gorgeous colour photography capturing the most vivid, pristine

hues of nature. This insertion of Sivakami into the physical, and consequently psychological, landscape of the protagonists, especially Shankaran, alters the relationships between them irrevocably, resulting in tragedy, everlasting guilt and a ceaseless guest for redemption. The title of the film bears mythical and spiritual connotations, indicating the site well-known in folk-lore where Siva metamorphoses from his primeval, earthly form of the phallus into the more celestial form of Nataraja, forever seeking to liberate the human spirit from the cosmos of pain. The film was hailed for its stunning cinematography by Shaji N. Karun. Aravindan's virtuoso direction, as well as the minimalist, yet deeply moving performances by the three principal actors. It received the 1986 National Award for Best Feature Film.



Film archives the world over are currently facing an unprecedented set of challenges from all directions. Motion picture films, which manufacturers once claimed were archivally stable, have been shown to be anything but: colours fade, cellulose acetate turns acetic, fungus grows determinedly. Archives understand that keeping film of any sort for the long-term requires great commitment of effort and money. To do this, film archivists are expected to be experts in the chemistry of plastics, the degradation patterns of photographic images, the design of low-temperature low-humidity storage facilities, as well as having an encyclopaedic knowledge of film production, film distribution and the art of cinematography in general.

At the same time, the arrival of digital technology, much heralded as the solution to virtually everything, demands that film archivists understand not only their bits and bytes, but also how these apply to both their existing collections of often degrading analogue materials, and to the new and ballooning quantities of digital-born material heading their way. And all of this in the familiar context of limited funding and a general lack of understanding at national level of this highly specialised field.

Meanwhile, the dying away of the traditional film production industry continues to push us into a world where the pool of dedicated experts steeped in the knowledge of film processes is rapidly drying up. Who knows what a C-roll is? Who understands sensitometry? How was a push-pull track used? Knowing the answers to questions of this sort can make the difference between a well-managed collection with high quality access copies, and a

series of expensive mistakes. How do we ensure that this precious knowledge doesn't become the preserve of a few industrial archaeologists, divorced from the practicalities of a working film archive? Unless the people working in the archive have this knowledge, they are doomed to a life of costly errors and sub-standard work.

This training course is part of that effort, to marshal the expertise vested in organisations and individuals around the world, and help to pass it on to the people that matter – the people who are the custodians of the world's treasured film heritage collections, large and small.

FIAF (the International Federation of Film Archives) is proud to be able to take a role in coordinating this event at the National Film Archive of India (NFAI) in Pune in association with the Film Heritage Foundation and the NFAI, and we are extremely fortunate in working with highly experienced teachers from both George Eastman Museum in the US and from L'Immagine Ritrovata in Italy, as well as some of the best individual experts in their field. We sincerely hope that over the course of this intensive 10-day workshop, participants will acquire a solid grounding in all aspects of stewardship of a film collection, and will be enthused by the dedication, passion and expertise of the people training them.

We believe that this workshop will be as much a learning experience for the tutors as the students. Many of us are unfamiliar with Indian cinema's extraordinarily rich heritage, and with the continuing importance and vitality of the modern Indian film industry, and this event will surely forge closer ties among the international community which we represent.

FILM PRESERVATION & RESTORATION WORKSHOP, INDIA 2016

In devising the structure of this course, we have tried to cover as much ground as possible, understanding that managing a film archive is so much more than just caring for films in stores: so we deal in detail with cataloguing and documentation, both of the subject matter and of the film elements themselves. A robust and standardised approach to documentation is a prerequisite for proper archival management: too often, this aspect of managing a film collection is neglected, or is reliant upon idiosyncratic home-grown systems ill-suited to the modern environment. We also cover at length the curatorship of photographs and printed posters and documents, since these are an essential adjunct to the films themselves, along with other areas of importance such as programming and disaster recovery.

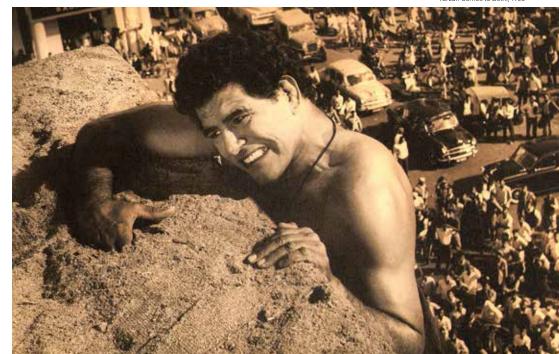
And of course, there is much emphasis on the technology of both film and videotape: handling, selection, digitisation, preservation, and so on, with as much hands-on practical exercises as can be fitted in. This is the second consecutive year that FIAF is partnering with Film Heritage Foundation to conduct a workshop of this nature. The first ever Film Preservation and Restoration School

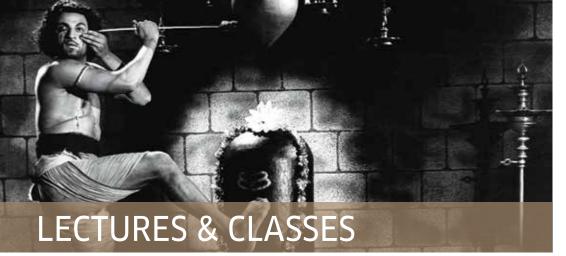
India 2015 held in Mumbai for a week in February last year was an introduction to the world of film archiving. Film Heritage Foundation was keen to build on the success of the first school and offer further education in the field not just to the earlier participants, but to others who see a future in film archiving. Hence, the Film Preservation & Restoration Workshop India 2016 is a more advanced, intensive and hands-on workshop being conducted at the only major film archive in the country.

Of course, we cannot expect in a mere ten days that participants will come away as fully rounded experts, but we hope to give them the tools to continue to expand their knowledge in their chosen direction. This, along with other similar events elsewhere, will, we believe, help to raise awareness of the importance of film archives in all parts of the world, and drive home the message that we need to act now to save so much of the cultural heritage that resides in these vital institutions.

David Walsh is the head of FIAF's Technical Commission and the Head of Digital Collections at the Imperial War Museum, London.

Tarzan Comes to Delhi. 1965





Bedara Kannappa, 1954

# THEORY CLASSES

#### INTRODUCTION TO FILM TECHNOLOGY

#### Camille Blot-Wellens

This module will introduce the students to the main aspects of Film Technology. The topics covered in the module are: what is film, an overview of the structure of film, early film, early film production, the advent of sound, duplicating stock, colour film, formats, film production routes, sound production, film editing, and printing and identifying film elements. The module will end with film identification issues.

#### FILM CURATORSHIP

#### Paolo Cherchi Usai

The aim of this introductory class is to present, articulate and discuss the goals and objectives of a collecting institution dedicated to cinema as a form of artistic expression. All the activities of a film archive or museum – acquisition, preservation, and exhibition – are developed according to a set of cultural principles broadly defined as "film curatorship". Their coherent application in all areas of activity is essential to the achievement of the organization's statutory mission, regardless of the size and scope of its holdings. Far from being a purely theoretical exercise, film curatorship is the practical manifestation of the ethical values that are integral to the act of safeguarding, restoring, and presenting moving images

for posterity. In the course of the presentation, the key components of film curatorship will be articulated in the context of a "real world" situation, where ambitions and ideals are confronted with the social, political and economic variables involved in the art of preserving cinema.

#### PRESERVATION PRACTICES & ETHICS

## Paolo Cherchi Usai

Film preservation does not occur in a void. Its policies and practices are deeply intertwined with the historical, economic, and cultural values of the society where the archive or museum operates. The nature of these values, the opportunities they offer, and their inherent limits must be fully understood - and, if necessary, challenged - before the preservation work actually begins. Deciding what needs to be preserved, and how, heavily depends upon what the film archive or museum is expected to do in order to fulfill its mandate, and on what the collecting institution's funding agencies (a government, a donor, the taxpayer) wish to achieve through the organization they financially support. In the course of this two-tier session (a lecture and a workshop), the selection criteria and ethical guidelines to be adopted in a preservation plan will be discussed in detail. Special emphasis will be given to the curators' responsibility in presenting and justifying the rationale of a preservation strategy in the course

of their discussions with administrators, stakeholders, and the audiences they serve.

#### ARCHIVE EQUIPMENT CARE

#### Benjamin Tucker

A primary duty of film archivists is to identify, assess, and repair film elements. This work takes specialised skills and equipment. This lecture will focus on giving students an introduction about how to perform these tasks. It will provide them with a controlled vocabulary for how to define what they see during an assessment. We will discuss how to complete inspection reports. We will also talk about the basic equipment and supplies of a film archivist and how to properly use and maintain them.

#### FILM PROJECTION

#### Spencer Christiano

The Projectionist is the final protector of and steward to a filmmaker's vision, and through mastery (or misuse) of their tools, they are the definitive interpreter of a cinematic work. To the audience, they are a magician: a figure neither seen nor heard, but with the power to transport them to another world— or to ruin their evening. This lecture will stress the importance of philosophy in the technical art of projection, examine the transcendental connection between a projector and its operator, and explore the Projectionist's dual roles as both servant to the print and God of the Machine.

#### POSTER AND DOCUMENTS

#### Nancy Kauffman

This introductory lecture will explain the duties and responsibilities of an archivist at the George Eastman Museum, alongside providing an overview of the paper and photographic collections in the Moving Image Department, their history and context, how they were originally used, and how they are used today. The basic organization and storage of these materials, particularly when dealing with voluminous materials, and prioritizing specific items for conservation treatment would be addressed using examples of poster

conservation treatments, with images and a description of the process. Finally, the lecture will examine digitization strategies for preserving paper and photographic collections and making them more accessible.

# IDENTIFICATION AND PRESERVATION OF PHOTOGRAPHS - AN OVERVIEW

#### Taina Meller

The first commercially successful photographic process, daguerreotypy, was introduced to the public in 1839. Since then, a variety of other photographic processes—many of them now obsolete—have been employed to create images.

From the very beginning, photographs have been widely neglected in terms of preservation. More recently, however, their value as a part of our cultural heritage has been realised. In order to preserve these important photographic materials, it is crucial to understand them as well as possible. Process identification is the key to increasing this understanding.

This session will include a two-part lecture that will give an introduction to the history, making and identification of various photographic materials. The most common types and causes of deterioration will be discussed, as will proper handling, care and preservation.

Following the lectures will be practical small group sessions in which participants will have the opportunity to practice process identification by looking at and working with actual photographs representing different processes.

#### HISTORY OF SOUND

#### Gilles Barberis

This lecture connects the dots of various subjects, such as film history, acoustics, psychoacoustics, and the history of technology, in order to shape the puzzle of the heterogeneous topic of sound on film, laying the theoretical foundations for a scientific approach to sound restoration.

The students will be taken through an extensive analysis of the history of technologies of sound for film. From the end of the 19th century till today, the students will go through a virtual

timeline that will link discoveries, patents, materials with method of reproduction and restoration workflows.

#### SOUND TECHNOLOGIES

#### Gilles Barberis

Over the past two decades, a few developers and researchers have been trying to solve the issue of image spread correction in variable area negative soundtracks. They were initially aiming to save time and money on the optical transfer process by avoiding the printing of new sound positives.

The lecture aims to emphasise the higher quality achievable with the features of the optical soundtrack scanners available nowadays, rather than just the economic advantages.

After a brief technical explanation of what image spread is, how it is generated by optical recorders and fixed by either positive prints or scanners, this session will analyze some specific, yet broadly recurring issues in variable area optical soundtracks, and explain how these can now be solved by scanner technology.

The approach proposed in this session will link each setting of optical scanners to precise examples of audio and optical damage or human mistakes coming from a particular period, film stock, or film sound technology.

Finally, it will try to envisage some possible developments of scanner technology, especially the increased collaboration between archives and laboratories, achieved by splitting raw scan and post processing and deploying the two processes to their most suitable environment.

#### SOUND RESTORATION

#### Gilles Barberis

Participants will go through an in-depth analysis of the current and forthcoming technologies and techniques used for sound transfer and restoration.

## INTRODUCTION TO DIGITAL TECHNOLOGY

#### Emanuele Vissani

This session will cover the basic film digitization

concepts: resolution, bit depth, data format, color space, and the representation of moving images in the digital domain.

# DIGITAL INFRASTRUCTURE, MASTERING AND WORKELOW

#### Emanuele Vissani

This lecture deals with the analysis of a film restoration laboratory digital infrastructure and its relation with the restoration workflow, techniques to design storage and networks to fulfill the projects requirements.

#### DISASTER RECOVERY

#### Emanuele Vissani

The session would explore the technological, logistic and organizational measures to recover critical systems and data after major emergencies, as well as plans, techniques and softwares to provide business continuity.

# THE IMPORTANCE OF FILM IN A DIGITAL WORLD- KODAK PRESENTATION

#### **Amit Sherigar**

Film has long been and will remain a vital part of our culture. It is Kodak's aim to keep supporting archives and content owners in their mission for the preservation of audio/visual content. After all, film has unrivaled archival properties and is the only proven medium that can preserve images for centuries. This session, titled "The Importance of Film in a Digital World", will provide students with an update about Kodak's commitment to film, the benefit of a film element in one's preservation strategy, as well as examples of best practices to preserve cultural heritage.

#### MOVING IMAGE CATALOGUING

#### Thelma Ross - Museum of Modern Art

This module will consist of three 90-minute sessions designed to introduce the major concepts of moving image cataloguing through the use of lecture, information-sharing, examples, discussion, and/or short exercises. The aspects of moving image cataloguing covered include its purpose and principles, factors impacting or

informing practices, strategies, resources, tools, and standards for effective cataloguing, the major steps involved in cataloguing and ways and means of creating cataloguing policy and best practices for one's collections.

**Session 1:** Introduction to moving image cataloguing: principles, purpose, policy and practices

Session 2: Introduction to a moving image metadata schema standard

Session 3: Introduction to cataloguing and controlling your descriptive metadata: content and data value standards

#### FILM SCANNERS AND SCANNING

#### David Walsh

This module seeks to provide an understanding of how film scanners work, the advantages and disadvantages of various types of scanners, the myriad ways in which scanner technology is developing and the likely future for film scanning.

Ample attention would be paid to the practicalities of scanning film: what can be scanned successfully, and what would be likely to cause problems.

#### PRESERVATION STRATEGIES

#### David Walsh

The different possible approaches to the preservation of film would be examined in this module. Preservation of the originals, preservation by film duplication, and preservation by digitisation will all be considered in the light of the type of collection and the prevailing conditions and funding.

#### PRESERVATION OF DIGITAL ASSETS

#### Richard Wright and David Walsh

This lecture primarily deals with the theory of digital preservation and what this means to real archives in the real world. It will include experiences and lessons from archives that have already established digital preservation system.

#### HISTORY OF TV AND VIDEO TECHNOLOGIES

#### Richard Wright

This presentation will be a complete historical survey of TV and video beginning from its origins

in 19th century audio and image technology, right through to digital, hybrid and super high definition TV of the 21st century. The phases of the early Farnsworth, Baird, EMI (and other) technologies, up to 1936, as well as the BBC launch of "high definition" (meaning 405 lines) in the same year would be explored. Subsequent phases such as the post-WWII re-launch of TV across Europe, its spread across the world in the next two decades, the development of colour television (of various standards), its diversification into cable, terrestrial, satellite modes, the advent of high definition (beyond 625 lines) and finally, the end of the CRT and of analogue. Alongside, several vital subjects such as the relation of TV to cinema and radio, determining standards for various forms of video and television as well as digital video, techniques of television recording, stereo sound (NICAM), hybrid TV and the future of television in the internet age would also be examined in detail.

# VIDEOTAPE PRESERVATION AND DIGITIZATION

#### Richard Wright

This session will look at the media preservation problem in terms of the obsolescence, degradation and fragility of media, as well as the current existing worldwide situation: anything between 200 to 500 million hours of archived audiovisual content on shelves. Up to 70% of this material will probably be lost, because of not being digitised in time.

In light of such statistics, the lecture seeks to impart knowledge of methods to save archives: preservation strategies, plans and business cases; techniques of digitization; the triage of kinds of video to save from among those uncompressed, losslessly compressed, or lossly compressed; as well as a roadmap for saving video from various formats of videotape.

The lecture also seeks to address questions about restoration, such as: why is the restoration of video a minor issue, compared to restoration of film? What about the digital preservation after digitisation? Isn't it cheaper to save moving images on film instead of as files? Finally, it seeks to provide strategies of managing mass storage

and digital files into the indefinite future.

# ACCESSING, PROGRAMMING AND PRESENTATION

#### Jurij Meden

Primarily dealing with the theory of film exhibition, this session aims to highlight film exhibition as an essential element of film preservation. In the process it seeks to address the following questions: why film exhibition and not simply screening? Why show films in their original medium and format? What is the difference between programming in a film museum and an art house?

Alongside, it also seeks to look at film projection as an event, thereby outlining the public role and responsibility of a film curator/programmer. The various approaches to film curation and the need for it, as well as the process of understanding, cultivating and engaging with audiences would be considered too.

Other areas covered in the lecture include examination of various print sources (distribution, archival), a brief study of the professional profiles of the theatre manager and the film projectionist and underscoring the importance of a theatre environment.

#### THE PRACTICE OF FILM EXHIBITION

#### Jurij Meden

This session would explore the practical aspects of film exhibition such as the components of the film exhibition budget, establishing film calendars, sources of booking as well as procuring rights process, as well as filmographic and technical information and writing the program notes.

Additional aspects covered in the session are selection and examination of screening prints, introducing films, the practice and technology of subtitling, choosing the perfect (if any) music for silent film, conducting public conversations with visiting artists, lecturers and special guests, and collaborating with external partners.

# PRACTICAL SESSIONS

#### FILM IDENTIFICATION

#### Camille Blot-Wellens

This very first step involves the identification, study and analysis of film materials. Since its creation until the use of digital technologies, cinema has been developed on film and many different film elements have been produced by the industry as well as by the archives. These store many different elements (negatives, positives, intermediates) made at different periods on different films stocks. During the practical class, the students will learn the basis of film identification: recognise the materials, identify the edge printings introduced by the manufacturers, situate the element in the duplication chain, etc. This part of the process is essential for a good knowledge of the collections and for diffusion or restoration.

#### FILM REPAIR

#### Marianna de Sanctis

Film repair is an essential aspect of film preservation and restoration. Participants will learn how to perform manual repairs on the film elements in preparation for its passage through the film scanning and sound transfer machines.

#### ARCHIVE EQUIPMENT CARE

# Benjamin Tucker

This practical will give students the opportunity to see how to properly handle, assess, and repair film elements. Using the tools of a film archivist, they will have a chance to wind through film, identify damage, and learn basic repair work. They will also learn how to properly use and maintain inspection benches, splicers, and counters.

#### POSTER AND DOCUMENTS

#### Nancy Kauffman

In the practical sessions, students will assess the storage conditions for paper materials at the NFAI and examine their sizes and characteristics. They will look at minimal approaches to processing these materials to provide for better protection and handling and discuss their re-housing and cataloging needs. In the advanced practical sessions, students will scan a selection of artifacts and use basic Photoshop tools to restore digital surrogates of artifacts.

#### FILM COMPARING

#### Silvia Spadotto

This very first step involves the analysis and comparing of different elements and non-filmic sources which are crucial for determining the most appropriate restoration workflow in consideration of the materials at hand. The session will cover how to gather information from inspection,

repair and scan and how to share the reconstruction project with digital cleaning, color correction and sound restoration.

#### ARCHIVE TOUR

#### Paolo Cherchi Usai and David Walsh

Students would be taken through a guided tour of various vaults of the National Film Archive of India, to view firsthand the various forms of negative and positive film prints and their storage. The tour would include a visit to the nitrate film archives as well.







Nirmala, 1938

# PAOLO CHERCHI USAI

#### Senior Curator, George Eastman Museum

Paolo Cherchi Usai is Senior Curator of the Moving Image Department at the George Eastman Museum in Rochester, New York, and co-founder (1982) of the Pordenone Silent Film Festival, the major international event on the rediscovery of the silent film heritage. He is Adjunct Professor of Film at the University of Rochester; Curator Emeritus of the National Film and Sound Archive of Australia, of which he was Director from 2004 to 2008; co-founder and current Director of the L. Jeffrey Selznick School of Film Preservation at the



George Eastman Museum, established in 1996. He is also the founder of The Nitrate Picture Show, the world's first festival of film conservation, established in 2015. His writings about film preservation, film history and curatorship are published and translated worldwide in about twenty languages. Cherchi Usai was knighted in 2002 by the French government as Chevalier de l'Ordre des Arts et des Lettres for his contribution to film culture, museum development, and moving image conservation and preservation.



# DAVIDE POZZI

#### Director, L'Immagine Ritrovata

Davide Pozzi has been working at Cineteca di Bologna since 2001, and in 2006 he became the director of L'Immagine Ritrovata film restoration laboratory. Under his management, the laboratory has established itself as one of the most highly specialised facilities in the field of film restoration worldwide



# **DAVID WALSH**

# Head of the Technical Commission, FIAF

David Walsh has worked at the Imperial War Museum (IWM) since 1975, having studied Chemistry at Oxford University. From an initial project to study the decomposition of cellulose nitrate film, he has established himself as an expert in the preservation and digitisation of film and video, and is currently Head of the Technical Commission of the International Federation of Film Archives (FIAF). His work includes teaching film archivists from around the world through FIAF training courses and at the annual FOCAL International Footage Training Week. At present he is responsible for IWM's strategy for digitisation and for long-term preservation of digital media.

# RICHARD WRIGHT

Richard Wright was, until December 2011, the archive preservation specialist in the BBC Research and Development department in London. He has 20 years of experience of broadcast archive technology and digitisation, working with the One Million Hour BBC archive, and working in collaborative projects with other audiovisual collections across Europe. He is a signal processing engineer with a PhD from the University of Southampton, and has been working on digital audio and video for more than 40 years. He was the BBC project manager on EC project PrestoPRIME (digital preservation), and before that on PrestoSpace and Presto, which were both about audiovisual digitisation – and about the preservation factory approach to efficiency.





### THELMA ROSS

#### Moving Image Cataloguer, Department of Film, Museum of Modern Art

Thelma Ross has a Master's degree in Library and Information Science from Kent State University. She has been employed as a moving image cataloguer for nearly a decade and currently works for the Department of Film at The Museum of Modern Art. She gives talks and presentations on moving image cataloging and metadata standards, and teaches these topics in workshops and university classes. She serves as the Head of the FIAF Cataloguing and Documentation Commission, and is co-author of the FIAF Moving Image Cataloguing Manual.

## **CAMILLE BLOT-WELLENS**

#### FIAF Technical Commission

Camille Blot-Wellens is an independent film researcher and historian. She is presently an Associate Senior Lecturer at Paris 8 University in France. She collaborates with European Archives for research and restoration projects. She is a member of FIAF's Technical Commission, and author of books and articles on restoration and film identification in specialised publications, such as the Journal of Film Preservation. She has participated in several FIAF Schools in South America (Chile, Cuba) and Italy.





# SPENCER CHRISTIANO

### Chief Projectionist, George Eastman Museum

Spencer Christiano is the Chief Projectionist at the George Eastman Museum in Rochester, NY, USA. He has over ten years of experience in film handling, inspection, repair, and exhibition. Before joining the George Eastman Museum's Moving Image Department, he was the Chief Projectionist at The Cinema Theatre in Rochester. He has worked extensively with Century, Kinoton, and Simplex projectors, 35mm and 16mm gauges, changeover and platter systems, as well as equipment used in the exhibition of DCPs and other digital content. He is trained in the projection of nitrate film, and is one of a handful of projectionists worldwide that still has the honor of projecting the rapidly disappearing medium. He leads a second life in the performing arts as a playwright, director, stage manager, and lighting/sound designer.

#### NANCY KAUFFMAN

#### Archivist, George Eastman Museum

Nancy Kauffman is the Archivist for the Stills, Posters, and Paper Collections in the Moving Image Department at the George Eastman Museum. Nancy has been on staff at the George Eastman Museum for nine years, managing and providing access to artifacts related to the history, production, marketing, and exhibition of motion pictures. The collections include over one million publicity stills, 10,000 posters and lobby cards, 1,000 silent film music cue sheets and scores, and approximately 600 cubic feet of historic research documents and



filmmakers' personal papers. As a faculty member of the L. Jeffrey Selznick School of Film Preservation, Nancy teaches students about the history, care, and handling of these artifacts, as well as collection management, and the digitisation of collections for increased accessibility. She also guides them in using the artifacts for research and film preservation projects.



## TAINA MELLER

# Conservator in Charge, Kay R. Whitmore Conservation Center, George Eastman Museum

Taina Meller is Conservator in Charge at the Kay R. Whitmore Conservation Center at the George Eastman Museum. After graduating from the EVTEK Institute of Art and Design in Vantaa, Finland, she worked as a photograph conservator for a number of major institutions in Helsinki, Finland, including The Finnish Museum of Photography and the Finnish National Gallery. In 2003 she became an Andrew W. Mellon Fellow in the 3rd cycle of the

Advanced Residency Program in Photograph Conservation at the George Eastman Museum and Image Permanence Institute in Rochester, New York. During the two-year fellowship she focused on the daguerreotype. In 2005 she became the Andrew W. Mellon Fellow at the Sherman Fairchild Center for Works on Paper and Photographic Conservation at the Metropolitan Museum of Art in New York where she continued her research on the daguerreotype. In 2007 she returned to the George Eastman Museum as the Associate Conservator and has held her current position since 2009.

#### BENJAMIN TUCKER

#### Assistant Collection Manager, George Eastman Museum

Benjamin Tucker is Assistant Collection Manager in the Moving Image Department at the George Eastman Museum in Rochester, NY - USA. He is a 2003 graduate of the L. Jeffrey Selznick School of Film Preservation. He has previously been employed as an archivist at the Andy Warhol Museum in Pittsburgh, USA.



#### JURIJ MEDEN

#### Curator of Film Exhibitions, George Eastman Museum

Jurij Meden works as Curator of Film Exhibitions at the George Eastman Museum since 2014. He is responsible for developing and managing the film and media programming for the Dryden Theatre and other exhibition spaces at the museum. Prior to that he served as head of the film programming department at the Slovenska Kinoteka—a member of the International Federation of Film Archives (FIAF)—in Ljubljana, Slovenia. With more than 17 years of experience in the field, Meden has curated and presented



film and media programs around the world, including Austria, Portugal, Germany, and the United States. In addition to his former role at the Slovenska Kinoteka, he currently also serves on the editorial board of the international KINO! magazine, and has been a member of the jury at numerous film festivals in Europe and Asia, including Mumbai International Film Festival in 2014.

# MARIANNA DE SANCTIS

#### Head of Film Repair Department, L'Immagine Ritrovata

Marianna De Sanctis has been working in Film Restoration at L'Immagine Ritrovata laboratory in Bologna, Italy, since 2004 and she is head of Film Repair department. She works with film materials coming from very different ages and countries and she is able to address different problems of physical and chemical decay of the film. She has been teaching Film Repair since 2007 at the FIAF Film Restoration School held in Bologna (Italy) and abroad.





#### SILVIA SPADOTTO

#### Head of Film Comparison Department, L'Immagine Ritrovata

Silvia Spadotto has been working at L'Immagine Ritrovata laboratory since 2009 where she is head of Film Comparison department since 2013. She supervises the researches on filmic and non-filmic material and the comparison of the different sources available in order to provide reconstruction projects to the different departments in the laboratory. She has been teaching Film Comparison since 2012 at the FIAF Film Restoration School in Italy and abroad.



#### L'Immagine Ritrovata

Gilles Barberis has been working at L'Immagine Ritrovata since 2007, overseeing every link of the sound restoration chain, from digitisation to optical recording. The wide range of materials he has encountered has given him the expertise to develop a personal, rigorous, scientific approach to film sound restoration, based on a broad and detailed knowledge of the history of sound technologies. He has been teaching Sound Restoration since 2007 at the FIAF Film Restoration Summer School held in Bologna, Italy.



# **EMANUELE VISSANI**

#### L'Immagine Ritrovata

Since 2007 Emanuele Vissani has worked at L'Immagine Ritrovata in diverse departments as sound restoration operator, telecine operator, colorist, system administrator and is now supervisor of the Mastering and Quality Control department. He has been teaching Sound Restoration since 2007 at the FIAF Film Restoration Summer School held in Bologna, Italy.



# CHRISTOPHE DUPIN

## International Federation of Film Archives (FIAF)

Christophe Dupin is Senior Administrator of the International Federation of Film Archives (FIAF) and Executive Publisher of the Journal of Film Preservation. From 1999 to 2004, he worked for the British Film Institute in London while writing his PhD thesis. He then embarked on a six-year academic project on the history of the BFI at Queen Mary, University of London. He co-edited "The British Film Institute, the Government and Film Culture" with Prof. Geoffrey Nowell-Smith (Manchester University Press, 2012).



#### The Film Foundation

Kristen Merola is Project Manager of The Film Foundation (TFF), based out of its Los Angeles office. Before joining TFF in 2013, she was the Assistant Director of the Visual Studies Workshop in Rochester, New York.





# **ORGANISERS**

# **COLLABORATORS**

#### NATIONAL FILM ARCHIVE OF INDIA (NFAI)

The NFAI is the largest film archive in India. It is the principal custodian of one of the most prolific and diverse film patrimonies in the world. The NFAI's Charter includes the promotion of film scholarship and research on cinema, furthering the global outreach of Indian cinema and showcasing the wealth of India's cinematic legacy to audiences across the country.

#### FILM HERITAGE FOUNDATION (FHF)

Film Heritage Foundation is a not-for-profit organisation set up by Shivendra Singh Dungarpur in 2014. Recognising the urgent need to preserve India's cinematic heritage, the foundation is

dedicated to supporting the conservation, preservation and restoration of the moving image and to developing interdisciplinary educational programs that will use film as an educational tool to create awareness about the language of cinema.

# INTERNATIONAL FEDERATION OF FILM ARCHIVES (FIAF)

FIAF, the International Federation of Film Archives, brings together the world's leading institutions in the field of moving picture heritage, comprising more than 150 institutions in over 77 countries. FIAF members are dedicated to the rescue, collection, preservation and screening of moving images.

Andaz, 1949

# THE FILM FOUNDATION'S WORLD CINEMA PROJECT

Created in 1990 by Martin Scorsese, The Film Foundation (TFF) is dedicated to preserving motion picture history. By working in partnership with archives and studios, the foundation has helped to restore nearly 700 films, making them available to international festivals, museums, and schools. TFF's World Cinema Project has restored 26 films from 19 different countries, representing the rich diversity of world cinema. The foundation's free educational curriculum, The Story of Movies, teaches young people about film language and history. Joining Scorsese on the board of directors are Woody Allen, Paul Thomas Anderson, Wes Anderson, Francis Ford Coppola, Clint Eastwood, Curtis Hanson, Peter Jackson, Ang Lee, George Lucas, Alexander Payne, Robert Redford, and Steven Spielberg. The Film Foundation is aligned with the Directors Guild of America

digital restoration laboratory. It is also the world's largest repository on the history of cinema technology from Edison and Lumière to the Technicolor Archives and the first Pixar prototype.

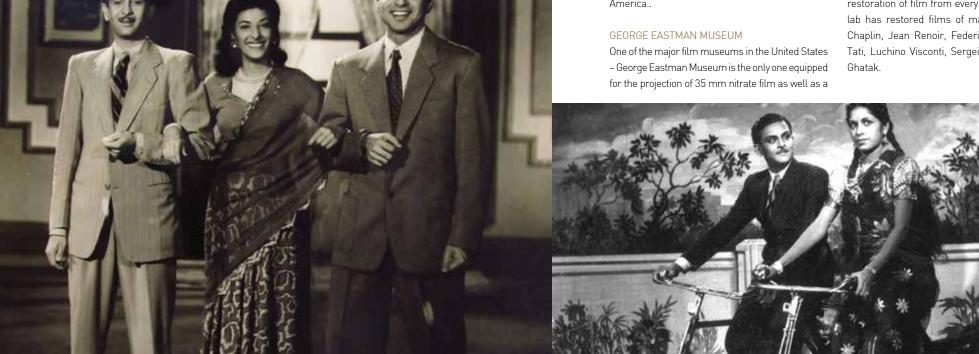
## SELZNICK SCHOOL OF FILM PRESERVATION

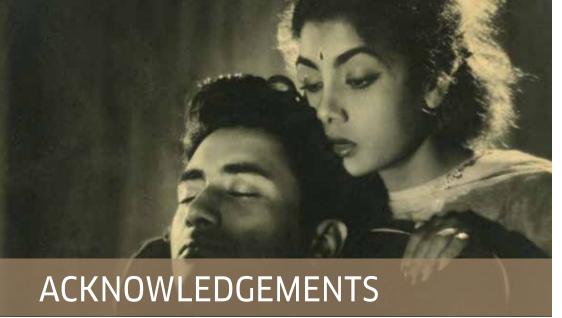
Established in 1996, the L. Jeffrey Selznick School of Film Preservation is a two-year graduate program held in partnership with the University of Rochester. The course is also available as a one-year certificate program with intensive training in film chemistry and conservation, curatorship and cultural management.

#### L'IMMAGINE RITROVATA

L'Immagine Ritrovata is a highly specialised film restoration laboratory, born and developed under the aegis of Cineteca di Bologna. Thanks to its innovative methodologies, it is a leading laboratory in the field and it is designed for the restoration of film from every cinematic age. The lab has restored films of masters like Charles Chaplin, Jean Renoir, Federico Fellini, Jacques Tati, Luchino Visconti, Sergei Leone, and Ritwik Ghatak.

Nam Iruvar, 1947





Sazaa, 1951

#### THE FILM FOUNDATION'S WORLD CINEMA PROJECT

Margaret Bodde, Jennifer Ahn, Kristen Merola, Maria Paleologos

# FIAF

Christophe Dupin, David Walsh, Thelma Ross, Camille Blot-Wellens

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