





IWM ANNUAL CONFERENCE 2016

29 June – 1 July, 2016

Organized by

School of Mathematics & Statistics

University of Hyderabad Hyderabad – 500 046

Venue: Sir C.V. Raman Auditorium, Science Complex, University of Hyderabad Campus

Supported by NBHM (DAE), CWM (IMU)

IWM WEBSITE: https://sites.google.com/site/iwmmath/

CONFERENCE WEBSITE:

https://sites.google.com/site/iwmconference2016/home

Report on the IWM Annual Conference 2016

1. Introduction

The 2016 annual conference of IWM was held at the School of Mathematics & Statistics, University of Hyderabad, Hyderabad during the period 29 June to 1 July, 2016.

This conference is in continuation of a successful series of events, beginning in 2012, organized by the Indian Women and Mathematics (IWM). Information on previous IWM annual conferences can be found in the Archives page of the IWM website (https://sites.google.com/site/iwmmath/archives).

This conference at the University of Hyderabad was aimed at bringing together women students, college and university teachers and early-career researchers with mathematicians, especially women mathematicians, working in the frontiers of Mathematics, to exchange mathematical ideas and share their views and experiences.

A major goal of this event was to enable junior women mathematicians to interact with their senior colleagues, both individually and in small groups, as well as to present their work. To this end, in addition to the invited talks, there was a poster session. Advanced Ph.D. students and early-career researchers were encouraged to apply for the poster session, while registering for this conference.

The organizing responsibilities were handled by the following persons:

Organizing Committee:

Archana Morye	University of Hyderabad		
B.Sri Padmavati (Chair)	University of Hyderabad		
Neela Nataraj	Indian Institute of Technology Bombay		
R. Radha	University of Hyderabad		
T. Amaranath	University of Hyderabad		
Riddhi Shah (Convener, IWM)	Jawaharlal Nehru University, New Delhi		

Scientific Committee:

B. Sri Padmavati	University of Hyderabad		
Neela Nataraj (Chair)	Indian Institute of Technology Bombay		
Riddhi Shah	Jawaharlal Nehru University, New Delhi		

2. List of IWM Executive Committee members and senior participants

The following is a list of members of the IWM Executive Committee and of participants who were at the conference by invitation in various capacities.

	Name & Affiliation	Role
1.	Amber Habib, Shiv Nadar University, NOIDA, Uttar Pradesh	EC Member &
	amber.habib@snu.edu.in	Panelist

		(Discussion #2)
2.	Anisa Chorwadwala, IISER, Pune	EC Member
	anisa@iiserpune.ac.in	
3.	B. Sri Padmavati, University of Hyderabad	EC Member
	bspsm@uohyd.ernet.in, bs.padmavathi@gmail.com	
4.	Gautam Bharali, IISc., Bangalore	EC Member
	bharali@math.iisc.ernet.in	
5.	Geetha Venkataraman, Ambedkar University Delhi	EC Member &
	geetha@aud.ac.in, geevenkat@gmail.com	Panelist
		(Discussion #2)
6.	Neela Nataraj, IIT Bombay	EC Member
	neela@math.iisc.ernet.in	
7.	Pooja Singla, IISc., Bangalore	EC Member
	pooja@math.iisc.ernet.in	
8.	Riddhi Shah, JNU, New Delhi	EC Member &
	rshah@jnu.ac.in, riddhi.kausti@gmail.com	Panelist
		(Discussion #2)
9.	Sachi Srivastava, University of Delhi	EC Member &
	sachi srivastava@yahoo.com	Invited Speaker
10.	Vijaylaxmi Trivedi, TIFR, Mumbai	EC Member
	<u>vija@math.tifr.res.in</u>	
11.	Gurmeet Kaur Bakshi, Panjab University, Chandigarh	Plenary Speaker
	gkbakshi@pu.ac.in	
12.	Mahuya Datta, ISI, Kolkata	EC Member
	mahuya@isical.ac.in	
13.	Mythily Ramaswamy, TIFR-CAM, Bangalore	EC Member
	mythily@math.tifrbng.res.in	
14.	Shreemayee Bora, IIT Guwahati	EC Member
	shbora@iitg.ernet.in	
15.	Mahan Maharaj, TIFR, Mumbai	Plenary Speaker
1.0	mahan.mj@gmail.com	DI 6 1
16.	Nalini Joshi, University of Sydney	Plenary Speaker
	maths.joshiera@sydney.edu.au	& Panelist
17	N. Caradha TIED Mumbai	(Discussion #2)
17.	N. Saradha, TIFR, Mumbai saradha@math.tifr.res.in	Plenary Speaker
18.	Tanvi Jain, ISI, Delhi Centre	Invited Speaker
10.	tanvi@isid.ac.in	Invited Speaker
19.	Anima Nagar, IIT Delhi	Invited Speaker
IJ.	anima@maths.iitd.ac.in	invited Speaker
20.	R. Radha, University of Hyderabad	Invited Speaker
20.	radhasm@uohyd.ernet.in,	mivited Speaker
	repakar@yahoo.com	
21.	Radhika Ganapathy, TIFR, Mumbai	Invited Speaker
	radhika@math.tifr.res.in	inviced Speaker
22.	Supriya Pisolkar, IISER Pune	Invited Speaker
	supriya@iiserpune.ac.in	inviced Speaker
23.	Sneh Lata, Shiv Nadar University	Invited Speaker
	sneh.lata@snu.edu.in	vicea opeaker

24.	Sandeep K., TIFR-CAM, Bangalore	Invited Speaker
	sandeep@math.tifrbng.res.in	(Mini-course)
25.	S. Kumaresan, University of Hyderabad	Panelist
	kumaresa@gmail.com	(Discussion #1)
26.	I.K. Rana, IIT Bombay	Panelist
	ikrana@iitb.ac.in	(Discussion #1)
27.	Christina Carter, SUNY Buffalo,	Panelist
	Fulbright Scholar at the University of Hyderabad in the winter	(Discussion #1)
	semester of 2016	
	tlc1946@gmail.com	

3. Timetable

Below is the timetable at a glance for the 3 days of the conference, followed by a detailed timetable featuring names and titles of the talks presented.

29th June – 1st July, 2016

Day 1 – Wednesday, 29th June, 2016

9:00am		10:00am	11:00am	11:30am	12:15pm		2:30pm	3:30pm		4:40pm
to		to	to	to	to		to	to		to
9:30	Т	11:00	11:30	12:15pm	1:00	L	3:30	4:10	Т	6.10
Inaugu-	Ε	Nalini	Supriya	Sachi	Tanvi	U	Mahan	Contri-	Ε	Panel
ration	Α	Joshi	Pisolkar	Srivastava	Jain	N	Mj	buted	Α	Discussion 1
						С		talks		
						Н		1-6		Mathematics
										Education*
								3 parallel		
								sessions		

Day 2 – Thursday, 30th June, 2016

9:30am		11:00am	11:30am	12:15pm		2:30pm	3:30pm		4:30pm
to		to	to	to		to	to		to
10:30	Т	11:30	12:15pm	1:00	L	3:30	4:00	Т	5:30
Gurmeet	Ε	Sneh Lata	R. Radha	Anima	U	Contri-	Poster	Ε	Panel Discussion 2
Kaur	Α			Nagar	N	buted	Session	Α	
Bakshi					С	talks			Women in
					Н	7-15			Mathematics:
									Initiatives from India
						3 parallel			and around the
						sessions			world**

Day 3 - Friday, 1st July, 2016

9:30am-		11.00am-	11.30am-	L	2.15pm-3.45pm	3.45pm-		
10.30am	Т	11.30am	1.00pm	U		4.15pm	Т	
N. Saradha	Ε	Radhika	Mini Course	N	Mini Course	Valedictory/	Ε	
	Α	Ganapathy	K. Sandeep	С	K. Sandeep	Vote of Thanks	Α	
				Н				

DETAILED TIME-TABLE

29th June, 2016

9:00 am-9:30 am	Inauguration	
9:30 am-10:00 am	Теа	
10:00 am-11:00 am	Nalini Joshi	
	"When Applied Mathematics Collided with Algebra"	
11:00 am-11:30 am	Supriya Pisolkar	
	"Arithmetic of Locally Symmetric Spaces"	
11:30 am-12:15 pm	Sachi Srivastava	
	"Asymptotics of C₀ Semigroups on L₀ Spaces"	
12:15 pm-1:00 pm	Tanvi Jain	
	"Matrix Approximation Problems"	
1:00 pm-2:30 pm	Lunch	
2:30 pm-3:30 pm	Mahan Mj	
	"Hyperbolic Geometry and Chaos in the Complex Plane"	
3:30 pm-4:10 pm	Contributed talks 1-6 (Session 1,2,3)	
4:10 pm-4:40 pm	Теа	
4:40 pm-6:10 pm	Panel Discussion #1	
	(Mathematics Education)	

30th June, 2016

9:30 am-10:30 am	Gurmeet K. Bakshi
	"The Role of Group Algebras in Group Theory"
10:30 am-11:00 am	Теа
11:00 am-11:30 am	Sneh Lata
	"Admissible Fundamental Operators"
11:30 am-12:15 pm	R. Radha
	"Hyperbolic Equations"
12:15 pm-1:00 pm	Anima Nagar
	"Stronger Forms of Transitivity"
1:00pm-2:30 pm	Lunch
2:30 pm-3:30 pm	Contributory talks 7-15 (Session 1,2,3)
3:30 pm-4:00 pm	Poster Session
4:00 pm-4:30 pm	Теа
4:30 pm-5:30 pm	Panel Discussion-2
	(Women in Mathematics: Initiatives from India and around
	the World)

^{*}S. Kumaresan (moderator) I. K. Rana, Christina Carter
** Nalini Joshi, Riddhi Shah, Amber Habib, Geetha Venkataraman (moderator)

1st July, 2016

9:30 am-10:30 am	N. Sarada		
	"Primes"		
10:30 am-11:00 am	Теа		
11:00 am-11:30 am	Radhika Ganapathy		
	"The Deligne-Kazhdan Philosophy and its Applications to the		
	Langlands Correspondence"		
11:30 am-1:00 pm	K. Sandeep		
	Mini-course on "An Introduction to the Analysis of PDE"		
1:00 pm-2:15 pm	Lunch		
2:15pm-3:45pm	K. Sandeep		
	"An Introduction to the Analysis of PDE" (contd.)		
3:45pm-4:15pm	Valedictory / Vote of Thanks		
4:15pm	Теа		

CONTRIBUTED TALKS SCHEDULE

June 29, 3:30 to 4:10 p.m.

Session-1	Session-2	Session-3
Ranjana Jain	M. Archana	Rashmi Tiwari
Yogitaben M. Parmar	Jaspreet Kaur	Ananya Lahiri

June 30, 2:30 to 3:30 p.m.

Session-1	Session-2	Session-3
Aisha Jabeen	Ratna Pal	K. Bhargav Kumar
Sugandha Maheshwary	R. Lakshmi Lavanya	
Nazia Parveen	Aradhana D. Jauhari	

June 29, 3:30 to 4:10 p.m.

Session 1

- Ranjana Jain (University of Delhi): Closed Lie Ideals in Certain Operator Algebras.
- Yogitaben Parmar (Shree D.K.V. Arts & Science College, Jamnagar): Recent Development in Hilbert Pro-C*-modules.

Session 2

- *M. Archana* (University of Hyderabad): Patterns of all 2-Cycles and Fixed Points for Interval Maps.
- Jaspreet Kaur (St. Stephens College, University of Delhi): Cohomology Algebra of Orbit Spaces of Free Circle Group Actions on Certain Spaces.

Session 3

- Rashmi Tiwari (Amity University, NOIDA): Moment Properties of Generalized Order Statistics from a General Class of Distribution.
- Ananya Lahiri (Chennai Mathematical Institute): Inference for Option Prices when the Stock Price is Driven by a Fractional Brownian Motion.

June 30, 2:30 to 3:30 p.m.

Session 1

- Aisha Jabeen (Aligarh Muslim University): Jordan Triple (σ,τ) -Higher Derivation of Triangular Algebra.
- Sugandha Maheshwary (IISER Mohali): Central Units of Integral Group Rings.
- *Nazia Parveen* (Galgotias University, NOIDA): On the Traces of Permuting *n*-Derivations in Rings.

Session 2

- Ratna Pal (Indian Institute of Science, Bangalore): Dynamics of Skew Products of Hénon Maps.
- R.Lakshmi Lavanya (IISER Tirupati): Revisiting the Fourier Transform on the Heisenberg Group.
- Aradhana Dutt Jauhari (Galgotias University, NOIDA): A New Theorem on $\left|N,p_n^{\alpha},q_n^{\beta},\delta(n)\right|_{\nu}$ Summability of an Orthogonal Series.

Session 3

• *K. Bhargav Kumar* (University of Hyderabad): Asymptotic Behavior of the Solution of a Nonlinear Renewal Equation with Diffusion.

4. Scientific Programme

- There were 4 plenary talks of 55 minutes' duration each followed by 5 minutes of discussion each.
- There were two categories of invited talks. There were longer invited talks 4 in number — of 40 minutes' duration each followed by 5 minutes of discussion each. A special effort was made to reach out to early-career mathematicians. Thus, there were 3 talks, designated as "Talks by Young Mathematicians", of 25 minutes' duration each followed by 5 minutes of discussion.

The names and affiliations of all plenary and invited speakers are listed in Section 2. Among the invited speakers listed in Section 2, Radhika Ganapathy, Sneh Lata and Supriya Pisolkar gave talks designated as "Talks by Young Mathematicians".

- A mini-course entitled "An Introduction to the Analysis of PDEs" was conducted by Prof. Sandeep K. of the Tata Institute of Fundamental Research Centre for Applicable Mathematics, Bangalore, in 2 sessions of one-and-a-half hours' duration each on the last day. To supplement the lectures, participants of the mini-course were given a copy of the textbook *Functional Analysis* by S. Kesavan (Texts and Readings in Mathematics 52, Hindustan Book Agency, 2009).
- There were 15 contributed talks of 15 minutes' duration followed by 5 minutes of discussion each. Talks 1-6 were held on the first day in 3 sessions and talks 7-15 were held on the second day of the conference in another 3 sessions. Details of the contributed talks are presented in Section 3.

- A poster session was held on the second day after the contributory talks.
- An exhibition of mathematics books was held alongside the conference.
- On the first day, there was a panel discussion on mathematics education moderated by S. Kumaresan, University of Hyderabad. The other panelists were I.K. Rana, IIT Bombay and Christina Carter, SUNY Buffalo, USA. On the second day, there was a panel discussion entitled "Women in Mathematics: Initiatives from India and around the World" moderated by Geetha Venkataraman, Ambedkar University Delhi. The other panelists were Nalini Joshi, University of Sydney, Australia; Riddhi Shah, JNU, New Delhi and Amber Habib, Shiv Nadar University, NOIDA. There was much spirited exchange of views. Brief reports on the panel discussions are presented below.
- There were 74 participants, including the speakers and IWM Executive Board Members. Of these, about one-third of the participants were students. While, expectedly, there were many participants from the states of South India, about half the Indian participants came from the other regions of India. The list of all participants is given in Appendix A of this report.

5. Panel Discussions

5.1. Panel Discussion 1: Mathematics Education

Moderator: S. Kumaresan (University of Hyderabad)

Panelists: S Kumaresan, Inder K. Rana (Indian Institute of Technology Mumbai), Christina Carter (SUNY Buffalo)

Christina Carter spoke about her experiences with the 'Flipped Classroom' that she had implemented at SUNY Buffalo as well as her experiences of teaching a flipped classroom on Abstract Algebra to students of the University of Hyderabad. She shared the data from her study and also spoke about a larger project that she was planning to undertake to investigate the use of flipped classroom as a pedagogical tool. She felt that in SUNY she had good results with the flipped classroom, which involves preparation of video material by the instructor, which students watch off-site from the classroom. The classroom is then used for discussion based on the videos watched, as well as working through problems that use the material in the videos. The instructor supervises these classroom activities.

S. Kumaresan spoke about his years of experience in teaching and creating the highly successful Mathematics Training and Talent Search (MTTS) programme. He spoke about the methodology that was followed in MTTS, where students arrive at proofs and solutions through working individually and in groups with hands-on supervision by all instructors involved in the programme. MTTS completes 25 years soon and has created a small but strong pool of mathematicians who both teach and do research.

Inder K. Rana spoke about his passion for Mathematics Education and addressed the need to consider mathematics teaching at the school level. He mentioned that while one may have doubts about the quality of the Bachelor in Education degree, which is essential for teaching at the school level, there is a huge problem of in-service training for school

teachers. He spoke about how technology can make the mathematics classroom meaningful, visual and have a good impact on learners when used prudently. He mentioned several initiatives that he was personally involved with, including Technology in Mathematics Education (TIME).

5.2. Panel Discussion 2: Initiatives from India & around the World

Moderator/Chair: Geetha Venkataraman (Ambedkar University Delhi)

Panelists: Nalini Joshi (University of Sydney), Riddhi Shah (Jawaharlal Nehru University, Delhi) and Amber Habib (Shiv Nadar University, NOIDA, Uttar Pradesh)

The discussion began with a brief preamble by the moderator, Geetha Venkataraman, on the numbers of women enrolled for a mathematics degree at the University of Delhi (DU) at different levels. Based on data from DU, she observed that more than 50% of the students at the undergraduate, Masters and MPhil levels in DU are women, but very few women register for the PhD. Analogously, undergraduate teaching departments have a large number of women faculty, but the picture is reversed as one goes higher up in the education landscape, with very few women faculty members at the research-oriented Institutes and even fewer in leadership positions.

Nalini Joshi made a presentation on the Science in Australia Gender Equity (SAGE) initiative in Australia, which was started by the Australian Academy of Sciences and is now led jointly with the Academy of Technological Sciences and Engineering to address gender equity issues. Nalini mentioned that for a long period she was the only woman professor in Mathematical Sciences at the University of Sydney. About 32 institutions have signed up for the SAGE pilot project. The project is modeled on the Athena SWAN project launched in the United Kingdom. The Athena SWAN charter provides an evaluation and accreditation framework to help improve gender equity policies and practices. These are designed in such a way as to generate action based on micro-level institutional information. The 32 institutions participating become members of the charter in Australia, and pledge to uphold 10 principles which will help advance gender equity and diversity in the disciplines of Science, Technology, Engineering, Mathematics and Medicine (STEMM). The pilot will determine whether the Athena SWAN programme needs adaptation for the Australian context.

Riddhi Shah spoke about the initiatives of European Women in Mathematics, as well as Indian Women in Mathematics (IWM), of which she is the chairperson. She informed how the Humboldt Foundation in Germany provided a 2-year leeway for women applicants for the post-doctoral fellowship. This meant that a women applicant who was, say, 30 years old would be expected to have published at the level of a 28 year old male applicant. The Department of Science and Technology (DST), Govt. of India, has many special schemes for fellowships and projects for women, in which it sets higher age-limits for eligibility for women applicants. DST also has a special scheme for women who take a break in their career. She also described the initiatives of the Indian Academy of Sciences (IASc) in addressing the need for increasing the role and presence of women in the sciences,

including mathematics. As for the IWM: apart from the annual conference, it has introduced two new activities, one of them being a one-and-a-half day regional mini-workshop (modeled after the IASc's one-day workshop) to allow women to participate and interact in such a workshop in their own region. The first such workshop was held in IIT Guwahati and the second one is planned for October in the M.S. University, Vadodara. These workshops are intended to expose the audience to fresh trends in research and as well as opportunities for careers in research. The other new activity is the IWM Visitor Programme, under which a distinguished women mathematician from India or abroad will visit one metro city and two nearby smaller towns to give popular talks and interact with young women students and encourage them to take up mathematics as a career. Riddhi concluded by describing the visits of the two women mathematicians invited this year: Isabelle Chalendar (University of Lyon 1, France) in March, who gave talks at the University of Delhi, the University of Rajasthan, Jaipur, and Banasthali Women's University, Vanasthali, Rajasthan; and Prof. Nalini Joshi (University of Sydney, Australia) who gave talks at the IWM 2016 annual conference at the University of Hyderabad, IISER Tirupati and Maris Stella College, Vijayawada.

Amber Habib spoke about the publications of several studies that had been conducted in the United States to consider the disparities in the number of women in employment in the STEMM disciplines. In one such study it was shown that the same CV, sent to a set of laboratories, one with a woman's name and another with a man's name, evoked different responses. The CV with the male name was given preference over that with the woman's name. It was also likely that, when offered employment, the woman would be offered a lower salary.

The presentations were followed by a discussion with the audience, which involved sharing of experiences as well as queries. It was felt that, in the Indian context, parents of women students had to be addressed and convinced of the advantages of letting their daughters study further, even for research degrees. While some participants expressed the fact that hard work — maybe even more than what men put in — is necessary for women to succeed, others felt that these experiences should not be different for men and women. It was also felt that when it came to employment, women faced the repercussions of the two-body problem far more than men, and that this needs to be addressed by the system. In this connection, it was mentioned that in faculty selection/appointment in India, no concession (in terms of number of publications, etc.) — not even in the government sector — was given to women applicants. Nalini Joshi had mentioned that there are provisions to consider and take into account career interruptions for women applicants in Australia, as well as mechanisms to encourage more women to apply for jobs at higher institutions.

6. Summary Observations and Expected Impact

Given that one of the aims of the IWM Annual Conference, since the inception of this event (see the Activities page of the IWM website for a background of this annual event: https://sites.google.com/site/iwmmath/activities), is to provide networking

opportunities for the many women delegates — especially those who are in the early stages of postgraduate studies or research — IWM and the organizers of the 2016 IWM annual conference have grounds for cautious optimism. Going by the questions posed to, and contact information sought from, the senior participants of the conference, it is hoped that early-career participants have made contact with colleagues who would be a resource to them in the near- to medium-term. *Specific* impacts that are relevant to the *specific* mission of IWM that are expected are as follows:

- The hard work of building more lasting bridges with early-career women mathematicians, and to provide them role-models and better exposure to good mathematics, falls upon the Regional Mini-workshops Programme and the IWM Visitor Programme (see https://sites.google.com/site/iwmmath/activities for more information). This conference has made many delegates, drawn from different regions of India, aware of the existence of IWM. It is expected that these delegates will generate positive word-of-mouth for the more region-focused activities, mentioned above, that are planned in their region.
- Given that some of the initiatives presented in the panel discussion "Women in Mathematics: Initiatives from India and around the World" were described in such specificity, it is expected that participants — especially participants who hold positions in search committees and the like — will be sensitized about ways in which the representation of women beyond the early-career stages of the discipline can be improved.

7. Appendices

Appendix A: List of Participants

S.No.	Name & <i>Affiliation</i>
1.	Amber Habib, Shiv Nadar University
2.	Anisa Chorwadwala, IISER Pune
3.	B. Sri Padmavati, <i>University of Hyderabad</i>
4.	Gautam Bharali, Indian Institute of Science
5.	Geetha Venkataraman, Ambedkar University Delhi
6.	Neela Nataraj, <i>IIT Bombay</i>
7.	Pooja Singla, Indian Institute of Science
8.	Riddhi Shah, Jawaharlal Nehru University
9.	Sachi Srivastava, <i>University of Delhi</i>
10.	Vijayalaxmi Trivedi, <i>TIFR – Mumbai</i>
11.	Gurmeet Kaur Bakshi, Panjab University
12.	Mahan Maharaj, TIFR – Mumbai
13.	Nalini Joshi, <i>University of Sydney, Australia</i>
14.	N. Saradha, <i>TIFR – Mumbai</i>
15.	Tanvi Jain, ISI – Delhi Centre
16.	Anima Nagar, IIT Delhi
17.	R. Radha, University of Hyderabad
18.	Radhika Ganapathy, TIFR – Mumbai
19.	Supriya Pisolkar, IISER Pune

20.	Sneh Lata, Shiv Nadar University
21.	Sandeep K., TIFR-CAM, Bangalore
22.	S. Kumaresan, University of Hyderabad
23.	I.K. Rana, IIT Bombay
24.	Christina Carter, Buffalo State (SUNY), USA
25.	A. Venkata Laxmi, Osmania University
26.	Ananya Lahiri, Chennai Mathematical Institute
27.	Anjalaiah, University of Hyderabad
28.	Aradhana Dutt Jauhari, Galgotias University NOIDA (U.P.)
29.	Gunjan Khurana, IP College for Women, Delhi
30.	Jaspreet Kaur, St. Stephen's College, Delhi
31.	K. Ambika, <i>Nirma University, Ahmedabad</i>
32.	M. Bharathi Devi, RISE Group of Inst. (A.P.)
33.	Mamata Kumari, SD College of Commerce & Economics, Goa
34.	Nazia Parveen, Galgotias University NOIDA (U.P.)
35.	Preena Samuel, IIT Kanpur
36.	R. Lakshmi Lavanya, IISER Tirupati
37.	Rakhee Basu, University of Hyderabad
38.	Ranjana Jain, University of Delhi
39.	Rashmi Tiwari, Amity University NOIDA (U.P.)
40.	Ratna Pal, Indian Institute of Science
41.	Sugandha Maheshwary, IISER Mohali
42.	Sundari Maddala, Chennai Mathematical Institute
43.	Talat Sultana, <i>Lakshmibai College, Delhi</i>
44.	Yogitaben M. Parmar, Shree D.K.V. College of Arts & Science,
	Jamnagar
45.	Aisa Jabeen, Aligarh Muslim University
46.	Alok Kumar Singh, <i>University of Allahabad</i>
47.	Deepika, Indian Institute of Science
48.	Gunjan Singh, Jawaharlal Nehru University
49.	K. Bhargav Kumar, University of Hyderabad
50.	Kriti Arya, IIT Patna
51.	Kunal Sannyasi, University of Hyderabad
52.	Lakshmi Girish, CUSAT, Cochin
53.	M. Mani Harshita, University of Hyderabad
54.	Meenu Mariya Jose, <i>CUSAT, Cochin</i>
55.	Mokshi Goyal, Panjab University
56.	Mukta Garg, University of Delhi
57.	Pooja Chandrasekhar Raut, Swami Ramanand Teerth Marathwada
	University, Nanded
58.	Pooja Punyani, <i>IIT Delhi</i>
59.	Reshmi Biswas, <i>IIT Guwahati</i>
60.	Seema Mishra, IIT-BHU
61.	Srashti Dwivedi, IIT Delhi
62.	Swati Maheshwari, IIT Delhi
63.	Tania Biswas, IISER Thiruvananthapuram
64.	Varsha Shivraj, Swami Ramanand Teerth Marathwada University,
	Nanded

65.	Yasmeen, Aligrah Muslim University
66.	Monika Singh, Lady Shriram College, Delhi
67.	H.P. Rani, NIT Warangal
68.	M. Archana, University of Hyderabad
69.	Deepika Neela, <i>IIT Hyderabad</i>
70.	T. Suman Kumar, University of Hyderabad
71.	R. Tandon, <i>University of Hyderabad</i>
72.	S. Ilangovan, University of Hyderabad
73.	T. Amaranath, University of Hyderabad
74.	Archana S. Morye, <i>University of Hyderabad</i>

Appendix B: Photographs



Group photograph: Day 1



Group photograph: Day 2



Group photograph: Day 3