

Research Scholars' Forum



Annual Report 2007-08

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SI.	Name of the Event	Date	Comment	
1	RSF Valedictory and Awards Function	29 th May, 2007	RSF Awards were Presented	
2	Interactive talks on "Presentation Skills and Report Writing", by Prof. Raghavan B. Sunoj and Prof. Abhiram Ranade	17 th Jul, 2007	Specifically arranged for Annual Progress Seminars	
3	Interactive Talk on "Idea to Business" by Prof. C. Amarnath	3 rd Aug 2007	Organized by RSF	
4	RSF Welcome	3 rd Sept, 2007	PhD Handbook was Released	
5	Interactive talk on "Neo Liberal Issue in Education" by Prof. Anil Sadgopal	3 rd Oct 2007	Jointly Organized by RSF and SAF	
6	"Empowering Research Scholars: Interactive Workshop Session on Right to Information" by Mr. Shailesh Gandhi	9 th Jan, 2008	Organized by RSF	
7	Talk on "The Joy of Invention: Recent Case Studies" by Dr. Pushpito Ghosh	27 th Feb, 2008	Organized by RSF	
8	Talk on "Great Moments in Science" by Dr. Karl Kruszelnicki	3 rd Mar 2008	Organized by RSF and Science Club	
9	Talk on "Music and its Significance" by Prof. Milind Malshe	17 th Mar 2008	Organized by RSF	
10	Talk by Dr. Gernot Gad, Director, German Research Foundation	11 th Apr 2008	Jointly Organized by RSF and Dean AIR	
11	Workshop on "Intellectual Property Rights (IPR) and IP Policy of IIT Bombay - An IPR Awareness Programme" by Dr. Raj Hirwani et al.	25 th Apr 2008	Jointly organized by RSF and IPR Chair, SJM SOM	

List of Events Organized by RSF in the Year 2007-08

1. Introduction

The year 2007-08 has been the decadal year of **Research Scholars' Forum (RSF)**, **Indian Institute of Technology Bombay (IITB)**. RSF, as it is popularly known in the institute, has marched ahead not only in time but also in its achievements. Bearing a representation of 1200+ Research Scholars, slowly but steadily, RSF has taken in its stride, activities which carry the load of an illustrious past and a visionary present admixtured with a promising future. From the point where Team RSF 2007-08 entrusts its load on the future teams, their responsibilities as one of the leading research-based organizations within the institute enters a very crucial phase, because in the coming years IIT B is poised to become a leading research hub of India and the world.

RSF team 2007-08 reviews with pride its achievements of the past one year since the time it embarked upon this journey, to this day when it happily wishes the future teams all luck for their new endeavors. We look back with satisfaction at the team spirit and a die-hard determination to leave our mark on IITB's yearbook of 2007-08. This year witnessed a meteoric rise in the role entrusted to RSF in almost every important event of the institute. From the **International Vice Chancellor's Conclave** to the **10 Great Ideas Venture**, from **designing the PhD Handbook**, **Scholarship Issues** to a say in **Vision IITB**, RSF has been a part of all major activities that have taken place in this illustrious Golden Jubilee Year of Indian Institute of Technology Bombay. We have been recognized as a significant force in IITB by our institute authorities. Through its patience, perseverance and a consistent spirit of discipline, RSF has proved that it *actually* intends to be the uniting force for researchers and the institute administration. Its aim for the future is fixed at being a genuine platform for Research Scholars of the institute, where they can put forth their creative and critical spirit as well as their issues and difficulties.

The purpose of this Annual Report is not just to recount the achievements of the team for the past one year, but also to document the position of RSF in the year 2007-08, 10 years after its genesis in 1998. Team 2007-08 lead by RSF coordinator **Mr. Hemant Kumar Rath** took charge on the Valedictory Function Day (Valfi) held on

the **29th May 2007** from the coordinator of Team 2006-07, **Mr. Sushant Sharma**. The core team as per the tradition comprised four members; the Seminar Coordinator (Mr. Shamlan Reshamwala), the Public Relations Manager (Ms. Arnapurna Rath) and the Web administrator (Mr. Punit Rathod). For the first time in the history of RSF, the annual allocated budget crossed Rs 1 lakh, which is definitely a major achievement. There were **32** members in RSF Team 2007-08 who represented their respective departments in the team, including a panel of advisors, executive members, department representatives and member secretaries. RSF follows a completely democratic procedure in all its meetings and the various posts that have been created are for a smoother functioning of the body. In the meetings each one is treated as a fellow colleague and friend, and each individual's opinion counts in the functioning of the entire team. In fact, the department representatives or the **DRs** as they are popularly known, actually form the pulse of the team, because of their role as the bridge between the department and the institute.

In this report we summarize some of the major activities/challenges that the Team RSF 2007-08 took up in the past one year.

2. RSF Valedictory and Awards Function

Date: 29th May, 2007

The Research Scholars' Forum, IIT Bombay organized its Annual Valedictory and Awards function at the IRCC Auditorium on the evening of 29th May 2007. The function, which commenced at 5.30pm, continued for about an hour and half and concluded at 7.00pm. An array of dignitaries graced the occasion. The Honorable Deputy Director Prof. Juzer. Vasi was the chief guest for the evening. The other distinguished guests were Prof. Dipan Kumar Ghosh, Prof. A. K. Singh (Dean, Academic Programs), Prof. V. M. Gadre (Convener, PG-APEC) Prof. K. Kurien Issac (Associate Dean, R&D) and Prof. C. Amarnath (Chairman SINE & Advisor, RSF). In his talk to the research community, Prof. Vasi stimulated the research scholars to develop a spirit of research and earn for IIT the recognition of a leading research institute not only in India but also in the world. Prof. Ghosh in his encouraging words praised RSF in its efforts to develop an all round capability in research scholars during their research tenure. Prof. Singh also inspired the congregation with his talk to the scholars. Prof. Kurian and Prof. Gadre also emphasized on research activities and inspired the research scholars to come up with better research output.

The major attraction of the evening was however, the prestigious RSF Awards for research and other co-curricular activities at the institute level and the RSF Office Bearer awards for organizational activities within RSF. The categories of the research awards were as follows: awards for the Best Research Paper, Outstanding Research in Engineering and Non-Engineering fields and Best Research Scholar for excellence in academic and extra curricular activities. The Best Research Paper Award went to Mr. S. Kuppusamy of Department of Chemistry, who has published 2 papers in Angwandte Chemie International Edition during the year 2006. Kuppusamy works in the field of synthetic main group chemistry. The Outstanding Research Award in Non-Engineering went to Dr. P. Chandrasekaran of the Dept. of Chemistry. Dr. Chandrasekaran has published 4 journal papers that got 7 citations. His work mainly focuses on "Inorganic and organo-metallic synthesis and catalysis with main attention on Phosphorus element". The Outstanding Research Award in Engineering stream was given to two research scholars, Mr. Ashish Tendulkar of the Department of Computer Science and Engineering and Dr. T. C. Manjunath of Systems and Control Engineering Inter-Disciplinary Program. Ashish has worked on "Analysis of Protein Structure using Geometric and Machine learning techniques", published 4 journal papers that got 38 citations and one conference paper. Dr. Manjunath, the other recipient, has worked on "Modeling, Control and Implementation of Smart Flexible Structures" and its applications to Aerospace Engg., Vibration Control and Robotics. He has published 16 journal papers, 62 conference papers and has coauthored a research monograph, which has been published by Springer-Verlag. The Best Research Scholar Award for excellence in academics and extra-curricular activities went to Mr. Debashis Panda of the Department of Chemistry. Debashis has worked on "Photo-physical Investigation of Biologically Relevant Fluorescent Probes". He has published 7 journal papers. Debashis served as General Secretary of Hostel 1 for the year 2006-2007 and received the Best Office Bearer award during his tenure. He also received the Best Defensive Player Award in the inter-departmental volleyball tournament in PG Sports 2007 along with many other sports awards. He was instrumental in organizing innumerable socio-cultural activities including Vanmahotsav.

The organizational awards within team RSF went to Mr. Praveen Agarwal for the **Best Office Bearer**, Mrs. Rupashree Baral for the **Best Event Organizer** and Mr. Kirti Patel for the **Most Enthusiastic Fresher** of the year 2006-07.

3. Freshers' Welcome

Date: 3rd September, 2007

RSF celebrated with pomp and splendor the Freshers' Orientation-cum-Welcome on the 3rd of September 2007 in the P. C. Saxena Auditorium of IIT Bombay. 2007 RSF welcome seemed to be a befitting prelude to the Golden Jubilee Celebrations of IIT Bombay which started on the 5th of September. The evening was presided over by Prof. Ashok Misra, esteemed Director of IIT Bombay followed by a rich assortment of dignitaries like Prof. Juzer Vasi - Deputy Director, the Guest of Honour; Prof. A. K. Singh - Dean Academic Program; Prof. C. Amarnath - Professor-in-charge SINE and mentor of RSF and Prof. V. M. Gadre – Convener PG-APEC.

Prof. Misra welcomed the new research scholars to the institute and exhorted them to work as a team and make IIT Bombay the foremost research institution. He emphasized on the shift in focus of IIT strategies from imparting excellence in its undergraduate programs, into a fully equipped research institute where there is an excellence in research activities as well as encouragement to intensive research. Prof. Misra stimulated the new scholars and fueled their dreams with incentives to help research activities with steady up-gradation of research process in all the streams. Prof. A. K. Singh, the Dean of Academic Programs spoke to students regarding the need to develop coping mechanisms for academic pressure and suggested them not to yield to weakening moments of stress. He emphasized on the need to bridge the gap between scholars, faculties and the authorities in order to smoothen the academic process.

Prof. C. Amarnath in his turn spoke about the requirement to develop entrepreneurship spirit in the research scholars. Finally, Prof. V. M. Gadre, Convener PG-APEC suggested the new entrants to be careful regarding their overall performance in the institute. He cautioned students against indulging in activities that will not only create unwarranted situations for themselves but also bring disrepute to the institute on the whole.

The evening came to an end with refreshments and an informal session where the new scholars had an opportunity to introduce themselves, showcase their talents and share a few lighter moments with senior research scholars.

4. RSF Talks/Workshops

Like the previous years, this year too RSF has conducted/organized various talks/workshops for the benefit of Research Scholars and other members of IIT Bombay. All talks/workshops were well appreciated by the students, faculties and staffs. The talks/workshops were of diverse nature and the speakers were from across the political boundaries of India too. Following are the reports of various talks/workshops conducted arranged in chronological order:

a. Presentation Skills and Report Writing

Speakers: Prof. Raghavan B. Sunoj (Dept. of Chemistry, IIT Bombay), Prof. Abhiram Ranade (Head, Dept of Computer Science and Engg, IIT Bombay)

Date: 17th July, 2007

An immensely useful talk meant for research scholars to help them develop their presentation skills and report writing was organized by Research Scholars Forum in the IRCC Auditorium of IIT Bombay on the 17th of July, 2007, Tuesday from 4.45pm – 6:30pm. The distinguished speakers for the occasion were Prof. Raghavan B. Sunoj from the Department of Chemistry, IIT Bombay and Prof. Abhiram Ranade from the Department of Computer Science & Engineering. Prof. Sunoj highlighted the significance of a good presentation and explained ways in which one can be fully equipped to present his/her ideas before any audience. In a well designed and

structured power point presentation, the talk entitled "Scientific Presentations: Basics and Beyond" emphasized on the ways in which presentations can be made interesting and effective. Prof. Sunoj stressed upon the fact that ideas need to be exchanged in order to get transformed into concrete events. He also added that presentations are one of the most effective ways to exchange and work on one's own ideas. According to him, the catchphrases of "illustration", "design" and "citations" are the key to any good presentation.

Basing his talk on **"Technical Report Writing"**, Prof. Abhiram Ranade discussed the fundamentals of a good report and explained on the nature of writing and documentation that any research work requires. Prof. Ranade explained the basics of technical writing and gave valuable tips and insights to improve writing skills which are the fundamentals of any research oriented task.

b. Idea to Business

Speakers: Prof. C. Amarnath (Professor In-charge, SINE, IIT Bombay)

Date: 3rd August, 2007

Research Scholars' Forum organized a talk for enthusiastic research scholars and budding young entrepreneurs on the 3rd of August 2007. The speaker was Prof. C. Amarnath Chairman SINE and the venue for the talk was EE Seminar Hall, IIT Bombay. Entitled **"Idea to Business"**, the talk was designed to cater to the growing demands of entrepreneurship in research fields. It guided students into developing their raw but original ideas into a full fledged business and entrepreneurial activity. Prof. Amarnath revealed the various facets of the facilities and assistance available to IITians within the institution itself in order to help them nurture their ideas. He cited various projects and business centers that have mushroomed within IIT itself and which are solely managed by IIT students, faculty or members of the staff and have grown into employment generators helping the country. He focused on the need for consistent labour and a dedicated approach towards one's ideas in order to develop full-fledged entrepreneurial ability. Prof. Amarnath also guided the audience as to how to nurture oneself into a successful leader and how to develop ideas into a fully

structured and qualitative business plan. The talk lasted for one hour and was followed by an intensive question-answer session with a number of questions streaming in from the audience.

c. Neo Liberal Issue in Education

Speaker: Prof. Anil Sadgopal (Eminent Academician, Education Activist, Pioneer of Movements on "Inquiry based Science Education, Application of Science & Technology in Rural Areas an Common School System")

Date: 3rd October, 2007

An interactive talk on "**Neo Liberal Education**" was given by Prof. Anil Sadgopal, Eminent Academician and Education Activist on 3rd October, 2007. The talk was jointly organized by Research Scholars' Forum (RSF) and Social Awareness Forum (SAF) of IIT Bombay. Prof. Sadgopal, a multi faceted personality, an eminent academician and education activist, in his talk emphasized the need of a common school system in India. Further, he spoke about the corrective methods which should be taken care of by the government and society at large to provide a decent education in India. The talk was well attended by many faculties and students and was quite interactive in nature.

d. Empowering Research Scholars: Interactive Workshop Session on Right to Information

Speaker: Mr. Shailesh Gandhi (Alumni IIT Bombay and RTI Activist)

Date: 9th January, 2008

Research Scholars' Forum (RSF) of IIT Bombay organized an interactive talk on **"Empowering yourself with Right to Information"** on 9th January 2008. The session was conducted by Mr. Shailesh Gandhi, a distinguished alumnus of IIT Bombay, who is also the Convener of the *National Campaign for People's Right to Information (NCPRI)*, and an indefatigable voice for transparency and democracy. He spoke about the intricacies of RTI, and gave some examples from his first hand experience as a contributor to this field. Highlighting some of the success stories, Mr.

Gandhi said that it is possible to attain the ideal of *"Swaraj"* if each citizen of our country decides to uphold the values of the nation. The talk was well attended by faculty and research scholars.

e. The Joy of Invention: Recent Case Studies

Speaker: Dr. Pushpito Ghosh (Director of Central Salt and Marine Chemicals Research Institute, Bhavnagar, Gujarat)

Date: 27th February 2008

RSF organized an informative talk on "**The Joy of Invention: Recent Case Studies From CSMCRI, Bhavnagar, Gujarat**" by Dr. Pushpito Ghosh, Director of Central Salt and Marine Chemicals Research Institute, Bhavnagar, Gujarat on 27th February 2008 at the IRCC auditorium. Dr. Ghosh spoke on the importance of bio-fuels and alternative sources of energy generation. Speaking about "novelty", "inventiveness" and "applicability" as the significant prerequisites for any individual aiming for a patent, he emphasized on effort and innovativeness along with technological progress for a new idea to take shape. He substantiated his arguments with case studies of biofuel which has caught so much of attention as an effective alternative source of energy generation in the 21st century. In his talk, Dr. Ghosh emphasized on the use of wastelands by plantation of Jatropha trees, the source of bio-fuel. This talk opened many new avenues for budding scientists and researchers working in the field of energy, power, and environmental sciences.

f. Great Moments in Science

Speaker: Dr Karl Kruszelnicki (Julius Sumner Miller Fellow, University of Sydney University, Australia)

Date: 3rd March, 2008

On the occasion of the National Science Day, RSF and the Science Club of IIT Bombay organized an excellent talk; **"Great Moments in Science"** on 3rd March 2008 by Dr. Karl Kruszelnicki, Julius Sumner Miller Fellow at Sydney University. Dr. Karl is a best selling author, a wander lust, doctor and an academician. The F.C. Kohli auditorium of our institute was packed to the brim for this talk with more than 250 people. As a part of IITB's Golden Jubilee event, the Golden Jubilee Office also contributed in organizing the event, especially in the refreshment part. Dr. Karl invigorated the audience with his animations, brilliant oratorical skills and beautiful video clips. He related his experiences of life in Australia, the stories of 2nd World War victories, quantum computers, power of silica and so on. His talk was full of small real life stories and short anecdotes aimed to make greater scientific concepts easily comprehensible for the audience. He gave a vivid description of the scientific moments of Mars exploration. The talk regenerated an awe and love for scientific concepts, theories and inventions in the audience. Additionally this talk was also the first in the series of Dr. Kruszelnicki's lectures to be delivered in four major cities in India over the next two weeks, under the auspices of the Australia-India council.

g. Music and its Significance

Speaker: Prof. Milind Malshe (Professor, Dept of Humanities and Social Sciences, IIT Bombay)

Date: 17th March, 2008

With the aim to transcend academic boundaries and to be truly inter disciplinary, Research Scholars' Forum organized a talk on "**Music and its Significance**" by Prof. Milind Malshe on 17th March 2008 in IRCC Auditorium. Prof. Malshe from the Department of Humanities & Social Sciences discussed the values and significance of music and its capacity to transcend human and geographical borders, in this stimulating talk. He traced the genesis of music, its various forms, the rhythms, therapeutic properties of music etc. Prof. Malshe discussed the difference between European and Indian music, *taals*, tonality in his presentation. The relevance of music from biological, scientific and aesthetic angles was also discussed by him. While playing some very interesting pieces from Vedic chants and Upanishads, Prof. Malshe demonstrated how music has evolved through centuries. He highlighted on the "socio-cultural" relevance of music and also its role as a purely "aesthetic" activity. The talk ended with a stimulating question answer session of more than 35 minutes. It was well attended by the students, faculties and staffs of the institute.

h. Talk by Dr. Gernot Gad, Director, German Research Foundation

Date: 11th April, 2008

Dr. Gernot Gad, Director, Deutsche Forschungsgemeinschaft (German Research Foundation) visited IIT Bombay on 11th April, 2008. During his visit Research Scholars' Forum (RSF) with the help of office of Dean (Alumni Affairs and International Relations) organized a meeting of Research Scholars, prospective researchers and other students with Dr. Gad.

In his talk Dr. Gad emphasized the opportunity for young researchers to pursue PhD and/or Post Doc. in Germany. Further, in his presentation he pointed out the various opportunities of Indo-German Research cooperation with a focus on funding avenues offered by German Organizations and universities. The talk was quite interactive and was well participated by many students of IIT Bombay.

At the beginning, Mr. Hemant Rath, RSF Coordinator, gave a brief introduction of RSF and its activities. Prof. Anand Swaroop Khanna, President, Humboldt Club, Mumbai and Professor, Dept. Corrosion Science and Engg, IIT Bombay introduced the speaker. The talk ended with a vote of thanks by Mr. Vinay Bavdekar, Event-coordinator from Team RSF.

i. Intellectual Property Rights (IPR) and IP Policy of IIT Bombay - An IPR Awareness Programme

Speaker: Dr. Raj Hirwani (Head URDIP, CSIR Unit for Research and Development of Information Products)

Date: 25th April, 2008

The World IP Day 2008 was celebrated at IIT Bombay through the IPR Chair, functioning at SJMSOM, IITB and the Research Scholars' Forum, IITB on April 25, 2008. The function was graced by Dr. Raj Hirwani, Head URDIP, CSIR Unit for Research and Development of Information Products (www.urdip.res.in). Dr.Hirwani is an alumnus of SJMSOM and specializes in Patinformatics – patent analysis and decision making, Traditional knowledge and Intellectual property rights.

WIPO, *www.wipo.int* is the international UN Agency which takes care of the Intellectual Property policies and helps countries to develop suitable Intellectual Property Rights and directives. The World IP Day celebrations started eight years ago and have had a yearly theme of celebration. For the year 2008, the theme is **"Celebrating Innovation and Promoting Respect for IP"**.

The programme had three segments, one was the lecture on "Intellectual Property Rights in Institutions", followed by "Know the IITB IPR Policy", conducted by Dr. Krishna Lala of IRCC, and finally an open forum comprising Prof. Karuna Jain, Head SOM, Prof Shishir K Jha, SOM, Dr. Krishna Lala and Dr. Raj Hirwani . The panel clarified doubts and issues related to Intellectual Property Rights. This program served as an eye opener for the people who were present at the program. The presentation by Dr. Hirwani had numerous case studies and he discussed the roles played by various players in an institution when creating an intellectual property and how it can be leveraged.

The IPR Chair at SJMSOM strives to spread the awareness of IPR at IIT Bombay and had earlier conducted an exclusive IP clinic for the researchers of IITB.

Apart from the talks/workshops organized by the team, RSF was also actively involved in many other significant events of the institute. Some of the major events were initiated by RSF whereas in some other activities RSF was invited to be a part. Following is a brief summary of other achievements of Team 2007-08:

5. PhD Handbook

The PhD Handbook is a significant milestone in the record of achievements of Team RSF 2007-08. It documents a steady up-gradation in the value of research activities, infrastructures and other facilities available to all research scholars during their tenure at IIT Bombay. It compiles information and important data with the vision of simplifying the academic process for any research scholar. There are many major issues like approaching for administrative help, financial help and related queries which have been particularly addressed in the handbook.

The PhD handbook is not a one individual endeavor. It is the result of the undying effort of the entire Research Scholars' Forum (RSF) and a vision of a year and a half. The PhD Handbook was an initiation of the Team RSF (2006-07). A rough sketch of the handbook was drafted during Nov 2006 and was shown to Prof. V. M.Gadre and other Professors in the PG-APEC meeting. With their encouraging words, Hemant Rath, RSF Coordinator (2007-08) started working on Mission **"PhD Handbook"** with a great zeal. A Google group was created in June 2007 and Team RSF (2007-08) began pouring their inputs into various sections of the handbook. Finally it was converted from Google document to LATEX by Amey Karkare (PG Nominee Acad and Adviser RSF). The draft version was circulated among many people (including Professors) for their feedback and ultimately it saw the light of the day in print. "PhD Handbook, IIT Bombay" was released by Prof. Ashok Misra, Director IIT Bombay on 3rd September, 2007.

The handbook is a dream of the collective. The aim was simple; enabling research to be hassle free and to make relevant information accessible to research scholars without complexities and confusion. The information given in this handbook is subject to changes with policy changes of the institute and other concerned organizations. It is an initiation process, and we hope the tempo is kept alive by the future RSF Teams. Right from designing the cover pages, to blurb and preface writing, to the sections and subsections of the handbook, to "LATEXing" it, etc; everything has been executed by research scholars with an unparalleled enthusiasm. The handbook is a witness to the strength of research scholars when they decide to unite in order to achieve a goal, finding time from their individual research for a collective good.

All Department Representatives have taken the initiative to distribute the copies of PhD Handbook among the research scholars and few copies of the same were distributed among the faculties too. From the academic year 2008-09, it will be distributed to the new entrants at the time of their joining the institute.

6. RSF Awards

For the last couple of years RSF has constituted following four different awards for the research scholars in order to encourage them to produce world class research output and to become leaders in various fronts.

- I. Best Research Paper Award,
- II. Outstanding Research Award (Engineering),
- III. Outstanding Research Award (Non-Engineering),
- *IV.* Best Research Scholar Award.

Though there is a fair competition for the awards, still it requires more competitiveness and awareness among the research scholars of this institute. To make the research awards more competitive and open, RSF sent a proposal to Prof. V. M. Gadre, Convener, PG-APEC on 31st May 2007 with the following few points:

- *I.* Formalization of RSF awards as institute awards.
- *II. Adding a mandatory clause for filing up the nominations along with the thesis submission.*

The proposal was well accepted by the committee members of PG-APEC. Further follow-ups were made again in Jan/Feb 2008 for consideration. On a positive note PG-APEC has forwarded RSF proposal to the PGPC headed by Dean AP Prof. S. Biswas. PGPC in its April 2008 meeting had discussed and forwarded the same to the scholarship committee for consideration. Regular follow-ups are being made in this regard.

Though the RSF awards used to be a part of the RSF Valedictory Function, this time RSF will not distribute the awards on the valedictory function day, the reason being the conversion of RSF awards into Institute Awards. There is a proposal to present the RSF awards on the Teachers' Day or on the Foundation Day.

7 RSF Election

For the first time in the history of RSF, this year RSF general election was held institute-wide on 25th May, 2008. Mr. Shamlan Reshamwala was elected as the RSF Coordinator for the year 2008-09. Since, the other core group posts could not be filled up by election (due to non-availability of contestants), Mr. Shamlan formed the RSF core group from among present RSF members.

Mr. Vinay Bavedekar of Chemical Engineering and Mr. Shivkimar Iyer of Electrical Engineering acted as independent Election Officers for the RSF Election 2008. As per the suggestion of Dean SA, RSF Election will be held jointly along with the other posts during the institute elections which generally take place in the month of March/April every year.

8. Miscellaneous

Each event/talk/ activities which RSF Team 07-08 undertook in the past one year has been perfectly documented and recorded in IITB's official Newsletter **"The Campus Diary"**. The Annual Report compiles these individual reports that have been dedicatedly sent to the PRO for publication after the conclusion of each event.

As noted in the introduction to this report, RSF has extended its horizon beyond organizing talks/seminars. Now it has also been recognized as a platform which

comprises and represents responsible research scholars, who are the intellectual and emotional investments of the institute. We are thankful to our Director Prof. Ashok Misra and Deputy Director Prof. Juzer Vasi and the Deans to have given RSF the respect, love and freedom which perhaps are given to people on whom one invests one's trust. Some of the major activities are listed below:

- Along with its usual activities RSF is also deeply involved in other institute activities. All RSF members actively participated in the organization of the "International Vice Chancellors' Conclave" held in Jan 2008. Starting from organizing the event to receiving guests at the airport, RSF worked in coordination and helped the institute in making the event one of the most successful events of the Golden Jubilee celebrations.
- On a different note, RSF too has contributed to McKinsey's Golden Jubilee Vision Book writing for IIT Bombay (2007). RSF Coordinator (Mr. Hemant Rath), PG-Nominee Acad (Mr. Amey Karkare) had several rounds of discussions with the representatives of McKinsey in this regard. RSF is also involved in the strategic vision of IIT Bombay (vision 2058). Hemant is a member of strategic Vision Committee of IIT Bombay.
- RSF is also actively participating in the mega Golden Jubilee event for PhD Scholars of IIT Bombay "Research Scholars' Confluence" which will be held during 18-19 October, 2008. Starting from the date base collection to sending invitation mails and website design, RSF has been steadily contributing in this event.
- Members of RSF are also involved in clearing the official huddles at different levels through **Right to Information (RTI)**. More than **15 RTIs** are filed with UGC, MHRD, AICTE etc. to know the status of Fellowship enhancement for MTech and PhD Students of IIT Bombay. RTIs brought success and as a result, new PhD fellowship scheme for UGC as well as institute TA/RAs were implemented and arrears were also disbursed among the students. RSF members also participated in the arrear calculation process, by providing updated list of

research scholars department wise and also helped the accounts department staffs in the final calculations of individual arrears.

- RSF is also following other fellowships like private fellowship, AICTE sponsored NDF fellowship etc with its regular efforts. It has also acted upon the CSIR fellowship enhancement resulting in successful implementation of it at IIT Bombay.
- RSF core team along with PG-Nominee Acad have met Dean AP, Deputy Director, Deputy Registrar (Academic) several times in the year 2007-08 on various issues, viz., married scholars' accommodation problem, travel funding problems, medical allowance problem, research facility problem, research scholars' facility problem (in every department) etc.
- Contingency Grant: Dean AP is quite positive on the Annual Contingency Grant for the institute TAs and RAs (MHRD Fellowship). This is the outcome of the meeting of RSF core team and PG-Nominee Acad with Dean AP.
- Attempt at negotiating with the authorities to provide stipend to all PhD Scholars regularly residing in the campus, and discussion with institute authorities to provide financial assistance to Self Financed (SF) RSs.
- As per IIT Bombay's guidelines Latex Class files are made available to all RS for PhD Thesis writing by Mr. Amey Karkare. Similar class files are also made available for Annual Progress Report writing. The class files are available at http://www.cse.iitb.ac.in/karkare/resources.html.

9. Achievements of RSF Members

- Hemant Rath was awarded "Institute Citation" for his organizational activities. He presented two research papers in international conferences (IEEE Comsware at Bangalore and IEEE ICC at Beijing) and one paper in the 14th National Conference on Communications (NCC). For the year 2007-08 he was awarded Phillips India Fellowship. Along with the post of RSF Coordinator, he has served as the Wardens' Nominee at Hostel-12. He was the Overall Coordinator of 14th NCC 2008.
- Punit Rathod was awarded Infosys Fellowship for the year 2007-10. He was the Overall Coordinator of 14th NCC 2008. He gave talks on GSM, GPRS and TCP/IP in AICTE and DST sponsored Short Term Training Programmes on "Recent Trends in Communication and Networking".
- Arnapurna Rath presented two research papers in international conferences "Affect and Attachment towards Land in South Asia", Goa and "17th Annual British Commonwealth and Postcolonial Studies Conference", Savannah, Georgia, USA. She was awarded Shastri Indo Canadian Endorsement Grant to present her 3rd paper in "13th International Bakhtin Conference" in Canada during July 2008.
- Shamlan Reshamwala served as the Department General Secretary, School of Biosciences and Bioengineering, IIT Bombay (2007-08). His research paper on Biofilm was accepted at the "108th General Meeting of the American Society for Microbiology", Boston, Massachusetts, USA.
- Anil Kumar was awarded "Roll of Honor" for his outstanding performance in organizational activities of Hostel-1 (2007-08). He was the Overall Coordinator (OC) of "VIth In-house Symposium, Dept. of Chemistry". He has presented his research papers at the "Joint Meeting of the Biophysical Society-52nd Annual Meeting and 16th International Biophysics Congress" (IUPAB), USA.
- Hashmukh Gajjar's research paper on "A piecewise linearization for retail shelf space allocation problem and a local search heuristic" is accepted in the

Annals of Operations Research, Special Issue on Cutting, Packing and Space Allocation.

- Amey Karkare's research paper was published in *ACM Transactions on Programming Language – TOPLAS.* He is a member of Taekwondo Federation of India and is currently a **Green Belt** holder.
- Sushant Sharma presented two papers in the "11th World Conference on Transport Research," Berkeley, California, USA, from June 24-28, 2007. He is the member of a sub-committee for "IIT Bombay Golden Jubilee Distinguished Lecture Series".
- Ashutosh Gore presented a research paper at IEEE GLOBECOM conference in Washington, DC, USA in Nov. 2007. His other research papers were accepted in IEEE Milcom and the 14th NCC 2008.
- Raman Singh has presented research papers in the "National Symposium on Quantum Chemistry, Soft Computation and Optimization", Jadavpur, Kolkata, April 2008 and in the "International Conference of Computational Methods in Sciences and Engineering 2007". He has been selected for SAARC / IAESTE-Japan Academic Internship Programme.

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