



Government of Maharashtra  
**Ismail Yusuf College**  
of Arts , Science and Commerce

Jogeshwari (East) - 400 060, Mumbai, India  
Re-accredited 'A' Grade by NAAC (CGPA-3.14)  
affiliated to University of Mumbai

Recent  
Innovations  
in  
Science and  
Technology

RIST ~ 2023



*Sustain the future...  
for thee and thine...*

- ◆ E-Conference Date: **10<sup>th</sup> and 11<sup>th</sup> January, 2023**
- ◆ Last Date for Registration: **20<sup>th</sup> December, 2022**  
Extended Date for Registration: **6<sup>th</sup> January, 2023**
- ◆ Organized by : **Science Department**
- ◆ Registration Link: **<https://forms.gle/p4R7XNQxA4qkpqxH8>**



## About the e-Conference:

The Ismail Yusuf College is glad to provide a platform through Recent Innovations in Science & Technology~2023 (RIST~2023) for promotion and exchange of ideas towards new innovations in scientific knowledge for a sustainable future. The international conference will provide a platform and help the scientific community in understanding the contemporary development in fields of Analytical, Material, Pharma, Data and Environmental Sciences.

The theme of the conference includes sessions and deliberations which would highlight new methodologies and innovations in research in the field of Science and Technology. The conference aims to bridge the gap between theoretical knowledge and practical use of materials, data and technologies in designing scientific experiments. Both learning and presentation platform will be provided to the participants in which eminent researchers, academicians and professionals from the industry will share various aspects of recent innovations in Science and Technology.

**“You only live once, but thy generations need to thrive on the planet Earth after thee!”**

## Themes:

- Analytical Chemistry Application
- Bioinformatics and Biomathematics
- Data Science
- Environmental Science
- Energy Storage Materials
- Green Technology
- Heterocyclic Chemistry
- Lifesciences
- Material Science
- Nanotechnology
- Pharmacology and Photochemistry

*\*Kindly note the conference RIST- 2023 is in **online mode**.*



## About the College:

Ismail Yusuf College, popularly known as I.Y. College, is a prestigious multi-faculty College owned and managed by the Government of Maharashtra. It is the oldest College in North Mumbai and the fourth oldest college in the city of Mumbai. It was established in 1930 with a big treasure-trove of donation from Sir Mohammed Yusuf Ismail, K.T. situated on the Jogeshwari hillock. The foundation stone of the College was laid by Sir Leslie Orme Wilson, the then Governor of Bombay in 1924. The College campus is spread over 54 acres and enjoys the immense beauty of nature with innumerable banyan, palm and other trees, rippling brooks and glittering ponds in the monsoons.

The vision of the founding fathers shaped up a temple of learning in sandstone in the regal Persian style with arches and spacious corridors, surrounded by big banyans and palms stretching heavenwards and dotting the horizon. Beginning with a moderate number of a few hundred students, today, the College has around six thousand students and the institution has been imparting education in different courses and programmes at Junior, Undergraduate, Postgraduate level and PhD level in Arts, Science and Commerce. Most of our students are first generation learners with poor economic and weak social backgrounds.

The College is abuzz with research activities with majority of its teachers equipped with Ph.D. degrees, and many of whom are recognised research guides at the University of Mumbai. The College has Science laboratories which are well equipped with highly sophisticated instruments such as Atomic Absorption Spectrophotometer (AAS), HPTLC, HPLC, UPLC, GC-MS, LC-MS, CHNS-O Analyzer, DSC, TG-DTA, FTIR, NMR, FTIR-XRD, TOC Analyzer, Auto -Analyzer and Parallel Microwave Synthesizer. The College takes special care of social and economically underprivileged students, students with special needs and slow learners through remedial coaching, bridge courses and mentoring system. The College organizes national and international conferences, seminars, workshops and lecture series on regular basis.





## Registration Details for Research Scholars and Participants:

### Participation, Registration and Submission of papers in the e-conference is FREE!

Inviting all Students, Research Scholars, Faculties, Academicians and Industry Professionals to participate with Oral/Poster presentation in the International e-Conference “Recent Innovations in Science & Technology ~ 2023” (RIST~2023). Kindly register at the link given below:

**Registration Link:** <https://forms.gle/p4R7XNQxA4qkpqxH8>

**Last Date for abstract(poster/paper) submission and registration:** 6<sup>th</sup> January, 2023 till 5:00 pm.

### Call for Papers:

To promote and encourage young students and research scholars there is no registration fee.

**Submit abstract at:** [erist2023@gmail.com](mailto:erist2023@gmail.com)

#### **Format for abstract submission:**

- Link to the template for the abstract submission: <https://tinyurl.com/2p93ny9p>

#### **Format for e-Poster submission:**

- Link to the sample for an e-poster: <https://tinyurl.com/58x2yea5>
- Send poster with recorded audio/video of maximum 10 minutes till: 6<sup>th</sup> January, 2023 by email at [erist2023@gmail.com](mailto:erist2023@gmail.com)

#### **For oral presentation:**

- Number of slides should be limited to 10 slides.
- Send recorded audio/video of the same of maximum 10 minutes until 6<sup>th</sup> January, 2023 by email at [erist2023@gmail.com](mailto:erist2023@gmail.com)

***\*Selected papers will be published in UGC Care listed journals.***

***Participants should bear the publishing charges per paper of the publisher.***

## Programme Schedule:

Date	Time	Topic and Speaker's Profile
10 <sup>th</sup> January, 2023 (Day 1)	10:00 am - 10:30 am	 <p>~ Inauguration ~ Message from Dignitaries ~ <b>Dr. Swati Wavhal</b>, Principal ~ Chief Guest: <b>Dr. (Mrs.) Sangeeta V Ghumatkar</b> Director, I/C, Directorate of Forensic science laboratories, Mumbai. ~ Release of Souvenir</p>
	10:30 am - 11:30 am	 <p>Keynote Address by <b>Dr. Arvind Deshmukh</b> Professor and Head, Department of Microbiology, Osmanabad Sub-Center, Dr. Babasaheb Ambedkar Marathwada, University, Aurangabad.</p>
	11:30 am - 12:30 pm	 <p><b>Dr. Dharmesh Reykundaliya</b> Dept. of Statistics Sardar Patel University, Vallabh Vidyanagar, Dist. Anand, Gujarat. Topic: <b>“Biostatistics”</b></p>
	12:30 pm - 1:30 pm	 <p><b>Anukul T. Shenoy, Ph.D.</b> Intersections Science (ISFS) Associate 2021, NIH/NHLBI K99/R00 Pathway to Independence Fellow, Instructor of Medicine, Pulmonary Center- Mizgerd Lab, Boston University School of Medicine. Topic: <b>“A tale of two cells: Lung Epithelial- CD4+ T cell dialog in health and disease”</b></p>
	1:30 pm - 2:30 pm	Lunch Break
	2:30 pm – 3:30 pm	 <p><b>Hanumant K. Kadam</b> Retd. Assistant General Manager, Rashtriya Chemicals &amp; Fertilizers Ltd. (RCF Ltd.) Topic: <b>“Emerging skills by adopting Industry 4.0 technologies in industrial plants”</b></p>
	3:30 pm- 4:30 pm	 <p><b>Dr. Eike Reich</b> CAMAG, Basel, Switzerland. Topic: <b>“HPTLC and it's Regulatory Aspects”</b></p>
	4:30 pm onwards	Oral / Poster Presentation-1”

## Programme Schedule:

Date	Time	Topic and Speaker's Profile	
11 <sup>th</sup> January, 2023 (Day 2)	9:30 am - 10:30 am		<b>Dr. Naval Singh</b> Research Associate, The University of Manchester, UK.  Topic: <b>“Soft matter transport in confined environments”</b>
	10:30 am - 11:30 am		<b>Prof. Selby Jose</b> Head, Department of Mathematics, HBSU, Mumbai.  Topic: <b>“Tools in Mathematics for Data Science ”</b>
	11:30 am - 12:30 pm		<b>Dr. John Welsh</b> Xylem, USA.  Topic: <b>“TOC Analyzer and it's applications”</b>
	2:00 pm – 3:00 pm		<b>Dr. Roberto Marcos Perchin</b> KPM Analytics, Italy.  Topic: <b>“Discrete Analyser in Inorganic Chemistry”</b>
	3:00 pm – 4:00 pm		<b>Paul Iacomi</b> Senior Product Scientist, Surface Measurement Systems Ltd, UK.  Topic: <b>“Advanced Characterization of surfaces and pores through adsorption.”</b>
	4:00 pm onwards	<b>Valedictory Function</b>	



## Chief Patrons



**Hon. Shri. Chandrakant Patil**  
Minister,  
Higher & Technical Education,  
Maharashtra State



**Hon. Shri. Vikas Chandra Rastogi**  
(IAS), Principal Secretary,  
Higher & Technical Education,  
Maharashtra State

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**Hon. Prof. Shailendra Deolankar**  
Director,  
Higher Education,  
Maharashtra State, Pune

## Convener



**Dr. Swati Wavhal**  
Principal

### **Co-Convener**

Prof. Bhavita Chavan, Head, Department of Zoology  
Mobile No. +91 9987141391

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Dr. Dattatraya Bhangare, Head, Department of Chemistry & Biotechnology  
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Dr. Vaishali Bambole, Head, Department of Physics, University of Mumbai.  
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Prof. Selby Jose, Head, Department of Mathematics, HBSU, Mumbai.  
Dr. Amol Sonawane, Head, Department of Mathematics, Govt. College of Arts and Science, Aurangabad.  
Dr. Archana Rath, Head, Department of Biotechnology, University of Mumbai.

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Established 1930

Jogeshwari (East), Mumbai 400 060

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**REPORT OF THE E-CONFERENCE**

**“RECENT INNOVATIONS IN SCIENCE & TECHNOLOGY- eRIST-2023”**

The Science faculty of the Govt. Of Maharashtra Ismail Yusuf College of Arts, Science and Commerce, Jogeshwari (East), Mumbai organized a Two Day e-conference titled **“Recent Innovations in Science and Technology (e-RIST-2023)”** on 10<sup>th</sup> and 11<sup>th</sup> January 2023. The conference was an effort to explore new specialized and interdisciplinary avenues of scientific inquiry, technological Innovations, techniques and amazing discoveries in Science by providing a platform for effective dissemination of knowledge, sharing of ideas, fruitful discussions and deliberations for the benefit of academicians, research scholars and industry.

The planning of the conference began well in advance around the month of July 2022 and a comprehensive and carefully designed brochure was in place to be circulated at least two months before the stipulated time so as to achieve as wide a circulation as possible among the academic fraternity and the allied fields. Smooth conduction of the e-conference was ensured by the paid subscription of Webinar and ZOOM one pro version. The registration form was provided with the link to join the Telegram group created for the conference. The entire event was live streamed on YouTube channel. The response was good and the registrations which were kept free as an incentive and a goodwill gesture were to the tune of 609 in number. The call for oral and poster presentations was also well received by a huge cross section of participants that included researchers, industry experts, teaching faculty of various colleges and students as well. The total numbers of abstracts received were 101.

The speakers invited for the various sessions of 45 minutes each were highly distinguished experts from varied fields such as (i) Dr. Dharmesh Raykundaliya from Dept. of Statistics, Sardar Patel University, Anand, Gujarat, (ii) Dr. Paul Iacomi, Senior Product Scientist, Surface measurement systems, UK, (iii) Dr. Naval Singh, Research associate, University of Manchester, UK, (iv) Dr. Eike Reich, Chief Scientific Officer, CAMAG, Basal, Switzerland, (v) Dr. Roberto Marcos Perchin, KPM Analytics, Italy (vi) Prof. Selby Jose, Head Dept. of Mathematics, HBSU, Mumbai, (vii) Dr. Anukul T. Shenoy, Instructor of Medicine, Pulmonary Centre, University School of Medicine, Boston, (viii) Dr. Hanumant K. Kadam, Retd. Assistant General Manager, RCF Ltd. Navi Mumbai, (ix) Dr. Dr. John Welsh, Xylem, USA.

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The e-conference was inaugurated at the hands of the Principal of the College, Dr. Swati Wavhal by invoking the blessings of Goddess Saraswati and by lighting the traditional lamp. The Principal welcomed all and delivered the inaugural address which provided an insight and the need for organizing such conferences in view of the emerging trends and innovations in the field of Science and how the college has been at the forefront of such efforts in recent times.

The Chief Guest for the inaugural ceremony was Dr.(Mrs.) Sangeeta V. Ghumatkar, I/C Director, Directorate of Forensic Science Laboratory, Mumbai, an eminent personality in the field of Forensic Sciences. Her address was inspiring for a lot of young students and researchers to pursue careers and undertake research projects in the promising field of Forensic Science.


The Keynote address was delivered by Dr. Arvind Madhavrao Deshmukh, President of the Microbiologists Society of India. In his address, Dr. Deshmukh touched upon multiple avenues of inquiry in the field of Biotechnology and how the many wonderful innovations in this field are having profound impact on the ever evolving global scene. His address was interesting as well as informative and set the right tone for fruitful discussion at the Conference.

All the sessions of the invited speakers were highly informative, interesting and covered varied aspects related to instrumentation, techniques, applications and statistical analysis pertaining to all sciences. The lectures were immensely well received by the participants. All the participants benefited and the Q & A sessions were equally interesting wherein some doubts were answered by the Guest Speakers.

The Oral and poster presentations were conducted in the third session of the first day 10<sup>th</sup> January 2023 of the conference. It included 67 presentations and the day ended with great enthusiasm and competitive spirit shown by the presenters about their research paper.

The valedictory function of the conference was presided by Shri. Surender Singh Raghav Director, FSSAI, Navi Mumbai who congratulated the Principal and the organising team for the success of the conference.

Due to the constant encouragement and guidance by the Principal and Convener, Dr. Swati Wavhal, along with the Co Convener, Dr. Bhavita Chavan, the Organizing, Editorial and Technical Committee members, the e-conference "Recent Innovations in Science and Technology" (e-RIST-2023) was a grand success.

  
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## Summary:

No of registrations:	609
No of feedback forms:	90

### No of participants in online mode: YouTube views:

Day I Session I (Inauguration):	1806 views
Day I Session II:	676 views
Day II Session I:	839 views
Day II Session II:	735 views

### No of presenters in online mode:

Oral:	48
Poster:	19
Abstracts for proceedings	34

### Online platform:

- 1) ZOOM Webinar version
- 2) ZOOM one pro version
- 3) YouTube livestream

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