

INDIAN PHYSICS ASSOCIATION
Draft Minutes of Annual General Body Meeting
held Online on Sunday, November 29, 2020

The Annual General Body Meeting of the Indian Physics Association was scheduled in online mode at 1700 hrs. on 29th Nov. 2020. The meeting was adjourned for 15 minutes due to lack of quorum and was reconvened at 1715 hrs. Meeting was live streamed on You Tube, with access restricted only to members. Most of the members joined through zoom link, while a few joined via unlisted YouTube link. The meeting was chaired by Prof. A. K. Mohanty, President, IPA.

Following agenda items were discussed in the meeting

- *Address by President, IPA.*
- *Confirmation of minutes of the previous AGBM, held on November 4, 2019 at Lecture Theatre of Tata Institute of Fundamental Research (TIFR), Mumbai 400 005.*
- *Presentation of IPA activities by General Secretary, IPA.*
- *Presentation of Accounts by Treasurer, IPA*
- *Any other matter with the permission of the Chair.*

I. Prof. Mohanty gave the welcome address. He briefed that IPA was founded in 1970 and has been an active platform for 50 years to interact with physics community in India from different channels. He said that 2020 has been challenging due to COVID-19, but pandemic also opened up opportunities of networking through online interactions and IPA has fully engaged with this.

To commemorate fifty years of IPA - for serving and strengthening the physics activities in the country, IPA has started a webinar series "New Horizons in Physics-IPA50" since Sept. 2020. The lectures have been well received and widely viewed on YouTube. He also briefed that IPA is engaged with sister organisation like IOP, U.K. and APS for new deliberation initiatives and exchange of programmes.

The Physics News was published online in 2020 and a special issue of Physics News on Prof. Bibha Chowdhury, a first woman eminent experimental scientist in India, will be brought out in 2021.

He emphasized that IPA activities have achieved a wider national spread as well as engagement with social media, and also include unique efforts to address the Gender issue in Physics community.

He informed that IPA Election 2020-22 was held and Prof. S. Ramakrishnan, Director, TIFR has been elected as President for this term. He congratulated him and said IPA activities will definitely flourish under his guidance.

He thanked DAE-BRNS for the financial support given to IPA various activities.

II. Prof. Nanal (General Secretary, IPA) informed that the draft minutes of the previous Annual General Body Meeting, held on 4th November 2019 were made available on the IPA webpage after the meeting. Further the minutes were shared during the online meeting and comments were invited from members present.

The AGBM (November 4, 2019) minutes were accepted by the General Body - Proposed by Prof. Pawan K. Kulriya and seconded by Prof. B. V. R. Tata.

III. Prof. Nanal (General Secretary, IPA) presented the annual report of the activities of IPA.

1. New Members enrolled: Life members 90, Annual members 7, student members 6

Total membership: 4271 life members

IPA Chapters-Roorkee, have enrolled Annual and Student members. IPA heartily welcomes all its new members.

2. Physics News: During the period November 2019 to November 2020, a total of 4 issues of Physics News were published with the support of BRNS grant.

Vol. 50 No. 3 July - Sep. 2020 (Celebrating 60 years of laser) (online)

Vol. 50 No. 2 April - June 2020 (online)

Vol. 50 No. 1 Jan. - March 2020 (online) (special articles on B.V. Sreekantan)

Vol. 49 No. 4 Oct.-Dec. 2019 (Vikram Sarabhai Birth Centenary) (published in print version)

The online versions are easily accessible (article wise) on the IPA webpage. Taking cognizance of various logistics, it is decided to bring out special issue of Physics News in print version and other two issues will be published online.

Several new features have been introduced in the Physics News – e.g. Meet the physicists, Department profile (from Oct-Dec.2020 issue) etc.

Editorial Board members: Prof. S. Kailas, Prof. Dipan Ghosh, Prof. Arnab Bhattacharya, Dr. Aradhana Shrivastava and Prof. Vandana Nanal.

IPA thanks the EB members for managing Physics news publication.

3. IPA Lectures:

(i) DAE – C. V. Raman Lecture Series: 2019-20: IPA continues to receive the financial support from BRNS, DAE for conducting five DAE – C.V. Raman Lectures across the country every year. Lectures were successfully conducted with the active support from various IPA local chapters.

a) Prof. G. Baskaran - “Room temperature superconductors: ephemeral, elusive to stable ones” organized on December 3, 2019 in Central University of Tamil Nadu.

b) Prof. Palash B. Pal – “Measurements of lengths and other simple things” organized on January 20, 2020 in Visva Bharati.

c) Prof. Amita Das – “Turbulence in Plasma and some experimental challenges in Physics and Engineering” organised on February 12, 2020 in IIT, Patna.

IPA would like to put on record thanks to BRNS (DAE) for supporting the DAE – C.V. Raman lectures, and to all the lecturers, the organizers (local chapters) as well as the host institutions for the successful organisation of these lectures.

(ii) IPA – IOP Biennial Exchange of Lecturers: Under the IPA-IOP exchange of programme, Prof. Andy Turner, University of Reading, U.K., had agreed to visit India and deliver Cockcroft-Walton lectures during March 28–April 9, 2020. Due to Covid-19 the lectures were conducted online.

- 26/10/2020 - “Observing the Indian monsoon – can we solve the problem of monsoon prediction?” at TIFR

- 28/10/2020 - “The Indian monsoon and climate change” University of Hyderabad

- 30/10/2020 – “Understanding mid-latitude influences on the Indian region” IIT Ropar

The IPA lectures for 2021 could not yet happen because of pandemic and it is proposed to hold these lectures during January – March, 2021 after the educational institutions open up (in online mode)

4. IPA Awards: Nominations for IPA awards 2020 were invited through advertisement on IPA webpage. From the year 2020, it is decided to keep nominations valid for two terms (e.g. 2020 and 2022 in the present case), subject to other eligibility criteria. Last date of nominations was 31st Aug. 2020. Evaluations have been completed and awards will be announced today.

5. IPA thesis and Olympiad Awards 2019/2020

- *IPA- Prof. C. V. K. Baba Best Thesis Award in Nuclear Physics:*

Dr. Ananya Kundu

Thesis title: “Study of electric multipole transition probabilities and their importance in reaction dynamics”

(Given during DAE-BRNS Nucl. Phys. Symposium -Dec. 2019)

- *Anil K. and Bharati Bhatnagar Best Ph.D. Thesis Award in Solid State Physics:*

Dr. Nishant N. Patel (B.A.R.C. Mumbai)

Thesis Title: “High Pressure High Temperature studies some Novel materials using Laser heated Diamond Anvil Cell Facility”

(Given during DAE-BRNS SSP Symposium- Dec. 2019)

- *C. L. Bhat Memorial Award 2020(Astronomy Olympiad Orientation – cum - Selection Camp):*

Due to Covid-19 the two awards (Senior & Junior group) were not given this year.

- *Indian National Physics Olympiad (2020)*

Due to Covid-19 the two awards “*Best Solution to a Challenging Problem*” and “*Best Performance in Experimental Programme*” were not given this year.

IPA thanks the Selection Committee Members of various IPA Awards.

6. Interaction with Overseas Physics Associations / Societies

- IPA participated in round table meeting of global physics societies organised by IOP (UK) to discuss the impact of pandemic and possible ways/initiatives to deal with associated challenges.
- AAPPS (Association of Asia Pacific Physical Societies): IPA continues to be a member of the Association of Asia Pacific Physical Societies and stays engaged with its activities.
- IPA also has MOU with APS and discussions have been initiated for exchange programs.
- The Italian Physics Society also has given an expression of interest for MOU. The matter is under discussion.

7. Activities of Gender in Physics Working Group (GIPWG):

The GIPWG was established in May, 2017 initially for a period of 3 years. The group has played an active role and has added an important dimension to IPA activities. For future, it is decided to have a 2-year term synchronous with IPA EC term. The guidelines for GIPWG, detailing objectives, constitution of the group and other logistics of functioning, constitution, objective and functions etc. are formed in consultation with EC and will be made available on the webpage. Recommendations of the conference PFP2019 held in Sept. 2019 in University of Hyderabad have culminated in the Hyderabad charter for gender equity in physics and has received a wide support. It should be pointed out that efforts of GIPWG, even during its nascent stage are commendable and it is suggested that conference like PFP2019 should become a regular part of IPA activity. New group will be constituted in Jan. 2021 as per approved guidelines

8. IPA50:

The plans to organise a two-day seminar to commemorate fifty years of IPA needed modification due to Covid-19. Hence, a webinar series “New Horizons in Physics-IPA50” is being conducted. The lectures are held online every Saturday at 5 pm. Details are available on the IPA webpage (www.tifr.res.in/~ipa1970). The webinar series aims to acquaint young students and researchers in the country, with major developments in Physics in recent years. Till today 13 lectures have been completed and another 12 lectures are planned. Lectures have received very good viewership on YouTube (average ~300+ views)

The webinar series is supported by BRNS-DAE and funds of Rs.1.5 Lakh have been sanctioned.

We thank Dr. Sanjoy Pal for IPA webpage management and Dr. B. Satyanarayana for valuable technical assistance in IPA50 webinar organization.

9. Conference partnership:

The IPA has accepted a proposal from Dr. Kamala Bharathi (Assistant professor, SRMIST, Chennai) to be a partner in the forthcoming International conference on Nanoscience and Nanotechnology (ICONN) 2021. This is a biennial international conference, 6th in series. The IPA members can avail partial waiver of registration fee for this conference.

10. IPA Elections (2020-2022):

The notice of biennial elections of IPA Office Bearers for the term 2020 - 2022 was initially issued in March 2020, however due to *Force majeure* situation resulting from Covid19 pandemic situations, elections were held in September – October 2020. The election notice was uploaded on the IPA

webpage. Additionally, the notice was sent to the members by email, wherever email addresses are available. Prof. M. N. Vahia, Narsee Monjee Institute of Management Studies, Mumbai and Prof. Sadhana Dash, IIT Bombay, Mumbai were appointed as returning officers.

Following members are declared elected to the IPA executive committee 2020-2022.

Prof. S. Ramakrishnan (President)
Prof. Tanusri Saha-Dasgupta (Vice-President)
Prof. Vandana Nanal (General Secretary)
Prof. Samit Mandal (Jt. Secretary)
Dr. Aradhana Shrivastava (Treasurer)
Prof. Srubabati Goswami (Member)
Prof. Bivash Behra (Member)

The new committee will take charge on 1st Jan. 2021 and will look after the affairs of IPA till 31st Dec. 2022. Elections for the subsequent EC should be completed by 31st Oct. 2022.

11. Activities of IPA Chapters: Presently, IPA has 44 chapters and a few amongst them are very active. A brief report on some major activities of Roorkee Chapter, Varanasi Chapter, Hyderabad chapter and Indore chapter, were presented and summary is attached in the Annexure I to IV.

12. Donations and Financial Support for IPA: This year IPA received Rs. 40,000/- towards the enhancement of C. V. K. Baba best thesis award Endowment and Rs. 1,00,000/- towards enhancement of Rahul Basu Memorial Award Endowment.

13. Updating of IPA documents to ensure gender neutrality: The IPA member list on the webpage has been updated and references to gender of members, which is not at all necessary, have been removed. IPA rules & regulations also need to be updated to replace “He” with “S/He”.

After due deliberation the report on IPA activities was accepted by the General Body. Proposed by: Prof. Tanusri Das-Sengupta and seconded by Prof. B. V. R. Tata.

IV. Prof. D. Udupa, Treasurer, IPA, presented the accounts of IPA for the financial year 2018-19. He informed that due to falling rate of interests, some of the award endowment expense accounts, namely, R.D. Birla, N.S. Satyamurthy and Aswini Kumar Rath, are showing negative balance. He said that as these are prestigious awards and it is not prudent to reduce the award amounts/medals from the present status and also efforts are being made to generate additional corpus.

He informed that following changes were made unanimously after discussions with EC members for the period 2018-2019 and also will be incorporated for the period 2019-2020.

- i. As a one-time corrective measure, the IPA will waive 20% establishment expenses for R.D. Birla, N.S. Satyamurthy and Aswini Kumar Rath Awards for 2018-19 and 2019-20.
- ii. For various thesis and Olympiad awards, evaluation and other logistics are handled by respective organizers and does not involve IPA administration. Hence to keep these awards attractive, in spite of the falling interest rates, from 2018-19 onwards it is decided to waive 20% establishment expenses for thesis and Olympiad awards.
- iii. For all the award endowments, from the accrued interest, 5% contribution to the IPA endowment and income tax at applicable rate will continue as before.
- iv. It was agreed to use surplus DAE SSPS 2019 and 2020 funds to meet shortfall in award expenses of 2018-19 and 2019-20.
- v. Wherever the additional balance is available in the endowment expense account, it is decided to augment the respective endowment by transferring the same or part of it – *as detailed below w.e.f. 1st April 2020.*

	Amount (Rs.)
P.A. Pandya Endowment	1,00,000/-
C.L. Bhat Award	80,000/-
Rahul Basu Memorial Award	1,50,000/-

Endowment status for after this adjustment and including expected/received additional donations is as given below:

	Amount (Rs.)
P.A. Pandya Endowment	6,00,000/-
C.L. Bhat Award	2,50,000/-
C.V.K. Baba Award	2,00,000/-
A.K. and Bharati Bhatnagar Award	30,000/-
Rahul Basu Memorial Award	9,50,000/-

Prof. Nanal further emphasized that it is highly essential to enhance the endowment corpus of various awards to ensure availability of sufficient funds for the award money and related logistics (e.g. travel support to awardees). She informed that several attempts have been made to contact Birla group and Satyamurthy family to enhance the Endowment of the respective corpus in the past 2-3 years, but they have been unsuccessful. She said that as IPA-IOP endowment was set up by DAE and Tata Trust, hence additional support has been sought from Tata Trust. She also mentioned that as agreed in the last AGBM, that annual account statement of the endowments will be sent to the respective donors. It was noted that for 2019-20, this has been delayed due to pandemic situation.

After due deliberations the accounts were approved by the General Body.

Proposed by: Prof. S. Panda and seconded by Prof. Rohini Godbole

V. IPA awards 2020:

Following awards were announced at the end of the AGBM on same day.

R. D. Birla Memorial Award in Physics:	Prof. Bimla Buti (Retd., PRL, Ahmedabad)
Murli M Chugani Memorial Award for Excellence in Applied Physics:	Prof. R. R. Navalgund (SAC, Ahmedabad)
P. K. Iyengar Memorial Award for Excellence in Experimental Physics:	Prof. S. A. Mujumdar (TIFR, Mumbai)
Buti Foundation Award for Excellence in Theoretical Physics, Astrophysics and Biophysics:	Dr. Jhilar Sadhukan (VECC, Kolkata)
S. N. Seshadri Memorial Instrumentation Award in Physical Sciences:	Dr. Pankaj Kumar (IUAC, New Delhi)
N. S. Satya Murthy Memorial Award in Physics for Young Scientists:	Dr. R. S. Dhaka (IIT, Delhi) and Dr. Sanjib Agarwalla (IOP, Bhubaneswar)
Aswini Kumar Rath Memorial Award in Nuclear Physics:	Dr. D. Siwal (Guru Gobind Singh Medical College, Punjab)

VI. Concluding Remarks:

Prof. A.K. Mohanty congratulated all the new committee members for all success for the future and invited Prof. Ramakrishnan to share his thoughts. Prof. Yusuf also joined Prof. A.K. Mohanty in congratulated newly elected members.

Prof. Ramakrishnan said that he is indeed honoured to be given this opportunity to serve as IPA President. He recalled that IPA started in 1970 at TIFR with the tireless efforts of Late Prof. B. M. Udgaonkar, and he is proud to be part of this legacy. He appreciated tremendous work done by Dr. Mohanty, DR. Yusuf and all the members of outgoing Executive Committee. It was particularly

noteworthy that even during the pandemic the reach of the IPA has been widened through new initiatives as well as webinars. He assured that the newly elected committee will carry these initiatives forward and build on the same. He proposed that this online platform can be used to for monthly IPA colloquium as well as colloquium for young scientists. He emphasized the importance of gender balance and the IPA EC will make a conscious effort to resolve this problem. He suggested to have a panel discussion on “path ahead for IPA”. He assured that TIFR is committed to IPA since its inception and will still continue to commit to IPA in the years to come.

He invited comments and suggestions on IPA programmes, which can be sent by email and pointed out that everybody’s support is crucial for IPA activities. He congratulated all the awardees and advised young awardees to use this as a stepping stone to bring out excellent research in future.

During discussion, it was suggested by some members to start “IPA jubilee fund” with donations from members and well-wishers, which can be used for various IPA activities. This was unanimously accepted.

Prof. Nanal informed that a few IPA members participated through YouTube and some of them have really appreciated the fact that they have been able to participate for the first time in the GBM. It was noted that the online mode for GBM needs to be continued.

Dr. Mohanty thanked the EC members for their enthusiastic support and active role to carry out IPA activities successfully in the past 2 years. He particularly appreciated the efforts of Prof. V. Nanal, General Secretary. Many members endorsed the appreciation for efforts and initiatives of the present General Secretary.

He also thanked the IPA office staff for their hard work.

The meeting ended with a vote of thanks to the Chair and the Executive Committee.

Vandana Nanal
General Secretary, IPA (2018-20)

Annexure - I

Report on activities by IPA Roorkee chapter (2019-2020)

New Memberships: Life members: 7, Annual members: 7, Student members: 6

IPA Lecture Series:

Sr. No.	Name of the speaker	Title of the talk	Date
1.	Prof. Shiladitya Sengupta	Structural relaxation in highly viscous fluids and amorphous solids: challenges and opportunities	03 rd April, 2019
2.	Mr. Anuj Kumar, Research Scholar, Department of Physics, IITR	Resistive Switching Memories – Mechanisms, Prospects, Current Status and Challenges	10 th April, 2019
3.	Prof. Bhal Chandra Joshi, National Centre for Radio Astrophysics, TIFR, Pune	Pulsar glitches and efforts to detect Gravitational waves using pulsar timing with the upgraded GMRT	15 th October, 2019
4.	Mr. Piyush Marmat, Int. M.Sc. student, Department of Physics, IITR	Is Betelgeuse going to be a Supernova soon?	20 th February, 2020
5.	Ms. Jaya S. Kashyap, M.Sc. student, Dept. of Physics, IITR	Observing the Universe through neutral hydrogen	30 th May, 2020
6.	Mr. Munna Dan, Research Scholar, Department of Physics, IITR	Extraction of static properties of halo nuclei from breakup reactions and applications in nuclear astrophysics	05 th June, 2020
7.	Mr. Bibhuti, Research Scholar, IIA & ARIES	Nature's Third Cycle: The Solar Cycle	12 th June, 2020
8.	Prof. H.M. Antia, TIFR, Mumbai	Covid-19: Data Analysis and Modelling	18 th June, 2020
9.	Mr. Mukesh K. Sharma, Research Scholar, Department of Physics, IITR	Monte Carlo Technique in Lattice Models	03 rd July, 2020
10.	Mr. Manish K. Vishwakarma, Research Scholar, Department of Physics, IITR	Development of 50 keV Table-Top Ion Accelerator at IIT Roorkee	17 th July, 2020
11.	Mr. Ankit Kumar, Research Scholar, Dept. of Physics, IITR	Jensen's inequality and the non-stationary Rutherford scattering experiment	01 st August, 2020

12.	Dr. Rahul Kothari, Dept. of Physics & Astronomy, University of the Western Cape, South Africa	Full-sky bi-spectrum in red- shift space for 21cm intensity maps	21 st August, 2020
13.	Mr. Naveen Kumar Tailor, Research Scholar, Department of Physics, IITR	Perovskite material in Optoelectronics: A Rising Star	28 th August, 2020
14	Prof. John H. Schwarz, Harold Brown Professor at Caltech	The Birth and Development of Superstring Theory	17 th October, 2020
15	Prof. Edward Witten	2-Dimensional gravity and volumes of moduli spaces	23 rd October, 2020
16	Prof. CumrunVafa, Hollis Professor of Maths & Natural Philosophy at Harvard	Puzzles to Unravel the Universe	31 st October, 2020
17.	Dr. Ashmeet Singh, Post Doc fellow, California Institute of Technology	Fun with Finite-Dimensional Quantum Theory Informed by Gravity	07 th November, 2020

Annexure – II

IPA VARANASI Chapter Report 2019-2020

i. **Opening balance** as on 01-04-2019: N

ii. **Closing balance on date:** 31/10/2020: N

We have made following members for the year 2019-2020:

Life member: Nil, Associate Member: Nil, Student Member: 6

Money transferred in IPA A/C by following mode:

(1) Cash deposited **Rs.1500/-** ($250*6=1500/-$) dated 19-06-2019

(2) By cheques: Nil

Lectures and Seminars organized during April 1, 2019 - October 31, 2020

Sr. No.	Resource Person	Address/ Institution	Topic	Date
1.	Prof. Ranjan Kumar Singh	Department of Physics, Institute of Science, Banaras Hindu University, Varanasi-	Nobel Prize in Physics: 2018	05-4-2019
2.	Prof. Avijit Bhattacharyya	Calcutta University, Kolkata	The fundamental constituents of matter : Mendeleev to Higgs	06-04-2019
3.	Prof. Rajiva Raman	Department of Zoology Banaras Hindu University, Varanasi	Pursuit of Science: Shaping up of a wayward career	12-04-2019
4.	Dr. D. K. Mishra	Department of Physics, Institute of Science, Banaras Hindu University, Varanasi	Quantum Interferometry	18-04-2019
5.	Professor Hari M. Upadhyaya	Head, Centre for Advanced Materials, School of Engineering, London South Bank University, 103 Borough Road, SE1 0AA, London, U.K.	Global Energy Transition: Recent technological advancements and challenges!	29-07-2019
6.	Prof. O. N. Srivastava	Department of Physics, Institute of Science, Banaras Hindu University, Varanasi-	The Science of Small and Large Things	30-08-2019
7.	Professor R. Shankar	Department of Physics, Institute of Science, Banaras Hindu University, Varanasi-	What can we learn from collision physics research?"	06-09-2019
8.	Miss Sukriti Kapur	School of Environmental	Journey to the Arctic:	19-09-2019

		Sciences, Jawaharlal Nehru University (JNU) New Delhi	My Experiences and Learning	
9.	Dr. Rajneesh Kumar	Department of Physics, Institute of Science	Prospective of Industrial Plasma	20-09-2019

Report of activities of IPA – Hyderabad Chapter

1. Pressing for Progress 2019 -

A first-of-its-kind in India science conference, titled Pressing for Progress, was held in Hyderabad from 19th to 21st September 2019. It was jointly organised by the Indian Physics Association in partnership with the University of Hyderabad. The Local Organizing committee consisted of faculty from University of Hyderabad, TIFR center for interdisciplinary sciences, MAANUU and BITS Pilani – Hyderabad. It contained invited lectures on Physics, on gender issues and also interactive sessions on gender issues.

The delegates of PFP 2019 stood to benefit from three workshops on “understanding gender equity”. The panel discussion on “Gender disparity in physics: Whose problem is it?” included three men among six panelists - a gender-neutral panel! Dr. Pratibha Jolly, former Principal of Miranda House, a women’s college in New Delhi, served as the moderator.

Many delegates were encouraged to become members of the IPA, associated with their respective local chapters.

2. The Biannual Cockcroft – Walton lecture was delivered by Dr. Andrew Turner, Department of Meteorology, University of Reading, Reading, UK, with the title “Indian Monsoon and the Climate Change”. It was a virtual seminar due to the present situation, held online on 28th October 2020. It was attended by several enthusiastic participants with a very exciting Q & A session.

3. Physics Departmental Fest, "BOSON", which is being organized by MSc (I and II year) and I MSc (IV and V year) students on **6th and 7th March, 2020.**

Organized and managed by students of M.Sc. Physics, but participants from both M.Sc. And Integrated M.Sc. Students. It contained lectures by students and senior faculty, and also a sky watch session with our new telescope. It was partially supported by School of Physics and IPA Hyderabad chapter.

In addition to all above, IPA Hyderabad Chapter also partially supports, both financially and logistically, the student activity of E.T.H.E.R - Engaging Talks on Highly Exciting Research. This is a student run seminar series wherein experts in different areas of science and related subjects talk to M.Sc. Level students about the new and exciting area of research in their professional field. This allows students to get a flavour the state of art research that is going on in different fields of Physics, Chemistry, Mathematics, Biology and allied areas.

The present office bearers are

1. Prof. B. V. R. Tata, School of Physics – President of the chapter
2. Dr. Ashok Vudaygiri, School of Physics – Secretary

Report of IPA-Indore Chapter (2018-20)

Indore chapter of Indian Physics Association organises various events for the upliftment of Science as well as to encourage young students to try Physics at home, school as well as during leisure time. Also, few lectures on advanced topics also conducted to feed the knowledge hungry members of IPA-Indore chapter. However, we would like to focus on the following three activities during past 18 months.

(I) First MP Jr. Young Scientist Congress

35th Young Scientist Congress was organised by MP Council of Science & Technology during Feb. 28-29, 2020. A science fair cum satellite program to the event was planned by Indian Physics Association - Indore Chapter during second week of Mar. 2020. Due to COVID advisories, it was conducted during June 01-20, 2020.

The event was conducted on the memory of centenary celebrations of Legendary Indian Space and Nuclear Scientist Padma Vibhushan Dr. Vikram Sarabhai. Target participants were students of Class 10 & 12 from schools and B.Sc., B.E. & M.Sc., from colleges. Following events were conducted via online mode using Kahoot platform and GSuite.

- 1) **E-Quiz:** Quiz on Physics, Chemistry, Mathematics & Biology at levels appropriate to each group
- 2) **STEM Skill Test:** This online competition was used to test the Science, Engineering, Technology & Mathematics skills of the students.
- 3) **Essay Writing:** Essays were invited on any one of the following topics.
 - a) INDIA-2047, *My Vision on Science & Technology*
 - b) *Why Vikram Sarabhai is my role model?*
 - c) For Science and Technology, COVID-19: is a *blessing* or a *damnation!*

1933 students from 130 schools and colleges from MP participated. The registrations received under various categories are 10th Std – 570, 12th std – 302 and Degree students -1061. Total of 27 students were selected for prizes while 30 more students were given certificate of appreciation. The prize and other costs for running the event were supported by MPCST-Bhopal and the technical and online support were provided by SGSITS, Indore.

(II) Colloquium by Prof. H. C. Verma

This event again was organised for the students of XII std and first year UG students. Prof. H.C. Verma and his books on Physics are popular among the students of above stream. The event was held at the auditorium of RRCAT, Indore (August 24, 2019). Due to the huge response from Schools and colleges, it is conducted also at SGSITS, Indore on August 25, 2019. On both events Prof. Verma discussed about his journey with Physics and Science. The title of the lecture was “Natural Processing of Learning”.

(III) Physics at Low temperatures and High magnetic fields (LTHM)

Three-days' workshop for research scholars, faculty members are conducted at UGC-DAE-CSR during May 28-30, 2019. There were about 130 participants and 30 speakers of eminence.

Dr. J. T. Andrews
Secretary, IPA-Indore Chapter