

# INDIAN PHYSICS ASSOCIATION

## Draft Minutes of Annual General Body Meeting

held on Monday, November 4, 2019

at AG66, Tata Institute of Fundamental Research, Homi Bhabha Road, Colaba, Mumbai 400005.

The Annual General Body Meeting of the Indian Physics Association was scheduled for 1800 hrs at the Lecture Theatre, AG66, Tata Institute of Fundamental Research, Colaba, Mumbai. The meeting was adjourned for 15 minutes due to lack of quorum and was reconvened at 1815 hrs. 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 May 24, 2018 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 and highlighted some of the achievements of IPA, on the eve of 50 years of IPA
- II. Prof. Nanal (General Secretary, IPA) read the draft minutes of the last Annual General Body Meeting, held on 24<sup>th</sup> May 2018, at Lecture Theatre (AG66), Tata Institute of Fundamental Research (TIFR), Colaba, Mumbai. Prof. Nanal informed that the draft minutes were made available on the IPA webpage. Comments and suggestions on the circulated draft minutes were invited from members.

The AGBM (24-May-2018) minutes were accepted by the General Body - Proposed by Prof. E.V. Sampathkumaran and seconded by Prof. L. C. Tribedi.

- III. Prof. Nanal, General Secretary, IPA read out the annual report on the activities of IPA.

1. A total of 101 new members (77 Life Members, 7 Annual Members and 17 Student Members) have been enrolled. Annual and Student members have been enrolled in Varanasi, Hyderabad and Roorkee chapters. IPA heartily welcomes all new members. Presently, IPA has 4189 life members.
2. IPA Webpage/Documents: The IPA webpage has been moved to TIFR server: <http://www.tifr.res.in/~ipa1970/>. It has been designed by Mr. Pawan Vengala (formerly in DHEP, TIFR) and maintained with help of Dr. Sanjoy Pal (PLF, TIFR). The membership is now online.
3. Physics News: During the period June 2018 to October 2019, four issues of Physics News have been published with the support of BRNS grant.

Vol. 48 No. 3 July - Sep 2018

Vol. 48 No. 4 Oct. – Dec. 2018 (special articles on Saha & Feynmann)

Vol. 49 No. 1 Jan – March 2019 (Nobel 2018 articles)

Vol. 49 No. 2-3 Apr-Sep 2019 (S. N. Bose Commemorative Special issue)

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

IPA thanks the EB members for their work in bringing out PN issues.

4. IPA Lectures

(i) *DAE – C. V. Raman Lecture Series:*

IPA continues to receive the financial support from BRNS, DAE for conducting fiver DAE – C.V. Raman Lectures across the country every year for the benefit of young

researchers and physics teachers. Lectures were successfully conducted with the active support from various IPA local chapters, as follows:

### 2018-19

- a) Prof. N. Mukunda - "E.C.G. Sudarshan's life and work – An appreciation"; organised by IISER Bhopal on Nov. 14, 2018.
- b) Prof. Amitava Raychaudhuri - "Mass of small things"; organized by IPA Kolkata Chapter on Feb 7, 2019 at Calcutta University.
- c) Prof. D. D. Sarma - "Brighter side of semiconductor nanocrystals: How to make defects useful"; organized by IPA Bengaluru Chapter on March 15, 2019 at Bangalore University.
- d) Prof. Sumathi Rao - "Majorana modes and their identification"; organized by IPA Varanasi Chapter on March 27, 2019 at Banaras Hindu University, Varanasi.

### 2019-20

- a) Prof. Rupamanjari Ghosh - "Manipulating Atoms by Light"; organized on September 23, 2019 in University of Delhi.
- b) Prof. N. D. Hari Dass - "Significance of the life and science of C. V. Raman"; organized on October 30, 2019 by IISER Tirupati.

Three more lectures are planned for the current year: Prof. Baskaran at CUTN, Prof. Amita Das at IIT Patna and Prof. Palash Pal at Visva Bharati.

IPA thanks BRNS (DAE) for the support and also all the lecturers, organizers (local chapters) and the host institutions.

#### *(ii) Prof. P. A. Pandya Endowment Lecture -2018:*

Prof. Sanjeev Dhurandhar (IUCAA, Pune) delivered a lecture on "Nobel Prize in Physics 2017: Discovery of Gravitational Waves", on 25<sup>th</sup> October 2018 at Annasaheb Magar College, Hadpsar, Pune under the auspices of IPA Pune Chapter.

IPA thanks Prof. Sanjeev Dhurandhar and Prof. V. L. Mathe, (Secretary, IPA,Pune Chapter) and the host colleges/departments for the successful organization of the lecture.

#### *(iii) IPA – IOP Biennial Exchange of Lecturers:*

Under the IPA-IOP exchange of programme, Prof. Ajay Sood (IISc. Bangalore), had visited to Institute of Physics (IOP), UK as Homi Bhabha Lecturer during March 11 - 15, 2018. Following lectures were given:

- i) "Nano Heat Engines: Extracting Work from Bacterial Baths and Non-conservative Probability Flows", 11<sup>th</sup> March 2019 at Cavendish Laboratory, University of Cambridge
- ii) Ultrafast Photo response of 2D and 3D Dirac Materials", 14<sup>th</sup> March 2019 at University of Manchester
- iii) "Nano Heat Engines: Extracting Work from Bacteria", 15<sup>th</sup> March 2019 at University of Edinburgh
- iv) "Tuning Topology of Quantum Materials by Pressure", 15<sup>th</sup> March 2019 at University of Edinburgh

## 5. IPA awards 2018

Following awards were given at the IPA Awards function, held at Lecture Theatre, TIFR, Colaba, Mumbai on 4<sup>th</sup> November 2019.

R. D. Birla Memorial Award in Physics:	Prof. Rohini Godbole (IISc, Bengaluru)
	Prof. M. Barma (TCIS, Hyderabad)
Murli M Chugani Memorial Award for Excellence in Applied Physics:	Dr. Tessa Thomas (DRDO, Bengaluru)
P. K. Iyengar Memorial Award for Excellence in Experimental Physics:	Prof. S. A. Rangwala (RRI, Bengaluru)
Buti Foundation Award for Excellence in Theoretical Physics, Astrophysics and Biophysics:	Dr. Joydeep Chakraborty (IIT Kanpur)
	Dr. Sanjay Kumar Mishra (PRL, Ahmedabad)
S. N. Seshadri Memorial Instrumentation Award in Physical Sciences:	Dr. Saurabh Mani Tripathi (IIT Kanpur)
N. S. Satya Murthy Memorial Award in Physics for Young Scientists:	Dr. Arjun Dey, (URSC, Bangalore)
Aswini Kumar Rath Memorial Award in Nuclear Physics:	Dr. Vivek V. Parkar (BARC, Mumbai)

IPA congratulates all the awardees and thanks the Selection Committee Members of various IPA Awards.

## 6. IPA thesis and Olympiad Awards 2018/2019

- IPA- Prof. C. V. K. Baba Best Thesis Award in Nuclear Physics:*  
 Dr. Biswarup Das (SINP, Kolkata)  
 Thesis title: “Nuclear structure studies at high angular momentum in mass~100 region”  
 (Given during DAE-BRNS Nucl. Phys. Symposium -Dec. 2018)
- Anil K. and Bharati Bhatnagar Best Ph.D. Thesis Award in Solid State Physics:*  
 Dr. Rohitash Kumar (IIT, Jodhpur)  
 Thesis Title: “Design, Development and characterization of low and high temperature PCMs for thermal energy storage applications”  
 (Given during DAE-BRNS SSP Symposium- Dec. 2018)
- Rahul Basu Memorial Award in High Energy Physics:*  
 Dr. Apratim Kaviraj, IISc., Bengaluru  
 Thesis Title: “Conformal Bootstrap: Old and New”  
 Dr. Ipsita Saha, IACS, Kolkata  
 Thesis Title: “The study of the physics beyond the SM at the LHC in the light of dark matter searches”  
 (Given during DAE-BRNS HEP Symposium- Dec. 2018)

- *C.L.Bhat Memorial Award 2019 (Astronomy Olympiad Orientation–cum-Selection Camp)*:  
Mr. Chirag Falor (Senior group)  
Mr. Josyula Venkata Aditya (Junior).
- *Indian National Physics Olympiad (2019)*  
Mr. Ankit Kumar Misra “Best Solution to a Challenging Problem”  
Mr. Nishant Abhangi “Best Performance in Experimental Programme”

IPA, congratulates all the awardees and thanks the Selection Committee Members of various IPA Awards.

#### 7. Interaction with Overseas Physics Associations / Societies

- *IOP*: As mentioned above, under IPA –IOP exchange programme Prof. Ajay Sood, IISc, Bengaluru had visited IOP, U.K. from March 11 - 15, 2018 to deliver Homi Bhabha Lectures.
- *AAPPS* (Association of Asia Pacific Physical Societies): IPA continues to be a member of the Association of Asia Pacific Physical Societies.

#### 8. Activities of Gender in Physics Working Group (GPWG)

‘Pressing for Progress 2019: An IPA National Conference towards Gender Equity in Physics’, was driven by GIPWG of the IPA, to bridge disciplinary divides and debate the long-standing question as to why there is a persistent gender gap in the physics profession in India. The conference was organized by the School of Physics of the University of Hyderabad and TCIS- Hyderabad. About 240 physicists, social scientists and educationists (about a third were men participants) participated in PFP2019 during September 19-21, 2019. Dr. Ashutosh Sharma (Secretary, DST) and Prof. K. Vijayraghvan (PSA) shared their thoughts at the inaugural session of the conference via video link. The program comprised 3 keynote physics talks, 30 short physics talks and a few talks by social scientists. There were also poster presentation (~50 numbers) by young physicists (both genders) and interactive workshops. A panel consisting of both mid-career and senior physicists, and those in leadership roles, discussed the question ‘The Gender Gap in Physics: Whose Problem is It?’ The recommendations emerged will be forwarded to DST.

#### 9. 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 these chapters is presented here.

- **Mumbai Chapter**: A special lecture was organised on the occasion of International day of Women and Girls in Science (Mumbai\_chpater\_report)
- **Roorkee Chapter**: organized several lectures throughout the year (Roorkee-chapter\_report)
- **Varanasi Chapter**: organised several invited Talks by eminent Scientists (Varanasi\_chapter\_report)
- **Kolkata Chapter**: Conducted the DAE C. V. Raman lecture of Prof. Amitava Raychaudhuri in collaboration with Kalpana Chawla Centre for Space and Nano Sciences.

After due deliberation the report on IPA activities was accepted by the General Body. Proposed by: Dr. S. Krishnagopal and seconded by Mr. Suhas Naik Satam.

IV. Prof. D. Udupa, Treasurer, IPA, presented the accounts of IPA for the financial year 2017-18.

It was noted that during 2017-18, funds generated through the DAE-BRNS SSP Symposium have resulted in surplus balance in the general income and expenditure head. ~~This additional amount has been deposited in SBI, BARC for 1 year~~

It was also mentioned that interest rates on bank deposits are falling gradually and 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). One of the members suggested that options to invest in Mutual Funds should be explored.

It was 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.

It was suggested that annual account statement of the respective endowment can be informed to the donors, along with the details of awardee.

After due deliberations the accounts were approved by the General Body. Proposed by: Prof. L. C. Tribedi and seconded by Dr. S. Krishnagopal

V. Under AOB, Prof. Prajval Shastri presented the report on the conference, 'Pressing for Progress 2019: An IPA National Conference towards Gender Equity in Physics'. (PFP2019\_report)

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

Vandana Nanal  
General Secretary, IPA (2018-19)