



**INSTITUTE OF ADVANCED STUDY IN SCIENCE AND TECHNOLOGY
(AN AUTONOMOUS INSTITUTE UNDER THE DEPARTMENT OF SCIENCE AND
TECHNOLOGY, GOVT. OF INDIA) PASCHIM BORAGAON, GARCHUK
GUWAHATI- 781035**

MINUTES OF THE THIRTEEN MEETING OF THE SCIENTIFIC ADVISORY COUNCIL
(SAC) OF THE INSTITUTE OF ADVANCED STUDY IN SCIENCE AND TECHNOLOGY
(IASST), GUWAHATI HELD ON 13TH & 14TH FEBRUARY 2023

Members present:

1. Prof. Seyed E. Hasnain, IIT Delhi, New Delhi	Chairman
2. Prof. Pulok Mukherjee, Director, IBSD, Imphal	Member
3. Prof. Amalendu Chandra, IIT, Kanpur	Member
4. Prof. Parameswar K. Iyar, IIT Guwahati	Member
5. Prof. B. N. Goswami, Cotton University, Guwahati	Member
6. Prof. Dhruva K. Bhattacharyya, Tezpur University, Tezpur	Member
7. Prof. A.K. Mukherjee, Director, IASST	Member
8. Dr. Rajlakhsmi Devi, IASST, Guwahati	Member
9. Prof. Neelotpal Sen Sarma, IASST, Guwahati	Member Secretary

Leave of absentia granted to:

1. Prof. Avinash Khare, VC, Sikkim University, Sikkim,
2. Dr. Arun Sharma, DG, NECTAR, Shillong,
3. Prof. Mahan Maharaj, TIER, Mumbai and
4. Prof. Neela Natraj, IIT Bombay, Mumbai, could not attend the meeting due to their preoccupations. The meeting was held in hybrid mode.

AGENDA ITEM NO. 1: Welcome addressed by the Director, IASST

Initially, Prof. A.K. Mukherjee, Director, IASST, welcomed Professor Seyed E. Hasnain, Chairman, Scientific Advisory Council, and the other esteemed members of the 13th Scientific Advisory Council (SAC) meeting of IASST held in the conference

room of IASST. Prof. Mukherjee briefly mentioned that the Institute is growing steadily with the advice and suggestions from the Advisory Council. Prof. Mukherjee then requested Prof. Hasnain, Chairman, SAC, to give his opening remark and suggestions for the Institute.

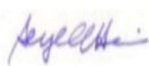
AGENDA ITEM NO. 2: Opening remarks by Prof. Seyed E. Hasnain, Chairman, SAC, IASST

1. In his opening remark, Prof. Seyed E. Hasnain welcomed all the members of the SAC and the faculties of IASST. As he missed the New Delhi-Guwahati flight on the 12th to attend the meeting physically, he offered his apologies for the same. Prof. Hasnain, in his remark, mentioned that IASST is a prestigious institute under DST, conducting research in many important branches of science. He appreciated that the sericulture group had been highly active in the Institute and contributed significantly. He congratulated the Institute for working on natural resources and biodiversity and also for the Institute's effort to solve the geographical problem in the northeastern region of India. The Chairman then requested the Director, IASST, to present the progress report for the period since the last SAC meeting held on 18th and 19th August 2022.

AGENDA ITEM NO. 3: Progress report of IASST presented by the Director, IASST

Prof. A.K. Mukherjee, the Director of IASST, made a brief PowerPoint presentation on the progress of IASST from August 2022 to January 2023. In the introduction, he showed the major thrust areas of IASST adopted in the GC, including the Institute's mandate, vision, mission, and objectives. He mentioned that since students are now coming from different parts of the country to pursue research work, IASST has started the construction of a 100-seater women's hostel with due approval from DST. The construction should be completed within eighteen months, improving student intake capacity and research quality.

Prof. Mukherjee showed that IASST had made remarkable progress in research activity during the last six months, apparent from the increased quality and quantity of publications. For example, during the period, IASST had 51 publications with an average Impact Factor of 4.57, almost double that of the earlier years, with two papers having an impact factor of more than 10. During this period, two patents were granted, and six were applied. One of the probiotics developed at IASST is on the verge of commercialization, and communication for the same is going on with a European company. Four research scholars of IASST were awarded PhD degrees during this



period.

Prof. Mukherjee introduced the newly joined faculty member under Life Sciences Division, Dr Asis Bala, to the members of the SAC. Further, he informed that, as per the suggestion of the GC, the vacant and abolished faculty positions would be downgraded to the Assistant Professor-II positions to get the appropriate number of applications against each vacancy. These additional recruitments will enhance the work power of IASST. Four institutional PDFs have been recruited under faculties on seniority to improve the research quality.

Prof. Mukherjee highlighted the noticeable progress of the work of Bionest, IASST, where 30 incubatees are involved in developing prototypes of their products. The effort is also going on to develop ethnic foods and obtain their GI tags.

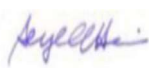
He further mentioned that the socioeconomic responsibility of the region was also taken care of, and faculty members took steps to improve the scientific knowledge at the school and college level students and teachers by arranging their regular visits to IASST laboratories. Further, IASST regularly organized classroom teaching for high school-level science students in the BTC areas and distributed scientific kits. The Director also presented the list of prizes/ awards IASST received during the period.

AGENDA ITEM NO. 4: Action taken report on the decisions of the last SAC meeting presented by the Member Secretary, SAC, IASST.

Prof. Neelotpal Sen Sarma, Member Secretary, SAC, IASST made a brief presentation of the action taken on the decisions of the last SAC meeting. The report was as follows:

Action Taken Report on the decisions/deliberations of the 12th meeting of the SAC held on 18th and 19th August 2022

Item	Suggestions	Action Taken
AGENDA ITEM NO. 7 (of last SAC meeting): Remarks by SAC member:	1. Prof. B.N. Goswami opined that the outstanding presentation, quality and quantity of publications, and scientific output of IASST faculty members are very encouraging. However, IASST needs more faculties to continue the excellent work. IASST has substantial potential and enough scope to improve its visibility. IASST should continue to work hard toward fulfilling its fundamental and societal commitment. He also opined that IASST should encourage international collaboration and exchange visits of foreign scientists.	The Director of IASST has taken the initiative to revive the vacant faculty positions at IASST. He is in continuous touch with DST for this purpose. Scientists of IASST have yet to establish global connections for collaborative research works. Dr. Santu Das of MCS, IASST, has made an academic visit to the following



	He emphasized stressing basic/fundamental research, addressing big science questions not only in the region but globally, and publishing the findings in high-impact journals. Steps may be taken to commercialize a few products developed by scientists is recommended. In North-East India, IASST has ample opportunity to take the lead in scientific temper and attitude. He said that IASST could add some new, budding areas of research. NE India has enough scope for climate change study and its effect on biodiversity; IASST may initiate an investigation in this area.	countries (funded by foreign collaborators and Universities). 1. The University of Newcastle, NSW 2308, AUS. Duration: 31st Oct – 25th Nov 2022. 2. Isaac Newton Institute (INI) of Mathematical Sciences, Cambridge, UK. Duration: 09-13 Jan 2023. Dr. Das also received an invitation to join a global collaborative program initiated by INI for regular visits to keep up the collaboration and interact with industry persons. Prof. Ashis K. Mukherjee, Director of IASST, has collaborated with several foreign universities. He has recently nominated a Professor from the University of Porto, Portugal, to visit IASST under the Raman Chair Professorship of the Indian Academy of Science, Bangalore.
	2. Prof. P.K. Iyer: Prof. Iyer appreciated the research work carried out during the period and the quality of the paper published. He also appreciated the authority's decision about the research scholars of IASST to run different sophisticated instruments of IASST to support the regular operators. Prof. Iyer suggested connecting with the defence persons to get the list of medicinal plants smuggled from the northeast. He advised approaching the Ayush Ministry and ARI to submit a funding proposal. The activity of Bionest has to be increased with more hubs in the region and coalition with IITG Bio-park and NIPER Guwahati. Research scholars are to be encouraged to initiate start-up businesses.	State medicinal plant board, Arunachal Pradesh and a RGU, AP faculty member, was consulted. They have informed us that <i>Paris polyphylla</i> is one of AP's highly smuggled plant species. Discussion is going on with Govt. Ayurvedic College and Hospital for submission of projects to Ayush Ministry.
	3. Prof. Mahan Maharaj: Prof. Mahan Maharaj of TIFR, Mumbai, appreciated the work and social responsibility of the Institute and opined that doing research in isolation will not be helpful for the Institute. IASST must prepare a roadmap for solving global issues with emerging local problems.	Collaborative work with National Taiwan Ocean University, Taiwan, is underway where scientists are trying to experimentally prove some of the features of wave blocking phenomenon in sea ice. The impact of climate change on the biodiversity of the NE region will be studied. The roadmap preparation is under process where the impact of rainfall and temperature on the survival of Muga silkworm will be studied.

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	4. Prof. Pulok Mukherjee: Prof. Pulok Mukherjee of IBSD, Imphal, appreciated the work done at IASST during the period and its interdisciplinary work in Physical, Chemical, and Biological Sciences. There is a boom in herbal research in the region, and IASST needs to specify the medicinal plants of the NE region they want to work with, thus avoiding duplication of research. Some of the very costly medicinal plants available in the region are not used in our Ayurvedic medicine but are exported to foreign countries. These	IASST has been working on Ayurvedic and traditionally used medicinal plants, as reported in earlier SAC meetings. An MoU with Govt. Ayurvedic and Medical College is also signed.
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	plants are explored for their therapeutic potential, and efforts may be made for indigenous drug development from such plants.	
	5. Prof. A.K. Mukharjee informed the house that suitable candidates are not found in a few subject/research areas even after four repetitions of the advertisement. He cited the example of the study Muga silk (extracted from the cocoons of <i>Antheraea assamensis</i>) at IASST, which is now hampered due to the non-availability of candidates in the subject. He also emphasized the necessity of recruiting a pharmacologist. He stressed the need to revive the lapsed scientific/faculty positions and give more faculty positions at the Assistant Professor level. All the members supported the view of Prof. Mukherjee.	Recently one faculty member has joined the IASST. Further, as per the suggestion of the GC, the vacant and abolished faculty positions will be downgraded to the Assistant Professor-II positions to get an appropriate number of applications against a vacancy.
AGENDA ITEM NO. 8 (of last SAC meeting): Remarks by the Chairman	1. Prof. Hasnain advised that the presentation time of the faculties may be increased to 20 minutes (15 min presentation + 5 min discussion) and can be continued for two days.	This suggestion has been well taken and will be followed.
	2. Collaboration with scientists other than North East on medicinal plants may be initiated. Probiotics made from local and ethnic foods can be developed, and database on this and medicinal plants can be made.	IASST has collaborative work on medicinal plants with CSIR-IIIM Jammu, CSIR-NBRI, DBT-THSTI, SCIEX etc. Regarding the development of probiotics and database, the comment has been noted, and work in this line is ongoing.
	3. A big project may be proposed to Ayush Ministry from IASST in collaboration with other Institutes of the region. Ayurvedic medicine may be helpful for COVID patients, and many local medicinal plants can be used against such an epidemic. It is now time for IASST to propose a research project fund of 5 crores or more.	Discussion is going on with Govt. Ayurvedic College and Hospital for submission of projects to Ayush Ministry.
	4. IASST needs Industry-Institution interaction, which can correlate with FICCI and PM Fellowship programs.	Earlier, there was some collaborative research work with the School of Petroleum Technology, Pandit Deendayal Energy University and ONGC on the remediation of contaminants at oil digging sites with the scientists of the Life Sciences Division. More such collaboration is being explored. As of today, we still need to get Ph.D students with PM Fellowship.
	5. He advised that let the foundation day of IASST be an open day to showcase the strength to the mass—invitation to the Prime Minister or Hon'ble President of India to some events.	This year we could not open the foundation day; However, the science day will be an open day for the students. We shall try our best to invite dignitaries on different occasions.
	6. For IASST, a global connection is vital, and a conference can be organized by inviting noble laureates and distinguished scientists in the field. IASST needs to recruit more faculties for its growth.	This suggestion will be followed. We invite top-class national scientists for interaction and to deliver lectures on different occasions.

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	7. Prof. Hasnain also advised that the patents on products developed by IASST may be transferred to the industry.	Our patented technology on anti-ageing curd was advertised for EOI from interested industries for transfer.
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Hasnain

Barna

		One European company has shown interest. The process of signing a MoA with NRDC to facilitate the transfer of technologies as per the GOI norms is in progress. Further, we have also signed MoU with KIIT, Bhubaneswar.
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AGENDA ITEM NO. 5: Presentation by the faculties

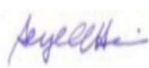
The faculty members from the Life Sciences Division (LSD) and Physical Sciences Division (PSD), including the Director, presented their research activities for the period August 2022 to January 2023 as follows:

- (i) Prof. Ashis K. Mukherjee (Director/LSD)
- (ii) Prof. Neelotpal Sen Sarma (PSD)
- (iii) Prof. (Mrs) R. Devi (LSD)
- (iv) Prof. D. Chowdhury (PSD)
- (v) Dr. J.C. Borah (LSD)
- (vi) Dr. G. Choudhury (PSD)
- (vii) Dr. D. Thakur (LSD)
- (viii) Dr. A.R. Pal (PSD)
- (ix) Dr. M.R. Khan (LSD)
- (x) Dr. S. Kundu (PSD)
- (xi) Dr. (Mrs) A. Devi (LSD)
- (xii) Dr. (Mrs) L.B. Mahanta (PSD)
- (xiii) Dr. (Mrs) M.B. Sahariah (PSD)
- (xiv) Dr. S. Biswas (PSD)
- (xv) Dr. B. Choudhury (PSD)
- (xvi) Dr. Santu Das (PSD)
- (xvii) Dr. (Mrs) Kamatchi S (PSD)

Remark/suggestions on the presentations:

- (i) Prof. Ashis K. Mukherjee (LSD)

All the members appreciated the work. Prof. Mukherjee clarified the incubation time for the cell culture study, as requested by Prof. Amalendu Chandra. Prof. Chandra also appreciated the plan of working on the animal model instead of *C. elegans* in future.




(ii) Prof. Neelotpal Sen Sarma (PSD)

Neelotpal

Sarma

Prof. Dhruba Kumar Bhattacharyya clarified the importance of sample numbers and suggested working on the samples collected from patients if possible. Prof. Seyed E. Hasnain suggested publication only after filing a patent for a particular research work.

(iii) Prof. (Mrs) R. Devi (LSD)

No comments were received from any members.

(iv) Prof. D. Chowdhury (PSD)

Prof. B. N. Goswami appreciated the collaborative work with Life Science. He also mentioned that the work has great potential for product development. He suggested more collaborative work for more productivity. Prof. Seyed E. Hasnain appreciated the work and recommended meaningful transformation. Prof. Ashis K. Mukherjee recommended being selective about commercializing his products considering the tediousness of the process and the associated cost.

(v) Dr. J.C. Borah (LSD)

All the members appreciated the work. Prof. Pulok K. Mukherjee suggested focusing on phytopharmaceutical yield as an important marker in natural product research, considering the cost of product/formulation development. He also suggested building a "Phytochemical Library" at the Institute. Prof. B. N. Goswami suggested documenting the repository for the natural products isolated and characterized. Prof. Dhruba Kumar Bhattacharyya supported the comments and mentioned that the acquired knowledge would be lost otherwise. The Chairman suggested focusing towards the product development line for SGLT2 inhibition.

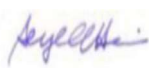
(vi) Dr. G. Choudhury (PSD)

All the members appreciated the work, specifically the epidemiological modelling part.

(vii) Dr. D. Thakur (LSD)

All the members appreciated the work. Prof. Pulok K. Mukherjee suggested working on translational components, especially on Microbes/metabolites affecting the growth of the tea plants and quality.

(viii) Dr. A.R. Pal (PSD)



All the members appreciated the work. Prof. Amalendu Chandra found the work on graphene-based materials interesting, which has the possibility of better replacement of the existing materials.

(ix) Dr. M. R. Khan (LSD)

All the members appreciated the work. Prof. Seyed E. Hasnain specifically appreciated the work on the microbiome. He also suggested working on marker development and animal model and publishing the work with solid evidence in a high-impact journal. Prof. B. N. Goswami appreciated his collaborative work with Prof. R. Devi on the effect of the seed of *Musa balbisiana* on rat gut microbiome against D-galactose-induced accelerated ageing.

(x) Dr. S. Kundu (PSD)

All the members appreciated the work.

(xi) Dr. (Mrs) A. Devi (LSD)

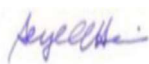
All the members appreciated the work. Prof. Seyed E. Hasnain suggested to collaborate with ONGC. Prof. A.K. Mukherjee suggested to focus on a comparative study with other available strains and already developed technologies. He also suggested to go for in house collaboration in this line of work.

(xii) Dr. (Mrs) L.B. Mahanta (PSD)

All the members appreciated the work. Prof Dhruba Kumar Bhattacharyya suggested collaborative work with other hospitals where more data can be accessed for analysis using deep learning techniques. He also suggested analyzing the genomic data available as an integral approach in future. Prof. B. N. Goswami suggested increasing the sample size if possible, as the sample size may not be enough for the oral cancer study. He also pointed out that the AI-based technique will assist the pathologist but is incapable of replacing the human being. Prof. Amalendu Chandra suggested using a separate set of data for testing analysis.

(xiii) Dr. (Mrs) M.B. Sahariah (PSD)

All the members appreciated the work. Prof. A.K. Mukherjee suggested establishing a supercomputing facility at IASST to benefit the different research



groups involved in computational works. Prof. B.N. Goswami suggested that IASST emphasize computational work, including bioinformatics, in collaboration with other institutes.

(xiv) Dr. S. Biswas (PSD)

All the members appreciated the work. Prof. B.N. Goswami suggested checking the application of Cold Atmospheric Plasma on inflammation or wound healing in collaboration with the Life Sciences division and also asked to check the cost effectivity. Prof. Hasnain and Prof. Goswami recommended collaborating with other Plasma Research Institutes to enhance the research.

(xv) Dr. B. Choudhury (PSD)

All the members appreciated the work. Prof. P K. Mukherjee suggested exploring the application of semiconductors in any biomedical application.

(xvi) Dr. Santu Das (PSD)

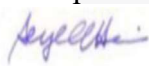
All the members appreciated the work. Prof Dhruba Kumar Bhattacharyya suggested creating his data set/features for real-time solutions. He also suggested focusing on precise prediction from a regional perspective. Prof. B. N. Goswami appreciated the model developed but suggested looking for the biases of physical models. Prof. A.K. Mukherjee suggested conducting more workshops/training/seminars on mathematics.

(xvii) Dr. (Mrs) Kamatchi S (PSD)

Members including Chairman appreciated the work and suggested collaborating with other Plasma Research centres. Prof. B. N. Goswami also recommended collaboration on the application of her work. Prof. Amalendu Chandra recommended in-depth work on the protein aggregation part. Prof. P.K. Mukherjee recommended both in-house and external collaboration.

AGENDA ITEM NO. 6: Presentation on activities of SAIC and procurement of new instruments by Dr. A.R. Pal, Head, SAIC

Dr. Arup Ratan Pal, Head of SAIC and Associate Professor of PSD, gave an informative presentation on SAIC's exciting activities and developments. He highlighted the range



of advanced instruments available, provided data on usage and sample records, income from external samples, and instruments procured in 2022-2023. He also outlined plans for future instrument procurement, training program and workshop. Furthermore, he noted that IASST faculties had proposed three new high-end instruments for acquisition over the next 2-3 years.

AGENDA ITEM NO. 6.1: Field Emission – Scanning Electron Microscope (FE-SEM). The budget is Rs. 450 lakhs.

In an engaging presentation, Dr. Devashis Chowdhury, Professor of PSD, IASST, discussed the current difficulties of the existing SEM and the need for a new instrument in addition to the existing one to support research in materials science and life science. The current SEM at IASST which is over a decade old and has high demand with a longer waiting period. This machine frequently malfunctions, causing disruption to research activities. Dr. Chowdhury also mentioned that the quality of publications at IASST has improved and the number of publications has also increased over the years due to FE-SEM facility. In addition to serving the research needs of IASST faculty and students, the new FE-SEM facility will also be available to external partners from colleges, universities, industries, and BioNEST incubatees on a fee-for-service basis.

AGENDA ITEM NO. 6.2: Atomic Force Microscope (AFM) with an approximate budget of Rs. 180 lakhs.

In his presentation, Dr. S. Kundu, Associate Professor of PSD, IASST, discussed the difficulties of the existing AFM and proposed the acquisition of a new instrument to support research in materials science and life science. Like the FE-SEM, the existing AFM at IASST is also a decade old. Since its installation in August 2013, the existing instrument has been used to analyze 1,923 samples and has facilitated the publication of 51 research papers. The existing old AFM requires manual operation for most of its functions. Acquiring a new instrument with computer-controlled features would significantly improve its efficiency. Dr. Kundu recommended procuring a new AFM instrument, which IASST faculty members would extensively use for materials science and life science research. In addition to supporting the research activities of IASST faculty and students, the new AFM facility will also be available to external partners from colleges, universities, industries, and BioNEST incubatees on a fee-for-service basis.



AGENDA ITEM NO. 6.3: Proposal for a High-Performance Computing Cluster with an approximate budget of Rs. 350 lakhs.

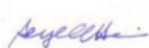
It was presented by Dr. (Mrs.) M. B. Sahariah, Associate Professor, PSD, IASST. The Computational Material Science group, Experimental Materials Science group, Climate Science research group, Mathematical Sciences group, and Computational Biology group of IASST will use the proposed Computing Cluster. The instrument will be used by most of the faculty members of IASST for research on materials science and life science. Dr. Sahariah also proposed the overall specification and budget of the Cluster.

The members asked for a few related clarifications on each of the presented instruments, its service and the depths of the requirement. They discussed and advised on the technical aspects of the instruments elaborately. For example, members clarified that storage for the Cluster might be 300 Tb instead of the proposed 100 Tb. The members, finally, deliberated on the requirement of the instruments and commented that it is justified to procure the proposed high-end instruments as the research activities of the Institute have grown manifold, and it is time to augment the research infrastructure further.

AGENDA ITEM NO. 7: Remarks by the members of the SAC

Prof. B.N. Goswami of Cotton University, Guwahati, opined that the Plasma Science group of IASST is currently tiny and needs to be more significant. He recommended collaborating with CPP-IPR Guwahati for bioscience application as CPP-IPR has several sophisticated instrument facilities, and historically they are separated into two centres from a single entity. Prof. Ashis K. Mukherjee lauded the suggestion, which the Chairman also supported. He also suggested initiating any Graduate program if possible. Further, he also recommended writing a big project in collaboration with Plasma Physics. Prof. B.N. Goswami also enquired about the present status of IASST's sericulture programme. Prof. Ashis K. Mukherjee replied that new initiatives had been taken to start work in this field.

Prof. Pulok Mukherjee: Prof. Pulok Mukherjee of IBSD, Imphal, appreciated the work done at IASST during the period and insisted on joint research work in the medicinal plants of the NE region.



Prof. Amalendu Chandra of IIT, Kanpur appreciated the publication made by the Institute in the last six months. He also recommended increasing the computational facility at IASST, Visiting Scientist program for faculty, Travel Grant/ Support policy for Visiting Scientist program. He opined that this would benefit the institution by bringing ideas through interaction with the outside world. He stressed the presence of intern students for the Institute. He also suggested considering an average number of years to complete a PhD degree in IASST, an important parameter. He also suggested initiating a teaching program in the future, which will benefit the Institute in the long run.

Prof. A.K. Mukherjee, the Director of IASST, recommended working on medicinal plants in North East India. He also suggested that Certificate Course (3-6 Months) on Instrumentation may be started in the Institute. He stressed intra-institutional collaborative work for good journal publications. It would also ensure a seamless continuation of the research activity in the event of the absence of any scientist.

AGENDA ITEM NO. 8: Concluding Remarks by the Chairman

The Chairman complimented everyone for the beautiful job done by a small institute like IASST. He appreciated the term "Very Good science" even though the Institute is located in the remote NE region. The Chairman appreciated the scientists of IASST for their scientific achievements and worked on social issues in the region. He also recommended focusing on plant complexes for their health benefits and effects on microbes rather than just individual plant molecules. While he did not support the idea of teaching programs, he suggested a twist on training programs to provide training for technicians already at the region's institutes.

He further made the following remarks:

- 1 He praised the Institute's Post-Doctoral Training program.
- 2 He also emphasized increasing the number of incubators in BIONEST.
- 3 Suggested applying big joint projects with other institutes of the nation.
- 4 Suggested that Institute should encourage and have the policy to reimburse APC/publication charges.
- 5 Prof. Hasnain also recommended that IASST should apply to concerned Govt. bodies for hosting the Prime Minister Doctoral/Post-Doctoral Fellowship programs.

AGENDA ITEM NO. 9: Vote of Thanks by the Member Secretary, SAC, IASST



Prof. Neelotpal Sen Sarma, Head PSD and Member Secretary, SAC, IASST, proposed the vote of thanks.

Approved by:



(Seyed E. Hasnain)

Chairman



(Neelotpal Sen Sarma)

Member Secretary

