

Summary Record of Discussion of the Thirteenth Meeting of Scientific Advisory Committee to the Cabinet (SAC-C) held on 17th October 2007, at Vigyan Bhawan Annexe, New Delhi.

The thirteenth meeting of the Scientific Advisory Committee to the Cabinet (SAC-C) was held on 17th October 2007 under the Chairmanship of **Dr. R. Chidambaram**, Principal Scientific Adviser to the Government of India (PSA to GOI) and Chairman, SAC-C.

The agenda of the meeting and list of participants are **Annexure-I** and **Annexure-II** respectively.

M13A1 Remarks by the Chairman, SAC-C

At the outset, the Chairman welcomed the participants and gave a brief description of issues to be discussed in the meeting. In this context, he mentioned about the Steering Committee on S&T for the 11th Five Year plan, wherein 11 more working groups were setup to look into specific areas such as attracting young people to Careers in Science and retaining them there, thrust areas in basic sciences, academia industry interaction, rural technology delivery, etc. He informed that as a part of programme for attracting young talents to careers in science, steps like massive revitalization of the Science Departments in the University System and a programme of 15 years assured career support have been evolved. Details of the proposal submitted to Planning Commission in this context will be presented by Secretary, Department of Science & Technology (DST). In the context of enhancing Academia-Industry Interactions, he pointed out that the office of the PSA to GOI has initiated an innovative programme, namely Core Advisory Group for Automotive Research (CAR) through TIFAC (Technology Information Forecasting & Assessment Council). He also made a brief mention about Rural Technology Action Group (RuTAG) programme, which provides an effective mechanism for demand driven technology upgradation and delivery in rural areas.

He emphasized the need of directed basic research in the long-term interest of society, industry or for long-term strategic interests. PSA informed the members about

the report of working group on Energy R&D for formation of 11th Five Year Plan which was chaired by him. He informed that the working group had submitted its report to the Planning Commission in December 2006. Briefing about other activities of the office of PSA, he told that efforts are being made for setting up of a facility to manufacture white LEDs in the country. PSA's office has recently brought together a group of scientists drawn from the IISc, CEERI, the SITAR, the RRCAT, the IIT Kharagpur and the Anna University for initiating further R&D work to develop the next generation of LEDs in the country.

Item no. M13A2P4 Enhancing Academia Industry Interaction – Presentation on Core Group on Automotive Research (CAR) by Sh. Sajid Mubashir, TIFAC was deferred for next SAC-C meeting due to unavoidable circumstances.

M13A2P1 Presentation by Dr. T Ramasami, Secretary, Department of Science & Technology

Dr. T Ramasami, Secretary, Department of Science & Technology (DST), made a presentation on the programme named “Innovation in Science Pursuit for Inspired Research (INSPIRE)” which is being launched during 2007-2008 to attract young people to careers in Science. He highlighted the supply chain management of Talent, the objective, the proposed mechanisms and other details of INSPIRE programme. The salient features of the programme are:

1. Scheme for Early Attraction of Talents (SEAT)

- (1) One million science awards for 10-15 age group through involvement of state councils and agencies
- (2) Summer camp in several locations to cover 50,000 students

2. Scholarship for Higher Education (SHE)

Two source inputs, based on board performance (top 1% at both class X and XII levels 7500 scholarships) 2500 based on performance in competitive examinations (like JEE, AIEEE, Olympiad, admission to IISER, NICER, etc) is planned to implement from the next academic year.

➤ **Assured Opportunity scheme**

1000 people at the level of Asst. professorship with Rs 10 lakhs research grant per year for 5 years

In this context, experiences of promotional schemes in the field of Medical and agricultural Sciences and the efforts being made by UGC in consultation with Ministry of Human Resource Development, Government of India, were also shared. There were suggestions that similar initiatives need to be taken to attract young talents to careers of teaching. Secretary DST mentioned that a programme to cover this important aspect is under planning. SAC-C appreciated the efforts made so far in this direction by the Office of the PSA to GOI and DST and strongly endorsed the proposal made by the DST to the planning commission.

M13A2P2 Presentation by Sh. S. Chatterjee, Adviser, Office of the Principal Scientific Adviser to the Government of India.

Sh. S. Chatterjee, Adviser, Office of the Principal Scientific Adviser to the Government of India made a presentation on Rural Technology Action Group (RuTAG). The programme relates to development and dissemination of technologies for rural application. He informed that three RuTAGs have so far been established, one each in Uttarakhand, Tamilnadu, and Assam (for the north-east states). Details of various technology upgradation projects undertaken by RuTAG in these states were mentioned. It was explained that several significant achievements have been made by improving locally available technologies with the help of advanced S&T inputs from different specialized institutions such as IITs, BARC, etc. In near future one RuTAG is proposed to be setup in IIT, Kharagpur. The RuTAGs in Tamilnadu and Uttarakhand are also expected to expand their operations in Andhra Pradesh and Himachal Pradesh respectively. In answer to a question, he mentioned that 500 rural micro enterprises are proposed to be set up in 100 districts all over the country during the 11th plan period.

M13A2P3 Presentation by Prof. S.B. Krupanidhi, Chairman, Materials Research Centre, Indian Institute of Science, Bangalore

A presentation on “R&D on Light Emitting Diodes (LEDs) for effective lighting was made by Professor S.B. Krupanidhi, Chairman, Materials Research Centre. IISc,

Bangalore. The presentation covered the current national and international status of the R&D work being done for the development of LEDs of different colours, as also the different technical options by which white LEDs – that have a major use in commercial lighting applications - can be produced.

During the discussion that followed the presentation, the Scientific Advisory committee to the Cabinet (SAC-C) decided that a **national networked initiative** for R&D on the development of the next generation of LEDs, particularly white LEDs, may be launched by Government of India, the money for which could be provided through the Department of Science and Technology. **The setting up of one or two National Centres of Excellence for LEDs** in appropriate academic/scientific institutes of the country was also recommended.

The meeting ended with a vote of thanks to the chair.

Thirteenth meeting of the Scientific Advisory Committee to the Cabinet (SAC-C)

Date : 17th October, 2007

Time : 10.30 A.M.

**Venue : Conference Hall No. A, Vigyan Bhawan
Annexe,
New Delhi.**

AGENDA

M13A1 Remarks by the Chairman, SAC-C

M13A2

M13A2P1 Attracting Young People to Careers in Science –
Presentation on **INSPIRE Programme** by
Department of Science and Technology (DST).

➤ Discussion

M13A2P2 Rural Technology Delivery: Presentation on **Rural
Technology Action Group (RuTAG)** –
Highlights of some activities – Sh. S. Chatterjee,
Office of the Principal Scientific Adviser to the
Government of India.

➤ Discussion

M13A2P3 **R & D for LED's** - Prof. S. B. Krupanidhi, IISc
Bangalore.

➤ Discussion

M13A2P4 Enhancing Academia Industry Interaction –
Presentation on **Core Group on Automotive
Research (CAR)** – Sh. Sajid Mubashir, TIFAC.

➤ Discussion

M13A3 Any other item with the permission of the Chair

M13A4 Concluding remarks by the Chair

Annexure-II

List of participants of the Thirteenth Meeting of Scientific Advisory Committee to Cabinet (SAC-C) held on 17th October 2007, at Vigyan Bhawan, New Delhi

Sr. No.	Name, Designation and Organization	Status
1.	Dr. R. Chidambaram, Principal Scientific Adviser to the Government of India, Vigyan Bhavan Annexe, Maulana Azad Road, New Delhi – 110011	Chairman
2.	Dr. S.K. Basu, Director, National Institute of Immunology, JNU Complex, Aruna Asaf Ali Marg, New Delhi – 110 067	Member
3.	Dr. Prem Shanker Goel, Secretary, Department of Ocean Development, Block No.12, CGO Complex, Lodhi Road, New Delhi – 110 003	Member
4.	Prof. S.K. Joshi, Vikram Sarabhai Professor & Honorary Emeritus Scientist, # 252, National Physical Laboratory, Dr. K.S. Krishnan Marg, New Delhi – 110 012	Member
5.	Dr. J.M. Khanna, Executive Director & President, Life Sciences, Jubilant Organosis Ltd., A-1, Sector 16-A, Institutional Area, Noida- 201301	Member
6.	Dr. S.P.S. Khanuja, Director, Central Institute of Medicinal and Aromatic Plants (CIMAP), (Council of Scientific & Industrial Research) PO-CIMAP, Near Kukrail Picnic Spot, Lucknow – 226015	Member
7.	Dr. Ashok Khosla, President, Development Alternatives, 111/9-Z, Kishangarh, Vasant Kunj, New Delhi – 110070	Member
8.	Dr. Goverdhan Mehta, Bhatnagar Fellow, Department of Organic Chemistry, Indian Institute of Science, C.V. Raman Avenue, Bangalore – 560 080	Member
9.	Dr. (Mrs.) Indira Nath, LEPR – Blue Peter Research Centre, Near TEC Building, Cherlapally, Hyderabad 501301	Member
9.	Dr. Placid Rodriguez, Flat 2B Adithya Apartments, 38 Balakrishna Road Valmiki Nagar, Chennai 600041	Member
10.	Dr. T. Ramasami, Secretary, Department of Science & Technology, Technology Bhawan, New Mehrauli Road, New Delhi – 110 016.	Member
11.	Dr. Bikash Chandra Sinha, Director, Saha Institute of Nuclear Physics, Sector I, Block AF, Bidhan Nagar, Kolkata	Member
12.	Prof. Veena Tandon, Parasitology Laboratory, Department of Zoology, School of Life Sciences, North-Eastern Hill University, Shillong – 793 022	Member
13.	Prof. A.L. Verma, Former Director, North Eastern Hill University Campus, Shillong D-3, Ram Vihar, Sector 30, Noida 201301	Member
14.	Dr. Mangala Rai, Secretary, Department of Agricultural Research & Education, Room No.105, 1st Floor, Krishi Bhawan, New Delhi – 110 001	Member
15.	Dr. Prema Ramachandran, President, National Academy of Medical Sciences, Ansari Nagar, New Delhi	Member
16.	Prof. Ashok Mishra, President, National Academy of Sciences (Allahabad), National Academy of Sciences, 5, Lajpatrai Road, New Katra, Allahabad - 211 002	Member
17.	Dr. S.K. Sikka, Scientific Secretary, Office of the Principal Scientific Adviser to Government of India, Vigyan Bhavan Annexe, Maulana Azad Road, New Delhi – 110011	Member-Secretary

Special Invitees

- | | | |
|-----|---|-----------------|
| 18. | Dr. (Mrs.) Niloffer Kazmi, (Addl. Secretary-II), Univeristy Grants Commission, Bahadur Shah Zafar Marg, New Delhi 110 002 | Special Invitee |
| 19. | Dr. S.B. Krupanidhi, Chairman, Materials Research Centre, Indian Institute of Science, Bangalore – 560 012. | Special Invitee |
| 20. | Sh. S. Chatterjee, Adviser, Office of the Principal Scientific Adviser to Government of India, Vigyan Bhavan Annexe, Maulana Azad Road, New Delhi – 110011 | Special Invitee |
| 21. | Dr. R.P. Gupta, Scientist, Office of the Principal Scientific Adviser to Government of India, Vigyan Bhavan Annexe, Maulana Azad Road, New Delhi – 110011 | Special Invitee |
| 22. | Sh. Neeraj Sinha, Scientist, Office of the Principal Scientific Adviser to Government of India, Vigyan Bhavan Annexe, Maulana Azad Road, New Delhi – 110011 | Special Invitee |
| 23. | Dr. Ketaki Bapat, Scientist, Office of the Principal Scientific Adviser to Government of India, Vigyan Bhavan Annexe, Maulana Azad Road, New Delhi – 110011 | Special Invitee |