

First Meeting of Senate

2nd February 2011; 14.30 hrs.

AGENDA



Academy of Scientific & Innovative Research (AcSIR)

2, Anusandhan Bhawan, CSIR HQ, Rafi Marg, New Delhi-110 001

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Academy of Scientific and Innovative Research (AcSIR)

Agenda for the first meeting of the Senate

February 2, 2011 at 14:30 hrs.

Venue: Room No. 101, Anusandhan Bhavan, CSIR HQ, New Delhi-110 001

AGENDA

I. INITIATION OF THE MEETING		Page No.	Annexure (Reference)
1.	Welcome address by Professor Gautam Biswas, Acting Director/OSD, AcSIR and Acting Chairperson of the Senate	1	
2.	Introduction of Members of the Senate	1	
3.	Opening Remarks by Prof. Samir K. Brahmachari, DG-CSIR, Secretary DSIR and Acting Chairman, AcSIR	1	
II. ITEMS FOR INFORMATION			
4.	(a) Discussion on futuristic structure of Academic program of AcSIR	3	I (1 Page)
	(b) Minutes of the first meeting of BoG	3	II (7 Pages)
III. DISCUSSION ITEMS			
5.	Framing of Curricula and courses to be offered by the Academy: The BoG has approved the initiation of programs of the Academy leading to courses for Ph.D. (Science); Ph.D. (Engineering); M.Tech./Integrated Ph.D. (Engineering). The courses for the curricula leading to fulfillment of these programs shall be discussed.	5	
6.	Procedure of Admission. The tentative admission procedure as outlined in the draft admission Brochure shall be discussed.	7	III (1 Page) & IV (16 Pages)
7.	Merger of PGRPE with AcSIR. The post graduate research programme (PGRPE) offered by eleven CSIR laboratories is proposed to be merged with the M.Tech.-Integrated Ph.D. (Engineering) of AcSIR. The proposal for this merger shall be discussed.	8	V (10 Pages)
8.	Approval of the Senate for the various Faculty positions of the Academy and Recommendations for the Academy Professors. Senate approval will be sought for Faculty positions and the Academy Professors.	9	VI (51 Pages)
9.	Formulation of the statutes and Ordinances of the Academy. The draft statutes and Ordinances of the Academy shall be placed before the Senate for discussion.	10	VII (55 Pages)
10.	Examination Committee to oversee examination and subsequent evaluation processes. Constitution of a subcommittee designated as "Examination Committee" to oversee examination and evaluation processes, shall be discussed.	11	
11.	Any other item with the permission of the Chair		

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INITIATION OF THE MEETING

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- 2. Introduction of Members of the Senate**
- 3. Opening Remarks by Prof. Samir K. Brahmachari, Acting Chairman, AcSIR and DG-CSIR, Secretary DSIR**

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ITEMS FOR INFORMATION

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4(a) Discussion on futuristic structure of Academic program of AcSIR

(b) Minutes of the first meeting of BoG

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ITEMS FOR DISCUSSION

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Item -5: Framing curricula and courses to be offered by the Academy.**Background:**

Clause (i) of the Resolution highlights that the “Academy shall provide for instructions and conduct research in such branches of learning like natural sciences, life sciences, mathematical and computational sciences, medical sciences, engineering, applied art, humanities, social sciences, law relating to these areas and interfacing thereof, and or in particular in interdisciplinary and multi-disciplinary areas of these branches and in all such areas as may emerge in future and other emerging areas of knowledge, as the Academy may from time to time determine and make provision of advancement and dissemination of knowledge”.

The Board of Governors in its first meeting held on 11.1.2011 approved the following programs and the curricula to be started with immediate effect- Ph.D. (Science), Ph.D. (Engineering), M.Tech-Integrated Ph.D. (Engineering).

Ph.D. Program in Sciences

The Academy will offer opportunities to talented students for pursuing advanced research in frontier areas of Biological, Chemical, Physical and Mathematical Sciences including fields such as Polymer Sciences, Catalysis, Information Sciences, Mathematical/Computational Modeling, Leather Research, Marine Research, Functional Genomics & Proteomics, Systems Biology, Synthetic Biology, Bioinformatics, Alternative Energy, Climate Change, Smart Materials, Nanotechnology, Food Technology, New Drug Discovery/Design, Vaccine& Immune Science, etc. leading to a Ph.D degree. The Program will consist of flexible course work followed by advanced research leading to a Ph.D thesis on a specific topic. The student also will have to dedicate 6-8 weeks on a project addressing societal issues. This unique program aims to instill social responsibility in students.

Ph.D Program in Engineering

Students with a keen interest in research in various disciplines in Engineering will have an opportunity to work in the areas that include but are not limited to Mechatronics, Engineering of Structures, Composites, Fabrionics, Sensors and Micro-systems, Bio-inspired Devices and Systems, Plasmonics, Applied Mathematical/Computational Modeling, Disaster Mitigation against Hazards, Environmental Risk Assessment, Leather Technology, Footwear Science and Engineering, Marine Science and Technology, Glass and Ceramic Engineering, Smart Embedded Systems, etc. The student also will have to dedicate 6-8 weeks on a project addressing societal issues. This unique program aims to instill social responsibility in students. Those candidates who have secured admission based on GATE score to M. Tech. program in institutes/universities other than AcSIR and have completed M. Tech. and possess excellent academic record, can join 3 year Ph.D in engineering after written test/interview

M.Tech/Integrated Ph.D Program in Engineering

The academy proposes to admit about 200 students per year into the five year integrated M. Tech and PhD Program. After the second year with the award of M.Tech degree, AcSIR will select for admission about 120 PhD candidates from among these M.Tech students for about 3 years to complete their Integrated PhD Program.

Status: A draft of the courses to be offered has been prepared based on courses that are being currently offered in some CSIR laboratories. However, these need to be suitably modified.

Proposal: It is proposed that a committee of Deans, Associate Deans a few coordinators formulate the courses in their respective disciplines in consultation with the coordinators of the laboratories and prepare a common booklet indicating the courses that are offered by various laboratories. Since the course work will start from the August session (2011), it is proposed that the above mentioned committee will finalize the courses to be offered in each Institute at the earliest which shall be placed in the next meeting of the Senate for approval.

Item-6: Procedure of Admission.**Background:**

Clause (xx) of the Resolution requires that the standard of admission to the Academy, which may include examination and other innovative model of testing or evaluation, should be determined. One of the functions of the proposed Senate is to maintain the standards of instruction, education and examinations in the Academy. Thus, one of the specific functions of the Senate shall be to frame the guidelines for admission of students, subject to procedures laid down in the Ordinance.

The Board of Governors in its first meeting held on 11.1.2011 approved the following programs and the curricula to be started with immediate effect- Ph.D. (Science), Ph.D. (Engineering) and M.Tech-Integrated Ph.D. (Engineering). For these three programs students have to be registered and hence a procedure for admission needs to be laid down.

The objective of the academy is not only to register students who have qualified examinations that offer fellowships like the National Eligibility Test but also to attract bright young minds who might not have qualified such examinations but in terms of research capabilities might be at par or better than the students holding fellowships. Thus, the admission procedures should be flexible enough to admit such students. However, the procedure should have mechanisms (evaluation procedures) in place to ensure that quality of students is not compromised by having such flexibility.

Status: As per the notification issued by the OSD/ Acting Director, AcSIR and Chairman of the Senate (Annexure III), the process of registration for students currently working in CSIR laboratories have been initiated. This will be suitably incorporated in the Ordinances.

Proposal: A tentative admission procedure is placed before the Senate as the **Admission Brochure (Annexure IV)**. It is proposed that the Senate form a subcommittee to frame the procedures for admission of students in the above three programs at the earliest and place it to the Chairman of the Senate for approval so that the process for registration for the August 2011 session could begin.

Item-7: Merger of PGRPE with AcSIR**Background**

Some CSIR Laboratories started Post Graduate Research Programmes in Engineering (PGRPE) in 2009 in a pilot scale as pre-cursor to the M.Tech. programme of the then proposed Academy. The programme has all the rigors and requirements that are proposed in the M.Tech-Integrated PhD programme of AcSIR. The first batch of PGRPE students would be completing their PGRPE programmes at different Laboratories by the end of June 2011. Now that the Board of Governors in their first meeting approved M.Tech./ Integrated Ph.D. programme, it would be logical to merge the PGRPE with the M.Tech./ Integrated Ph.D. programme of AcSIR. As a consequence of the merger, the students on successful completion of the programmes (minimum of 6.5 CGPA) should be awarded M.Tech. degree of the AcSIR. The course structure and requirements for successful completion of the PGRPE programmes at various Laboratories are attached (**Annexure V**) with this proposal as a ready reference.

Status: The first batch of PGRPE students will complete their programmes by June-July 2011.

Proposal: It is proposed that AcSIR confer M.Tech. degree to the first batch of graduating PGRPE students. It is further proposed that henceforth PGRPE programme will be merged with the M.Tech-Integrated Ph.D. programme of AcSIR. The proposal is placed for consideration and approval

Item -8: Faculties of the Academy.**Background**

Clause (ix) of the Resolution highlights that the "Academy shall Institute Professorships, Associate Professorships and Assistant Professorships including Academy Professors, Professors of Eminence, Distinguished Professor, Outstanding Professor, Senior Professor, Emeritus Professors, Professor, or visiting positions and other teaching or academic or other positions, required by the Academy and make appointments to such positions."

Accordingly, a list of Distinguished Professors, Outstanding Professors, Professors, Associate Professors and Assistant Professors (drawn from the CSIR system) are tabled for the approval of the Senate (**Annexure VI**). However, since the assessment and recruitment of the CSIR scientists are on-going processes, Senate is requested to update such lists from time to time.

Considering the enormous contribution in Creation of AcSIR and extraordinary scholarly work of some Individuals, the following Professors are recommended for the Academy Professorship:

1. Prof. R.A. Mashelkar
2. Prof. S.K. Brahmachari

Furthermore, considering enthusiastic support and futuristic ideas for AcSIR and his keen interest in CSIR's affordable health care initiative, the following name is also recommended for the Academy Professorship.

1. Prof. George M. Whitesides

Senate is requested to accord its approval to the above mentioned recommendations.

Item-9 : Formulation of the Statutes and the Ordinances of the Academy**Background:**

Clause (v) of the resolution directs the academy to “frame Statutes and Ordinances and to alter, modify or rescind the same.” The Statutes shall encompass procedures for administration, management of finance, management of estates and endowments, registration of graduates and maintaining a database of registered graduates, personnel rules, service rules, discipline and conduct, delegation and acquisition of powers, relationship with other organizations and institutions, relationship with other organizations and institutions, quality assurance guidelines and other relevant matters.

The Ordinances shall encompass admission procedure and fees , procedure of conduct of examinations, administration of Gifts, Endowments and Benefactions and award of Scholarships, Fellowships etc, control, supervision and inspection of teaching programmes of constituent institutions, convocation and award of degrees, management of overseas Affairs , residences of staff and students and other relevant matters.

Status- In pursuance of the said clause a draft Statutes and ordinance has been framed (**Annexure VII**). However, this needs to be finalized.

Proposal: The Senate may appoint a subcommittee to formulate the Statutes and Ordinance of the Academy for consideration and approval of the Senate followed by that of the Board.

Item-10: Examination committee to oversee examination and subsequent evaluation processes.

Background:

Clause (iv) of the resolution provide *inter alia* that the academy shall grant “diplomas or certificates and confer degrees or other academic distinctions on the basis of such methods of evaluation and to hold examination. The Senate has the powers of control and general regulation of the Academy, with the responsibility for maintenance of standards of instruction, education and examinations in the Academy. One of the specific functions and powers of the Senate shall be to Conduct examinations, evaluate students and declare results of such examinations subject to the procedures laid down in the Ordinance.

Proposal: In order to oversee this activity, there is a need to appoint a subcommittee designated as “Examination committee” to oversee examination and subsequent evaluation processes.